EF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

T TYPE: Full-sized Project
F TRUST FUND:GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title: Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts			
Country(ies):	Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Morocco, Montenegro, Tunisia, Turkey	GEF Project ID:[1]	9684
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01533
Other Executing Partner(s):	UNEP MAP, Plan Bleu and SCPRAC	Submission Date:	2019-11-26
GEF Focal Area (s):	Chemicals and Wastes and International Waters	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐	Corporate Program: SGP ☐	
Name of Parent Program	Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security	Agency Fee ($)	1,282,500

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES[2]

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in $)	
			GEF Project Financing	Co-financing
CW-2 Program 3	3.1 Quantifiable and verifiable tons of POPs eliminated or reduced.	GEFTF	6,250,000	21,852,048
CW-2 Program 4	4.1 Mercury is reduced	GEFTF	5,000,000	21,852,049
IW2 Program 3	3.1 Improved governance of shared water bodies, including conjunctive management of surface and groundwater through regional institutions and frameworks for cooperation lead to increased environmental and socio-economic benefits.	GEFTF	3,000,000	9,442,630
	Total project costs		14,250,000	53,146,727

[1] Project ID number remains the same as the assigned PIF number.
[2] When completing Table A, refer to the excerpts on GEF 6 Results Frameworks for GETF, LDCF and SCCF and CBIT programming directions.

B. PROJECT DESCRIPTION SUMMARY

Project Objective: To achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas.						
Project Components/ Programs	**Financing Type[3]**	**Project Outcomes**	**Project Outputs**	**Trust Fund**	**(in $)**	
					GEF Project Financing	**Confirmed Co-financing**
Component 1: Chemicals and Waste	TA	Reduction of wastes and hazardous chemicals (POPs and mercury) in coastal hotspots and catchment areas	1.1 Management and disposal of 2,000 tonnes of POPs 1.2 Management and safe storage of 50 tonnes of mercury wastes 1.3 New POPs reduction and alternatives pilot activities completed 1.4 Mercury reduction through pilot activities on mercury alternatives	GEFTF	5,218,500 3,763,500 545,500 809,500	43,704,097
Component 2: International Waters	TA	Littoral countries enabled to identify trends and progress to impacts.	2.1: Updated Transboundary Diagnostic Assessment including gender assessment 2.2: Report on progress to impacts 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations 2.4: Data sharing policy for the Mediterranean	GEFTF	1,463,250 162,250 697,250 277,250	8,577,120
Component 3: Monitoring and Evaluation and information dissemination	TA	Project results and knowledge are effectively disseminated and used to adaptively manage the project	3.1 Knowledge Management strategy shares knowledge from Child Project 1.1 3.2 Regular monitoring and evaluation of project progress and results	GEFTF	636,000 *(378,000 for C&W; 258,000 IW)*	
				Subtotal	13,573,000	52,281,217
				Project Management Cost (PMC)[4]	GEFTF 677,000	865,510
				Total project costs	14,250,000	53,146,727

[3] Financing type can be either investment or technical assistance.

[4] For GEF Project Financing up to $2 million, PMC could be up to10% of the subtotal; above $2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount ($)
Recipient Government	Algeria MoE	in-kind	22,352,977
Recipient Government	Ministry of Environment - Lebanon	in-kind	15,000,000
Recipient Government	–Environment General Authority - Libya	in-kind	1,300,000
Recipient Government	Ministry of Environment – Morocco	in-kind	8,000,000
Recipient Government	Ministry of Local Affairs and Environment – Tunisia	in-kind	1,490,000
Others	Plan Bleu	in-kind	542,000
Others	Sustainable Consumption and Production Regional Activity Centre (SCPRAC)	in-kind	4,075,718
Others	UNEP Mediterranean Action Plan	In-kind	386,032
Total Co-financing			53,146,727

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee [a] (b)[2]	Total (c)=a+b
UNEP	GEF TF	Regional: Albania, Algeria, Egypt, Lebanon, Montenegro, Morocco, Tunisia and Turkey.	Chemicals and Wastes	POPS	6,250,000	562,500	6,812,500
UNEP	GEF TF	Regional: Algeria, Bosnia and Herzegovina, Lebanon, Morocco, Tunisia and Turkey.	Chemicals and Wastes	Mercury	5,000,000	450,000	5,450,000
UNEP	GEF TF	Regional: Albania, Bosnia and Herzegovina, Egypt, Lebanon,	International Waters		3,000,000	270,000	3,270,000

		Libya, Montenegro, Morocco and Tunisia.					
Total Grant Resources					14,250,000	1,282,500	15,532,500

a) Refer to the Fee Policy for GEF Partner Agencies

E. PROJECT'S TARGET CONTRIBUTIONS TO GEF 6 CORE INDICATORS[5]

Update the relevant sub-indicator values for this project using the methodologies indicated in the Core Indicator Worksheet (as used in GEF 7 Endorsement template – Annex E) and aggregating them in the table below. Progress in programming against these targets is updated at mid-term evaluation and at terminal evaluation. Achieved targets will be aggregated and reported any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCCF.

Project Core Indicators		**Expected at CEO Endorsement**
1	**Terrestrial protected areas** created or under improved management for conservation and sustainable use (Hectares)	
2	**Marine protected areas** created or under improved management for conservation and sustainable use (Hectares)	
3	Area of **land restored (**Hectares)	
4	Area of **landscapes under improved practices** (excluding protected areas)(Hectares)	
5	Area of **marine habitat under improved practices** (excluding protected areas) (Hectares)	
	Total area under improved management (Hectares)	
6	**Greenhouse Gas Emissions Mitigated** (metric tons of CO2e)	
7	**Number of shared water ecosystems** (fresh or marine) under new or improved cooperative management	1
8	Globally over-exploited **marine fisheries** moved to more sustainable levels (metric tons)	
9	**Reduction**, disposal/destruction, phase out, **elimination** and avoidance of **chemicals of global concern** and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced)	2,050 metric tons

[5] Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions*, will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

10	Reduction, avoidance of emissions of **POPs to air** from point and non-point sources (grams of toxic equivalent gTEQ)	
11	Number of **direct beneficiaries disaggregated by gender** as co-benefit of GEF investment	4,000 (2,000 women and 2,000 men)

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided.

The project targets relate to the following Core Indicators:

7: The project will intervene in the Mediterranean Large Marine Ecosystem (LME) and achieve rating 4 by the end (sub indicators 7.1 and 7.2). It will also contribute to achieving the rating of 1 under Indicators 7.3 and 7.4 via engagement of inter-ministerial committees and IWLEARN.

9.1: Disposal of at least 2,000 metric tons of POPs, mostly PCBs, including prevention of up to 650 metric tons of new POPs via 3 country pilot demonstration projects on alternatives to new POPs in manufacturing. The project baseline activities estimated over 3,000 tonnes of PCB and associated wastes, and identified likely use of up to prevention activities target 20 tonnes of PFOS foams imported per year in Lebanon and Tunisia; and 630 tonnes of HBCD used each year for polystyrene manufacture in Lebanon, Morocco, Tunisia and Turkey. Further information on the calculation of these targets is available in the Baseline section and summarized in Table 9 of the CEO Endorsement Request.

9.2: Disposal of up to 50 metric tons of mercury and mercury contaminated wastes.

9.4: Regulators will introduce import restrictions, procurement policies, and/or product restrictions in 3 project countries to prevent import and use of new POPs.

9.6: Reduction of up to 300 tonnes of mercury-containing equipment in hospitals via national pilot demonstration projects. This is a conservative estimate of approximately half the estimated generation of such contaminated equipment in the hospitals surveyed during the PPG phase. Further information on the calculation of these targets is available in the Baseline section and summarized in Table 9 of the CEO Endorsement Request.

11: An estimate is provided of the number of people that are expected to attend training and meetings, and/or contribute and use the project outputs including inventory tools, knowledge products, etc. The estimate of 4,000 beneficiaries is based on the ten project countries with activities spanning 5 years.

F. PROJECT TAXONOMY

Please update the table below for the taxonomic information provided at PIF stage. Use the GEF Taxonomy Worksheet provided in Annex R to find the most relevant keywords/topics/themes that best describe the project.

Level 1	Level 2	Level 3	Level 4
Influencing Models	Strengthen institutional capacity/decision-making		

Influencing Models	Demonstrate innovative approaches		
Stakeholders	Private sector	Large corporations	
Stakeholders	Private sector	SMEs	
Capacity, Knowledge and Research	Capacity Development		
Capacity, Knowledge and Research	Knowledge Generation and Exchange		
Gender Equality	Gender mainstreaming		
Gender Equality	Gender results areas		
Focal Area/Theme	Chemicals and wastes		
Focal Area/Theme	International waters		
Rio Markers	Climate Change Mitigation 0		
Rio Markers	Climate Change Mitigation 0		

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF[6]

A1.1.1 Changes in Alignment with Original PIF Design

Two major changes have emerged to the design of the project at PFD stage.

a) Child project structure of Chemicals and Waste funding

An important change from the Programme Framework Document (PFD) relates to the breakdown of activities and subsequent disposal targets between the original Chemicals and Wastes child projects under the MedProgramme, namely the current Child Project 1.1 and Child Project 1.2 (Mediterranean Pollution Hot Spots Investment Project. Both child projects are Implemented by UNEP.

At PFD stage, it was envisaged that Child Project 1.2 would reduce 20 tonnes of mercury through investment activities by the European Investment Bank (EIB) in former Chlor Alkali manufacturing plants in Kasserine (Tunisia), and the closure of the operational Chlor Alkali plant owned by Coelma (Morocco). Feasibility assessment activities led by the EIB under Child 1.2 concluded that foreseen investment activities were not viable. As such Child 1.2 will proceed with the International Waters investment activities only. To ensure the Programme meets its overall mercury reduction target, the Chemicals and Wastes budget from Child 1.2, together with the 20 tonnes reduction of mercury target, has been transferred to this Child Project 1.1. The Programme Framework Document was approved under GEF 6, when the Minamata Convention was not yet in force. Therefore the participating countries identified in

[6] For questions A.1 –A.7 in Part II, if there are no changes since PIF , no need to respond, please enter "NA" after the respective question.

the PFD for this Child Project are all eligible for mercury funding even if they are not yet Parties to the Convention at the time of submission of the CEO Endorsement Request. Baseline research indicated it may not be possible to reach the combined target of 50 t of metallic mercury in the countries that have signed/ ratified Minamata Convention; so the scope has broadened to include mercury contaminated wastes, and two countries which are as yet not Party to the Minamata Convention but are anticipated to become Parties during the course of the project.

Table 1: Summary of changes to original chemicals and wastes child projects

	Global Environmental Benefit Target (CW only)	GEF funds allocation (CW only)
Original project structure:		
PFD Child Project 1.1	POPs: 2,000 tonnes Mercury: 30 tonnes	POPs: USD 6,250,000 Mercury: USD 3,000,000
PFD Child Project 1.2	Mercury: 20 tonnes	Mercury: USD 2,000,000
PFD Child Project 1.3	POPs: 1,250 tonnes	POPs: USD 3,750,000
Total PFD:	**POPs: 3,250 tonnes** **Mercury: 50 tonnes**	**POPs: USD 10,000,000** **Mercury: USD 5,000,000**
Revised project structure:		
Revised Child Project 1.1	POPs: 2,000 tonnes Mercury: 50 tonnes	POPs: USD 6,250,000 Mercury: USD 5,000,000
Revised Child Project 1.2	-	-
Revised Child Project 1.3	POPs: 1,250 tonnes	POPs: USD 3,750,000
Total revised:	**POPs: 3,250 tonnes** **Mercury: 50 tonnes**	**POPs: USD 10,000,000** **Mercury: USD 5,000,000**

b) Participating countries

The outline of this project included in the PFD noted that this child project would focus on national activities in five countries: Albania, Libya, Montenegro, Morocco, Tunisia. The remaining Med countries would be involved through regional activities. Since the PFD was endorsed several changes have occurred in relation to focus countries as follows:

- Algeria endorsed the Programme after approval, and are now included in the project. Turkey endorsed the Chemicals and Waste child project and have also been included.
- Egypt, Lebanon and Bosnia and Herzegovina (which had already endorsed the entire Programme) were also added to the countries with national level activities under Child Project 1.1 following expression of countries' interest[7] during PPG Regional Consultation Meetings (see Annex P) to take part in the national activities on POPs/ PCBs and mercury elimination.
- Libya has been removed from the project because the Stockholm Convention National Implementation Plan (NIP) has not been completed. This means that for Chemicals and Waste, there is no baseline data on POPs, meaning that priority chemicals issues of concern could not be confirmed, and rendering Libya ineligible for GEF support on POPs.

[7] Countries expressed interest during the first and second Regional Consultation meetings in Athens and Paris in 2017 and 2018

The project design as presented in this document therefore focuses on national level activities in Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco, Tunisia and Turkey.

A1.1.2 Overview of the MedProgramme and context of the Child Project 1.1

The GEF/UN Environment "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (2019-2024)[8] represents the first GEF programmatic multi-focal area initiative in the Mediterranean Sea. It will operationalize priority actions to reduce major transboundary environmental stresses in its coastal areas while strengthening climate resilience and water security and improving the health and livelihoods of coastal populations. The MedProgramme will be implemented in ten beneficiary countries sharing the Mediterranean basin: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco, Tunisia and Turkey. Its eight Child Projects[9] cut across four different Focal Areas of the Global Environment Facility Biodiversity [BD], Chemicals and Waste [CW], Climate Change Adaptation [CCA] and International Waters [IW])and involve a wide spectrum of developmental and societal sectors ranging from banking institutions, the private sector, governmental and non-governmental bodies, industry, research, media, and various other organizations including Regional Activity Centers and Basel and Stockholm Regional Centers. It builds on the MedPartnership and ClimVar & Integrated Coastal Zone Management (ICZM)[10] GEF projects (GEF IDs 2600 and 3990) which have enriched the knowledge on the Mediterranean environment and unraveled the implications of climate change and variability; strengthened countries' mutual trust, cooperation and common purpose; consolidated the partnership among countries, UN bodies, civil society organizations, bilateral donors and the European Union (EU); and, tested on the ground the feasibility and effectiveness of technical and policy instruments aimed at addressing major present and future threats to environmental sustainability and climate related impacts.

The eight Child Projects (CP) of the MedProgramme (Table 1 and Fig 1) are expected to deliver a set of complementary results embracing three categories of priorities identified by the Transboundary Diagnostic Assessment (TDA) for the Mediterranean Sea which are translated into three components of the programme: i) Reduction of Land-Based Pollution in Priority Coastal Hotspots and measuring progress to impacts; ii) Enhancing Sustainability and Climate Resilience in the Coastal Zone; and iii) Protecting Marine Biodiversity.

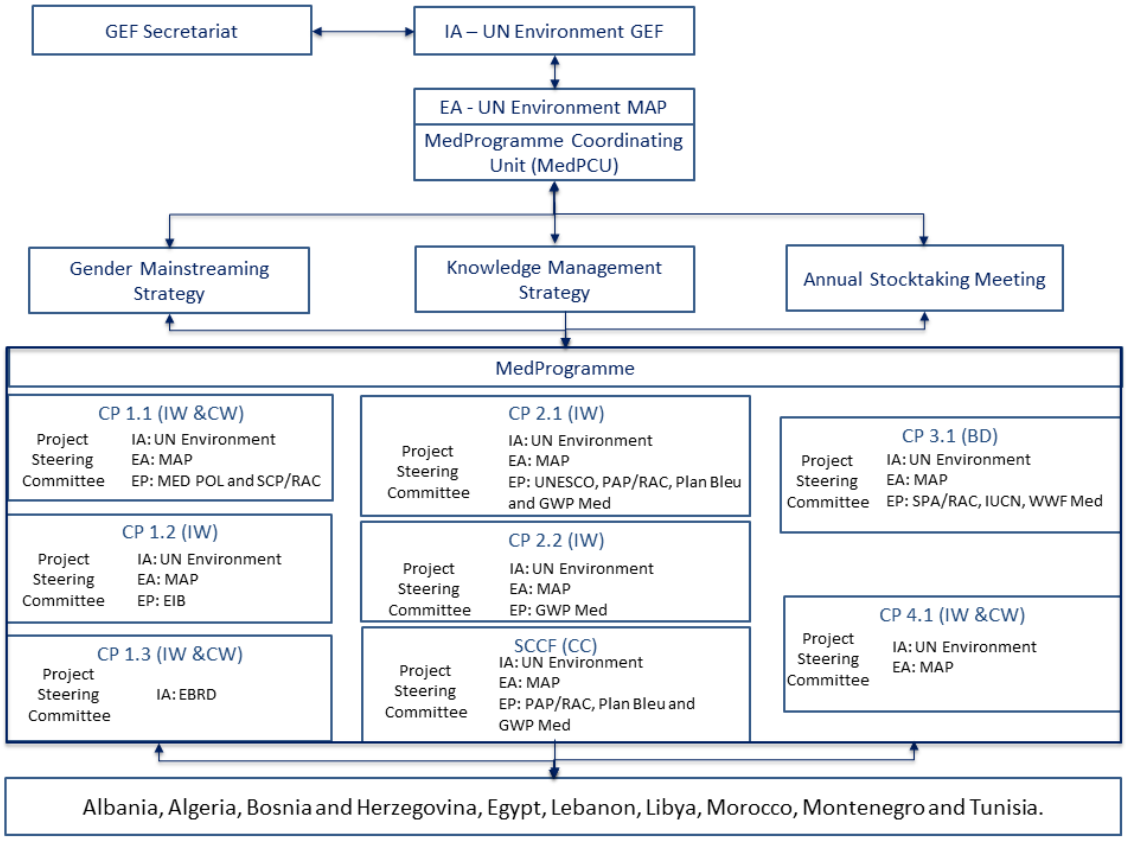
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[8] GEF Lead Implementing Agency: UN Environment. Other GEF Implementing Agency: European Bank for Reconstruction and Development (EBRD). Leading Executing Agency: UN Environment/MAP. Executing partners: UNESCO International Hydrological Programme (IHP), European Investment Bank (EIB), Global Water Partnership – Mediterranean (GWP-Med), WWF Mediterranean Programme Office (WWF MedPO), IUCN, Priority Actions Programme Regional Activity Centre (PAP/RAC), Plan Bleu Regional Activity Centre (Plan Bleu), Specially Protected Areas Regional Activity Centre (SPA/RAC) and the Sustainable Consumption and Production Regional Activity Centre (SCP/RAC).

[9] At the time of its approval in October 2016, the MedProgramme was comprised of seven Child Projects. Subsequently, a Mediterranean climate change adaptation project was developed by UN Environment/MAP for financing through the Special Climate Change Fund (SCCF). It was agreed by the UN Environment/MAP, UN Environment and the GEF Secretariat that this SCCF project would be managed for all intents and purposes as an additional Child Project of the MedProgramme. Hence the reference to eight Child Projects of the MedProgramme.

[10] More info on MedPartnership, ClimVar and ICZM (Integration of climatic variability and change into national strategies to implement the ICZM Protocol in the Mediterranean) projects: http://www.themedpartnership.org/, https://iwlearn.net/iw-projects/2600 and https://iwlearn.net/iw-projects/3990.

FIGURE 1 : MEDPROGRAMME STRUCTURE



The fourth component (Knowledge Management and Programme Coordination) is comprised of Child Project 4.1 "*Mediterranean Sea LME Environment and Climate Regional Support Project*" which plays a key role within the MedProgramme as it "implements mechanisms for Programme-wide learning and dissemination of knowledge, monitoring the Programme's progress to impacts, and fostering synergistic interactions among Child Projects". Within the GEF programmatic approaches there is a need to ensure programme coherence and impact through coordination among diverse sets of multi-focal area Child Projects contributing to the same programme outcomes. The Support Project functions as a common link among Child Projects by providing overall coordination of the programme portfolio, resource-saving services, a robust system to managing knowledge effectively and a sound action plan for gender mainstreaming.

TABLE 2 MEDPROGRAMME COMPONENTS, CHILD PROJECTS AND GEF FOCAL AREAS

Mediterranean Sea Programme (MedProgramme)		
MedProgramme Component	**Child Project**	**GEF Focal Areas**
1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and measuring progress to impacts.	1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts"	IW and CW
	1.2 "Mediterranean Pollution Hot Spots Investment Project"	IW
	1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"	IW and CW

Mediterranean Sea Programme (MedProgramme)		
MedProgramme Component	**Child Project**	**GEF Focal Areas**
2. Enhancing Sustainability and Climate Resilience in the Coastal Zone.	2.1 "Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection"	IW
	2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS"	IW
	SCCF "Enhancing regional climate change adaptation in the Mediterranean Marine and Coastal Areas"	CC
3. Protecting Marine Biodiversity	3.1 "Management Support and Expansion of Marine Protected Areas in Libya"	BD
4. Knowledge Management and Programme Coordination	4.1 "Mediterranean Sea Large Marine Ecosystem Environment and Climate Regional Support Project"	IW and CW

It is in this context that Child Project 1.1 will contribute to the MedProgramme Component i): *Reduction of Land-Based Pollution in Priority Coastal Hotspots and measuring progress to impacts*. The project will focus on land-based sources of hazardous chemicals pollution, namely Persistent Organic Pollutants (POPs) banned under the Stockholm Convention, and mercury banned under the Minamata Convention. This work will complement actions by partners under Child Projects 1.2 and 1.3 which will focus on waste water as a source of excess nutrient pollution to the Mediterranean.

The continuing degradation of the Mediterranean coastal zone and marine environments, coupled with the urgent growing impacts of climate variability, the loss of livelihoods and dramatic deterioration of social conditions along critical sections of the Southern and Eastern Mediterranean shores, prompted the development of the Mediterranean Sea Programme: Enhancing Environmental Security (MedProgramme).

The Mediterranean Sea - the largest semi-enclosed sea in the world - is shared by 21 countries with a coastline of 46,000 km. Its coastal areas are undergoing a dramatic process of development. The populations of coastal states have grown from 95 million in 1979 to 143 million in 2000 and expected to reach 174 million in 2025[11]. Population density in coastal areas ranges from double to ten times the national average due to the more favorable climatic and socioeconomic conditions. Population load is shifting towards the southern and eastern Mediterranean and about 60% of that lives within 100 km of the coast. In addition the Mediterranean region hosts one third of world tourism. Traditional ways of using natural resources and ecosystem services of the Mediterranean (for maritime transport and fishing, for example) have diversified and include more recently developed/ expanding activities such as offshore energy generation, marine resources mining and others – all exacerbating pressures on vulnerable and in some cases scarce resources in the Mediterranean. As a result of the increased demand for space, water and natural resources, the stress on coastal ecosystems and the infringement on natural and agricultural land is continuously increasing.

[11]https://www.eea.europa.eu/soer-2015/countries/mediterranean

The coastal populace of the Mediterranean show significant diversity in terms of socioeconomic and gender aspects, leading to different population subgroups showing varying susceptibilities and vulnerabilities. Risks arising from pollutants and hazardous substances often work as threat multipliers, meaning although chemical pollution and hazardous substances have blanket exposure on general populations, the ramifications and long-term effects of these conditions vary. Threat multipliers exacerbate present conditions of poverty and lack of economic capital, lack of health equity and access, and gender and sociocultural differences, leading to different coping capacities of population subgroups. Section A.4, and the Gender Assessment and Action Plan (Annex I[12]) explores these nuances further.

The region is characterized by a unique and rich yet fragile biodiversity, hosted by many diverse ecosystems which together form an invaluable natural capital on which populations and economies depend. It is estimated that between 10,000 and 12,000 marine species thrive in the Mediterranean Sea, and that around 20–30% of these species are endemic. A range of human activities threatens many of these species. Pollution from land-based sources, such as discharges of excess nutrients and hazardous substances, marine litter, and degradation of critical habitats, are among the key factors responsible for this biodiversity loss. This also jeopardizes the economy and livelihoods of those who depend on its resources.

Climate change and variability are adding another layer of complexity to the nature – economy – society interdependencies, and so do the development disparities and instabilities typical for the region. Despite evident successes in addressing major environmental concerns, a number of recent assessments concluded the attainment of Good Environmental Status (GES) by 2020 was unlikely, and that the lack of regional or EU coordination potentially led to a fragmented and ineffective approach to tackling the pressures[13]. This merits increased attention of all the regional partners and of the Mediterranean countries and calls for better understanding of the state of the Mediterranean environment. Better instruments to assess linkages between drivers of environmental change and their impacts, and to measure progress in achieving the set goals are also needed, most notably in the framework of implementing Sustainable Development Goal (SDG) 14 to conserve and sustainably use the oceans, seas and marine resources, and other relevant SDGs.

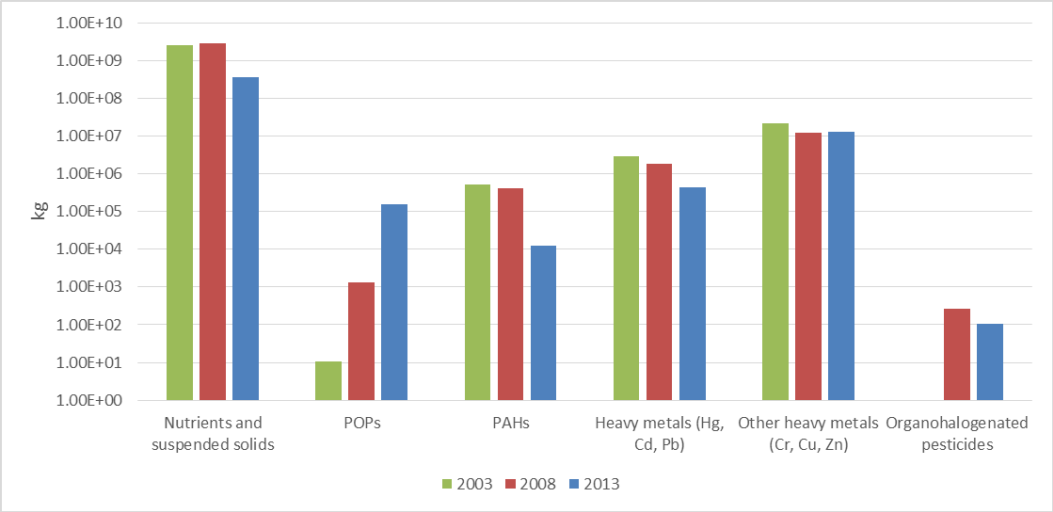
Eighty per cent of the pollution load of the Mediterranean Sea originates from land-based sources, mainly in the form of untreated discharges of urban waste (which includes microbiological, nutrient and chemical contaminants) reaching the sea from coastal sources, rivers and submarine groundwater discharges. Lack of sewage collection, treatment and disposal infrastructure is still the greatest problem in many Mediterranean countries. Beyond municipal waste water, 66 million m^3 of untreated industrial wastewater is discharged to the Mediterranean each year. The “National Baseline Budget” (NBB) is based on a Pollutant Release and Transfer Register approach, to monitor pollution loads over 30 sectors according to the Land Based Sources of Pollution (LBS) protocol of the Barcelona Convention. NBB data is available for 2003/2008/2013, and data for 2018 under preparation. The data indicates that loads of PCB/PCT, Hexachlorobenzene, Lindane, PCDD/PCDDF, Cadmium and Copper being discharged into the

[12] Annex I, the Gender Assessment and Action Plan, was jointly developed across all the Child Projects of the MedProgramme and is referenced in other CP documents as Annex P.

[13] Report from the Commission to the European Parliament and the Council assessing Member States’ programmes of measures under the Marine Strategy Framework Directive, COM (2018) 562 final

Mediterranean Sea are increasing, but other heavy metals loads including mercury are decreasing (Fig 2).

FIGURE 2*: RELATIVE LEVELS OF DIFFERENT POLLUTANTS FROM LAND-BASED SOURCES*



A.1. *Project Description*. *Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area*[14] *strategies, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.*

A1.1.3: Global environmental problems (chemicals and waste)

The following paragraphs highlight particular environmental problems associated with each of the types of chemicals to be addressed by the Chemicals and Waste component of this project, namely PCB and mercury wastes, new industrial POPs, and mercury in health settings.

Scientific research continues to show the impact of PCB on marine wildlife. In 2018 a study showed PCB-mediated effects on reproduction and immune function threaten the long-term viability of >50% of the world's killer whale populations[15] and concluded that a population in the Straits of Gibraltar faced the highest risk of collapse in the next 100 years. Large stocks of PCBs in the region which have been historically poorly managed are a major source of pollution in hot spots identified in the updated Barcelona Convention NAPs[16] and are national priority contamination issues. Please refer to the detailed country baseline tables below for more information on stocks and contaminated sites prioritized in national plans under the Barcelona, Stockholm and Minamata Conventions.

While there is limited evidence of the impacts of new POPs specifically on the Mediterranean Sea, the confirmed use of three of the new POPs in the countries is a contributor to known global impacts of these new POPs.

- **PFOS:** The use of firefighting foam containing perfluorooctanesulfonic acid (PFOS) and other per- and polyfluorinated alkylated substances (PFAS) has resulted in the contamination of ground water, drinking water and surface water in many countries including the Southern Mediterranean Sea, which are considered to be particularly vulnerable to water stresses and shortages under current climate change scenarios. Climate stresses are also predicted to increase the frequency and weather-driven danger of fires in the Mediterranean region[17], resulting in increased need and extent of application of firefighting foams. PFOS is added in firefighting foam concentrates at levels

[14] For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which Aichi Target(s) the project will directly contribute to achieving..

[15] Desforges et al (2018) Predicting global killer whale population collapse from PCB pollution, Science 361, 1373–1376

[16] National Action Plan (NAPs) prepared under the Barcelona Convention Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (LBS Protocol).

[17] Rigo, D., Libertà, G., Houston Durrant, T., Artés Vivancos, T., San-Miguel-Ayanz, J., Forest fire danger extremes in Europe under climate change: variability and uncertainty, EUR 28926 EN, Publications Office of the European Union, Luxembourg, 2017http://publications.jrc.ec.europa.eu/repository/bitstream/JRC108974/jrc108974_final.pdf

between 1 to 10%, and then further diluted in water to produce the foam, such that 1 tonne of PFOS will generate between 16 to 33 tonnes of POPs waste foam with concentrations of PFOS above the low POPs limit of 50ppm. In addition to disposing of waste foams, the Stockholm Convention guidance also recommends that the wastewater from fire-fighting be gathered and managed in an environmentally sound manner[18]. Failure to treat firefighting water has led to contamination of drinking water sources in Germany and the US. USEPA found that the drinking water of at least 6 million citizens has PFOS/PFOA levels above the health advisory level[19]; while in Germany, remediation of PFOS contamination at Dusseldorf Airport, including drinking water sources and a nearby lake, is estimated to cost 100m euro to remediate[20].

- **HBCD**: Hexabromocyclododecane (HBCD) is a category of brominated flame-retardants, used in the Mediterranean in expanded polystyrene foam (EPS) and extruded polystyrene foam (XPS) in building insulation, and leading to exposure from products and dust at home and the workplace. HBCD is used at concentrations between 0.5 to 2.5%[21], such that 1 tonne of HBCD results in the contamination of 100 to 200 tonnes of EPS/XPS. Egypt alone uses 120,000 tonnes of polystyrene a year, although there is no data on how much of this is treated with flame retardants.
- **SCCP**: Listed under Annex A of the Stockholm Convention in May 2017, SCCP production and use must be eliminated by 2024. SCCPs are used as fat-liquoring in leather; plasticizers in sealants, flexible polyvinyl chloride, additives in rubber, waterproofing and fire-retardant paints; industrial oil in metal processing and lubricant.

Large quantities of mercury and mercury contaminated wastes are found in the project countries, at sites of operational and decommissioned chlor-alkali plants in Algeria, Bosnia and Herzegovina, Morocco and Tunisia. Under the Barcelona Convention Regional Plan on reduction of mercury, countries have committed to phase out chlor-alkali plants using mercury cells by 2020, yet much remains to be done to ensure full implementation, including of the provision that prohibits mercury re-entry to the market. In some cases, actions have been implemented to sort and properly store contaminated wastes, but the capacities for ESM of mercury wastes are generally insufficient to address the scope and magnitude of the problem. In some cases, the extent of contamination is not fully known and further assessments and studies are needed.

Mercury is used in medical measuring devices, especially thermometers which are intensively used in hospitals with high levels of replacement reported, either due to breakage or loss (e.g. taken home by patients). In either case the mercury contained within them can be assumed to eventually be released into the environment, since most countries do not have adequate hazardous waste collection and

[18] UN Environment (2016) Guidance on best available techniques and best environmental practices for the use of perfluorooctane sulfonic acid (PFOS) and related chemicals listed under the Stockholm Convention on Persistent Organic Pollutants. December 2016.

[19] Hu et al. (2016) Detection of Poly- and Perfluoroalkyl Substances (PFASs) in U.S. Drinking Water Linked to Industrial Sites, Military Fire Training Areas, and Wastewater Treatment Plants, Environ. Sci. Technol. Lett., DOI:10.1021/acs.estlett.6b00260; August 9, 2016

[20] Der Westen (2013) PFT bringt Flughafen Düsseldorf in Turbulenzen. 20.09.2013; https://www.derwesten.de/staedte/duesseldorf/pft-bringt-flughafen-duesseldorf-in-turbulenzen-id8466138.html Access 30.06.2017.

[21] Stockholm Convention (2017) Draft guidance on preparing inventories of hexachlorobutadiene (HCBD). UNEP/POPS/COP.8/INF/18.

treatment for municipal waste. Estimates of the quantities of mercury thermometers have been assessed through a literature review and PPG studies, as follows:

- **Lebanon**: At an minimum 4.7-5.6kg pure mercury or 90kg of mercury containing waste thermometers are generated per year in the 28 hospitals that are targeted for the pilot project (2,387 beds)[22]. In total there are 138 private hospitals, 29 public hospitals, 216 primary health care centres and 516 laboratories in Lebanon, offering significant scale-up opportunities for the pilot.
- **Tunisia:** The Ministry of Health reports the emitted mercury waste per year is 5,6 Kg for smaller hospitals (300-500 beds) up to 16 Kg (>500 beds). For the 25 hospitals targeted by the project this is estimated as 140 - 400 Kg of mercury-containing equipment per year.

Additional amounts of mercury containing devices were not quantified during the PPG as the priority expressed by the partners was for thermometers, however the WHO guidance and approach to be adopted will also address other types of equipment particularly sphygmomanometers.

A1.1.4: Root causes (chemicals and waste)

The above land-based practices have led to the current situation whereby POPs are mercury are released into the Mediterranean environment. As part of project preparation a common problem tree was developed by the two Chemicals and Waste focal area projects (Child Project 1.1 implemented by UN Environment, and Child Project 1.3 implemented by the European Bank for Reconstruction and Development), to analyze the root causes and barriers to addressing the central problem of current practices leading to the release of POPs and mercury into the Mediterranean environment. The problem tree and Theory of Change included in Annex B sets out the generic root causes and barriers, addressing POPs pesticides, PCBs, new POPs and mercury releases. Further details for each of these pollutant categories are described in the paragraphs below.

Two root causes lead to contamination of the Mediterranean by PCBs:

a. in-use electrical equipment including transformers and capacitors contain PCB contaminated oil, and this oil contaminates other equipment and oils due to current top-up practices; and
b. owners of decommissioned equipment containing PCB contaminated oil (power generation, transmission and distribution companies, industries, public sector institutions) store waste equipment without appropriate safety or environmental management measures, at risk of being disposed of with municipal waste or sold into local markets instead of being disposed of in an environmentally sound manner;

The root causes of mercury pollution in the Mediterranean are that mercury use and related waste generation in chlor-alkali plants remains significant. In Tunisia and Bosnia Herzegovina, chlor-alkali plants have been decommissioned, but both elemental mercury and mercury containing construction waste remain. In Morocco the COELMA chlor-alkali plant continues to operate, using significant volumes of mercury and contaminating the surrounding environment. In Algeria there are several operational chlor-alkali plants in the country's coastal regions; decommissioning of chlor-alkali technology is identified as a priority under the country's Barcelona Convention NAP and has already taken place in the

[22] UNDP (2013) Demonstrating and Promoting Best Techniques and Practices for Reducing Health-Care Waste to Avoid Environmental Releases of Dioxins and Mercury Final Report. The quantity is a minimum as it refers only to broken thermometers not other equipment such as sphygmomanometers

facilities operated by GIPEC company (now operating with membrane technology) based in Baba Ali near Algiers.

The root cause of continued use of new POPs in products in Mediterranean countries is the continued import either as POPs containing products, or as ingredients to formulate POPs containing products.

The cause of the continued use of mercury containing medical measuring devices in Mediterranean countries is the continued import of these products at low prices.

A1.1.5: Barriers (chemicals and waste)

a) Barriers to addressing PCBs

Key barriers to the sound environmental management of PCB contaminated equipment include respectively: the high capital cost and lack of incentives or financial mechanisms to replace in-use transformers; and the high cost and lack of local infrastructure for environmentally sound disposal of the wastes. Detailed inventories for all the equipment suspected of PCBs contamination are being progressively developed (in the course of NIP updates or as a part of specific projects) but are not yet available in all the project countries.

b) Barriers to addressing mercury wastes

Key barriers to the environmentally sound management of mercury include the lack of safe mercury containment options in project countries; and the lack of effective regulatory controls on mercury, despite the commitment of governments to prevent mercury use in chlor-alkali plants by 2020.

c) Barriers to phasing out new POPs

The major barriers to phasing in safe alternatives to new POPs are common to both PFOS and HBCD, namely:

i. **Awareness**: many users of new POPs are simply not aware that their products contain these chemicals, and are not aware of the need to replace them (for both health/ environmental reasons, but also in order to comply with relevant regulations). In the case of PFOS/PFOA, foam manufacturers may claim their foams are fluorine-free or only containing traces but this needs to be confirmed. Users of fluorinated foams may not be aware of the reliability and effectiveness of alternatives, although international experience from developed countries is that they are as effective.

ii. **Price, performance and availability**: fluorine free foams (3F) are more expensive than PFOS[23], while very cheap firefighting foams may be available in local markets with lower performance, outcompeting the higher priced and more effective foams. International firefighting foam performance standards were written in the early 1960's, based on performance of fluorine surfactant technology. Since then, only the International Civil Aviation Organization (ICAO) Level B standard for aviation has been updated, which has facilitated all major airports in Australia and the UK using this standard to now operate with fluorine free foams. Where governments have not adopted such updated standards, fluorine free foams may be unable to meet requirements where they are unfairly challenged. Alternatives to HBCD are more expensive, for example butadiene-

[23] Introduction of environmentally safe foams to North African markets, Gary McDowall, 3F company www.3fff.co.uk.

styrene brominated copolymer ("BLUEDGETM Polymeric FRTM trademark") costs 5% more than HBCD. Other alternative products include non-flame retarded EPS and XPS insulation foams, polyurethane foam (PUR/PIR); mineral wool/ rockwool/ stone wool/ glass wool insulation or wood fibre insulation board. Alternatives that may exist may not be available on the market in the Mediterranean project countries, creating barriers for users to access them at a competitive price. For SCCP, the price of one alternative 'DINCH' is approximately 2-3 times higher in the region, but prices in the region may be inflated as prices are similar from international sources (Alibaba).

iii. **Regulations**: lack of legislation to restrict the use of new POPs in countries, which could potentially range for inclusion in lists of restricted substances which could affect import; strict water quality standards limiting levels of PFOS-PFAS in water sources; or Extended Producer Responsibility (EPR) for building products and related waste, requiring companies that produce building products to take back HBCD-contaminated products.

iv. **Procurement**: For PFOS, fire-fighting foams are procured via a public tender process which does not adequately address sustainability criteria and particularly potential impacts on water. Informal feedback also suggests corruption might play a key role to maintain fluorinated foams as "dominants" in the market and the traditional choice for the region., particularly for high value public procurement such as for Civil Protection.

v. **Technology**: For HBCD there is a need to adjust technical procedures, develop and test new formulas, to produce EPS and XPS with a POPs-free alternative flame retardant (e.g. butadiene-styrene brominated copolymer) For PVC production with SCCP, DINCH and other alternative chemicals can substitute SCCP additives. Whilst the "injection molding" process needs to be modified to use alternatives, it is not necessary to upgrade or acquire new equipment.

d) Barriers to switching to alternatives to mercury measuring devices

The major barriers to phasing in safe alternatives to mercury containing devices are:

i. **Regulations**: lack of legislation and/or enforcement to restrict or prohibit the use of mercury containing devices in countries, either as restriction of mercury-containing products or Extended Producer Responsibility (EPR) requiring producers to take back the generated mercury waste and health services and institutions to properly treat mercury waste as hazardous waste according to local legislation and international standards.

ii. **Awareness**: most users of mercury containing devices, particularly hospital personnel and laboratories, are perfectly aware of the health implications of mercury exposure but they are not as aware of the environmental implications and impacts of these products at its end-of-life if not properly managed (normally ending up in landfills), neither the need to replace them by safe alternatives.

iii. **Price and availability:** Mercury-measuring devices initially appear more affordable - for example digital thermometers are about 2-5 times more expensive than mercury thermometers. However hospitals applying full cost accounting (considering calibration, batteries, mercury waste management costs, product lifetime, device specifications, number of purchased devices, location of purchase etc.) in Mexico, Argentina and the Philippines reported overall savings when switching to digital thermometers[24]. In the case of sphygmomanometers, the cost of

[24] WHO (2015) Developing national strategies for phasing out mercury-containing thermometers and sphygmomanometers in health care, including in the context of the Minamata Convention on Mercury, Key Considerations And Step-By-Step Guidance

mercury sphygmomanometers and the alternative (aneroid sphygmomanometers) is about the same .

iv. **Procurement**: Measuring devices might be procured via a public tender (in the case of public hospitals, laboratories or other public entities) which does not satisfactorily address sustainability criteria and particularly potential impacts of mercury waste on health and the environment and the true cost of the environmentally sound management and recycling of mercury waste.

A1.1.6: Global environmental problems (international waters)

Analysis of the environmental problems and status of the Mediterranean Sea was first provided in the Mediterranean Transboundary Diagnostic Analysis (TDA) in 1997. Since then, several key assessments have been undertaken by UN Environment/ MAP, EC, EEA and other partners, which are presented below and describe the main environmental problems that the MedProgramme has been designed to address.

The 2005 Mediterranean TDA identified and analyzed major environmental concerns in the Mediterranean Sea, including declines in biodiversity, seawater quality, human health risks and degradation of coastal ecosystems. It identified three overarching environmental quality objectives to address major environmental concerns: 1) reduce the impacts of land-based pollution sources on Mediterranean marine environment and human health; 2) sustainable productivity from fisheries; and 3) conserve the marine biodiversity and ecosystem.

In the years following the TDA, other reviews and analyses include the State of Environment and Development Report (2009); the initial integrated assessment of the Mediterranean Sea (2011); the State of the Mediterranean Marine and Coastal Environment (2012); the EEA/ UNEP/MAP report on the implementation of Horizon 2020 (H2020) initiative to depollute the Mediterranean by 2020 (2014). These documents confirmed the conclusions of the 2005 Mediterranean TDA with the addition of adaptation to climate change.

The 2014 Intergovernmental Panel on Climate Change (IPCC) Report identified the Mediterranean region as a climate change hotspot that "*will suffer multiple stresses and systemic failures due to climate changes*". In 2015, the impacts of climate change and variability and of coastal aquifers degradation were analyzed and elaborated in the two TDA supplements developed through ClimVar & ICZM Project[25] (2015) and MedPartnership (2015). The results of these projects added new perspectives to the overall diagnostic of the current state of the Mediterranean Sea and its coastal areas, creating a basis to guide future remedial and adaptation actions. This expanded understanding was translated into two Sub-regional Action Plans on Coastal Aquifers, and in specific recommendations for climate change adaptation priorities and measures.

In 2016, Regional Climate Change Adaptation Framework for the Mediterranean Marine and Coastal Areas (Decision IG.22/6) was adopted by the Barcelona Convention Contracting Parties, setting four strategic objectives referring to: 1) institutional and policy frameworks, awareness and stakeholder engagement, and capacity building and cooperation; 2) development of best practices for effective and

[25] Full title of the project: Integration of climatic variability and change into national strategies to implement the ICZM Protocol in the Mediterranean.

sustainable adaptation; 3) access to existing and emerging finance mechanisms; and 4) better informed decision-making through research and scientific cooperation. The need for development of a monitoring and evaluation framework for the implementation of adaptation policies and plans at national and regional levels is emphasized as one of the priorities (to include objectives, benchmarks, indicators and timescales).

In the context of implementing the EcAp Roadmap adopted by the Barcelona Convention Contracting Parties in 2008, the MAP system has delivered the 2017 Mediterranean Quality Status Report (MED QSR)as the first assessment product based on the MAP Ecological Objectives (EOs) and Integrated Monitoring and Assessment Programme (IMAP) Common Indicators. The assessment builds upon existing data and is complemented with inputs from numerous diverse sources where appropriate. Despite the challenges met, given the limited availability of data and the fact that the IMAP implementation is still in an early phase, the 2017 MED QSR allowed for important conclusions and highlighted gaps that need to be overcome for successive assessments:

- Assessment of the quality of the Mediterranean coastal and marine environment for pollution-related EOs (on eutrophication, contaminates and marine litter) indicated mixed results were achieved with the implementation of pollution reduction and prevention measures, with some successes but also with some negative trends. Eutrophication is caused by both regional sources such as urban effluents, industrial discharges, and aquaculture activities as well as transboundary components such as agricultural runoffs, riverine outflows, and airborne nutrient deposition. The main coastal areas in the Mediterranean which are historically known to be influenced by natural and/ or anthropogenic inputs of nutrients are the Alboran Sea, the Gulf of Lions, the Gulf of Gabès, the Adriatic, Northern Aegean and the South-east Mediterranean (Nile–Levantine).
- Pollution assessment against environmental assessment criteria (EACs) was carried out for the first time in the framework of 2017 QSR for concentration of key harmful contaminants measured in the relevant matrix (biota, sediment, seawater). Notwithstanding certain shortcomings (including the need to further improve and fine-tune assessment metrics and to consider sub-regional differences), the assessment indicated generally acceptable levels of heavy metals assessed from bivalves and fish, with lead having values above threshold for 10% of stations. Accidents rates, the extent of acute pollution events (e.g. slicks from oil, oil products and hazardous substances) and their impact on biota have gone down regionally, suggesting international regulatory framework and technical cooperation at regional level (especially as far as prevention of accidental pollution is concerned) have yielded positive effects. Recent studies on the percentage of intestinal enterococci concentration, show that the implementation of measures (e.g. sewage treatment plants) to reduce, among others, the faecal pollution in coastal waters, has been a story-of-success in the Mediterranean Sea. In the period 2004 – 2010 alone, the share of Mediterranean coastal cities served with wastewater treatment plants (WWTPs) increased significantly: from 68% to 75% for the cities with population of 10,000 – 100,000, and from 74% to 82% for the cities with population above 100,000[26].
- Information on beach marine litter exists but the picture is still fragmented and is geographically restricted to the northern part of the Mediterranean. Plastics are the major components and cigarette butts, food wrappers and plastic bags comprise the top marine litter items. Information on the distribution, quantities and identification of beach marine litter sources needs to be further

[26] EEA/ UNEP MAP (2015) joint report Horizon 2020 Mediterranean report: toward shared environmental information systems.

advanced. The abundance of floating litter in Mediterranean waters has been reported at quantities measuring over 2 cm range from 0 to over 600 items per square kilometre. The 2015 UN Environment/ MAP Marine Litter Assessment report states that approximately 0.5 billion litter items are currently lying on the Mediterranean seafloor. Data on floating and seafloor marine litter are inconsistent and geographically restricted in only few areas of the Mediterranean Sea. The legally binding regional action plan on marine litter sets a target for reduction of 20% beach litter by 2020.

- For the third cluster of EOs assessed for the 2017 MED QSR on hydrography and coastal ecosystems and landscapes, the monitoring programme is at the early stages of development. The national monitoring related to hydrography (EO7) has not been initiated yet (except for the Contracting Parties that are EU Member States) or is in the inception phase. There is a need for more rigorous monitoring as to be able to undertake regional and sub-regional assessments. Similarly, the length of coastline subject to physical disturbance due to the influence of man-made structures (EO8 on coastal ecosystems and landscapes) is not systematically monitored (except for a few countries where monitoring is in place or under development). This despite the fact that Mediterranean coastal areas are threatened by intensive construction that can impact landscapes, habitats and biodiversity. The national reporting on state and evolution of coastal zones is required under the ICZM Protocol.

Some of the key QSR messages on biodiversity and ecosystems, non-indigenous species and fisheries related EOs are presented in Table 3.

TABLE 3: 2017 MED QUALITY STATUS REPORT: THE KEY FINDINGS

Biodiversity and ecosystems	• The existing studies regarding habitat distributional range and condition of the habitat's typical species and communities indicate a large proportion of habitats are to some degree threatened, although much of the Mediterranean remains un-sampled. • Species distributional range, population abundance and population demographic characteristics were assessed for marine mammals, seabirds and marine reptiles based on available studies. Major gaps in data and studies were noted overall, and therefore an overall regional assessment was not possible. • The Mediterranean monk seal and the 11 cetacean species face several threats, due to heavy anthropogenic pressures throughout the entire Mediterranean basin.
Non-indigenous species (NIS)	• Corridors are the most important pathways of new introductions in the Mediterranean, followed by shipping and aquaculture. Introductions of new non-indigenous species have an upward trend. • Progress has been made in creating national and regional inventories of non-indigenous species and assessing their pathways and impacts. • Evidence for most of the reported impacts of alien species is weak, mostly based on expert judgement; a need for stronger inference is needed based on experiments or ecological modelling. • There is a need for better coordination at national and sub-regional level on NIS monitoring.
Fisheries	• Most of Mediterranean stocks (~85%) are subject to overfishing. Mediterranean catches are stagnant, with current yields at around 800,000 tons, below the maximum yield of around 1 million tons in the mid-90's. • Data expressed through Spawning Stock Biomass indicates that up to 42% of the stocks assessed in the Mediterranean show a low biomass in comparison with the existing time series, and only for 22% of the stocks the biomass is considered as relatively high in relation to the time series. However, the level of information differs between species and geographical areas, with information concentrating on a few stocks.

	• The correct estimation of total landings requires a precise knowledge of the fishing activities carried out by the active fishing fleet operating in the Mediterranean. The specificities of the Mediterranean fleet, composed by a large majority of small scale polyvalent vessels, as well as the existing variety of landing sites, and the different capacity of Mediterranean riparian states to accurately monitor the landings in such sites, hamper an accurate estimation of landings in the region. Furthermore, Illegal, Unregulated or Unreported (IUU) fishing activities in the area also affects the estimates.

Source: 2017 MED QSR

The 2017 WWF report - Reviving Economy of the Mediterranean Sea concludes that the health of the Mediterranean Sea is declining sharply after decades of excessive and often unregulated economic activity. Ecosystems and the services they provide have been degraded rapidly. At the same time, ocean-related activities in the Mediterranean Sea have been assessed to generate an annual economic value of US$ 450 billion. This makes the 'Mediterranean economy' one of the largest in the region, ranking fifth among the regional GDPs (after France, Italy, Spain and Turkey). The value represents about 20% of the world's annual gross marine product[27] and is generated in an area which makes up only 1% of the world's ocean. Economic assets of the Mediterranean Sea are conservatively valued at astounding US$ 5.6 trillion.

Strategic priorities to achieve a sustainable economic model in the Mediterranean (all of which build upon SDGs) are formulated based on the WWF 2017 report analysis and include implementation of integrated and ecosystem-based ocean planning and management, adoption of blue economy approach, development of climate resilient and carbon-neutral economies as well as development of sustainable tourism and fisheries.

WWF MedTrends 2015 Report (Blue Growth in the Mediterranean Sea: The Challenge of Good Environmental Status) concludes that apart from professional fisheries, all traditional sectors of Mediterranean maritime economy such as tourism, shipping, aquaculture and offshore oil and gas are expected to keep growing in the period until 2030. Details on the assessment of future trends are presented in the Table 4. For several sectors, the estimations are predominantly based on the data for the EU Member States.

TABLE 4: ASSESSMENT OF TRENDS FOR VARIOUS MARITIME ECONOMY SECTORS

Sector	Expected development trend	Estimations
Oil and gas exploration and extraction	↗	• Offshore oil production could increase by 60% between 2010 and 2020 at the Mediterranean level. • Offshore gas production could increase five-fold from 2010 to 2030, from 55 to 250 Mtoe/ year.
Maritime transport and ports	↗	4% per annum growth rate in global trade over the next decade can be anticipated; this will affect international maritime traffic routes in the Mediterranean regional level (Suez-Gibraltar axis, Aegean Sea, Adriatic Sea, and to a lesser extent the north-western Mediterranean)

[27] The concept of 'gross marine product' is used in the WWF report in a comparable manner to the use of gross domestic product (GDP) as a measure of the size of national economics.

Professional fishing	↘	A downward trend is expected at an uncertain rate at the Mediterranean regional level.
Recreational fishing	↗	An upward trend is expected at an uncertain rate in the Mediterranean countries of the EU.
Marine aquaculture	↗	Forecast of fish aquaculture production in the Mediterranean countries of the EU anticipates a 112% increase between 2010 and 2030; production could reach 600,000 t.
Tourism (coastal tourism, cruise tourism, recreational boating)	↗	International tourist arrivals in the Mediterranean should increase by 60% between 2015 and 2030 to reach 500 million arrivals in 2030. France, Italy and Spain will remain the three biggest destinations.
Renewable energy	↗	While no marine renewable energy was produced in 2014, predicted production of electricity by offshore wind farms could reach 12 gigawatts (GW) in 2030 in the Mediterranean countries of the EU.
Marine mining	↗	An upward trend is expected at an uncertain rate in the mid-term, mainly in the Mediterranean countries of the EU.
Coastal development	↗	5,000 km of additional coastline will be artificialized by 2025 as compared to the 2005 situation at the Mediterranean regional level.
Land-based pollution sources	↗ ↘	In the Mediterranean countries of the EU: • Pollution from wastewater is expected to keep decreasing • over the next 15 years. • Persistent Organic Pollutants (POPs) are expected to slowly decline. • An upward trend in heavy metal pollution can be observed for mercury and lead. • Nutrient discharges are expected to increase slightly over the next 15 years.

Source: WWF MedTrends 2015

Despite difficulties in determining the whole range of interactions between these activities and the cumulative impacts of their pressures on the state of marine ecosystems, growth in the maritime economy is likely to represent an additional threat to the health of already-stressed Mediterranean ecosystems. It is likely that some pressures and, more importantly, cumulative impacts will grow at a faster rate than the solutions developed and implemented to mitigate them. The 2015 MedTrend report emphasizes there is consequently a high risk of failing to achieve GES in the Mediterranean Sea by 2020 for 7 out of 11 of the descriptors of the MSFD. Attainment of Aichi target 11 by 2020 is also questionable, notwithstanding the fact the MPA coverage grew from 1.08% in 2012 to 3.27% of the total surface in 2015.

A1.1.7: Root causes and barriers (international waters)

Table 5 summarizes the findings of the causal chain analyses conducted in the process of the TDA development including Supplement on Coastal Aquifers. These causes of the major environmental concerns are underpinned by the need to improve the evidence and scientific basis for policy making in the region. Irrespective of the progress with development of monitoring systems, indicators and data management, several major issues remain unresolved, in particular as regards GEF eligible countries of the Mediterranean. These are:

- A need to further elaborate a set of common indicators, including ecosystem approach-based indicators to assess drivers, pressures and responses in a framework of revised TDA coupled with 2019 State of the Environment and Development Report.
- Countries have strongly requested financial and technical support in the development and implementation of revised monitoring programmes, for the marine and coastal environment, including offshore monitoring, climate change and emerging priority issues. Current data availability in the majority of countries is scarce and scattered.
- There is a strong need to integrate existing national and regional databases, not towards the creation of new platforms but to look towards systems of sharing data, and making it publicly available, through for example Spatial Data Infrastructure (SDI). Barriers include many national databases that are in the national language and need translation, the need for data agreements endorsed by all participating countries, and potentially also a data sharing decision to be adopted by the Barcelona Convention Contracting Parties.

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TABLE 5: CAUSAL CHAIN ANALYSIS FROM 2005 TDA AND COASTAL AQUIFERS SUPPLEMENT

Mediterranean Sea Large Marine Ecosystem (LME) – 2005 Transboundary Diagnostic Analysis			2015 Coastal Aquifers Supplement	
Major Environmental Concerns	**Statement of the causes**	**Main Issues of Transboundary Concern**	**Contribution of coastal aquifers degradation to issues of transboundary concern**	**Causes of degradation**
Decline of Biodiversity	Pollution (sewage, oil, nutrients, etc.), invasive species, introduced species, land reclamation, river damming and flow modification, over-fishing, by-catch, and adverse effects of fishing gear and uses on marine habitats (e.g. bottom trawling), solid waste disposal at sea, uncontrolled tourist presence in ecologically sensitive areas, as well as inadequate public and stakeholder awareness, and inadequate or non-existent legislation and available enforcement means.	Land Based Pollution Degradation and Conversion of Critical Habitats: Sea Grass Meadows; Coastal Wetlands and Lagoons. Overexploitation of Marine Living Resources Alien Species Introduction	Submarine discharges of contaminated groundwater polluting coastal waters Impaired aquifer function in sustaining coastal lagoons and wetlands and the services they provide due to pollution, over-exploitation, seawater intrusion and/or reduced natural recharge. Modifications of near-shore habitats due to sea water intrusion or to reduced submarine discharges of groundwater	Domestic, agricultural and industrial solid and liquid wastes contaminating shallow unconfined coastal aquifers Lack of adequate coastal zone land-use planning tools (coastal aquifer comprehensive vulnerability mapping) and policies Weak enforcement of existing laws and regulations, and of sanitary groundwater protection zones Lack of, or weak, monitoring capacity and protocols Land use practices causing growing impermeability of land surface Climate variability and change reducing natural recharge rates
Decline in Sea Water Quality	Land based sources of marine pollution, both point and non-point, determine increasing trends in eutrophication and its related oxygen deficiency and bloom of nuisance species; presence of hot spots of pollution (125 identified by TDA) leading to decline in overall water quality, loss of coastal habitats and biodiversity, and human health problems.	Land Based Pollution: (i) point sources (excess nutrients, toxics and persistent toxic substances). (ii) non-point sources (mostly nutrients from agriculture, and sediments).	Submarine discharges of contaminated groundwater polluting shallow coastal waters	Domestic, agricultural and industrial wastes contaminating shallow unconfined coastal aquifers Lack of adequate coastal zone land-use planning tools (coastal aquifer comprehensive vulnerability mapping) and policies Weak enforcement of existing laws and regulations, and of sanitary groundwater protection zones

		Anthropogenic Pressures on Coastal Zones	Reduced submarine discharges of high-quality groundwater	Lack of, or weak, monitoring capacity and protocols Over-exploitation of coastal groundwater Loss of permeability of the land surface – deforestation, urban, touristic and industrial developments – causing reduced rainwater infiltration
Human Health Risks	Pollutants that degrade the ecosystem also present risks to human health, including heavy metals, organochlorines, pesticides, hydrocarbons, and the like, but also microbial and viral pollution. In addition, the response of the ecosystem to stress may induce toxicity, such as toxic dinoflagellates that arise from eutrophic conditions in some instances. This may affect human health in the region. Primary pathways for human health risks include ingestion of water or seafood products, contact with contaminated seawater (or in some cases beaches), and perhaps contact with contaminated sea food (for marine products workers).	Land Based Pollution Anthropogenic Pressures on Coastal Zones	Submarine discharges of contaminated groundwater polluting shallow coastal waters Loss of coastal ecosystem services Coastal aquifer salinization High human dependency on coastal groundwater for domestic purposes	Domestic, agricultural and industrial wastes contaminating shallow unconfined coastal aquifers Lack of adequate coastal zone land-use planning tools (coastal aquifer comprehensive vulnerability mapping) and policies Weak enforcement of existing laws and regulations, and of sanitary groundwater protection zones Lack of, or weak, monitoring capacity and protocols Impaired aquifer function in sustaining coastal lagoons and wetlands Over-extraction of groundwater Lack of alternative high-quality sources
Degradation and loss of coastal freshwater resources, and of coastal ecosystem services.	Growing population and unregulated coastal development interfere with coastal processes, cause groundwater salinization, and degradation of coastal ecosystems	Anthropogenic pressure on Coastal Zones		

Sources: Transboundary Diagnostic Analysis for the Mediterranean Sea, 2005; Management of Coastal Aquifers and Groundwater, 2015

A1.2. Baseline scenario or any associated baseline projects

A1.2.1 Chemicals and Waste baseline scenario and associated projects

UN Environment Mediterranean Action Plan (MAP) – Barcelona Convention Secretariat coordinated development of an elaborate legal and policy framework to address pollution from land-based sources in the Mediterranean, including:

- the Convention itself and Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (LBS Protocol);
- Mediterranean Strategy for Sustainable Development 2016-2025;
- Strategic Action Programme to combat Pollution from Land Based Sources (SAP MED);
- 10 Regional Plans on Persistent Organic Pollutants (POPs), mercury, wastewater treatment and marine litter;
- Bathing water quality criteria;
- LBS Protocol National Action Plans (NAPs), including the updated NAPs with operational targets and measures to implement the SAP MED and achieve GES over the period 2015-2025;
- Regional Action Plan on Sustainable Consumption and Production in the Mediterranean;
- Guidelines on Best Environmental Practices (BEP) for the Environmental Sound Management
- (ESM) of mercury contaminated sites;
- Integrated Monitoring and Assessment Program (IMAP) adopted by the 19th Meeting of the Contracting Parties to the Barcelona Convention (COP 19), comprising three pollution related ecological objectives (on eutrophication, contaminants and marine litter).

SAP MED contains 33 regional pollution reduction targets addressing a range of substances (including those that are toxic, persistent and liable to bioaccumulate) and sectors in accordance with the LBS Protocol. The Mediterranean countries translated the SAP priorities into their National Action Plans. Moreover, the regional plans on POPs and mercury set time-bound targets to phase-out/ eliminate POPs, and reduce inputs of mercury. The leaders of the Union for the Mediterranean (UfM) countries agreed to increase efforts to substantially reduce the pollution of the Mediterranean by 2020 at the 10th Anniversary Euro-Mediterranean Summit in Barcelona in 2005. The Horizon 2020 Initiative tackles the sources of pollution that are said to account for around 80% of the overall pollution of the Mediterranean Sea, namely municipal waste, urban waste water and industrial pollution, among them POPs and Mercury. The EC established several specific programmes to support the H2020 Initiative, such as the Mediterranean Hot Spots Investment Programme (MeHSIP), which aims to support the Horizon 2020 Investments for Pollution Reduction and Prevention component. This is mainly being achieved through providing project development support to infrastructure investment projects associated with the "hotspots" identified under the updated NAPs[28] and can support the reduction and disposal of POPs and Mercury. MEHSIP is fully integrated with the MedProgramme through the participation of the European Investment Bank in the component 1 of the programme.

H2020 is also supporting several regional projects such as SWITCH-Med which aims to assist 10 countries of the southern Mediterranean to develop and implement policies to SWITCH to sustainable pattern of consumption and production (SCP) promoting it among consumers, small and medium-sized enterprises and Mediterranean policy-makers. SWITCH-Med is being implemented through collaborative efforts by the EU, UNIDO, UNEP/MAP-Sustainable Consumption and Production Centre (SCP/RAC) and UN Environment's Economy Division.

[28] Updated NAPs contain programmes of measures and timetables required to achieve GES and the Regional Plans objectives in the framework of the Strategic Action Programme to address pollution from land-based activities (SAP MED) and Barcelona Convention LBS Protocol.

Med Partnership (GEF ID 2600) was implemented in the period 2009 – 2015. The project included a component on ESM of equipment, stocks and wastes containing or contaminated by PCBs in national electricity companies of the Mediterranean countries, addressing NAPs and NIPs priorities and building up on existing initiatives in some of the participating countries. It was executed by MED POL and SCP/RAC, and consisted of five activities, including upgrade of legal and institutional frameworks for PCBs management and awareness raising. More than 300 individuals from the four participating countries (Albania, Bosnia and Herzegovina, Egypt and Turkey) were trained on collection, packaging, and shipment of PCBs, and increased technical expertise and awareness on the environmentally sound management of PCBs.. A short guide was developed for preliminary identification of PCBs and four PCB analyzers were provided. More than 150 national experts were trained on how to use the analyzers and prepare inventories. 1,100 tonnes of PCBs were inventoried in 42 utilities in Turkey, Bosnia and Herzegovina, and Egypt and 930t were eliminated (764t exported for disposal to France and Spain and 166t liquid PCBs incinerated in Turkey).

PCB disposal projects have been done in the region, demonstrating commitment of governments to meeting their obligations for environmentally sound management of PCB wastes under the Stockholm Convention. These are further described in the National Baseline Tables in the baseline section (Table 7).

The Barcelona Convention Contracting Parties adopted the Regional Plan on Mercury in 2012[29], which includes the following measures:

1. The Parties shall prohibit the installation of new chlor-alkali plants using mercury cells with immediate effect.
2. The Parties shall prohibit the installation of vinyl chloride monomer production plants using mercury as a catalyst with immediate effect.
3. The Parties shall ensure that the releases of mercury from the activity of chlor-alkali plants shall cease by 2020 at the latest and i) that the environmentally sound management of metallic mercury from the decommissioned plants is achieved, including the prohibition of its re-entry into the market; ii) that the total releases of mercury (to the air, the water and to the products) from existing chlor-alkali plants are progressively reduced until their final cessation with the view not to exceed 1.0g per metric tons of installed chlorine production capacity in each plant. In doing so, the air emissions should not exceed 0.9g per metric tons of installed chlorine production capacity in each plant.
4. The Parties shall take the appropriate measures to isolate and contain the mercury containing wastes to avoid potential contamination of air, soil or water.
5. The Parties shall identify existing sites which have been historically contaminated with mercury including at least the old mines and decommissioned chlor-alkali plants, and take, with regard to these sites, environmentally sound management measures such as safety works, use restrictions or decontamination, as appropriate.
6. The Parties shall ensure that their competent authorities or appropriate bodies monitor releases of Mercury into water, air and soil to verify compliance with the requirements of the above table.
7. The Parties shall take the necessary steps to enforce the above measures.

In terms of new industrial POPs prevention projects, there are very few baseline initiatives. Some countries have conducted very initial inventories as part of their Stockholm Convention NIP update projects (see detailed national baseline Tables 7 below). The UN Environment Global Monitoring Programme set of projects (GEF ID 4886 in Africa) has initiated methodological and analytical work to facilitate the analysis of new POPs for which

[29] Decision IG.20/8.1: Regional Plan on the reduction of inputs of Mercury in the framework of the implementation of Article 15 of the LBS Protocol

there may be limited laboratory capacity in the region. Among others, the regular interlaboratory assessment process[30] has compared laboratories to identify those that meet international standards and use harmonized approaches acceptable for international requirements. In Turkey, there will be a UNIDO implemented GEF project on prevention of HBCDD in XPS and EPS Sector, and any further work on new POPs prevention in other sectors (see proposed alternative scenario) will be delivered in coordination with that project.

The WHO programme on the Minamata Convention has developed a number of guidance documents on mercury in the health sector, and undertook a series of Regional Meetings for Ministries of Health, in 2016 for the Eastern Mediterranean region which includes the project countries. Participants highlighted that '*safe practices for the collection and disposal of mercury-containing hospital waste need to be established and mercury replacement strategies developed*'[31].

TABLE 6*: RATIFICATION STATUS OF PROJECT COUNTRIES TO CHEMICALS AND WASTES CONVENTIONS*

Country	Conventions, status of ratification (a – accession; S – signed) and year				
	Barcelona	**Basel**	**Minamata**	**Rotterdam**	**Stockholm**
Albania	1990 (a); 2001	1999 (a)	2014 (S)	2010 (a)	2004
Algeria	1981 (a); 2004	1998 (a)	-	-	2006
Bosnia and Herzegovina	1994 (succession)	2001 (a)	-	2007 (a)	2010
Lebanon	1977 (a); 2009	1994	2017 (a)	2006 (a)	2003
Montenegro	2007 (a); 2007	2006 (s)	2014 (S)	2011 (a)	2011
Morocco	1980 (R); 2004	1995 (a)	2014 (S)	2011 (a)	2004
Tunisia	1977 (R); 1998	1995 (a)	2013 (S)	2016	2004

National baselines

The follow set of country-by-country baseline tables provide a snapshot of current and past activities and concerns on POPs pesticides, PCBs, and mercury in each of the project countries. Each table highlights key NAP and NIP priorities and concerns in relation to POPs and mercury, as well as current national (government and donor-led) activities and baseline projects on these issues. Finally, each table outlines the quantities of POPs pesticides, PCBs, and mercury identified in the project preparatory phase.

For new POPs, the countries which didn't yet benefit from the MedPartnership project and which have completed NIP updates for PFOS, HBCD and SCCP were Lebanon, Morocco and Tunisia, which are summarized below.

[30] https://www.unenvironment.org/explore-topics/chemicals-waste/what-we-do/persistent-organic-pollutants/pops-interlaboratory

[31] WHO (2018) Health sector involvement in the Minamata Convention on mercury: Outcomes of WHO regional workshops for ministries of health

TABLE 7: NATIONAL BASELINE TABLES

	Albania
PPG Review type	Desktop only
NAP (2015)	Rehabilitation of six hotspots with historic pollution was proposed under the NAP 2015, including: - Metallurgic Plant Elbasan (priority hot spot A): Heavy metals and other hazardous chemicals - Ferrochrome Smelter Elbasan (hot spot A): Wastes from production of Fe-Cr - Battery Enterprise Berat (hot spot A): Highly toxic chemicals, batteries containing Pb (lead) - Textile Enterprise Berat (hot spot A): 32 tons ammonium - Former pesticide storehouse Lushnje (hot spot A): expired pesticides, pesticide human risk - Former Plastic Factory Lushnje (hot spot A): 1,700 tons of toxic chemicals
NIP (2017)	NIP concludes there are no stocks of POPs pesticides, and strongly recommends including the POPs pesticides monitoring, especially in contaminated sites. NIP lacks comprehensive assessment of PCBs but prioritizes transformer and contaminated site assessment. Of the total 12,789 transformers inventoried, 6,000 transformers date from before 1990 and are suspected to contain PCB
Minamata status	Signed (2014); yet to ratify. MIA is under preparation (UNDP/ GEF project ID 9122)
Significant previous chemicals/clean up projects	2006- 2012: Projects to remediate the area of the closed Vlora chlor-alkali plant, including MoE/ WB, UNDP, and a EUR2.6 Million EU funded project titled "Environmental clean-up and disposal of hazardous waste in the Chlor-Alkali plant in Vlore, Albania" providing for site's clean-up and landfilling mercury contaminated waste into a confined disposal facility at the site. 2006: "Repackaging and removal of pesticides and chemicals from Albania, Bishti i Pallës," Dutch Government funded. Removed DDT, HCH and Lindane stocks, and the former central area of Lindane production (Porto Romano, near Durres) was surrounded and encapsulated (cemented).
POPs pesticides stocks identified	No POPs stockpiles. Several POPs contaminated sites: Durrës (former chemical plant in Porto Romano), Vlora (former PVC), in Elbasan (former coke plant), in Lushnjë (former PVC processing factory) and Shkodra (Bajza railway station).
Mercury stocks identified	No
Total PCB contaminated oils and transformers identified	12,789, not yet tested; presence of PCBs suspected for 47% of the total number (about 6,000 units). The bulk owned by the distribution company OEED (Operator of Electricity Energy Distribution)
National capacity for POPs analysis	No

	Algeria
PPG Review type	Desktop and country missions focusing on POPs/ PCBs disposal and identification of locations with mercury wastes stocks for potential disposal in February and September 2018
NAP (2016)	Seven coastal regions categorized as pollution hot spots: Tlemcen, Oran, Chlef, Alger, Béjaïa, Skikda, and Annaba. These spread along 65% of the national coastline, account for 45% of the country's population, and 86% of industrial activities. Over 1,000,000 tons of mercury contaminated wastes, primarily in the former mercury mining region of Skikda, but also as a result of operation of several chlor-alkali plants in the coastal zone. NAP mercury related priorities include: Gradual reduction of total releases of mercury from chlor-alkali plants, decommissioning/ change of technological process by 2020 (Soachlore, Mostaganem; Baba Ali, Algiers; and CPAK, Skikda); Surveys for establishment of a temporary storage area for containment of highly polluted materials and treatment of mercury contaminated waste; and introduction of tax incentives for mercury waste collection.
NIP (2017)[32]	NIP update based on 5 inventories: on PCBs/old POPs (identifying *inter alia* 1,968 t of PCB contaminated equipment in the coastal regions), and on four new POPs. NIP priorities are to: eliminate remaining quantities of POPs; prevent emissions of new POPs; and remediate contaminated sites
Minamata status	Neither signed, nor ratified, although the GoA states that the ratification instrument is under preparation and has been submitted to the Ministry of Foreign Affairs. No National Action Plan or MIA has been initiated.
Significant previous chemicals/clean up projects	2005-2006: Algerian company (NewTech - permitted for hazardous waste management) in cooperation with French partners collected, transported and exported 2,000 t of PCBs wastes including: 831 transformers, the equivalent weight of 972 t; 439 t of oil; 604 t of contaminated soil; and 33 t of other PCBs contaminated waste with funding from the Ministry of Environment emergency environmental fund.
POPs pesticides stocks identified	According to the Algeria NAP 2016, obsolete pesticides (both POPs and non-POPs) are located in the regions of Tlemcen, Algiers, Skikda and Mostaganem. A quantity of 191 tons of DDT is recorded, 94% of which is stored at Mostaganem. The inventory update and a feasibility study for elimination of obsolete pesticides was carried out in 2012. The results showed that 2,360 tons of obsolete pesticides were spread over 500 sites in 42 regions, of which 639 tons were classified as highly toxic; the metropolis area of Algiers alone stores 34% of the total quantity.
Mercury stocks identified	17 t of metallic mercury stored at GIPEC company chlor-alkali plant located in Baba Ali, Algiers

[32] This draft NIP was not available for review. The project team were provided a summary during consultations.

	1.5 kg metallic mercury identified in the WWTP in Tizi Ouzu
Total PCB contaminated oils and transformers identified	A total of 313.574 t of PCBs and PCB contaminated equipment verified in the project preparation phase, is centralized and available for immediate removal.. GoA requested assistance with disposal of additional approx. 1,650 t of oils and equipment from coastal regions, including 500 t from public institutions on a priority basis. Further investigation (including lab analyses) of the stocks is needed.
National capacity for PCB analysis	National Centre for Clean Production Technologies that acts as the regional centre of the Stockholm Convention for North Africa, and the NewTech company (permitted for hazardous waste management) with previous experience in collection and removal of PCBs (no known capacity for analysis).

	Bosnia and Herzegovina
PPG Review type	Desktop review and country missions focusing on mercury wastes stocks and contaminated sites in October 2018
NAP (2015)	NAP identified hot spots in Mostar, Neum, Capljina and Trebinje, with key pollution pressures linked to inadequate urban wastewater and solid waste management. No industrial sources of mercury and POPs related pollution were identified in the area covered by the NAP.
NIP (2015)	Targeted MedPartnership inventory reported in the NIP indicated 250 t of equipment (transformers, capacitors, switches) and oil with confirmed and/ or suspected presence of PCBs
Minamata status	Neither signed, nor ratified. Completed MIA with UNDP (2018).
Significant previous chemicals/clean up projects	2008- 2013: 2,500 tons of PCB potentially contaminated waste exported. 2015: GEF-funded MedPartnership project (GEF ID: 2600) supported a partial PCB inventory, and 104 t PCB contaminated equipment was exported under the project.
POPs pesticides stocks identified	No.
Mercury stocks identified	3 t of metallic mercury in a steel container and an estimated 15.3 t of mercury wastes (in 110 plastic containers, 60 l volume) verified at former chlor-alkali plant (HAK I) in the industrial area in Tuzla; estimated content of pure mercury is 0.725-1.61 t.
Total PCB contaminated oils and transformers identified	At least 146t, but a nationwide inventory has not been undertaken and most of the 146t are likely to be in-use.
National capacity for PCB analysis	Yes: Laboratory of the Hydro-Engineering Institute of Civil Engineering Faculty at the University of Sarajevo; Laboratory of the Faculty of Pharmacy at the University of Sarajevo; and Laboratory of the Institute of Protection, Ecology and Informatics in Banja Luka.

	Lebanon
PPG Review type	Desktop review and country mission in December 2017
NAP (2015)	NAP identified two hot spots with PCB contamination problems: Baouchrieh (transformers repair and storage site); and Zouk (power plant). NAP sets the goal of ensuring safe storage and containment of mercury waste produced by healthcare sector by 2025.
NIP (2017)	Lindane and Hexachlorocyclohexane, one ton was imported in 2009, and 250 kilograms in 2014. The NIP notes there are no POPs stockpiles nor empty pesticide containers. The NIP update includes three new POPs, with inventories for PFOS and HBCD and SCCP highlighted as a priority in the Action Plan. The PFOS inventory confirmed no use of PFOS in the surface treatment or paper production sectors, but identified nine retailers and extinguisher refilling companies for firefighting forms, which are imported by three suppliers.
Minamata status	Party.
Significant previous chemicals/clean up projects	2015 –2019 (ongoing): PCB Management in the Power Sector Project (World Bank/GEF), export of 230t of PCB contaminated equipment. 2016: Sectoral Assessment of POPs Pesticides in Lebanon, updated the pesticides inventory. No stockpiles or empty containers identified. 2011: PCBs Inventory Update and Project Preparation Study
POPs pesticides stocks identified	No. And Lebanon says POPs pesticides are not a priority.
Mercury stocks identified	No. But assistance requested on mercury prevention activities, as well as on mercury waste in the health sector.
Total PCB contaminated oils and transformers identified	A full inventory (including lab analyses) for the power sector and military transformers completed in June 2018 under the World Bank/ GEF project (GEF ID 4108). A quantity of 272 tonnes of PCB-contaminated stockpile is centralized and verified as available for immediate removal. Additional 780 t of PCB contaminated (above 50 ppm) oils and equipment owned by EDL and various concession holders is also identified. Assistance is also requested for mobile dechlorination for 126 t of oil (confirmed contamination above 50 ppm) from large transmission transformers.
National capacity for POPs analysis	Yes PFOS available from lab which sends samples abroad (Qatar and UAE)
New POPs status as determined during PPG phase	Visits to 4 suppliers /importers estimated total import of foams/ extinguishers is 6 tonnes in 2016 and 32 tonnes in 2017. Stockpile of 5,000-15,000 litres of foams held by Issa Petrol Trade Oil & Gas. POPs legislation and standards:

	- Lebanese Standard Institution (Libnor) Standards (NL: 161:2016) for water quality (drinking water) sets non-obligatory limit of 200mg/l; Decision 8/1/2001 (Standards for Environmental Quality) sets Environmental Limit Values (ELVs) for wastewater but not limits are specified for any POP. - No restrictions on PFOS in either import/export regulations. Law 432 dated 08/08/2002 which transposed the Stockholm Convention but National Decrees have not yet been passed to extend the obligations to the new POPs. - National standards on firefighting equipment (but not on foams) are set by Libnor. Suppliers of foams use different international standards Procurement: Civil defense purchase firefighting foams every around 2 years from the local suppliers through a public tender. Such tenders have never specified that the firefighting foam should be PFOS free. Contaminated sites: no national standards for POPs, however the following fire incident sites may be contaminated with PFOS: Ashrafieh, Beirut Port, Jnah, Zokak Belat (2010), Koraytem, Zarif, Zokak Belat (2012), Karantina, Talet Khayat, Biel.

	Montenegro
PPG Review type	Desktop
NAP (2015)	NAP classified Shipyard Bijela as hot spot B, with elevated concentrations of heavy metals, PAHs and PCBs in the sea sediment (caused by shipyard activities). Seawater pollution was recorded in the immediate vicinity, including PCBs and POPs concentrations in mussels in the breeding locations near the shipyard. The NAP set a 70% reduction target in hazardous substances emissions from Bijela shipyard by 2020, and remediation of polluted sediments.
NIP (2013)	Based on the preliminary inventory of the PCBs and PCBs contaminated equipment provided in the 2013 NIP, the overall quantities in the country estimated at 145 t stocks and 455 t in use. NIP Update status - drafted and is undergoing public consultation process (as of September 2018); adoption by Government is planned for the end 2018
Minamata status	Signed 2014. Not yet ratified. MIA completed in 2017 (with support of UNDP/ GEF project ID 9198)
Significant previous/ongoing chemicals/clean up projects	2017-2021 (ongoing): UNDP (GEF ID 9045) Comprehensive Environmentally Sound Management (ESM) of PCBs. Project includes legislative improvements, national PCBs inventory, and specialized capacity building for stakeholders in public and private sectors on ESM for pure and low-concentrated PCBs and associated waste material, supported by general awareness raising on hazardous waste handling. Disposal or decontamination of at least 700 t of PCBs contaminated equipment and 200 t of PCBs contaminated soil is planned with the budget (for disposal/ decontamination activities) of USD 2.5 million (the overall project budget is USD 3.5 million). At the project preparation phase stage the amount of 517.686 tons of PCB contaminated equipment and waste was identified. 2014-2019 (ongoing): Industrial waste management and clean-up project World Bank project for hot spots remediation will address Bijela shipyard estimated 60,000 tons of contaminated grit stored in big bags (under project's Component 1 – Remediation of Selected Legacy Industrial Waste Disposal Sites). The in situ contaminated sediments are expected to remain. 2007 – 2009: Export of around 210 t of PCBs contaminated equipment and wastes from aluminum and steel industries
POPs pesticides stocks identified	No.
Mercury stocks identified	No.
Total PCB contaminated oils and transformers identified	Unknown how many PCB contaminated transformers will be left after UNDP project; it is estimated (based on the spring 2018 UNDP project inventory for the APP - Aluminum Plant Podgorica - site) around 40 currently in use transformers may remain at the APP (up to 200 t total weight).
National capacity for POPs analysis	Yes, Centre for Eco-toxicological Research

	Morocco
PPG Review type	Desktop and EIB mercury related field assessment (including visit to COELMA site)
NAP (2016)	NAP hot spots include Tanger and Tetouan, the latter being location where COELMA chlor-alkali plant – potential mercury disposal site - is operating. NAP prioritizes reduction and control of mercury related pollution, by *inter alia*: 20% annual reduction of mercury discharges from COELMA; decontamination of sites polluted by Hg beginning with highly contaminated sites (by 2020); and collection of 30% of mercury waste. NAP also proposes replacement of the mercury electrolysis production process used by COELMA with membrane electrolysis.
NIP (2017)	The NIP prioritizes continued removal of identified stocks of PCBs and POPs pesticides. It identifies: heptachlor (9600 kg), stored at FERTIMA de Oued Zem; and 21,294 kg of HCH stored as obsolete pesticides mainly in Tiznit. The 2017 NIP refers to a 2010 inventory: 20 Kg of chlordane located at the Salé SPV; 181Kg of Dieldrin at Marrakech SPV (106 kg) and the remaining 75 kg is in the Séfrou experimental area; 790Kg of lindane split between El Kelaa Des Sraghna and El Hajeb; and 733Kg endosulfan at various sites (including 171 Kg at Kelaa des Seraghna and 148Kg at Chtouka Ait Baha). Equipment containing/ contaminated with PCBs (based on inventory from February 2016) included: 8 t with pure PCBs; 198 t with contamination levels above 5,000 ppm; 468 t with contamination levels below 5,000 ppm. The new POPs addressed in the NIP Update are PBDE, HBCD and PFOS. PFOS: inventory estimates 13 tonnes per year in the coatings sector (paper, carpets, leather and furnishing fabrics); no estimate of imports of firefighting foams. HBCD: 7,174 tonnes each of XPS and EPS imported into the country over 15 years (data from 1998-2013), totaling 14,348 tonnes, equivalent to up to 229 tonnes of pure HBCD. No information is provided on imports of either the polystyrene pellets or HBCD. HBCD was also calculated at up to 229 tonnes in textiles in vehicles (in service, imported, or at end of life, again for the reference date of 2013).
Minamata status	Signed in Minamata 2014. MIA is underway, with support of UNDP (GEF ID 9343)
Significant previous/current chemicals/clean up projects	2018- 2021 (GEF ID 9916, UNIDO): Making PCB and elimination sustainable in Morocco (USD 1,826,484). Under Component 3 of the project (*PCBs elimination and promotion of Africa's first PCB decontamination platform*), the following outputs are planned: 613 tons of PCBs-contaminated equipment and 2.4 tons of pure PCBs oil are sent abroad for safe elimination; 1,740 transformers with 541 tons of dielectric oils are locally decontaminated. 2009- 2014: Safe PCB Management Programme in Morocco, *Pillar II* (GEF ID 3883), the cleaning and treatment of contaminated oil started in February 2016 and continued until March 2017 resulting in the treatment of 450 transformers, with 110 t of contaminated oil (US$2,437,600). By April 2017, 371 pieces of equipment were processed, with 88.57 tonnes of oils and 500 tonnes of solid mass being decontaminated. 2008 – 2013: Safe Management and Disposal of PCBs (GEF ID 3082), *Pillar I*: over 1,080 tons of PCBs-contaminated equipment

	and wastes containing PCBs were exported to France for elimination (at TREDI facility) (US$2,198,000);
POPs pesticide stocks identified	2010 inventory (described above) includes over 30t of POPs stocks.
Mercury stocks identified	Unconfirmed stocks of mercury in storeroom (from 2017 EIB report) 65 bottles of 34.5 kg of mercury (total 2.2 tonnes) are stored in the plant's facilities. It is not clear if this privately operated facility would agree to the project disposing of these stocks (they may be used for ongoing activities).
Total PCB contaminated oils and transformers	Equipment containing/ contaminated with PCBs (based on inventory from February 2016) included: 8 t with pure PCBs; 198 t with contamination levels above 5,000 ppm; 468 t with contamination levels below 5,000 ppm. Ongoing PCB project with UNIDO (GEF ID 9916) to dispose of contaminated equipment.
National capacity for POPs analysis	Yes, Laboratoire OKSA-Maroc. PFOS analysis at National Laboratory for Pollution Studies and Monitoring and Public Testing and Study Laboratory (LPEE)
New POPs status as determined during PPG phase	About 10 companies identified as potential users of HBCD in EPS XPS production. Training on new industrial POPs planned for October 2018. Legislation: - Polluter Pays Principle: Law 36-15 on water established fundamental principles (right to water, decentralized management of resources) and establishes a water police with a judicial function to monitor compliance, exercised under the authority of the public prosecutor by sworn agents coming from the various services of the State. - No PFOS limits in water legislation. Institutions responsible for updating these water quality standards are: the Moroccan Institute for Standardization (IMANOR), National Office of Electricity and Drinking Water (ONEE), Ministry of Health. - The import and export of products is governed by Law No. 91-14 on foreign trade in goods and services. However, there is no specific regulation or performance standards for fire-fighting foams. - Extended Producer Responsibility is established under Framework Law 99-12 on the National Charter for the Environment and Sustainable Development; and will be included in an ongoing revision of the Law 28-00 on the management and elimination of waste. EPR is being applied in several sectors in Morocco such as used batteries, tires, etc. Procurement: There is no criteria - laws to avoid PFOS foams on Public procurement. For the procurement of equipment, public institutions launch a tender in accordance with Decree No. 2-12-349 of 20-03-2013 relating to public procurement. There are no criteria on the supply of PFOS free foams. Contaminated sites: draft Bill for the protection of the soils including instruments related to land use, soil pollution, rehabilitation of sites and responsibility for land degradation.

	Tunisia
PPG Review type	Desktop review and country missions focusing on POPs/ PCBs, (Feb 2018) and site visit to Kasserine/ SNCPA site for mercury wastes assessment (Apr 2018)
NAP (2015)	The NAP identified: Golfe de Tunis – with four specific sub-locations (administrative units) that were categorized either as priority hot spots (category A) or critical locations (hot spot category B): Bizerte (B); Ariana (A); Tunis (B); Ben Arous (B); and Nabeul (B); and Golfe de Gabes – with two specific sub-locations (administrative units) that were categorized as follows: Sfax (B) and Gabes (B). No specific impact of POPs/mercury pollution mentioned in relation to identified hot spots.
NIP (2017)	There are 6 sites where stocks of POP pesticides, including Lindane, Hexachlorocyclohexane (HCH) and DDT, are found. Quantities are estimated at 68.6 t. The NIP includes initial inventories for PFOS and HBCD. HBCD: estimates annual sales are about 85 tonnes (equivalent to 3,400 – 17,000 tonnes of EPS/XPS) PFOS: Four sectors prioritized (industrial, manufacturing, chemical especially fire-fighting foams, and waste, especially stocks and contaminated sites), inventory estimates quantities from 18 -160 tonnes / year.
Minamata status	Signed.
Significant previous/current chemicals/clean up projects	2017-2018: Tunisian Government funded programme on management of mercury wastes at National Society of Cellulose and Paper Alfa (SNCPA) site in Kasserine resulted in repackaging and storing on the site of: 0.65 t metallic mercury; 25 t of sand and gravel (1,000-3,900 ppm); 0.78 t carbide waste (25,000-39,000 ppm); 15 t scrap metal (27-160 ppm): and 6 t activated carbon (19,000-40,000 ppm). Estimated mercury content in these wastes is 0.16-0.37 t 2015-2018: Improve Mercury Management (GEF ID 8000, UNIDO). The 2017 UNIDO study[33] estimated around 30 t of mercury (15 t in the cells, 15 t in the decomposers) were abandoned on the site in 1998 when chlor-alkali technology was phased out. 2010-2017: Demonstrating and Promoting Best Techniques and Practices for Managing Healthcare Waste and PCBs, (GEF ID 2995), GEF-funded project (implemented by the World Bank) addressing health care wastes and PCBs management that was completed in May 2017. 1,100 tonnes of PCBs/ PCB contaminated equipment were exported to Belgium for destruction/ decontamination. The project supported a range of other activities including development of PCBs dynamic inventory, identification of contaminated sites and others. Activities were implemented in the period 2013 – 2017 (the budget for the PCBs component of the project was USD 2.4 million).
POPs pesticide stocks	Lindane, Hexachlorocyclohexane (HCH) and DDT, are found. Quantities are estimated at 68.6 t.

[33] UNIDO (2016) Synthèse des travaux sur la contamination Hg du site du complexe SNCPA et ses environs à Kasserine

identified	
Mercury stocks identified	SNCPA plant, Kasserine: 0.65 tonnes metallic mercury stored in 5 x 150L stainless steel containers; >30 t of highly contaminated wastes (1,000 – 40,000 ppm) (stored in 300 x 1-1.5t bags)
Total PCB contaminated oils and transformers	Remaining quantity of PCBs is 1,380 t, including 200 t in stocks (the rest is in use). In total, 28 sites contaminated with PCBs are identified, and the quantity of contaminated soil at these sites is estimated at around 300 t. The PCBs stock (cca 200 t) is spread across more than ten Governorates.
National capacity for POPs analysis	Yes, Tunis International Centre for Environmental Technologies (CITET) and other laboratories
New POPs status as determined during PPG phase	The National Office of Civil Protection (ONPC) reports to the Ministry of Environment, on use of 70 tonnes of fire-fighting foam per year; and the Civil Aviation and Airports Authority (OACA) reports use of 15 tonnes of powder and liquid foams per year. A list of seven companies were identified that are potentially using HBCD in EPS XPS production. Legislation and standards: national drinking water standard does not limit PFOS. Standards can be amended by ministries of Health or Environment, and by INNORPI (National Institute for Standards). No information was available on fire fighting performance or import regulations or standards.

	Turkey
PPG Review type	Desktop review
NIP (201x)	The NIP was updated in 2016, with detailed inventories of new POPs included (see below)
Minamata status	Signatory as of 24/09/2014. Not yet ratified.
Significant previous chemicals/clean-up projects	MedPartnership project with UNEP MAP disposed of 634 tons out of 1080 tonnes pure PCB inventoried. Current project 'POPs Legacy Elimination and POPs Release Reduction Project' (GEF ID 4601 with UNDP, until 2019) aims to dispose of a further 280 tons of PCB.
POPs pesticides stocks identified	Current GEF project disposing of approximately 2000 tonnes of lindane; however up to 500 tonnes may remain at the end of the project due to budget limitations.
Total PCB contaminated oils and transformers identified	Based on the NIP and current disposal operations, there will remain 166 tons of PCB waste. In addition there is an estimated 150 tons of pure or high concentration PCB equipment in use in the network, with a more detailed analysis of 8000 transformers ongoing under the current project, which is anticipated to increase the total amount of PCB for management
National capacity for POPs analysis and destruction	Current GEF project determined the status of public and private labs for POPs analysis. Based on this, currently, most of the public and private labs were accredited for POPs analysis including new POPs. However, it is necessary to have some background analysis study for POPs and Mercury in Turkey in order to have a baseline exposure situation of the country. Turkey has three licenced hazardous waste incineration/pyrolysis plants with capacity of 35.000 t/y for IZAYDAŞ (Incineration), 17.000 t/y for PETKİM (Incineration) and 100.000 t/y for ITC Turkey (Pyrolysis). Within the Current GEF project, a capacity building and test burn trial was completed for IZAYDAS plant and it is proved that IZAYDAS facility is compliant with criteria set out in Stockholm and Basel Conventions.
New POPs status as determined during PPG phase	Inventories of new POPs were done in the NIP update and estimate the following total amounts: - C-PentaBDE in vehicles as at 2012: 59 tonnes in use vehicles; 303 tonnes in end-of-life vehicles - HexaBDE and heptaBDE in stocks of CRT computer monitors in 2013: 168 tonnes, including 80 tonnes in recycled polymers. In addition, the Customs Office reports import of 547 tonnes of diphenyl ether and 177 tonnes of penta/tetra bromodiphenyether imported between 1996 – 2013 (17 years). - HBCD: The national Chemicals Registration System has reported 3500 tonnes of HBCD placed on the market for XPS and EPS sectors between 2009 – 2011. As of 2019, companies will be required to report stockpiles to the government under the POPs by-law. Authorities estimate stocks of approx. 100 tonnes of pure HBCD and 200 tonnes of HBCD containing articles will be notified over the MedProgramme project period.

Concurrently with baselining work the participating countries confirmed national priorities from among the total stocks of wastes identified. This consultation process included presentations at regional consultation events (MED POL focal point meeting in May 2017; first MedProgramme Regional consultation meeting in Athens in March 2018 and second meeting in Paris in September 2018), as well as numerous bilateral consultations and communications requesting MED POL and SCP RAC focal points to confirm interest in participating in the regional project, to send estimates of POPs, PCBs and mercury stockpiles, and to discuss and confirm the priorities set out below (Table 8). The table confirms that the total PCB and POPs wastes prioritized by the nine participating governments and potentially available for Phase 2 disposal under the project is in excess of 2000 tonnes, in addition to the 586 tonnes already verified for immediate disposal.

TABLE 8*:* PARTICIPATING COUNTRY PRIORITIES

COUNTY	COUNTRY EXPRESSED PREFERENCE/PRIORITY	PRIORITY STATED
ALBANIA	1. Complete inventory for transformers suspected for PCBs contamination (est 6,000 transformers) 2. Disposal of 200 t of PCBs contaminated equipment and oil	1 and 2: Direct consultation with Albania MED POL Focal Point, May – Sept 2018
ALGERIA	1. PCBs disposal –1,968 t from coastal regions, including: 316 t (ready for disposal); 500 t high priority from public institutions (requiring verification); 1,152 t lower priority (requiring verification). 2. Disposal of mercury wastes from GIPEC company, Baba Ali, Algiers (17 t verified); and 1.5kg from Tizi Ouzu WWTP	1 and 2: Country mission February and September 2018, and subsequent direct consultations (communication with the Ministry of Environment April – September 2018) and MedProgramme Regional Consultation Meetings (March and September 2018)
BOSNIA AND HERZE-GOVINA	1. Verification and disposal of mercury wastes from HAK Tuzla site (3 t metallic mercury and 15.3t of wastes verified in 110 drums, 60 l volume)	1: Direct consultation with BiH MAP and MED POL Focal Points, August 2017 and MedProgramme Regional consultation meeting (March 2018, Athens)
LEBANON	1. PCBs disposal – a total of t 1,052 including: a. 272 t Phase 1 b. 780 t Phase 2 2. Dechlorination - 126 t of PCB contaminated oil from transmission (in-use) transformers 3. Priority remediation measures for Baouchrieh hot spot (PCBs contaminated transformer maintenance and storage site) 4. Prevention of New POPs: PFOS-PFAS (fire-fighting sector); and SCCP (in PVC sector).	1 – 3: Country mission December 2017 and direct consultations (with the Ministry of Environment) February – Sept 2018 4. SCPRAC country Mission April 2018, consultation with the Ministry of Environment and Ministry of Industry.
MONTE-NEGRO	1. Disposal of up to 200 t PCBs contaminated equipment that may remain after completion of UNDP (GEF ID 9045) project (to be completed 2021) 2. Assessment study for remediation of contaminated sea sediments at Bijela hot spot (shipyard)	1 and 2: MedProgramme Regional consultation meeting (March 2018, Athens and Sept 2018, Paris)
MOROCCO	1. Inventory and disposal of 32 tonnes of POPs wastes (including pesticides) 2. Prevention of New POPs: PFOS-PFAS - (fire-fighting sector); HBCD (in EPS-XPS Sector) and	1: Consultation with Morocco MED POL Focal Point, June – August 2017, confirmed no priority POPs/PCBs for disposal.

	SCCP (PVC sector)	2. SCPRAC country mission May 2018, confirmed with the Ministry of Environment.
TUNISIA	1. Disposal of 68 t of POPs pesticides 2. Disposal of 200 t of PCBs contaminated equipment 3. Disposal of mercury wastes from SNCPA plant, Kasserine (0.65 t metallic and up to 47 t of highly contaminated wastes). Assessment of former electrolysis cells to identify pockets with elemental mercury 4. Prevention of New POPs: PFOS-PFAS (fire-fighting sector); and HBCD (EPS-XPS Sector).	1 – 3: Country missions February and April 2018 and direct consultations (communication with the Ministry of Environment) March – Sept 2018 4. SCPRAC Country mission May 2018, consultation with Ministry of Environment, Ministry of Industry, Ministry of Energy, Tunisian National Office of Civil Protection (ONPC) and Civil Aviation and Airports Authority (OACA)..
TURKEY	1. Disposal of 300 tonnes of PCB 2. Prevention of use of HBCD in various sectors (est 1000 tonnes per year) and disposal of est 100 tonnes pure HBCD and 200 tonnes of HBCD containing articles. 3. Collection and disposal of 100 tonnes of PBDE from established electronics and end-of-life-vehicles recycling/dismantling facilities.	Country consultation November 2018 at Minamata CoP Submission received from Ministry of Environment January 2019

A1.2.2 International Waters baseline scenario

Over the last 20 years the GEF has provided significant support for regional efforts aimed at identifying and accelerating key reforms and investments in the region. The GEF IW projects with a total budget of over USD 21 million were implemented by UN Environment/ Mediterranean Action Plan (MAP) assisting the Mediterranean countries with identification of priority actions, Strategic Action Programmes (SAP) elaboration and implementation, and with development of tolls and mechanisms to address climate variability .

The landmark developments of relevance for monitoring in the Mediterranean to identify trends and monitor progress to impacts include the adoption of the EU MSFD in 2008[34] and a parallel effort of the MAP – Barcelona Convention system to put in place an ecosystem-based approach to managing and monitoring the state of coastal and marine environment. Adoption of SDGs represents another key development.

In addition to IMAP and Common Indicators Development, work under the MAP system and related initiatives (e.g Horizon 2020 initiative to depollute the Mediterranean by 2020) resulted in the adoption of an elaborate set of indicators to monitor, among other things, implementation of the Mediterranean Strategy on Sustainable Development (MSSD), NAPs (developed under the LBS Protocol, containing measures and timetables to implement SAP MED and achieve GES), Regional Action Plan on Sustainable Consumption and Production (SCP) in the Mediterranean, Regional Strategy for Prevention of and Response to Marine Pollution from Ships 2016-2021 and other policies and plans at regional and national levels. The set of indictors used in the MAP – Barcelona Convention system is being increasingly aligned with the relevant SDGs.

Important steps in the implementation of the EcAp Roadmap by MAP/ Barcelona Convention were adoption of 11 Ecological Objectives, 61 indicators and definition of GES and targets in 2012, followed by the IMAP Decision (IG.22/7) in 2016 on the Integrated Monitoring and Assessment Programme in the Mediterranean that comprises

[34] Requiring the EU Member States to develop monitoring plans based on a set of detailed common criteria and indicators.

23 (state and impacts) Common Indicators addressing marine pollution, biodiversity, fisheries, coastal issues and marine litter. These posed several challenges for the Barcelona Convention Contracting Parties to redesign their national monitoring programmes in line with IMAP and its 23 Common Indicators also covering the offshore areas beyond coastal or territorial waters. For pollution monitoring, countries are expected to build upon their MED POL monitoring programmes and database[35] (covering agreed parameters and stations in key hotspots and coastal areas). Very little data exists for majority of the Common Indicators, particularly in the GEF eligible countries of the Mediterranean; exceptions refer to some contaminants, nutrients and chlorophyll data.

Several databases and data platforms that are relevant for the Mediterranean exist in Europe, the main ones include Copernicus (Marine Environment Monitoring Service)[36], the European Marine Observation and Data Network EMODnet[37], and THE MEDLEM (MEDiterranean Large Elasmobranchs Monitoring) PROGRAM and database application[38]. The above consist of indicators assessing the state and impact of the marine environment and are populated mainly with relevant data from the EU Member States.

The main UN Environment/ MAP portals include the MED POL Info-system, a Mediterranean Integrated Geographical Information System on Marine Pollution Risk Assessment and Response[39], the SPA/RAC[40] Mediterranean Database of Cetacean Stranding (MEDACES)[41], its Mediterranean Invasive Alien Species (MAMIAS) database and MedPAN database on Marine Protected Areas[42], Mediterranean portal on Climate Adaptation and ICZM[43] and the Pegaso Geoportal on ICZM[44]. MAP's Regional Activity Centre for Information and Communication (INFO-RAC) is coordinating efforts on the establishment of an umbrella Info-MAP[45] System.

Moreover, the Mediterranean countries are in the process of developing their national SDG indicators. At the regional level, work is ongoing under the MAP/ Barcelona Convention to develop and populate a dashboard of indicators to assess the MSSD implementation (in addition to the work on the development of a number of SCP, LBS NAPs implementation and other relevant indicators).

As regards the climate change monitoring, the IMAP Guidance[46] recommends the following should be duly considered in designing the IMAP and defining GES:

- Climate change is influencing the characteristics of the marine environment and can be expected to affect hydrological conditions (e.g. sea level, wave action from increased storminess, water temperature, water circulation patterns), water chemistry (increased acidification) and biodiversity (e.g. species range changes due to sea temperature changes).
- It is relevant to determine GES in a way which takes account of changes in species composition and range due to the dynamics of the marine and coastal ecosystems, some of which may be affected by climate-induced effects.

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[35] Developed since 1999; in 2006, MED POL IV Monitoring Programme was initiated.
[36] http://marine.copernicus.eu
[37] http://www.emodnet.eu
[38] http://www.arpat.toscana.it/temi-ambientali/acqua/acque-marine-e-costiere/medlem/pr_medlem_en.html
[39] http://medgismar.rempec.org
[40] MAP's Regional Activity Centre for Specially Protected Areas
[41] http://medaces.uv.es/home_eng.htm
[42] http://www.mapamed.org
[43] http://medicip.grid.unep.ch
[44] http://pegasosdi.uab.es/geoportal
[45] Info-MAP is a node for the collection and sharing of monitoring data and the implementation of IMAP indicators.
[46] Draft Integrated Monitoring and Assessment Guidance, UNEP(DEPI)/MED WG.420/4

- Monitoring the effects of climate change-induced pressures is important. It is important to be able to distinguish wider climate-change effects (e.g. temperature, acidification, biodiversity) from more local effects caused by other anthropogenic pressures, as these latter cases are the most practical to address within the context of the IMAP.

The 2017 MED QSR formulated a set of recommendations to address monitoring and data related gaps and needs, including general (applicable to all Common Indicators) and recommendations relevant for different clusters (e.g. biodiversity, coast and hydrography, pollution and litter) of Common Indicators; selected recommendations are presented in Box 1.

Box 1: Addressing monitoring and data related gaps and needs in IMAP implementation

General recommendations
– Harmonize and standardize monitoring and assessment methods. – Improve availability and ensure long time series of quality assured data to monitor the trends in the status of the marine environment. – Improve availability of the synchronized datasets for marine environment state assessment, including use of data stored in other databases were some of the Mediterranean countries regularly contribute. – Improve data accessibility with the view to improve knowledge on the Mediterranean marine environment and ensure that Info-MAP System is operational and continuously upgraded, to accommodate data submissions for all the IMAP Common Indicators.
Pollution and Litter
– Further develop harmonized monitoring protocols, risk-based approaches, analytical testing and assessment methodologies for monitoring levels of the contaminants in commonly consumed sea food. – Test new research-proved tools for monitoring toxic effects. – Develop region-wide harmonized criteria for reference condition and threshold/boundaries values for key nutrients in water column, taking account of available standards for coastal waters. – Continue the work on underwater noise and its impact on marine fauna, in close collaboration with the relevant bodies, especially ACCOBAMS. – Improve knowledge on Emerging Chemicals. – Ensure testing of the Background Assessment Criteria (BACs) and Environmental Assessment Criteria (EACs) and thresholds application on a trial basis in interested countries and regional and sub-regional level. – Follow up development of harmonized and standardized monitoring and assessment methods for marine litter and its impacts, including through active participation of MAP in relevant processes such as the ongoing work of MSFD Technical Group on Marine Litter.

Source: 2017 MED QSR

The MAP – Barcelona Convention information system is undergoing significant changes. The alignment of the MED POL IV Monitoring Programme with the requirements of the IMAP highlighted a set of new challenges for the Contracting Parties in the process towards setting up of a fully-fledged and operational Info-MAP System. These are mainly linked to the following: i) improved availability of long time series of quality-assured data to monitor the trends of the status of the marine environment; ii) revised temporal and spatial scale of monitoring programmes (e.g. eutrophication becomes integral part of monitoring programme, whereas it was previously implemented through pilot approaches; temporal trends of selected contaminants at the designated hot spot sites in the coastal marine environment and coastal reference stations to be extended as appropriate to the offshore area, etc.), and iii) enhanced data quality assurance and control.

Monitoring programmes typically cover various stratums of coastal and marine waters. Box 2 provides information on the sequence of the main maritime zones (including internal and territorial waters, contiguous

and exclusive economic zone, and high seas) based on the UN Convention on the Law of the Sea (UNCLOS) definitions.

Box 2: Main maritime zones

Based on the UN Convention on the Law of the Sea (UNCLOS), the following five main maritime zones can be singled out:

- Internal waters: littoral areas such as ports, rivers, inlets and other marine spaces landward of the baseline (low-water line);
- Territorial waters: extending 12 nautical miles from the baseline;
- Contiguous zone: an intermediary zone extending to a maximum of 24 nautical miles from baseline;
- Exclusive economic zone (EEZ): another intermediary zone, lying between the territorial and the high seas to the maximum extent of 200 nautical miles;
- High seas: areas beyond 200 nautical miles from shore i.e. beyond national jurisdictions.

Source: adapted from the UN Convention on the Law of the Sea

The coastal waters zone – commonly defined as an area extending one nautical mile on the seaward side from the baseline – is also important for monitoring purposes. Recent reviews (e.g. 2015 Mediterranean Regional Report by Milieu Ltd) of the monitoring programmes in the EU Member States showed coastal waters were the most covered zone while the scope and frequency of monitoring reduced in the successive maritime zones. The current pollution monitoring programme established in the framework of MAP – Barcelona Convention focuses on coastal areas close to land-based pollution sources[47], while the scope of IMAP is wider and is meant to cover areas beyond coastal or territorial waters. The IMAP implementation will thus require revisions of the spatial scale and extension of the networks of monitoring stations to the offshore areas. To this end, the need has been established to support the GEF eligible countries of the Mediterranean with IMAP implementation to also cover the areas that are not directly impacted by the land-based sources.

A1.2.3 International waters baseline projects and activities

Following the 2005 TDA, a Strategic Action Programme for land-based pollution (SAP MED) was elaborated through the UN Environment MAP/ GEF project and adopted by the Barcelona Convention Contracting Parties covering the period to 2025. Strategic Action Programme for the conservation of Biological Diversity (SAP BIO) was adopted in 2003, also in the framework of the MAP – Barcelona Convention system and supported by GEF; SAP BIO underwent an update on climate change issues in 2009. Other important processes that have set regional priorities include projects, studies and coordination mechanisms implemented under Horizon 2020 initiative to depollute the Mediterranean by 2020, hot spots identification (for different marine regions/ sub-regions), adoption of legally binding instruments (Regional Plans) under the Barcelona Convention Land-based Sources (LBS) Protocol, preparation of the State of the Environment reports, and others. National-level priority setting has taken place through preparation of national actions plans for the implementation of relevant regional strategies (e.g. SAP MED, SAP BIO), Conventions (e.g. Barcelona, Stockholm), Protocols and Regional Plans, as well as through inventories of hot spots/ sensitive areas and loads of pollutants discharged into the Mediterranean.

Moreover, evaluation of the Barcelona Convention SAPs and NAPs (National Action Plans) implementation, as well as the revision of the NAPs have all contributed to strengthening of the knowledge base on the state of the environment in the Mediterranean and on the key drivers of environmental change. Over 100 technical reports

[47] In line with Article 12 of the Barcelona Convention and Article 8 of the LBS Protocol which, among other things, require the Contracting Parties to assess, as far as possible, the levels of pollution along their coasts, in particular with regard to the sectors of activity and categories of substances listed in the annex I of the Protocol.

were produced during the lifespan of the MedPartnership project on various issues including pollution, aquifers, MPA's and fisheries. In addition, a significant number of marine related research projects has been supported by the EC and other actors in the last decade, with many projects in recent years also attempting to bring together science and policymaking.

The main projects of relevance for the TDA update that are currently under way or being conceptualized include preparation of State of the Environment and Development Report (SoED) 2019, MED 2050 Foresight Study on the Environment and Development in the Mediterranean, and 2023 Mediterranean QSR.

The SoED 2019 is designed as a comprehensive and up-to-date assessment of the environmental status and sustainability issues related to the environment and development in the Mediterranean, in the context of the mandate of the MAP/ Barcelona Convention. By applying an integrated, systemic and holistic approach, the SoED 2019 is expected to increase awareness and understanding of environmental and development status and trends in the Mediterranean, their driving forces and impacts. It is designed to provide an up-to-date foundation for improved decision-making at all levels and to enhance the delivery of the 2030 Agenda, the achievement of its SDGs, and the implementation of the MSSD. The report is being developed by Plan Bleu with the support of all MAP components (UNEP/ MED IG. 447/3).

Plan Bleu is also leading preparation (over 2018 – 2021 period) of the MED 2050 Foresight Study, in line with COP 20 Decision (Annex 2, Decision IG.23/4). The MED 2050 is conceived as an original science-policy interface that will involve decision-makers and stakeholders in a participatory approach and help generate contrasted visions across the Mediterranean. It will capitalize on previous and on-going works, including the SoED 2019, while reinforcing dissemination, communication and capacity building. MED 2050 will also build on existing and on-going foresight studies and fill critical gaps identified in the benchmark study of 35 foresight exercises conducted in the Mediterranean region over the last 15 years. (Annex 4, Information Document UNEP/MED WG.447/Inf.4)

Preparation of the 2023 QSR has been initiated by the MAP, in line with the Decision IG.23/6 on the 2017 MED QSR. Based on the gaps underlined in the 2017 report, the focus in the coming period will be on the harmonisation and standardisation of monitoring and assessment methods, improvements in data availability, better use of existing datasets and improved accessibility of data, all of which are expected to lead to a more comprehensive and precise assessment of the status of the Mediterranean coastal and marine environment by 2023.

The EU funded EcAp MED II and Marine Litter MED projects are supporting IMAP implementation in conjunction with the assistance extended from the MAP core funds/ Mediterranean Trust Fund (MTF). The key activities include country-specific and sub-regional capacity building, and technical assistance. EcAp MED II project comprises several components such as support for IMAP implementation, strengthening of sub-regional cooperation, strengthening of science-policy interface, EcAp related data and information management, and mobilization of resources for IMAP implementation.

During the initial phase of IMAP implementation (2016-2018), significant progress has been made by all the Barcelona Convention Contracting Parties. The biodiversity and non-indigenous species (NIS) parts of national IMAP-based monitoring were developed for all Southern Mediterranean countries with the technical support of SPA/RAC under EcAp MED II Project. The assistance has also been extended to a number of countries (Egypt, Israel, Lebanon, Libya and Morocco) with the aim to: i) support ongoing implementation of the MED POL IV Monitoring Programme, avoiding any discontinuity in submitting and assessing data related to marine pollution; ii) ensure gradual transition to new IMAP-based monitoring of marine environment, as well as to iii) support implementation of some pilot projects which include marine litter monitoring. Data standards and data dictionaries for pollution and marine litter Common Indicators are being finalized. By mid-2018, the countries

were in the process of verifying the final drafts of the coast and hydrography monitoring programmes (or finalizing their drafts).

On the regional level, progress is noted with regards to the update of the pollution assessment criteria and thresholds. Twenty-four new/ updated pollution assessment criteria were approved by the COP 20 with the aim to encourage the Contracting Parties and the MAP to test them for indicative purposes in the different contexts that exist in the Mediterranean.

INFO-RAC is developing Info-MAP platform and platform for the implementation of IMAP, connected to MAP Components' information systems and other relevant regional knowledge platforms. For example, efforts are underway to ensure MED POL online database (developed in 2012) is made available to all Contracting Parties to report their monitoring data and to view their past reports. MED POL data collected since 2000 are being re-uploaded by INFO-RAC into the system to ensure availability of MED POL online database for inclusion into IMAP compatible Info-system. The IMAP Info-system is expected to enable IMAP-related reporting as of May 2019 for 10 IMAP Common Indicators. Conceptual model for the development of the pilot Info-system is shown in Figure 3.

Science-policy interface (SPI) in IMAP implementation has been addressed through a set of activities led by Plan Bleu aiming to promote and encourage exchanges between scientists and environmental decision makers. Considering that only a small fraction of relevant marine scientific knowledge is actually used for management and implementation of marine policies, five regional SPI workshops took place between December 2015 and April 2017 gathering scientists and decision makers to discuss pre-determined issues, mainly the gaps in scientific knowledge compromising the full implementation of the IMAP.

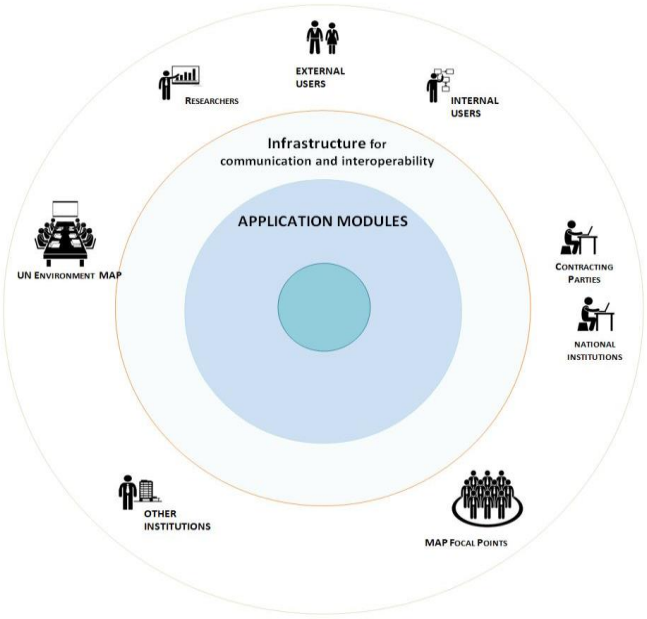
FIGURE 3: IMAP PILOT INFO-SYSTEM

General characteristics of the pilot Info-system

… presentation and operation in a highly integrated way, guaranteeing data sharing in line with agreed policy;

… a central core represented by a common database, by a set of autonomous application modules (software components) and by an infrastructure for communication and interoperability with other systems;

… the system allows the hierarchical distribution of users (external circle) according to Contracting Parties' needs.



Source: UNEP(DEPI)/MED WG.444/Inf.15

The EU funded ENI SEIS II South Support Mechanism project aims to contribute to the reduction of the marine pollution in the Mediterranean by developing a Shared Environmental Information System (SEIS) supporting the

regular production and sharing of quality assessed environmental data, indicators and information. The overarching principles guiding the development of SEIS are presented in Box 3.

Box 3: SEIS principles

The seven principles of the Shared Environmental Information System

1) Information should be managed as close as possible to its source;
2) Information should be collected once, and shared with others for many purposes;
3) Information should be readily available to public authorities and enable them to easily fulfil their legal reporting obligations
4) Information should be readily accessible to end-users, primarily public authorities at all levels, to enable them to assess in a timely fashion the state of the environment and the effectiveness of their policies, and to design new policy;
5) Information should also be accessible to enable end-users, both public authorities and citizens, to make comparisons at the appropriate geographical scale (e.g. countries, cities, catchments areas) and to participate meaningfully in the development and implementation of environmental policy;
6) Information should be fully available to the general public, after due consideration of the appropriate level of aggregation and subject to appropriate confidentiality constraints, and at national level in the relevant national language(s); and
7) Information sharing and processing should be supported through common, free open source software tools.

Source: Adapted from SEIS Communication, COM(2008) 46 final[48]

The ENI SEIS II (2016 – 2020) builds upon results of the preceding project Towards a Shared Environmental Information System in the European Neighborhoods[49] aiming to improve the availability and access to relevant environmental information to the benefit of effective and knowledge-based policy-making in the ENP South region[50]. The project is implemented by the European Environment Agency (EEA) in partnership with UN Environment/ MAP. The project inter alia supports further development of H2020 indicators to measure progress in achieving H2020 objectives as well as in complying with Barcelona Convention commitments (including, for example, implementation of the NAPs). Within the project component dedicated to development of indictors, an expanded set of NAP/ Horizon 2020 monitoring indicators has been agreed upon in April 2018.

ENI SEIS II is also supporting in-country processes for sharing the H2020 indicators data sets, use of existing data infrastructure, establishment and maintenance of national and regional environmental information systems and data sharing in line with SEIS principles, and preparation of indicator-based assessments. Specific activities are implemented to improve efficiency of existing data flows (in particular for PRTRs – Pollution Release and Transfer Registers), enhance synergies with the existing MED POL information system (NBB – national baseline budgets of pollutants) as part of the Info-MAP platform, and to support the creation of new data flows and quality assurance/ control procedures for the expanded set of NAP/ H2020 indicators. The project will also support preparation of the 2nd H2020 assessment report in 2019, covering all the Mediterranean countries and linking the EcAp and MSFD processes.

General Fisheries Commission for the Mediterranean (GFCM) initiated preparation of assessment reports for fisheries related Common Indicators (7 – 12); FAO assessments of the deeps sea fisheries are also relevant source of data.

[48] Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions - Towards a Shared Environmental Information System

[49] The project (completed in 2015) provided support to environmental and statistical authorities in 16 partner countries in the East and South European Neighborhood regions in promoting SEIS principles.

[50] Project beneficiary countries are Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia.

GEF ID 9545 project Implementation of Ecosystem Approach in the Adriatic Sea through Marine Spatial Planning (2016 – 2018) is aiming to restore the ecological balance of the Adriatic Sea through implementation of the ecosystem approach and improve sub-regional management capacity through Marine Spatial Planning.

The main objective of the GEF ID 9670 project Enhancing regional climate change adaptation in the Mediterranean Marine and Coastal Areas (associated to MedProgramme) is to enhance capacities of countries in the Mediterranean region to adapt to climate change with a view to influencing wider development processes in the region.

A1.3. Proposed alternative scenario

The objective of this project is to achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas.

This objective will be achieved through a multi-focal area collaboration between the GEF Chemicals and Waste and International Waters focal areas, with two project Components aiming to a) reduce land based sources of pollution (Chemicals and Waste component) and b) improve monitoring capacity in order to be able to measure these and future reductions in pollution levels (International Waters component).

Component 1: Chemicals and Waste, aims to improve human health and coastal habitats, through reduction of wastes and harmful chemicals (POPs and mercury) in coastal hotspots and catchment areas.
Based on the problem and objective analysis (Annex B) the component has been designed around: engaging with participating country governments on the provision of disposal options (for POPs) and long-term containment (for mercury); and raising awareness on new POPs in products and mercury in the healthcare sector, through targeted pilot activities to introduce alternatives. It is envisaged these activities will lead to the safe containment of mercury and mercury waste; the environmentally sounds management and disposal of PCB containing waste; and decreases in use of new POPs and mercury via a transition to environmentally sound alternatives in the region. Ultimately project activities should lead to a tangible reduction of land-based pollutants in Mediterranean countries, through the disposal of over 2,000t of POPs and over 50t of Mercury waste, in line with the Chemicals and Waste Focal Area objective CW2 to "*reduce the prevalence of harmful chemicals and waste and support the implementation of clean alternative technologies/substances*". The project will contribute to Programs 3 (Reduction and Elimination of POPs); and Program 4 (Reduction or elimination of anthropogenic emissions and releases of mercury to the environment).

The national baseline tables confirm the presence of potentially available wastes at higher levels than the project GEB targets:

TABLE 9: QUANTIFIED SUMMARY TABLE OF POTENTIAL GEB BY COUNTRY

Country	PCB and POPs disposal	Total potential - disposal	Total potential - prevention
Albania	Testing of est 6,000 untested transformers and potential disposal of 200 t PCB	200 t (PCB)	
Algeria	314 t (PCB contaminated oil and equipment confirmed for Phase 1 Disposal of est 1,654 t PCB including high priority 500t from public institutions 17 t metallic mercury from former chlor-alkali plants, GIPEC Baba Ali, Algiers; 1.5 kg from Tizi Ouzu WWTP	314 t (Phase 1) 1,654 t (PCBs) 17 t mercury	

Bosnia and Herzegovina	Disposal of 3 t metallic mercury and 15.3 t mercury contaminated wastes from former chlor-alkali plant HAK I Tuzla	18.3t (mercury)	
Lebanon	272t PCB contaminated oil and equipment confirmed for Phase 1 Up to 780t (PCB contaminated oil and equipment) Mobile dichlorination (decontamination) for 126 t of oil from large transmission transformers	272 t (Phase 1) 780 t (PCBs) 126 t (PCB in use)	
	Up to 22 tonnes foams in 2017 (Civil Defense, ports and others). Up to 3 tonnes HBCD imported per year/ est 600 tonnes XPS/EPS Medical wastes to be prevented in hospitals (tbc)		22 tonnes PFOS /yr 3 tonnes HBCD/ yr 600 tonnes products
Montenegro	Potential disposal of 200 t of PCB contaminated oil and equipment (if left after UNDP project)	200 t (PCB)	NA
Morocco	30 t of POPs waste to be inventoried, safeguarded and disposed of 2t of Mercury stored in COLEMA	30t (POPs) 2.2t (mercury)	
	Up to 15 tonnes of pure HBCD used per year / 1,000 tonnes EPS/XPS per year. PFOS estimate not available Medical wastes to be prevented in hospitals (tbc)		15 tonnes HBCD/ yr 1000 tonnes products
Tunisia	200 t of PCB contaminated oil and equipment 68 t of POPs waste to be inventoried, safeguarded and disposed of 0.65 t of metallic mercury at Kasserine site 47.7t of mercury contaminated wastes	200t (PCBs 68t (POPs waste 0.65t (mercury) 47.7t (mercury wastes)	
	Up to 85 tonnes of pure HBCD imported per year/ up to 20,400 tonnes EPS/XPS per year. From 18-160 tonnes PFOS foams per year Medical wastes to be prevented in hospitals (tbc)		85 tonnes HBCD/ yr 20,400 products From 18 tonnes PFOS/ yr
Turkey	166 tonnes PCB stockpiles remaining after current disposal project. 150 tonnes of in-use contaminated equipment. Up to 500 tonnes of lindane and pesticide wastes left after current disposal project.	166 tonnes PCB 150 tonnes PCB in use 500 tonnes POPs pesticides	
	ELV and WEEE facilities in Turkey can yield at least 100 tonnes of PBDE-contaminated wastes for disposal 3500 tonnes of HBCD used in XPS/EPS between 2009-2011. Est 300 tonnes of waste to arise for disposal during project.	100 tonnes PBDE wastes 300 tonnes HBCD wastes	1,166 tonnes HBCD/ yr

Potential disposal POPs	Confirmed PCB for Phase 1: Total potential PCB and POPs for Phase 2:	586t 4,424t	**Total Potential POPs: 5,010 t**
Potential disposal mercury	Metallic mercury: Mercury contaminated wastes:	22.85 t 63 t	**Total mercury: 85.85 tonnes**
Possible prevention POPs	Pure HBCD used per year: PFOS foams used per year: Products containing POPs per year:	1,269 t 40 t 22,000 t	**Total POPs used: 1,309 t per year**

The proposed remediation actions from Activity 1.1.4 (see below) would yield additional tonnes of GEB which cannot be quantified until initial reviews are completed.

The expected outcome will be achieved through activities under four outputs, structured so as to allow distinct reporting and financial management of the GEF funds being allocated under the POPs and mercury programs respectively:

Output 1.1: Management and disposal of POPs
Output 1.2: Management and safe storage of mercury
Output 1.3: Long term POPs reduction through pilot activities on new POPs alternatives
Output 1.4: Mercury reduction through pilot activities on mercury alternatives

Output 1.1 Management and disposal of 2,000 tonnes of POPs

Output 1 will be delivered in two phases, with a first phase of collection to secure, export, and dispose of 586 tonnes of PCB that were verified during the PPG phase as being ready for disposal. An additional 3000+ potential tonnes have been identified (see Table 9 above), however additional work is required to verify these stocks and to determine the highest priorities.

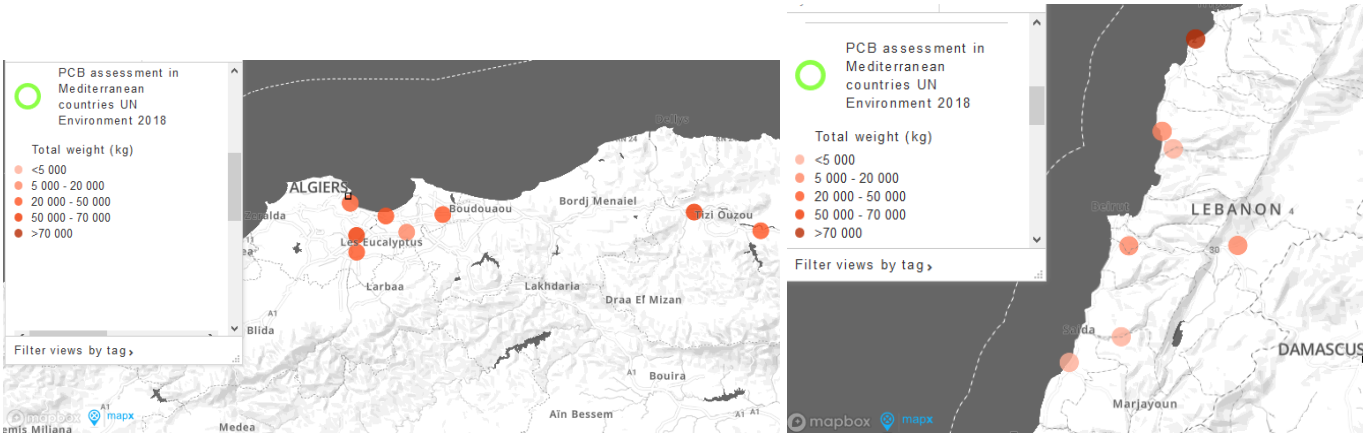
Activity 1.1.1: Phase 1 POPs disposal

The criteria for determining quantities of POPs and mercury to be included in **Phase 1** were as follows:

- fully inventoried on a per piece basis (i.e. individual transformers and other equipment are indicated in detail);
- confirmed as contaminated and, in the case of PCB contaminated oil, oil has been tested and PCB concentrations verified, or presence of pure PCBs established;
- declared by their owners to be available and ready for immediate disposal by the project, with adequate security measures in place to prevent stocks from being accessed and/or removed prior to project initiation.

This process defined 586 tonnes of Phase 1 stocks at 17 sites in Algeria and Lebanon, for which detailed Environmental Management Plans (EMP) were completed during the PPG (Annex J). The project proposes to initiate the disposal tender for these wastes immediately upon project launch, using the detailed inventory lists and Environmental Management Plans that were developed during the project preparation phase. Disposal of these wastes should be complete by the end of Year 2.

FIGURE 4: MAPS OF PHASE 1 STOCKS READY FOR IMMEDIATE ELIMINATION



Activity 1.1.2: Phase 2 POPs inventory and prioritization

Estimates made during the project preparation phase indicate there are greater volumes of POPs wastes present in project countries than can be accommodated in the project budget. The existing estimates summarized in the baseline section above (see Table 7) were gathered through consultations on NIP priorities, analysis of available

inventories (such as project inventories from Lebanon and site-specific assessment of an Aluminium Plant Podgorica in Montenegro) and desk research, but did not meet the criteria for **Phase 1**. As such, the project will invest in a more detailed inventory where comprehensive equipment lists are not available, to be able to prioritize which stocks can be addressed by the project. For inclusion in **Phase 2,** once the different priority wastes are characterized, a transparent and objective analysis will be made of the stocks based on the following criteria:

- Immediate risk to human health and environment; this will be assessed following an approach developed by FAO[51] based on a chemical risk factor and an environment/ exposure risk factor;
- Cost effectiveness and feasibility within the timescale of the project, including the priority expressed by governments and existence of political will and cofinance to address wastes;
- Balance between disposal of legacy accumulations of wastes, and contemporary accumulations, in support of prevention pilots;
- Equitable regional distribution of project activities across project countries.

Activities under this Output include:

- Field inventory of wastes in the project countries including training of national teams and use of an innovative mobile data collection app currently under development and allowing direct upload into GIS (MapX);
- Laboratory testing of oil from equipment to confirm contamination levels. As the number of samples are large a screening step will precede laboratory analysis to limit the number of samples analysed and contain costs.
- Upload, visualisation and environmental risk assessment of inventoried stockpiles in MapX, using a combination of waste data collected during inventory and GIS datasets to calculate the risk to health and environment (first criterion for prioritization above).
- Consultation with countries at Regional Steering Committee to confirm the prioritization and the wastes to be disposed in Phase 2.

Activity 1.1.3: Phase 2 POPs disposal

Following confirmation of stocks and prioritization of those stocks and/or contaminated sites for priority management and elimination, the same process will be followed as for Phase 1, namely:

- Development of regional disposal plan and budget for the prioritized wastes, including consideration of cost, number and types of procurement processes; different destruction options including export in line with Basel Convention requirements and in-situ options (e.g. mobile dichlorination) where economies of scale permit and are cost effective; and diverse funding basis including cofinance from countries and potential for investment for long term regional capacity development.
- Development of site-specific EMPs and tendering for repackaging and disposal services. Guided by experience from Phase 1, the project will seek to maximise the roles for national waste management and/or POPs-owning partners to ensure national capacity is built in both public and private sectors that can continue to address remaining stocks in the future.
- Training for management of disposal operations and supervision thereof by national Environmental Inspection services in the Ministries of Environment.
- Export and destruction of PCB and other POPs wastes in an environmentally sound manner.

[51] The risk factors proposed by the FAO methodology include consideration of multiple factors for each item of POPs waste (amount and type of waste; conditions of storage and possible leakage; store conditions and location with respect to sensitive populations or habitats or access to emergency services in the event of an accident). FAO (2009) Environmental Management Tool Kit for Obsolete Pesticides Volume 1 http://www.fao.org/tempref/docrep/fao/011/i0473e/i0473e.pdf

Activity 1.1.4: POPs remediation and assessment

Remediation actions and assessments proposed by project countries, including potential support to address POPs/ PCBs contamination at NAP hot spots (Baouchrieh, Lebanon and Bijela, Montenegro) and mercury contamination at Kasserine, Tunisia, would render additional GEB. Priority remediation actions identified:

- Baouchrieh site include drainage system improvement, pumping out the content of the site's well and disposal of the pumped oil/ sludge (estimated at around 100 t, highly contaminated).
- Assessment for Bijela site would look into options to remediate contaminated sea sediments
- Kasserine assessment would help identify pockets of metallic mercury at former electrolysis cells and propose an overall management plan for the contaminated site

Output 1.2: Management and safe storage of 50 tonnes of mercury

The project preparation phase has identified a combination of liquid mercury and highly contaminated mercury wastes which will be treated in an environmentally sound manner according to international standards on long term containment of mercury. The key activities for the elimination of mercury stocks are:

Activity 1.2.1: Confirmation of mercury stocks for disposal

The stocks of mercury for disposal that were identified in the PPG phase will be confirmed, including:

- Verification through site inspection and analysis where relevant.
- Support to countries in the process of ratification of the Minamata Convention where relevant and upon request by the countries (e.g. Algeria and Bosnia and Herzegovina, other countries as needed),
- Consultations with waste owners to confirm the availability of wastes for removal, and to arrange interim secure storage to ensure wastes do not leak or get diverted elsewhere (in the case of liquid mercury). This will also include any stockpiled mercury-containing devices identified in the national stock-take of the health sector and hospitals in Output 1.4 (see below).

Activity 1.2.2: Planning and disposal of mercury

- Detailed Environmental Management Plans will be developed for the safe management of the verified wastes, including centralization, transport, and disposal options.
- Tendering and disposal of wastes in line with the agreed Environmental Management Plans.

Output 1.3: New POPs reduction and alternatives pilot activities completed

Outputs 1.3 and 1.4 both seek to demonstrate the practical replacement of mercury and new POPs through adoption of environmentally sound alternatives in Mediterranean countries.

Prevention of the new POPs identified in the country NIPs will be focused on the following chemicals and sectors:

- **PFOS** will target Civil Defence and public firefighting organizations, as these are the single largest users of PFOS foams; and also due to the direct application of large volumes of foams directly onto soil and surface waters. While the gas & oil, and restaurant extinguishers sectors also import large volumes of PFOS, and may discharge unused foams directly to sewers, these are more dispersed among multiple users and not cost effective for a first pilot project to address.
- **HBCD** will target importers of EPS / XPS pellet and manufacturers of EPS / XPS insulation panels and architects, engineers, financiers and standard setting and procurement bodies who may have a role in setting specifications for building developments. Users in the building sector were prioritized over textiles in vehicles, which reported similar volumes in the NIP of Morocco, because of a more limited number of users in the building sector, compared to textiles that are in every imported-in service vehicles, trucks, etc.
- **SCCP** will target the whole sector of PVC production in Lebanon, which is known to use large quantities of chlorinated paraffins, while data is scarce for other SCCP priority sectors such as paints and sealants, metal working fluids, lubricants and rubber. Secondly, the Ministry prioritizes this sector due to the high potential

health impact for food-and water contact and medical applications such as PVC containers, PVC piping and PVC medical devices due to exposure to CPs.

Specific partners for each country have been identified during the PPG and are listed in the table in the 'Stakeholders' section of this document.

Activity 1.3.1: Pilot demonstration projects in three countries

The selection of countries and chemicals for the demonstration pilots was driven by eligibility considerations (that the country had included the new POP in its NIP update) and by feasibility considerations (e.g. political support and commitment from government and industries), which are provided in more detail in Table 10. In most cases NIP update inventories do not provide quantitative information, making it impossible for the project to estimate quantities of new POPs that could potentially be reduced in the pilot projects. However, these criteria resulted in the selection of the three potential demonstration pilots as summarized in the feasibility assessment table below.

The proposed mechanisms to effect change and change practices toward substitution of new POPs are similar for the three different chemicals/ sectors, and explicitly address the four main barriers identified earlier. Each pilot project will differ the details (e.g. products, users) and relevance of activities (not all activities will be needed in all pilots). These individual pilot distinctions are summarized in the feasibility assessment summary below. The common intervention points are the following:

a. **Accurate inventory and database**: a partial inventory for the priority sectors identified and database of current user and quantities of use of new POPs. The existing NIP update inventories will be confirmed and quantified using product sampling to confirm the presence of POPs; and by environmental sampling to confirm presence and impacts in priority endpoints (soil, surface water).
    - For PFOS, the inventory will cover import and use of PFAS, PFOA, and/or PFHxS and other PFAS chemicals. Sampling of PFOS in soil/ groundwater in key fire incident sites (Lebanon, see Table 10)
    - For HBCD, companies importing or using EPS/ XPS pellets, including sampling of pellets to confirm and quantify HBCD presence and concentration;
    - For SCCP, companies importing chlorinated paraffins for PVC production (see list of companies in the Stakeholder section A.3), and sampling of these to confirm SCCP content and concentrations (e.g. as pure SCCP or at significant levels in medium chain chlorinated paraffins (MCCP);
b. **Legal support** and a coordinated awareness campaign for technical staff and political decision makers and officials, aiming to support updated legislation with mandatory provisions to restrict the import, export and use of PFOS-PFOA fire fighting foams based on the Stockholm Convention requirements.
    - For PFOS, updating water quality standard to include mandatory PFOS limits; new regulation to restrict import and use of PFOS foams. Furthermore for PFOS, international performance standards exist for firefighting foams, e.g. US, France, Australia, UK. However only some of these allow/favour the use of fluorine free (F3) and solvent free foams (Australian, UK) so adoption of these can support phase-out of PFOS
    - For HBCD and SCCP the main legislation or provisions to be targeted are bans on import and use of these new POPs; and potential use of EPR legislation (where available) to oblige producers to manage wastes, thus providing incentives for adoption of alternatives
c. **Technical assistance** for testing and training in adoption of environmentally sound alternatives. This assistance will be provided directly to users and producers of new POPs and related products, and seek to unlock particular barriers include technical/ process barriers as well as procurement and financial barriers.
    - For PFOS, current tenders of firefighting foams in the public sector do not include any sustainability criteria, such as specifying PFOS free option. The pilots will support adoption of such sustainability criteria in the procurement of firefighting foams. Secondly, the project will

cover the cost difference of environmentally sound alternatives (Fluorine and solvent free foams) to substitute PFOS firefighting foams in several facilities.

- For HBCD, Technical assistance and training with key importers, retailers and producers of HBCD to promote environmentally sound alternatives and support testing and technology shifts to enable the substitution of HBCD in production processes. This may include supply of alternatives e.g. butadiene-styrene brominated copolymer to substitute HBCD in the EPS/ XPS construction sector.
- For SCCP, working with PVC producers to promote environmentally sound alternatives and support and co-finance testing and technology shifts to enable the substitution of SCCP (or MCCP with SCCP content above legal limits) in production processes.

TABLE 10: POPS PREVENTION PILOT PROJECT COUNTRY SUMMARY

	Lebanon	**Tunisia**	**Morocco**	**Turkey**
PFOS	*1. Inventory/database*: in civil defense, airports, ports and/or Oil & gas facilities. Sampling at fire sites: Ashrafieh, Beirut Port, Jnah, Zokak Belat, Koraytem, Zarif, Zokak Belat, Karantina, Talet Khayat, Biel *2. Legal support:* 2a. Product standards of the Lebanese Standards Institution (LIBNOR) adapted to reflect PFOS free performance. 2b. Current water quality standards with 'informative' PFOS limit of 200 mg/l to be made mandatory. 2c. New legislation drafted and adopted restricting import, export and use of PFOS-PFOA foams. 2d. Promotion of adoption of Extended Producer Responsibility (EPR) of products and waste. There is no law on EPR in Lebanon. *3. Technical support*: 3a. Supply of fluorine and solvent free firefighting foams at several facilities. 3b. Sustainability criteria introduced in procurement of firefighting foams.	*1. Inventory/database:* in civil defense and airports. *2. Legal support:* 2a. Product standards of the National Institute for Standards (INNORPI) adapted to reflect PFOS free performance. 2b. National water quality legislation was updated in 2018 but it does not contain PFOS limits. The revision of this regulation can be amended by the Ministry of Environment, Ministry of Health and the National Institute for Standards (INNORPI). 2c. New legislation drafted and adopted restricting import, export and use of PFOS-PFOA foams. *3. Technical support:* 3a. Supply of fluorine and solvent free firefighting foams at several facilities 3b. Sustainability criteria introduced in procurement of firefighting foams.	*1. Inventory and database* - civil defense and airports. *2. Legal support*: 2a. Product standards of the Moroccan Institute for Standardization (IMANOR adapted to reflect PFOS free performance. 2b. Amendment of no. 03.7.001 on human food including water quality by the Moroccan Institute for Standardization (IMANOR), National Office of Electricity and Drinking Water (ONEE) and Ministry of Health, to include PFOS limits. 2c. Amendment of legislation on import and export of products (Law No. 91-14 on foreign trade in goods and services) to restrict import, export and use of PFOS-PFOA foams. *3. Technical support*: 3a. Supply of fluorine and solvent free firefighting foams at several facilities 3b. Sustainability criteria in procurement of firefighting foams introduced under Decree No. 2-12-349 of 20-03-2013 on public procurement as needed	1. Inventory and database - civil defense and airports.
HBCD	*1. Inventory/database*: EPS/XPS users in the construction sector. Testing of pellets. *2. Legal support:* 2a. Product standards adapted to reflect use of HBCD free EPS/XPS, HBCD limit, ecolabelling and ESM.	*1. Inventory/database*: EPS/XPS users in the construction sector. Testing of pellets. *2. Legal support:* 2a. Product standards adapted to reflect use of HBCD free EPS/XPS, HBCD limit, ecolabelling and ESM.	*1. Inventory/database*: EPS/XPS users in the construction sector. Testing of pellets. *2. Legal support:* 2a. Product standards adapted to reflect use of HBCD free EPS/XPS, HBCD limit, ecolabelling and ESM.	1. Implementation of National regulation on HBCD stockpile reporting and replacement in manufacture of XPS/EPS. 2. Technical support to construction and plastic industry to extract POPs from waste for ESM and Prevention

	3. Technical support: 3a. Supply of alternative flame retardants (e.g. butadiene-styrene brominated copolymer)	*3. Technical support*: Green procurement and management by companies on HBCD use.	*3. Technical support*: 3a. Supply of alternative flame retardants (e.g. butadiene-styrene brominated copolymer)	
PBDE				Technical support to existing ELV and WEEE handling facilities to extract POPs from waste for ESM and Prevention
SCCP	1. Accurate inventory and database of current industrial use of SCCP and SCCP content in MCCP in PVC production. 2. Legal compliance of the Stockholm Convention on the import, export and use of SCCP and MCCP with SCCP content and green procurement and management by companies on SCCP use.	Not identified as a country priority at the time	Not identified as a country priority at the time	1. Accurate inventory and database of current industrial use of SCCP and SCCP content in MCCP in PVC production.

In the first phase, the pilots will be prioritized based on country readiness and potential for impact. In this phase funds have been allocated independently of the possible contribution to GEB targets. Once initial results are confirmed for example quantifying potential tonnes to be prevented in different sectors/ countries, and obtaining commitments for cofinance and for cooperation from countries and stakeholders (e.g. on updating of legislation or procurement processes), project funds will be allocated on the basis of the number of tonnes that can realistically be prevented.

Activity 1.3.2: Replication and expansion of prevention pilot projects
In the second half of the project each of the pilot demonstration projects will provide case studies which will be actively disseminated to other countries through the MedProgramme Knowledge Management system (Child Project 4.1) in varied formats (possibly including publications, Experience Notes, video documentaries for example). Targeted training will be rolled out on successful approaches and potential expansion of pilot projects to additional countries, allowing reduction of new POPs to contribute to project GEB targets.

Output 1.4: Mercury reduction through pilot activities on mercury alternatives
The pilot project on prevention of mercury in health sector, in particular mercury containing measuring devices, will involve top-down and bottom-up approaches in Lebanon and Tunisia based on the approach developed by WHO. They will target and involve key public servants from the Ministry of Health, Ministry of Environment and Customs as well as managers, maintenance and procurement staff from 28 public hospitals in Lebanon, and 25 in Tunisia, who may have a role in acquiring medical measurement equipment and managing current mercury containing devices and mercury waste.

Activities are based on the WHO guidance, and will include:
- Activity 1.4.1: Identification/ verification of national institutions and hospitals using mercury-containing measuring devices and detailed stock-take of mercury containing wastes in the hospitals in the country;
- Activity 1.4.2: Development of awareness (politicians, high level officials, etc.) and training activities on mercury containing devices management and mercury waste (technical);
- Activity 1.4.3: Update legislation/ provisions on mercury in articles (product standards) and phase-out;
- Activity 1.4.4: Substitution of mercury devices in hospitals by alternatives including technical assistance, substitution, testing, procurement, monitoring, solutions to collection and disposal, etc.

Component 2: International Waters
Under Component 2, regional cooperation frameworks will be used and strengthened through the project interventions to identify priorities and actions that will lead to increased environmental and socioeconomic benefits in the Mediterranean. Activities will be performed to assist the Mediterranean countries to update the 2005 baseline regarding transboundary issues that affect the state of their marine and coastal environments, analyze causes and impacts of identified/ prioritized issues, and recommend areas where adequate responses are needed to ensure attainment of GES. The update will include a gender assessment and strengthen the knowledge base on several pertinent topics (such as impact of climate change on natural and socio-economic systems, impact of pollution on marine ecosystems, potential for blue economy development, etc.), looking also at trends and future scenarios. Capacities to monitor and report (referring to national, regional and global scales) will be enhanced, enabling (in conjunction with other MedProgramme projects and components) the assessment of progress towards stress reduction impacts and achievement of relevant SDG targets.

Existing knowledge will be used, synergies will be created with related assessments and data collection processes, and the countries will be assisted to upgrade their national monitoring programmes in line with IMAP requirements to also cover the offshore areas beyond coastal or territorial waters and address topics not

sufficiently covered under the existing monitoring (primarily for pollution and litter). Capacities to assess different elements (including linkages between drivers, pressures and impacts; cumulative impacts; etc.) of the complex Mediterranean LME will be enhanced and inputs provided to ensure better availability and accessibility of pertinent data.

The expected outcome of the Component 2 is: "Littoral countries enabled to identify trends and progress to impacts" (MedProgramme PFD). This outcome will be achieved through activities to be implemented under the following four outputs:

Output 2.1: Updated TDA including gender assessment
Output 2.2: Report on progress to impacts
Output 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations
Output 2.4: Data sharing policy for the Mediterranean

Output 2.1: Updated TDA including gender assessment

Under this output, the TDA update process will be undertaken and the TDA document will be elaborated, reviewed by the key stakeholders and ultimately adopted (by the Project Steering Committee). The updated TDA will include recommendations on areas of critical importance to be considered for future priority action setting processes.

TDA update represents an opportunity to take into account significant changes in the policy and cooperation frameworks in the region that have happened since 2005 (including implementation of the Barcelona Convention Ecosystem Approach), to address areas not sufficiently covered under the so far and forthcoming Mediterranean assessments (such as gender, climate change impacts on ecosystem services and socio-economic activities, impact of pollution on marine biodiversity and similar), as well as to capture the most recent available data and assess trends. In this context, TDA will also benefit from related assessments to explore potential for systemic and transformational change by 2050 through cross-sectoral foresight scenarios, all with a view to SDGs implementation.

To respond to the changed context and gaps, the updated TDA needs to address issues that have emerged and/ or gained importance during the past decade, such as climate change related vulnerabilities and risks, marine litter and microplastics, costs of degradation of the coastal and marine ecosystems, and potential for blue economy development. Oher topics that merit special attention for the updated TDA include impact of marine pollution and litter on biodiversity, with due attention to maritime traffic and offshore activities as important drivers of pollution. Experiences from the GEF/UNDP West Indian Ocean SAPPHIRE project (GEF ID: 5513) will be considered during the Project inception. The SAPPHIRE project has works closely with the World Ocean Council and with the purpose of involving the shipping industry in the monitoring of ocean health. Gender assessment will represent another new element compared to previous TDAs, to be implemented in response to the need to identify and develop appropriate gender mainstreaming actions. Building on the existing prospective studies and work on the development of the MED 2050 report, the TDA will also look into a longer-term perspective through the application of foresight scenarios for the 2050 time horizon. The development of TDA indicators will take into account changes introduced through the implementation of the Barcelona Convention IMAP, establishing at the same time links to relevant SDGs (primarily SDG 14 and SDG 5).

The purpose of the TDA update will be to identify pressures of transboundary nature and set a basis for integrated and effective approaches in addressing them through strengthened regional cooperation in the framework of the MAP – BC system and in close cooperation with other regional policy frameworks (including GFCM, Union for the Mediterranean, and others) and partners. The ultimate goal is to improve state of coastal and marine ecosystems in the Mediterranean thus contributing to the attainment of GES and implementation of

relevant SDGs (primarily SDG 14, in synergy with SDG 5 – Gender Equality – and SDG 13 – Target 13.B – special focus on climate change and environment in the context of gender equality).

TDA update will be carried out in such a way as to:

- Identify & prioritize the transboundary problems;
- Gather and interpret information on the environmental impacts and socio-economic consequences of each problem (including on the economic value of ecosystems services and functions);
- Analyze the immediate, underlying, and root causes for each problem, and in particular identify specific practices, sources, locations, and human activity sectors from which environmental degradation arises or threatens to arise[52].

The updated TDA will provide a factual basis for expected follow-up activities towards formulation of the next SAP for the Mediterranean that will (through strategic planning and negotiations) set priorities for the time horizon beyond 2025 to resolve the priority transboundary problems identified in the TDA. While the primary purpose of the updated TDA is to respond to the need for a new up-to-date baseline (while identifying indicators for monitoring progress to impacts achieved through MedProgramme and other complementary ongoing efforts), it will also provide a list of preliminary recommendations for the SAP development, alongside with identification of leverage points i.e. places where a small shift at one point can produce large changes elsewhere in the complex system (such as the Mediterranean LME).

TDA update will be carried out through a consultative and collaborative process involving all the Barcelona Convention Contracting Parties, utilizing regional advisory and governance frameworks in addition to project supported consultation mechanisms and meetings. TDA team will be established to carry out the update, ensuring balanced representation of all the interested countries and stakeholders. It will be a multidisciplinary team comprising natural and social scientists, economists, legal and policy experts. Team leader will be appointed to ensure overall coordination and integration of the technical aspects of the work.

The analysis of a baseline situation (including 2005 TDA and recent Mediterranean assessment) clearly highlighted the need for the updated TDA to be data driven and to rely on a DPSIR (drivers, pressures, state, impact, response) set of indicators. A starting point in identifying the set of indicators to be used in the TDA process was stocktaking of all the indicators used in the MAP – Barcelona Convention system and linking them to the relevant SDGs. Drivers indictors referring to the four key economic sectors in the Mediterranean – tourism, fisheries, maritime transport and energy – were added to the set of MAP indicators and considered in the subsequent steps, which included identification of indicators most relevant for the TDA update and selection/ proposal of a short list of indicators to be used in the TDA and SAP (as set out in Annex K).

In addition to the proposed set (short list) of TDA indicators, preparatory activities established the need for more detailed coverage of climate change and gender indicators. For the former, the indicators already used within MAP system mainly refer to climate change related processes, and there is a need (within the TDA process) to develop additional indicators to (in particular) assess effects of climate change and threats to natural and man-made resources in the Mediterranean, as well as to monitor implementation of adaptation policies. For gender, relevant SDG indicators (not used in the MAP system) as well as findings of the gender assessment to be conducted within the TDA update process will be used to determine the appropriate set of indicators of relevance

[52] The TDA/SAP Guidance Manual updated by GEF IW:LEARN in 2018

for TDA and SAP. In designing and carrying out the TDA gender assessment, GEF[53] and UN Environment[54] gender strategies will be used as the reference framework, and the same applies to the United Nations World Water Assessment Programme of UNESCO (WWAP) methodology for the collection of sex-disaggregated water data and indicators, promoted through GEF IW:LEARN[55].

In addition to governance, stakeholders, and gender assessments that will be a constituent parts of the TDA update process, other thematic assessments[56] will be carried out to address areas where the currently available information is not sufficient to design adequate responses and for informed decision-making.

Available data and recent reports on the state of marine environment in the Mediterranean clearly indicate the need for a comprehensive assessment of the impacts of marine pollution/ litter on biodiversity. Impacts of maritime traffic pollution (covering chronic sources – illicit discharges – and accidental pollution, oil and hazardous and noxious substances) on marine ecosystems[57], as well as impacts of operational releases of oil and other contaminants from offshore activities merit special attention and should be considered as potential stand-alone assessments or as a part of a broader study addressing all pollution sources and how they affect Mediterranean ecosystems and biodiversity. This type of information is not likely to be available through the national monitoring systems in the near future, yet it is very important in the transboundary context. The similar applies to the assessment of impacts of marine litter. Other potential thematic assessments to be carried out in the course of TDA update include costs of degradation of the Mediterranean coastal and marine ecosystems with the assessment of blue economy potential, and ecosystem and socio-economic vulnerabilities related to climate variability and change. Proposed Table of Contents for the updated TDA (including proposed thematic assessments) is laid out in Annex N.

A gender assessment will be conducted to examine how differences in gender norms, roles, power structures, activities, needs, opportunities and rights affect men, women, girls and boys in the context of changing environmental and socioeconomic situation in the Mediterranean. To this end, collection and analysis of sex-disaggregated data and gender information to understand gender differences and gaps, and determine gender differentiated impacts and risks will be conducted. An action plan will be also produced to identify measures to avoid adverse gender impacts, and to uncover and act on opportunities to address gender gaps and inequalities.

The key activities to be implemented under output 2.1 are:

- Establishment of TDA team, work plan and budget preparation;
- Knowledge pooling with relevant MAP (SoED 2019, QSR 2023, MED 2050) and other assessments and data collection processes;
- Organisation of relevant meetings (for training, analytical and review/ consultative purposes);
- Identification and prioritisation of transboundary issues, determination of impacts, causal chain analysis;
- Carrying out thematic assessments, preparation of thematic reports and their review and analysis;
- Synthesising analytical work, TDA drafting and identification of linkages with the SAP process;

[53] See here for the latest GEF Gender Mainstreaming guide (EN). GEF. (2017) (publication)
[54] *Gender Equality and the Environment: Policy and Strategy.* UN Environment. (2015)
[55] See http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/water-and-gender/ and https://iwlearn.net/events/engendering-international-waters
[56] Final decision on the TDA thematic assessment is to be made by the TDA team and Project Steering Committee.
[57] In conjunction with this, an assessment focusing on introduction of Non-Indigenous (NIS) and related harmful impacts on marine biodiversity, fish stocks and health of marine ecosystem could be conducted.

- Assisting countries to develop more elaborate indicators to assess effects of climate change and monitor implementation of adaptation policies, and/ or to integrate climate change considerations into IMAP implementation;
- Assisting countries to build capacities for socio-economic assessments, including gender.

The activities planned under the output 2.1 will be delivered through technical assistance, capacity building, conducting technical studies and assessments, sharing of good practices and regional consultations.

Output 2.2: Report on progress to impacts

Under this output, information compiled through the knowledge management MedProgramme activities (Child Project 4.1) will be analysed together with information generated through the Child Project 1.1 Component 1 and with the updated TDA to identify key areas of project's impacts on/ contribution to the overall programme objectives, and to substantiate findings with quantitate and qualitative data. Based on the set of TDA indicators and their linkages with SDGs, as well as by utilizing national data and reports on SDGs implementation, progress with the implementation of SDGs in the Mediterranean will be assessed and an attempt made to discern project's contribution to the overall environmental and socio-economic improvements. The report will be prepared by consultants hired under CP1.1 with support of the MAP, MED POL and MedPCU.

Key activities to be implemented:

- Utilisation of Programme's knowledge management tools and data to assess progress;
- Combining MAP/ Mediterranean and SGDs reporting to assess progress and identify project's impacts;
- Preparation of the report.

Output 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations, *and* Output 2.4: Data sharing policy for the Mediterranean

Activities to be conducted under outputs 2.3 and 2.4 will address the existing shortcomings and limitations, including the fact that assessments and policy making in the Mediterranean still face (irrespective of comprehensive and developing knowledge base) difficulties with adequacy, availability and comparability of data, as well as with data accessibility.

Strengthening of monitoring and assessment tools is essential for better understanding of interlinkages between activities/ drivers, pressures and impacts, for assessing the state of marine environment as well as for identification of adequate responses and attainment of GES in the long run. Without a strong and quality assured monitoring programme in the Mediterranean coastal and offshore waters, it is not possible to measure the impact and changes resulting from the implementation of policy and technical measures, projects, policy reforms, capacity building initiatives and investments, including those that will be implemented under the MedProgramme.

Progress report on the implementation of Decision IG.22/7 on IMAP implementation (UNEP/MED WG.450/3) provided an elaborate set of recommendations on the actions needed to support effective implementation of IMAP at national level. The report emphasizes the need for (among other things) implementation of tailored capacity-building activities to fill the identified gaps, including those related to technical capacities, software, monitoring protocols, human resources etc. Moreover, the report calls for provision of specific support to Contracting Parties on new areas of monitoring (i.e. biodiversity, Non-Indigenous Species – NIS, coast and hydrography, pollution/ marine litter) from 2019. The following areas were identified as highly significant to further enhance implementation of IMAP on the national level:

1. Further development of the risk-based approaches, analytical testing and assessment methodologies, assessment criteria for integrated chemical and biological assessment methods and testing of new research-proved tools for monitoring the toxic effects, as well as improvement of knowledge on emerging chemicals;
2. Testing of the Background Assessment Criteria (BACs) and Environmental Assessment Criteria (EACs) and thresholds application on a trial basis and at regional and sub-regional levels.
3. Enhancing identification and evaluation of marine litter accumulation (stranding fluxes, loads and linkage with specific sources) and hotspots using GIS and mapping systems and modelling tools, including better understanding of transport dynamics and accumulation zones.

In terms of harmonization of monitoring protocols and improved availability and accessibility of quality assured monitoring data, the following recommendations stand out: 1) harmonisation and standardisation of monitoring and assessment methods; 2) improvement of availability and ensuring of long time series of quality assured data to monitor the trends in the status of the marine environment; 3) improvement of availability of the synchronised datasets for marine environment state assessments, including use of data stored in other databases where some of the Mediterranean countries regularly contribute; and 4) improvement of data accessibility with the view to improving knowledge on the Mediterranean marine environment and ensuring that Info-MAP system is operational and continuously upgraded, to accommodate data submissions for all the IMAP Common Indicators.

In the first phase of IMAP implementation (2016-2018), significant progress was achieved with the development of national IMAP-based monitoring in the GEF-eligible Barcelona Convention Contracting Parties for the three clusters of Common Indicators – biodiversity and NIS, pollution and litter, and coast and hydrography. In addition to national efforts, technical assistance extended through MAP and various projects (most notably EcAp MED II and Marine Litter MED) contributed to the achieved progress. The work focused on coastal waters.

The other Contracting Parties are developing national IMAPs based on the overall MAP technical guidance. For the EU Member States, the analysis showed that between 50 and 70% of the MSFD descriptor categories were to be monitored as of 2018. Analysis of the spatial coverage of the MSs monitoring programmes showed predominant share (68%) of monitoring takes place in coastal waters. A high proportion also occurs in territorial waters (57%) and in the EEZ (51%), while the lowest proportion (6%) takes place in continental waters beyond the EEZ. As regards regional coherence and coordination, the analysis pointed out MSs in the Mediterranean Sea region need to develop more consistent monitoring through regional efforts for a number of descriptors.

The output 2.3 activities will build upon progress achieved across the region, working specifically on the IMAP extension in offshore areas for pollution and litter Common Indicators (for GEF eligible countries) while utilizing the existing knowledge in the region and strengthening regional cooperation. Other Child Projects, in particular those implemented under MedProgramme Component 2, will contribute to IMAP implementation for coast and hydrography Common Indicators.
Activities to be implemented under output 2.3 are developed having in mind the above needs and recommendations for provision of effective support with implementation of IMAP at national level pertinent to the extension of monitoring to marine areas beyond the coastal or territorial waters. Three groups of activities are envisaged:

1. Definition of the offshore monitoring strategy;
2. Identification of at least 20 sites for offshore monitoring stations; and
3. Piloting IMAP implementation for selected indicators at up to 5 offshore stations.

The offshore monitoring strategy will be developed based on the assessment of comparative experiences with offshore monitoring in the Mediterranean and the needs of the GEF eligible countries, laying out rational and methodology for selection of offshore monitoring stations. The agreed methodology will then be applied to assist participating countries to expand their national IMAPs to the marine areas not directly impacted by land-based

sources. Finally, the project will support up to 5 pilots to put in place IMAP for selected indictors in offshore areas. For the selection of pilots, offshore monitoring stations identified/ agreed upon two or more countries will be prioritised. The selection of relevant IMAP indicators in pilot cases will be based on respective pressures and ecosystem values, accumulation and integration of impacts on marine environment.

In developing the offshore monitoring strategy, an assessment of the existing approaches in integrating coastal and offshore monitoring will be undertaken to:

a. Review the scope of national monitoring programmes that will be in place by the beginning of the project;
b. Identify gaps to be addressed in the context of IMAP implementation in beneficiary countries in offshore areas; and
c. Examine spatial and temporal scope of national monitoring programmes in offshore areas to ensure their alignment with IMAP requirements.

Moreover, preparation of the offshore monitoring strategy and IMAP extension to offshore areas will be accompanied with a governance and financial analysis that will inform and enable development of a long-term funding scheme, taking into account ongoing efforts on the development of resource mobilization strategy for IMAP implementation and by utilizing, as appropriate, the MAP core funds/ MTF .

The strategy will propose appropriate methodology for establishment of national monitoring stations in offshore areas to ensure harmonized approach and establishment of consistent sub-regional networks capable of supporting collection of data of relevance for application of Nested approach for future regional assessment products. The strategy will also include deliberations/ recommendations on the following:

a. The need for update or development of new monitoring protocols to specifically address offshore monitoring needs;
b. Proposal of the procedures for data sampling and processing,
c. Proposal of statistical interpretation of field surveys data, specifically on trend analysis assessment for the Mediterranean;
d. Proposal for an update/ development of the assessment criteria to be applied in offshore areas;
e. Proposal of quality control scheme;
f. Proposal for data standards and procedures for data reporting;
g. Proposal of the methodology for integrated monitoring and assessment in offshore waters, including scales of monitoring and assessment;

The project will support implementation of the strategy by providing for consultations and technical guidance to the countries to determine 20 suitable locations (for single or joint monitoring) and establish offshore monitoring stations, including reference ones.

Up to 5 pilots planned under output 2.3 will deliver necessary assistance to countries to ensure implementation of selected IMAP indicators at newly established offshore monitoring stations, prioritizing stations of sub-regional relevance (i.e. those identified through agreements between two or more countries where joint monitoring will be established), taking into account balanced regional distribution and using the risk-based approach. The activities are designed and will be executed with a view to support preparation of the thematic assessments related to pollution and biodiversity (including potential TDA assessments on the impacts of maritime traffic and of operational releases of oil and other contaminants from offshore activities on marine biodiversity). The pilot activities will entail provision of basic equipment to support synchronized and standardized collection of data in offshore areas within national monitoring programmes.

The activities planned under the output 2.3 will be delivered through technical assistance, capacity building work (including provision of necessary equipment), sharing of good practices and regional consultations.

To address some of the gaps and recommendations related to data availability and accessibility (as identified in the Progress report on the implementation of Decision IG.22/7 on IMAP implementation), and to propose a data sharing policy for consideration by the Barcelona Convention Contracting Parties, the following set of activities will be implemented under output 2.4:

- The existing regional databases, governance mechanisms and data sharing approaches will be assessed to identify possible gaps and issues;
- Structure, functions and content of national databases/ IT platforms will be reviewed to identify what is needed to make them fully compatible with Info-MAP System;
- Design of the IT model (node) to connect national platforms in a regional network/ platform will be recommended to facilitate functional exchange of data between national systems while allowing their functional connectivity with IMAP regional platform. The recommendations on the design of IT model will include technical elements that support spatial visualization of quality assured monitoring data in the form of assessment maps.
- Based on the above and taking into account work on the development of Info-MAP platform (providing for connection of national platforms with MAP Components' information systems and other relevant regional knowledge platforms), regional data sharing policy will be developed based on SEIS principles to facilitate reporting and use of IMAP data collected by the Barcelona Convention Contracting Parties
- Regional cooperation and exchange of best practices will be promoted to strengthen SPI by facilitating information exchange between scientists and policy makers on priority topics (e.g. on scales of monitoring and assessment).

The activities planned under the output 2.4 will be delivered through technical assistance, sharing of good practices and regional consultations.

Component 3 Monitoring and Evaluation and information dissemination disseminates project results and knowledge and uses these to adaptively manage the project.

Component 3 cuts across both the Chemicals and Waste and International Waters components of the project. It will be delivered in close coordination with the Child Project 4.1 and the MedPCU (Programme Coordination Unit, see section A.6 on institutional arrangements).

Output 3.1: Knowledge Management strategy shares knowledge from Child Project 1.1

This output will generate the specific knowledge products and monitoring tools for the Child Project 1.1 and ensure they are compiled and packaged for integration and dissemination through the Programme-wide Knowledge Management tools and channels (see section A.8 below). Specific knowledge products will include at least:

- Activity 3.1.1 Interactive visualizations of chemicals inventories across the 8 countries using interface provided by MapX;
- Activity 3.1.2 Case studies in different formats including video for the prevention pilots;
- Activity 3.1.3 Data sharing protocol, analysis and management (IW)

Output 3.2: Regular monitoring and evaluation of project progress and results

This output will ensure the regular monitoring of project results and delivery, including quarterly progress and financial reports to the Implementing Agency, annual reports to GEF and effective documentation of project lessons learnt. It will also include periodic independent evaluation of project results and achievement of intended outcomes, through external reviews at project midterm and completion.

- Activity 3.2.1: Quarterly financial reports and annual progress reports monitoring status of project execution
- Activity 3.2.2: Midterm and Terminal evaluations of project impacts completed in Years 3 and at the end of the project in order to provide an independent assessment of the project results and, in the case of the mid-term review, to provide an assessment of progress and propose any corrective actions for the project.

A1.4. Incremental/additional cost reasoning

Without GEF assistance, activities to reduce pollution from harmful chemicals and wastes in the Mediterranean are likely to remain uncoordinated and incoherent. GEF assistance will ensure UN Environment can provide guidance and leadership on these issues in a coordinated manner, through both the Chemical and Wastes and International Waters Focal Areas. The delivery of the project via the Secretariat of the Barcelona Convention allows for sustainability of regional activities, building on existing networks on pollution in the Mediterranean.

Component 1 on Chemicals and Waste builds on the significant regional work of MEDPOL in providing support to countries across the region through the Med Partnership. The first phase project included a component on ESM of equipment, stocks and wastes containing or contaminated by PCBs in national electricity companies of the Mediterranean countries, including training on ESM of PCBs equipment for more than 300 individuals from four countries (Albania, Bosnia and Herzegovina, Egypt and Turkey). Training was provided to the national PCB teams on collection, packaging, and shipment of PCBs, and increased technical expertise and awareness on the environmentally sound management of PCBs. This project extends the work of the Med Partnership through focusing on countries with significant PCB stocks that did not benefit from disposal under the MED Partnership.
The project will further develop close linkages between the Barcelona, Stockholm and Minamata Conventions and their delivery mechanisms at national and regional level will allow capacity on chemicals and waste to be linked across thematic and sectoral boundaries.

Component 2 similarly builds on significant existing initiatives by MEDPOL baseline projects and forthcoming assessments (including EcAp MED II, Marine Litter MED and ENI SEIS II South projects, as well as preparation of reports and assessments such as SoED 2019 report, 2023 Mediterranean QSR and MED 2050 Foresight Study) are expected to contribute significantly to improved data availability and knowledge on the processes in the Mediterranean LME to inform and facilitate TDA development and tracking of progress with environmental and socioeconomic improvements. The Barcelona Convention processes and its governance mechanisms represent a framework for the regional cooperation that will underpin Component 2, and enable smooth delivery of project outputs. GEF incremental funding will allow to consolidate all the information derived from the plethora of relevant albeit fragmented efforts being implemented in the Mediterranean, and produce a new comprehensive and coherent diagnostic focused on transboundary issues of concern.

A1.5. Global environmental benefits

Humans and ecosystems are simultaneously exposed to multiple combinations of chemicals, multiplying uncertainty around impacts of exposure to individual chemicals. Many chemicals may feature in one or more categories. In this context, the expected outcome under Component 1 of Child Project 1.1 is to achieve measurable reduction of wastes and hazardous chemicals (POPs, Mercury) impacting human health and coastal habitats, through innovative practices, techniques and regulatory approaches. The adoption of a gender-responsive approach mainstreamed within the project's activities, such as: (i) conducting small-scale surveys in site-specific contexts to understand the exposure risks determined by socioeconomic factors, and (ii) awareness-raising and capacity-building efforts, will facilitate Child Project 1.1 to pioneer an understanding of gender mainstreaming and chemicals in the region. These outcomes will contribute to the desired overall programmatic impact of enhanced environmental security in the Mediterranean.

In terms of global environmental benefits the project will dispose of over 2,000 tons or POPs, preventing their future release into the environment. The project will also contain, repackage, and dispose of over 50 tonnes of mercury and mercury contaminated waste, preventing future release into the environment. Any stocks of obsolete PFOS/ HBCD identified through the pilot projects will be assessed as part of the Phase 2 disposal operation under Output 1.1 and may be disposed along with the other POPs wastes, thus counting toward the GEB target.

The lack of quantitative inventories on new POPs prevents the project team in setting quantitative targets for new POPs and mercury reduction at project design. Furthermore, there is no guidance or accepted methodology from the convention and GEF on calculating the contribution of prevention of POPs and mercury toward global targets, especially considering the fact that the amounts of these contaminated products/ wastes are orders of magnitude more than established GEF global targets. The PPG phase has therefore focused on identifying enough wastes to potentially meet the entire Global Environmental Benefit targets through disposal (outputs 1.1 and 1.2). During phase 2, once inventories of new POPs are available, it may be possible to quantify and document the contribution of prevention activities toward the GEB target.

There is a need to improve formulation and implementation of integrated, coordinated and effective approaches to tackle certain transboundary pressures that negatively affect the state of the Mediterranean environment and its resources, and undermine the prospects for the attainment of GES. At the same time, it is recognized that better instruments are needed to assess linkages between drivers of environmental change and their impacts, and to measure progress in achieving the set goals, in particular in the framework of SDGs implementation. According to recent assessments, a conservative estimate of the value of economic assets of the Mediterranean Sea is around US$ 5.6 trillion.

By improving the knowledge base for coordinated responses to address identified pressures and their root causes, Component 2 of the project will make a significant contribution to preservation of the unique Mediterranean ecosystems and of their economic assets, directly contributing to the achievement of GEBs, SDGs, the enhancement of environmental security, and the further strengthening of transboundary cooperation.

A1.6. Innovativeness, sustainability and potential for scaling up

The disposal activities for the Chemicals and Waste component have been designed in a two-phased approach which will allow the project to achieve quick wins (expenditures and achievement of part of the GEB targets), while rapidly reducing the risk of further environmental degradation of the Mediterranean Sea from coastal hot-spots. This approach also supports efficient scaling up of the disposal in the remaining countries, as the tools and methods (including Environmental Management Plans, country delivery mechanisms and tendering processes) will have been completed once and lessons learnt for Phase 2.

The POPs prevention pilots are highly innovative, since the PPG research was unable to identify any examples of such pilots on phasing out new POPs in developing countries. The process of selecting pilot interventions has been guided by the priorities expressed by governments, and through a systematic assessment of the feasibility and likelihood of impact of different approaches. As this is the first time that new POPs are being addressed, the project is deliberately trying diverse approaches, spanning across legal mechanisms (import restrictions, water quality standards) and technical support (demonstration of alternatives, support to modifying production processes), using procurement as a lever for change. The budgeting for the demonstration of alternatives has been done in a two-phase approach, in order for the results of initial pilots to be demonstrated and the most successful approaches replicated in the region and other countries. The pioneering gender focus will bolster the

fledgling attention paid to the crosscutting nature of socioeconomic and gender factors within the larger chemicals and waste arenas. Certainly, the generation of relevant information and data in an otherwise overlooked interlinkage will not only make this project proactively GEF-7 ready, but as well provide direction to future interventions.

Component 2 innovative elements are linked to implementation of project activities that will go beyond prevailing assessment and monitoring practices to include foresight scenarios, improving the assessments of climate change impacts and vulnerabilities, promoting the value of ecosystem services and potential for blue economy development, upgrading knowledge on the impacts of pollution on marine biodiversity, gender equality conditions, refining and improving IMAP implementation and availability and usability of data at national and regional levels, and similar. New approaches will be tested through integration of coastal and offshore monitoring and efforts will be made to ensure coherent, coordinated and comparable monitoring systems, aligned with the SDGs and the needs of future assessments and state of environment reports.

Replication and scaling up potential on the regional level is primarily identified through sharing of best practices with IMAP implementation and management and sharing of data. Sustainability of project interventions will be ensured through extensive work on upgrading the assessment capacities across the region. Moreover, strengthening of science policy interface represents an opportunity to ensure results of the existing (and forthcoming) scientific projects are integrated in policy making, thus contributing to sustainability

A.2. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

The project is a child project under the GEF/UN Environment multi-focal area "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security". Please refer to the introduction section for a description of the Programme and its eight constituent child projects. The MedProgramme is structured into three components: i) Reduction of Land-Based Pollution in Priority Coastal Hotspots and measuring progress to impacts; ii) Enhancing Sustainability and Climate Resilience in the Coastal Zone; and iii) Protecting Marine Biodiversity.

Child Project 1.1 will contribute to the MedProgramme Component i): Reduction of Land-Based Pollution in Priority Coastal Hotspots and measuring progress to impacts. The project will focus on land-based sources of hazardous chemicals pollution, namely Persistent Organic Pollutants (POPs) banned under the Stockholm Convention, and mercury banned under the Minamata Convention. It covers national activities in up to eight countries, as well regional activities to share lessons learned. The Child Project will remove over 3,000 tonnes of POPs and mercury wastes from the coastal zones of the project countries, directly removing the land-based sources of chemical pollution and breaking the source-pathway-receptor linkages to the Mediterranean Sea ecosystem and inhabitants. The Component will contribute to the overall Gender Mainstreaming Strategy of the MedProgramme by incorporating strategic and tailored gender actions within the overall results framework (see Annex I[58]) thus contributing to address the dearth of information on gender and chemicals, as well as pioneering a regional effort.

Component 2 of the CP 1.1 will contribute to the Programme objectives and impacts primarily by providing an up-to-date, comprehensive and coherent baseline for monitoring progress to impact in a harmonised Mediterranean-wide way, and by identifying key issues of transboundary concern for future priority setting.

The outputs and activities planned under Component 2 will help with consolidation of existing data and development of capacities to monitor and report, to enable (in synergy with other MedProgramme and complementary efforts) the assessment of progress with relevant processes, stress reduction and environmental status in the Mediterranean. Based on the set of TDA indicators and their linkages with SDGs, as well as by utilizing national data and reports on SDGs implementation, progress with the implementation of SDGs in the Mediterranean will be also evaluated. The gender assessment to be carried out in the framework of TDA update is expected to allow for a better understanding and addressing the crosscutting issues of gender, water, and environmental security, and to provide an important and proactive input for the overall MedProgramme gender agenda. Another important contribution of the Component 2 to the overall Programme objectives will be through the assistance to GEF eligible countries of the Mediterranean to upgrade their national monitoring programmes in line with IMAP requirements to also cover the offshore areas, and to ensure better availability and accessibility of monitoring data.

A.3. Stakeholders.

Please provide the Stakeholder Engagement Plan or equivalent assessment. (Type response here; if available, upload document or provide link) In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be

[58] Annex I, the Gender Mainstreaming Strategy, was jointly developed across all the Child Projects of the MedProgramme and is referenced in other CP documents as Annex T.

disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.
Select what role civil society will play in the project:
☐ *Consulted only;*
☐ *Member of Advisory Body; contractor;*
☐ *Co-financier;*
☒ *Member of project steering committee or equivalent decision-making body;*
☒ *Executor or co-executor;*
☐ *Other (Please explain)*

Chemicals and Waste stakeholders

STAKEHOLDER	Engagement in project preparation	Proposed engagement in project execution
International		
MEDPOL	Coordinated consultations, data collection and research on disposal activities; developed pertinent activities	Executing Agency for the Child Project
SCPRAC	Coordinated the research and consultations on new POPs.	Coordination and technical support to new POPs prevention pilots.
National - Albania		
Ministry of Environment	Overall support for and coordination of the national preparatory activities; provision of data and of guidance on national priorities	Coordination of Phase 2 inventory, prioritization and potential disposal of PCB and other POPs wastes
National - Algeria		
Ministry of Environment	Support for, and coordination of, national preparatory activities; provision of data and of guidance on national priorities	Supervision of repackaging and disposal of Phase 1 PCB stocks. Support to disposal, including issuance of Basel export permits
Regional Environmental Administration – Tizi Ouzu	Provision of detailed information on the main environmental issues (including PCBs management) on the regional level	
CNTPP (Centre National des Technologies de Production Plus Propre)	Collection of data on the equipment and sites, verification of PCBs stocks, facilitation on missions	Coordination of Phase 1 PCB disposal. Coordination of Phase 2 inventory, prioritization and potential disposal of PCB
Representatives of owners of PCBs equipment in Algiers and Tizi Ouzu[59]	Facilitation of site visits, provision of information on stocks of PCBs contaminated equipment kept at each site, description of procedures	Will support process for the safeguarding of Phase 1 and Phase 2 PCB stocks, including potentially providing technicians as team members for field operations.
National Bosnia and Herzegovina		
Ministry of Environment	Provision of data and of guidance on national priorities for mercury wastes	Support to disposal, including supervision of mercury disposal and issuance of Basel export permits
Owner of mercury waste site (ORGANICA)	Provision of data on site	Safeguard the wastes and facilitate packaging and removal

[59] Cabel, SNVI, ENIEM, EATIT, SAFEX, ENNA, Sonelgaz, EDIEL

National - Lebanon		
Ministry of Environment	Support for, and coordination of, national preparatory activities; provision of data and of guidance on national priorities Supplied information on use of New POPs, consulted on project.	Coordination and supervision of disposal operations under Phase 1 including issuance of Basel export permits Coordination of Phase 2 inventory, prioritization and potential disposal of PCB and other POPs wastes, including issuance of Basel export permits. Coordination and support for new POPs projects on PFOS HBCD and SCCP, including development of legislation
PCB stock owners - Electricite du Liban and concession holders (Qadisha, Jbeil, Aley, others)	Provision of data on sites and equipment, facilitation of site visits	Will support process for the disposal of Phase 1 PCB stocks, including potentially providing technicians as team members for field operations.
Lebanese Standards Institution	Consulted on product standards and quality standards	Beneficiaries of the project, will receive support to update relevant standards on new POPs
Ministry of Industry	Supplied information on use of New POPs, consulted on project	Coordination and support for new POPs projects on PFOS HBCD and SCCP.
Ministry of Health	Supplied information on use of mercury in hospitals.	Coordination and support jointly with the Ministry of Environment for audit, management and substitution of mercury devices in hospitals.
Syndicate of security & safety professionals in Lebanon	Supplied information on use of fire fighting foams, consulted on project.	Technical support to delivery of PFOS pilot project including liaison and involvement of suppliers of alternatives
Users of new POPs[60]	Supplied information on import and use of new POPs (PFOS in firefighting; and SCCP in PVC production)	Beneficiary of pilot project, will be supported to change procurement criteria for firefighting foams
National- Montenegro		
Ministry of Environment	Provision of data and of guidance on national priorities	Coordination and support for disposal in Phase 2, including inventory and stock verification and issuance of Basel export permits. Supervision of potential PCBs disposal, coordination of prioritization activities'
UNDP Montenegro	Provision of data/ detailed inventory for PCBs containing equipment at Aluminum Plant Podgorica	Coordination, provision of data on stocks not addressed under the project they are implementing
National - Morocco		
Ministry Of Environment	Supply of information on use of New POPs, consulted on project preparation.	Coordination and support for disposal in Phase 2, including inventory and stock verification and issuance of Basel export permits
Protection Civil (PC) – Inspection Generale PC – service approvisionnement	Provided information on use of New POPs	Beneficiary of pilot project, will be supported to change procurement criteria for firefighting foams

[60] PFOS – Civil Defense, airports (Beirut), Issa Petrol Trade Oil & Gas Company; and ports (jieh, Zouk Terminal).
SCCP – Rockyplast, Sevenplast, Advanced Plastic Industries (API), The United Lebanese Plastic Industries sal (ULPI) and M C Line.
HBCD: Kilzi, Kappa Systems, Joseph Hajjar Est, Genial Sarl, Meric, Cmc, Mic Co Sarl, Sodamco Sal, Hintraco

Users of new POPs[61]	Provided information on use of New POPs	Beneficiary of pilot project, will be supported to change procurement criteria for firefighting foams; and supported to test modifications to technology and production processes to accommodate HBCD-alternatives.
National - Tunisia		
Ministry of Environment	Coordination of the national preparatory activities; provision of data and of guidance on national priorities; facilitation of site visit Supplied information on use of New POPs, consulted on project	Coordination and support for disposal in Phase 2, including inventory and stock verification and issuance of Basel export permits Coordination and support for new POPs projects on PFOS and HBCD
ANPE (National Environmental Protection Agency) and OTEDDD (Tunisian Observatory of the Environment and Sustainable Development)	Provision of data on stockpiles and wastes	Supervision of mercury disposal and of potential PCBs/ POPs disposal Assistance with permits/ approvals, prioritization of Phase 2 stocks and similar
ANGed (National Waste Management Agency)	Provision of data on PCBs management and results of PCBs inventory	supervision of mercury disposal and of potential PCBs/ POPs disposal Assistance with permits/ approvals, prioritization of Phase 2 stocks and similar
CITET (Tunis International Centre for Environmental Technologies)	Provision of data	coordination of potential inventory for POPs wastes
SNCPA plant, Kasserine	Provision of data on the mercury site and waste quantities; facilitation of MEDPOL site visit	Collaboration in execution of project activities, disposal of mercury wastes
Ministry of Health	Supplied information on use of mercury in hospitals.	Coordination and support jointly with the Ministry of Environment for audit, management and substitution of mercury devices in hospitals.
Ministry of Industry	Supplied information on use of New POPs, consulted on project	Coordination and support for new POPs projects on PFOS and HBCD
Users of new POPs[62]	Supplied information on Fire-fighting foams, consulted on project	Beneficiary of pilot project, will be supported to change procurement criteria for firefighting foams; and supported to test modifications to technology and production processes to accommodate HBCD-alternatives.
National - Turkey		
Ministry of Environment and Urbanization	Coordination of the national preparatory activities; provision of	Coordination and support for disposal in Phase 2, including inventory and stock verification and issuance

[61] PFOS - Office National des Aeroports (ONA) – Service pompiers ; Casablanca Airport. Service de L´incendie et de Sauvetage des Avions. Direction ONDA. Aeroport Med V, Nouasser; Agence Nationale des Ports (ANP).Mohamedia Port and / or Tanger Med Port. SNEP in Mohamedia
HBCD: EPS / XPS importers, retailers and producers - Soprema Maroc, Sonefi; Panax; Sodiflex; Razana; Intreprise Chérifienne D'isolation; Gama Etanche; Les Matériaux Nouveaux; Interfer and BASF – Maroc**.**

[62] PFOS - Tunisian National Office of Civil Protection (ONPC); Tunisian Civil Aviation and Airports Authority (OACA); VIVO Energy (SHELL Licensee in Africa); SOTULUB (Lubricants); Military and the Tunisian Ports Authority.
HBCD: EPS / XPS importers, retailers and producers such as Le Record; Polycoq; Polyjumbo: Structura; Polymed SA; Polybat; and Afroflex.

	data and of guidance on national priorities; facilitation of site visit Supplied information on use of New POPs, consulted on project	of Basel export permits Coordination and support for new POPs projects on PFOS and HBCD
IZODER (Heat, Water, Sound and Fire Insulators Association)	Not consulted but are affected by regulations on new POPs	Beneficiary of investment in new POPs pilot projects

International Water stakeholders

The Project preparation for Component 2 was coordinated by UN Environment/MAP, MED POL and Plan Bleu. The MedProgramme Regional Consultation Meetings held in March and September 2018 were used to solicit opinions and gather information needed for the project design. Moreover, various meetings organized in the framework of Barcelona Convention – MAP system (for example 2018 meetings on IMAP and SEIS implementation), were also used as additional consultation forums for specific topics such as TDA indicators, extension of IMAP to offshore areas, and similar.

The key regional and national stakeholders and their roles in project implementation are described in the table below, followed by a more comprehensive list of identified stakeholders at the Mediterranean level and in the project beneficiary countries.

Stakeholder	Role/ responsibility in project implementation
Regional level	
Barcelona Conventions governance and advisory bodies including Ecosystem Approach Correspondence Groups (on biodiversity, pollution, marine litter and coast and hydrography)	Overall guidance and support towards delivery of updated TDA, extension of monitoring to offshore areas, Barcelona Convention data sharing policy and report on progress to impacts
UN Environment MAP	Overall coordination, consultations through the MAP Focal Points; MedPCU to coordinate preparation of the report on progress to impacts
MED POL	Coordinate and support project activities (TDA, offshore monitoring, data sharing policy); provision of data and expertise, support to TDA team/ working groups, consultations through the MED POL Focal Points
Plan Bleu	Support TDA update, coordinate/ conduct preparation of selected thematic assessments (in particular for socio-economic topics); foresight scenarios; contribute to identification and prioritisation of issues, causal chain analysis for TDA
Other MAP components (primarily INFO/RAC, REMPEC)	Provision of data and expertise, support to development of data sharing policy; contribute to identification and prioritisation of issues, causal chain analysis for TDA
MAP partners, including think-tanks, NGOs, research organization	Provision of data, contribution to TDA preparation, consultations
Marine Litter Regional Collaboration Platform	Provision of data on marine litter, consultations
GEF IW:LEARN, UN Environment	Support TDA preparation through advices and training
MCSD Steering Committee	Overall guidance and support towards TDA preparation with a view to implementation of SDGs
General Fisheries Commission for the Mediterranean	Provision of data on fisheries, consultations
National – Albania	
Ministry of Tourism and Environment (including national environmental, coastal	Coordination and provision of national inputs for TDA update, provision of inputs for offshore monitoring and data sharing policy; participation in TDA working

and protected areas agencies)	groups, national level consultations
Agency for the Management of Water Resources (and river basin agencies)	Provision of national data/ inputs for relevant TDA assessments
Ministry of Social Welfare and Youth	Provision of national data/ inputs for gender assessment
National - Algeria	
Ministry of Water Resources and Environment	Coordination and provision of national inputs for TDA update, provision of inputs for offshore monitoring and data sharing policy; participation in TDA working groups, national level consultations
National Office for the Environment and Sustainable Development	Provision of national data/ inputs for relevant TDA assessments
National Agency for Integrated Water resources management	Provision of national data/ inputs for relevant TDA assessments
National Agency for Climate Change	Provision of national data/ inputs for relevant TDA assessments
Ministry of National Solidarity, Family Affairs and Status of Women	Provision of national data/ inputs for gender assessment
National – Bosnia and Herzegovina	
Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina – Environmental Protection Department	Overall national level guidance on TDA update
Hydro Engineering Institute	Coordination and provision of national inputs for TDA update, provision of inputs for offshore monitoring and data sharing policy; participation in TDA working groups, national level consultations
Agency for Gender Equality of Bosnia and Herzegovina	Provision of national data/ inputs for gender assessment
National – Egypt	
Egyptian Environmental Affairs Agency	Coordination and provision of national inputs for TDA update, provision of inputs for offshore monitoring and data sharing policy; participation in TDA working groups, national level consultations
Ministry of Water Resources and Irrigation	Provision of national data/ inputs for relevant TDA assessments
National Committee to follow up on the implementation of the SDGs	Provision of national data/ inputs on SDGs implementation
National Council for Climate Change	Provision of national data/ inputs for relevant TDA assessments
National Council for Women	Provision of national data/ inputs for gender assessment
National – Lebanon	
Ministry of Environment	Coordination and provision of national inputs for TDA update, provision of inputs for offshore monitoring and data sharing policy; participation in TDA working groups, national level consultations
Ministry of Energy and Water	Provision of national data/ inputs for relevant TDA assessments
National Commission for Lebanese Women	Provision of national data/ inputs for gender assessment
National – Libya	
Environment General Authority	Coordination and provision of national inputs for TDA update, provision of inputs for offshore monitoring and data sharing policy; participation in TDA working groups, national level consultations
General Water Authority	Provision of national data/ inputs for relevant TDA assessments
National – Montenegro	
Ministry of Sustainable Development and Tourism (including Environmental and Nature Protection Agency)	Coordination and provision of national inputs for TDA update, provision of inputs for offshore monitoring and data sharing policy; participation in TDA working groups, national level consultations
National Council for Sustainable Development, Climate Change and Integrated Coastal Zone Management	Overall national level guidance on TDA update
Department of Gender Equality Affairs	Provision of national data/ inputs for gender assessment
National – Morocco	

State Secretariat in charge of Sustainable Development, Ministry of Energy, Mining and Sustainable Development	Coordination and provision of national inputs for TDA update, provision of inputs for offshore monitoring and data sharing policy; participation in TDA working groups, national level consultations
State Secretariat in charge of Water, Ministry of Equipment, Transport, Logistics, and Water	Provision of national data/ inputs for relevant TDA assessments
Ministry of Family, Solidarity, Equality and Social Development	Provision of national data/ inputs for gender assessment
National Observatory of the Environment (ONEM)	Provision of national data/ inputs for relevant TDA assessments
National – Tunisia	
Ministry of Local Affairs and Environment	Coordination and provision of national inputs for TDA update, provision of inputs for offshore monitoring and data sharing policy; participation in TDA working groups, national level consultations
National Environmental Protection Agency (ANPE)	Provision of national data/ inputs for relevant TDA assessments
Tunisian Association of Climate Change and Sustainable Development	Provision of national data/ inputs for relevant TDA assessments
National Council of Peers for Equality and Equal Opportunities between Women and Men	Provision of national data/ inputs for gender assessment

A.4. Gender Equality and Women's Empowerment.

Provide the gender analysis or equivalent socio-economic assessment. (Type response here; if available, upload document or provide link)

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment? (yes ☒ /no☐) If yes, please upload gender action plan or equivalent here. See Annex I

If possible, indicate in which results area(s) the project is expected to contribute to gender equality:

☐ *closing gender gaps in access to and control over natural resources;*

☒ *improving women's participation and decision making; and or*

☐ *generating socio-economic benefits or services for women.*

Does the project's results framework or logical framework include gender-sensitive indicators? (yes ☒ /no☐)

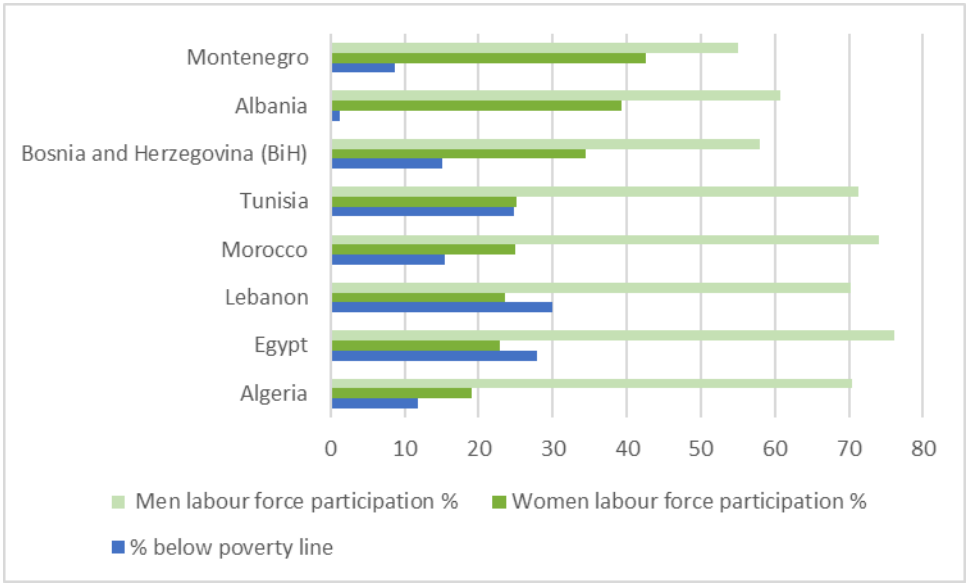
Despite the fact that land-based pollutants, hazardous substances, and chemicals and wastes reach and expose populations equally, factors such as: (i) poverty and socioeconomic status, (ii) gender-based and customary norms, (iii) health access and equity, and (iv) overall representation in decision-making processes and management policies relating to chemicals and waste, determine the extent of repercussions and ramifications of these on population subgroups. Socioeconomic landscapes and gender relations in the Mediterranean region form a kaleidoscope of overlapping social, economic and cultural roles, spread across a diverse multitude of countries and communities. The northern-coast Mediterranean countries have distinct social patterns and gender norms, which differ from the Middle East and North Africa (MENA) Mediterranean countries, for example. Additionally, the varying political situations in the region also determine how women and men are able to access and leverage sustainable development opportunities to be able to cope with environmental degradation, pollution, chemicals and waste hazards, and pressures on natural resources and coastal and marine ecosystems.

Epidemiological studies of differential health effects of certain chemicals on female and male biology are known in the scientific arena. Despite mounting evidence of severe and irreversible health effects of specific hazardous chemicals on different population subgroups, there is a lack of action to minimize and address these by policymakers, governments and researchers. Of particular concern is that the socioeconomic perspectives on crosscutting issues of gender and chemicals remains under-researched, and this Child Project will strive to use this as an entry point towards gender mainstreaming. Some examples of such a perspective applied to research on chemicals and waste impacts are:

- Poverty status and access to financial resources: These are among the important determinants of coping capacities to external shocks such as health risks arising from chemicals and waste, such that women (and other marginalized groups, including ethnic minorities such as Romas) are more likely to be unable to afford care but also prevent future exposures by accessing protective equipment or knowledge.
- 'Time poverty': relates to the time required for non-productive or unpaid labour that limit people's opportunities to participate in remunerative economic activities. This may be the burden of care work of those exhibiting health effects of exposure to hazardous substances, as often women are expected to fulfill roles of unpaid domestic work, and this can add to the existing and entrenched time poverty.

The 'double disadvantage' of the situation, thus, has to be reckoned with: due to lack of viable economic capital or socioeconomic rights, vulnerable groups are often excluded from, and limited by their lack of representation and agency, in chemicals and waste management policies– increasing the possibilities of exposure to the threats looming in the Mediterranean region. Women, as a general trend, face institutionalized exclusion from civil society and political spheres. Decision-making power within the household and the polity is limited, reducing women's capacities to engage in the public sphere and gear development opportunities to safeguard their interests. In recent years, however, women have been capitalizing on opportunities presented by pluralistic interpretations of traditional gender norms, and entering both the work force and the public space in the Mediterranean region (particularly the MENA countries, Fig 5). The table in Annex I provides a general overview of the socioeconomic and gender baseline in the beneficiary countries, including ratings under the Human Development Index, Gender Inequality Index and Gender Development Index.

FIGURE 5: SOCIOECONOMIC AND GENDER BASELINE IN PROJECT COUNTRIES



Given the project's focus, a gender lens is both necessary and relevant for the project to achieve its primary objective of reducing hazardous chemicals in the Mediterranean, improving human and ecosystem health, and managing land-based pollutants. As elucidated in the Gender Action Plan in Annex I, efforts will be made to

improve upon the socioeconomic and gender baseline presented above, through: (i) by awareness-raising among and capacity-building of personnel working to improve/devise disposal and prevention plans, (ii) by creating the impetus (through small-scale surveys) towards collection of gender-relevant data and information where possible, and (iii) by engaging stakeholders (such as local women's groups, NGOs, CSOs, where possible) on gender and socioeconomic aspects within policy solutions. By adopting this pioneering gender focus, the project will ensure both environmental and social co-benefits through its results framework. Both the GEF and UN Environment have prioritized delivering inclusive and gender-responsive environmental results, and mitigation solutions towards pollution risks, chemical hazards, and ecosystems degradation – Child Project 1.1 will continue this conversation, and bolster these efforts.

Contextualizing gender action in TDA process

The Mediterranean Basin covers a vast geographical expanse of complex cultural and social landscapes, which need to be understood to be able to develop tailored gender action in the region for transboundary waters.

Labour market statistics in the northern Mediterranean countries, for example, show a significant gender gap: women's employment rates (especially for marginalized communities such as Romas) are lower, exacerbated further by a wage gap. Since economic capital is among important determinants of coping capacities to external shocks, emerging threats and potential risks (in this case, arising from lack of gender-sensitive water management policies, or disregard for mounting transboundary issues by regional players), women (and other marginalized groups, including ethnic minorities) are more likely to be vulnerable.

To illustrate further, women in MENA Mediterranean countries face greater institutionalized exclusion from civil society and political spheres than typical of the entire region. In recent years, however, women have been capitalizing on opportunities presented by pluralistic interpretations of traditional gender norms, and entering both the work force and the public space. Nevertheless, the gains achieved through social change in this region may not keep pace with the growing threats of water stress, climate change and environmental degradation, and as with the northern Mediterranean countries, burdens of emerging risks and threats may fall on the vulnerable groups.

Component 2 of Child Project 1.1 envisaging gender mainstreaming actions through a dedicated Gender Assessment in the course of TDA update is thus timely. At the outset, it will help in establishing a baseline, showing the differences in gender norms, roles, power structures, activities, needs, opportunities, and rights, which affect men, women, girls and boys in the context of changing environmental and socio-economic situation in the Mediterranean.

Further, this assessment will pioneer a gender perspective within the TDA, reiterating the importance of the collection of sex-disaggregated indicators for water assessment, that could further develop into gender-sensitive water monitoring, piloting projects on the field to test out these indicators and validating results, followed by dissemination.[63] In doing so, it could address data capacity gaps in programmatic approaches of transboundary water resource management, as well as knowledge and implementation gaps.

Gender mainstreaming at the GEF, UN Environment and the MedProgramme

[63] Seager, Joni & Greco, Francesca. *Sex-disaggregated indicators for water assessment, monitoring and reporting*, United Nations Educational, Scientific and Cultural Organization (UNESCO). (2015)

Employing a strong mandate of gender mainstreaming and promoting women's empowerment as well as contributing to the international conversation on gender mainstreaming, both the GEF and UN Environment – and, accordingly the MedProgramme – have prioritized delivering inclusive and gender-responsive environmental results and mitigation solutions.

Having launched its initial gender policy in 2011, the GEF approved a reinforced policy in November 2017[64] shifting the focus from a 'gender-aware, do no harm' approach to a 'gender-responsive, do good' approach. This requires robust standards in the design, implementation and evaluation of GEF activities, and introducing measures that will allow the GEF, over time, to better leverage strategic opportunities to address gender gaps critical to the achievement of global environment benefits.[65] The GEF-7 Programming Directions further clarify the GEF's evolving and progressive gender strategy and lay out clear gender standards for each domain under the GEF. For CP 1.1 Component 2 – gender directives of the International Waters focal area (such as: gender assessments and social analysis during project preparation, differentiated reporting of output indicators, and additional measures based on the GEF's Gender Action Plan) are particularly relevant and will be incorporated as action points for the operationalization for the TDA Update Gender Assessment.

UN Environment recognizes the role of gender equality as a 'driver of sustainable environment development'[66], particularly to enhance environmental security and climate resilience; to assuage the stresses on natural resources and dependent communities, including unsustainable management of coastal resources; and to preserve the health of large marine ecosystems (like the Mediterranean Basin) which provide vital environmental and economic services to coastal populaces.

The MedProgramme has also developed a Gender Mainstreaming Strategy (Annex I), focused on bringing cohesive gender-responsive action throughout its diverse portfolio. The Strategy provisions for Child Projects to develop their unique gender action plans to address project objective-specific gender and socioeconomic dimension, and pioneers a pan-Mediterranean effort towards greater gender equality and environmental security among beneficiary countries.

Component 2 focus on developing an exclusive gender assessment to inform the TDA update will represent an important and proactive input for the overall MedProgramme gender agenda. In tandem, this gender mainstreaming activity will contribute to the fulfillment of mandates adopted by the GEF and UN Environment (as described above) and contribute to the global effort for better understanding and addressing the crosscutting issues of gender, water, and environmental security.

A.5 Risk.

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

RISK	RISK RANKING	MITIGATION MEASURES
Operational / delivery risks		

[64] See here for the latest GEF Gender Mainstreaming guide (EN). GEF. (2017) (publication)
[65] "A new Policy on Gender Equality for the GEF". GEF official website. (2017) (news update)
[66] *Gender Equality and the Environment: Policy and Strategy.* UN Environment. (2015)

Security in Algeria renders project activities unimplementable	Medium	A review of UN Security Procedures during project preparation indicated that one-week advance notice is provided to evaluate risk and issue clearance for activities. This clearance procedure and timeframe will be accounted for the project workplan.
PCB contaminated equipment identified in inventories is no longer available for removal during project	Medium	When long intervals separate inventory work from actual disposal, it is common to find that transformers with a high resale value for scrap metal, may disappear from the store they were inventoried from. The project addresses this risk through a) an immediate disposal Phase 1 planned for year 1, minimizing the interval between inventory and disposal; and b) by coordinating with baseline projects in many countries (e.g. Lebanon, Montenegro) where detailed inventories and partial disposal is being completed. The national focal points are already connected with equipment owners and have raised their awareness of the POPs risk and need for secure storage of wastes until their disposal.
Sale of metallic mercury in advance of project activities	Medium	There is widespread global demand for metallic mercury and anecdotal evidence gleaned during project preparation indicated that metallic mercury is at real risk of being sold. Owners of stocks identified during the PPG in Tunisia and Algeria were committed to securing these stocks, and regular monitoring of the security of these sites will begin in Phase 1 pending their final disposal during Phase 2.
Basel permits take too long to process, exceeding project work plan	Medium	In most cases project countries are familiar with the process, having already administered exports in the past (Lebanon, Algeria, Tunisia, Bosnia..). For the Phase 2 countries information exchanges will be established with the Phase 1 countries in order to familiarize countries with the process in advance of the planned export timings.
Prevention of new POPs is not measurable in tonnes	Medium	The new POPs pilot projects are designed in two phases, with a first phase confirming and completing baseline data collected to establish realistic targets in terms of tonnes to be prevented. Funds for full prevention activities, based on a budget per tonne reduced, will be allocated only after this feasibility confirmation, by the Project Steering Committee or midterm review. Such funds will be diverted to disposal if prevention is deemed not feasible, to meet the GEB targets.
Labs with technical capacity to provide reliable analysis of new POPs not available in the region	High	Laboratory facilities to analyse the presence and concentration of new POPs, particularly PFOS, is limited in the region. Close cooperation between this project and the Africa regional Global Monitoring Programme (GEF ID: 4886) will ensure access to labs in other regions as necessary.
Impacts of climate change on the project	High	The Mediterranean Sea region has been identified as one of the main climate change global hotspots (i.e. the areas most responsive to climate

		change). The recent IPCC Fifth Assessment Report (2013-2014), considers the Region as "*highly vulnerable to climate change*"[67], and predict it "*will suffer multiple stresses and systemic failures due to climate changes*". Physical changes in the Mediterranean climate have been widely observed and such trends are projected to continue in the future. Major changes are related to an exceptionally high temperature increase compared to the European and global average, in the range of 2 to 6.5 °C by the end of the century. This is expected to be accompanied by a particularly large decrease in annual mean precipitation especially in summer and an increase in evaporation
Lack of sustained political commitment of beneficiary countries	Low	Strong involvement of beneficiary countries in project execution. The project benefits from the commitment of beneficiary countries to processes and activities of the Barcelona Convention including regular meetings where project issues can also be discussed on a more regular basis than the project-specific and funded meetings.
Data gaps continue to affect quality and applicability of assessments, ability to track progress and formulate adequate responses	Medium	Strengthening of regional cooperation and exchanges between technical, scientific and policy stakeholders through the TDA update and BC governance mechanisms Targeted assessments to improve knowledge
Lack of monitoring and reporting capacities; reluctance with provision/ sharing of data	Low	Countries assisted with monitoring and information systems upgrade, and with reporting to the regional level
Social and environmental safeguard risks *(see also ESERN checklist, Annex L)*		
Accident or spill during the field waste operations	Low	The environmental and social risk management framework of the project is well established and sets out a relevant risk assessment and initial environmental management plan (EMP) for each site where operations will be conducted. Health and environmental management capacity is a criterion for the selection of the international contractor who will be appointed to manage the operations. Finally, the contractor is required to produce a Health and Safety Plan for each site, detailing the precautionary and emergency measures to be in place before operations begin, including ongoing monitoring of worker exposure, air quality, and other relevant measures depending on the specific wastes being handled.
Wastes collected for	Low	The project has been designed with two Phases of disposal, so that

[67] IPCC, Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Chapter 21.5.1.2. Hotspots

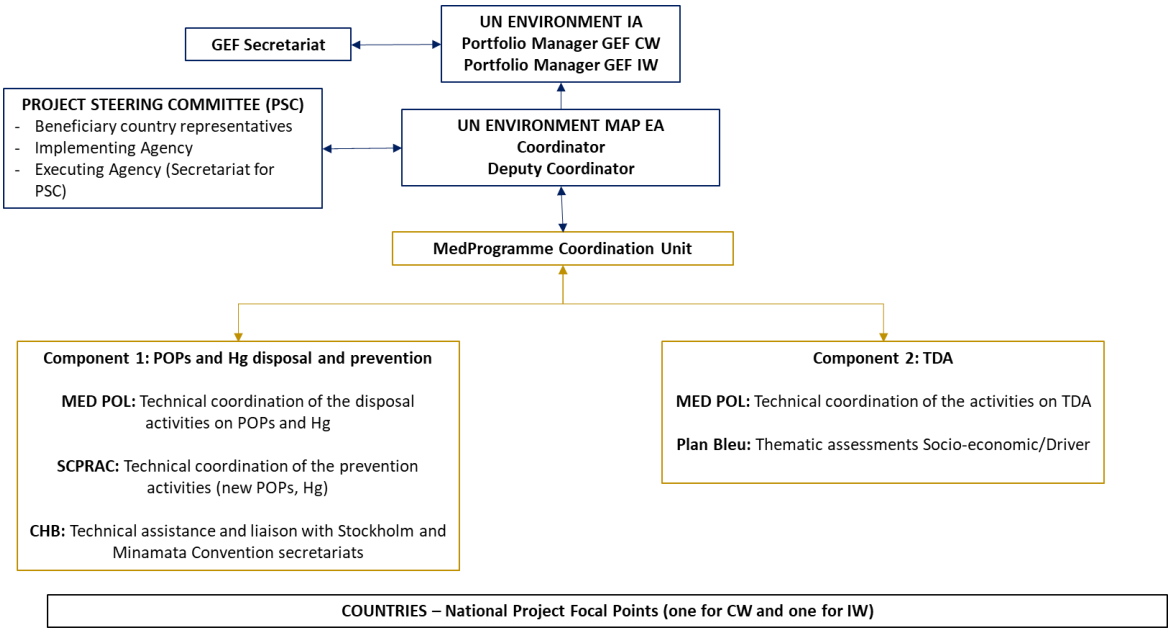
temporary storage are not disposed for some reason and remain at the project end		immediately ready stocks are disposed of quickly after project start up. A detailed planning phase is envisaged before any Phase 2 operations begin, to ensure that a) inventories are fully confirmed and verified and b) funds and human and technical resources are in place to fully address any centralized stocks in an environmentally sound manner.

A.6. Institutional Arrangement and Coordination.

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

The organizational structure for the coordination and management of the Child Project 1.1 is illustrated in Figure 6.

FIGURE 6: INSTITUTION ARRANGEMENTS AND COORDINATION OF CHILD PROJECT 1.1



Implementing Agency (IA): The GEF Units in the Ecosystems and Economy Divisions of UN Environment will serve as Implementing Agency (IA) for Child Project 2.1. The IA will be responsible for overall supervision of the project and will oversee its progress through the monitoring and evaluation of activities and through progress reports. The IA will report on the project implementation progress to the GEF and will take part in the Project Steering Committee (PSC). The IA will provide guidance and oversight of project execution by the Executing Agency (EA) including through the review and approval of work plans, budget allocations and budget revisions proposed by the Executing Agency.

Project Steering Committee (PSC): The PSC will be established and will carry out the function of a Project Board. The PSC will consist of: 1) beneficiary countries, the IA and the Executing Agency (EA) representatives; and 2) the MedProgramme Coordinating Unit (MedPCU) acting as Secretariat for the PSC. These are the Members of the PSC. Countries will be represented at the PSC at a technical, decision making level, e.g. national focal points for conventions (Stockholm, Minamata or Barcelona) and/or technical focal points (MED POL focal point). Following the model of the PPG Regional Consultation Meetings, the PSC meetings will bring together both Chemicals and

Waste and International Water stakeholders, with parallel technical working sessions combined with plenary discussion and approval of workplans to maximize transparency and joint working across the two Focal Areas.

It is anticipated that to ensure an efficient use of the resources, PSC of different Child Projects of the MedProgramme will be organized back to back. These meetings will dedicate one session to inform the countries about the progress made by the entire MedProgramme followed by several sessions dedicated to specific decisions to be made by the countries for each Child Project.

The Executing Partners (EP) will intervene at the PSC to present the progress made and support the Secretariat for the PSC by providing background information on substantive and technical issues, as well as on modification to the Project Document and its annexes presented to the PSC by the MedPCU. The role of the PSC is to:

- Oversee the project;
- Provide overall guidance and ensure coordination among all parties;
- Provide overall supervision for project implementation;
- Approve the annual work plan and budget;
- Oversee the implementation of corrective actions;
- Enhance synergy between the project and other ongoing initiatives related to the GEF International Waters Focal Area;
- Ensure full coordination of the project with the entire MedProgramme.

Additional stakeholder representatives from private sector, academia, CSOs, NGOs, etc. can be invited to join the PSC during the project execution as observers. At all times, the PSC and its activities will comply with the policies, conditions and regulations of the UN and the GEF.

Executing Agency (EA): The UN Environment/Mediterranean Action Plan (UN Environment/MAP) will serve as the Executing Agency (EA) for the project. The EA will report on the project implementation progress to the IA (including those activities executed by the Executing Partners), and will organize and act as Secretariat to the PSC. The EA will be responsible for, inter alia, the following required activities to achieve the project objectives, outputs and outcomes:

- Establishing, hosting and supervising the MedProgramme Coordinating Unit (MedPCU);
- Acting as Secretariat for the Project Steering Committee (PSC);
- Ensuring that the project is executed according to the agreed work plan and budget;
- Review and submit required reporting obligations to the IA, including quarterly expenditure reports and annual Project Implementation report (PIR);
- Ensuring all procurement is done in compliance with Agency standards;
- Communicating with and disseminating information to the Executing Partners (EP) and other stakeholders.

The EA will ensure that all activities, including procurement of goods and services, are carried out in strict compliance with the rules and procedures of UN Environment and GEF. The EA will be responsible for the establishment, adequate staffing and uninterrupted functioning, throughout the project's life span, of the MedPCU.

MedProgramme Coordinating Unit (MedPCU):

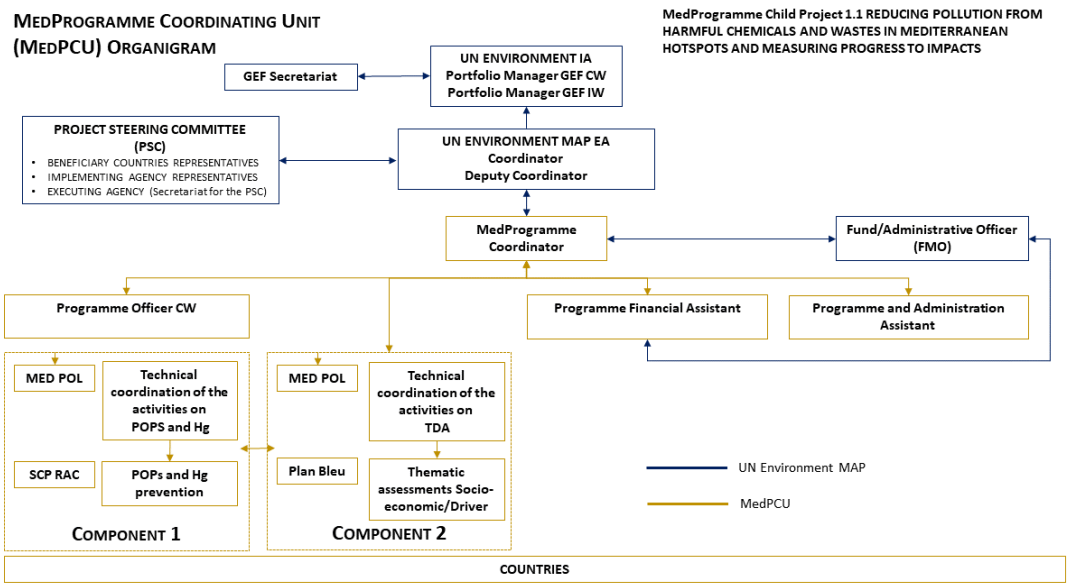
During the project development phase of the Child Projects under the MedProgramme particular attention was given to setting up a MedProgramme Coordinating Unit (MedPCU). The MedPCU was designed taking into consideration the high complexity of the MedProgramme. The staff under the MedPCU will deliver cross-cutting functions across the Child Projects of the Programme. Moreover cost efficiency will be maximized by centralizing

the overall Programme management into a single unit, thus avoiding duplication of project management units, functions, task and deliverables. This choice will also ensure timely and consistent execution of the Child projects of the MedProgramme, allowing at the same time transfer of lessons learned and cross-fertilization. It is anticipated that the MedPCU will be staffed with the following core positions:

- MedProgramme Coordinator (P4)
- Programme Officer CW (P3)
- Programme Financial Assistant (G5)
- Programme and Administration Assistant (G5)

In addition to this, the MedPCU operations will be supported during specific periods of the lifespan of the Child Project 1.1, by one Gender Specialist and one Knowledge Management Specialist to be engaged through out-sourced contracts. The proposed organigram for the PCU is:

FIGURE 7: ORGANIGRAM OF THE MEDPROGRAMME COORDINATING UNIT



The MedPCU will be established, hosted and supervised by UN Environment/MAP (Barcelona Convention). The MedPCU will ensure coordination across the entire MedProgramme and the consistent execution of the seven Child Projects implemented by UN Environment and executed by MAP (Barcelona Convention), as well as the Child Project implemented by EBRD. In terms of MedProgramme coordination, the MedPCU will provide management functions to the Child Projects implemented by UN Environment and executed by UN Environment/MAP and EBRD.

The Unit will be responsible for, inter alia, the following tasks:

Project management services:

- Manage the flow of information from the field and produce periodic monitoring reports, namely quarterly financial expenditure reports; annual expenditure forecasts and procurement plans; half-yearly narrative reports of progress including the annual Project Implementation Review; annual cofinance report;
- Initiate, validate, sign and implement legal instruments with all bilateral partners including executing partners and countries where appropriate;
- Organize travel and payment of DSA for staff and consultants as needed;

- Coordinate and support the project activities of MED POL and SCP/RAC (Component 1), and MED POL and Plan Bleu (Component 2);
- Organize the meetings of the Project Steering Committee (PSC) and serve as its Secretariat;
- Ensure the Project governance and oversight of the financial resources from the GEF investment and the co-financing delivered by the Project stakeholders.

Programmatic coordination:

- Ensure that the execution of the entire MedProgramme is aligned and integrated with the priorities of the Contracting Parties to the Barcelona Convention, its 2016-2021 MidTerm Strategy and biennial Programmes of Work;
- Ensure that the execution of the MedProgramme Gender and Knowledge Management Strategies is consistent across the entire Programme and adequately support and include the Child Project 1.1.
- Record-keeping and facilitation of the delivery of the Programme monitoring and evaluation plan to allow reporting of progress towards the objectives of the MedProgramme as a whole by the Executing and Implementing Agencies.

MedProgramme Visibility:

- Represent the MedProgramme in global events and initiatives;
- Ensure that the Programme Annual Stocktaking Meeting is organized in a coordinated manner to efficiently serve the countries, IA, EA and stakeholders;
- Share the Project achievements, products/outputs with the Project and MedProgramme's stakeholders;

Technical support, execution of technical tasks

- Refer to detailed deliverables in Table 15 below.

The cost of the MedPCU will be covered by PMC, cash co-financing provided by the Barcelona Convention and to a minor extent, by the projects budget as detailed in Table 14. The latter, will be allocated specifically for Child Project 1.1 to run technical and substantive tasks as described in Table 15 below.

TABLE 11: DETAILS OF THE BUDGET ALLOCATED FOR THE MEDPCU

MedProgramme Coordinating Unit (MedPCU)		Budget Allocated for the MedPCU US$		Total US$
	GEF Grants	PMC[1]	Technical Tasks[2]	PMC+Technical Tasks
Child Project 1.1 (GEF ID 9684)[3]	14,250,000	677,000	760,000	1,437,000
Child Project1.2 (GEF ID 9717)	*5,000,000*	90,000	-	90,000
Child Project 2.1 (GEF ID 9687)	7,000,000	333,000	90,000	423,000
Child Project 2.2 (GEF ID 9685)	*3,500,000*	166,000	84,000	250,000
Child Project 3.1 (GEF ID 10158)	*1,376,147*	65,500	58,500	124,000
Child Project 4.1 (GEF ID 9686)	*2,500,000*	119,000	95,000	214,000
SCCF Project (GEF ID 9670)	*1,000,000*	80,000	5,000	85,000
Total GEF Grants	33,626,147	1,530,500	1,092,500	2,623,000
Staffing costs as %:		5%	3%	8%

1: Including travel costs of the MedPCU's staff.
2: Details of the technical tasks executed by the MedPCU's staff are provided under the sections A.6 og the GEF CEO Endorsement Request Template and in Annexes E (Annex O for CP1.1 -9684), of each child project submission package.
3: Breakdown of the 760,000 allocated for Techcnial Tasks: 485,000 US$ from CW grants for the Programme Officer CW and 275,000 US$ from IW grants for the technical support on TDA of the Med POL Officer.

TABLE 12: DELIVERABLES AND COSTING OF PCU TECHNICAL SUPPORT

Position Titles	*$ /Person Month, Est Person Month*	*Tasks to Be Performed /Deliverables*	*Related workplan activity*
MedPCU Technical support			
Chemical and Waste			
P3 Chemicals and Waste Programme Officer	*12,000 / 3 months*	• *Provision of technical inputs for tender preparation related to Phase 1 Disposal of POPs in Algeria and Lebanon, based on UNEP C&W IA team formats.* • *Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service.* • *Review of contract documents and related specifications.* • *Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor.*	*1.1.1: Phase 1 POPs disposal*
	12,000 / 5	• *Provision of technical inputs for tender related to Phase 2 POPs Inventory and* • *Prioritization, based on UNEP C&W IA team formats.* • *Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service.* • *Review of contract documents and related specifications.* • *Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor with regards to the following deliverables:* o *National POPs inventory teams.* o *National site assessment and remediation studies.* o *Laboratory services for POPs and mercury analysis.* o *MapX platform.* o *Environmental Management Plans for stockpiles.*	*1.1.2: Phase 2 POPs inventory and prioritization*
	12,000 / 4	• *Provision of technical inputs for tender related to Phase 2 Disposal of POPs, based on UNEP C&W IA team formats.* • *Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service.* • *Review of contract documents and related specifications.* • *Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor.*	*1.1.3: Phase 2 POPs disposal*

	12,000 / 4 - 5 months	• *Provision of technical inputs for tender related to POPs Remediation and Assessment in Algeria and Lebanon, based on UNEP C&W IA team formats* • *Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service.* • *Review of contract documents and related specifications.* • *Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor with regards to the following deliverables:* o *National site assessment and remediation studies.* o *Laboratory services for POPs and mercury analysis.* o *MapX platform.* o *Environmental Assessments contaminated sites*.	*1.1.4: POPs remediation and assessment*
	12,000 / 6	• *Provision of technical inputs for tender related to Confirmation and Planning of mercury stocks for disposal (Algeria and Lebanon), based on UNEP C&W IA team formats.* • *Provision of input for the technical evaluation of submitted bids by consultants in coordination with UN procurement service.* • *Review of contract documents and related specifications.* • *Following up on work progress (in the field?) and reporting on percentage achievements.*	*1.2.1: Confirmation of mercury stocks for disposal* *1.2.2: Planning and disposal of mercury*
	12,000 / 10	• *Ensure consistency with Stockholm Convention best practices and networks, including through liaison with UNEP Chemicals and Health branch* • *Technical review of POPs and mercury publications and knowledge products*	*1.3.1: Pilot demonstration projects in three countries*
	12,000 / 8	• *Develops capacity building and awareness raising programme in cooperation with regional consultants and oversees its execution* • *Technical inputs and delivery of presentations to project steering committees and Annual Stock-taking Meetings*	*Cross-cutting (all POPs and Hg workplan activities)*
International Waters			
MED POL P4 (technical support, 25% of the salary)	*4,583 /60*	• *Overall/ strategic guidance, development of Terms of Reference and review of consultants' deliverables for:* o *TDA update* o *Preparation of report on progress to impacts* o *Extension of monitoring to offshore areas* o *Data sharing policy* • *Collecting and providing inputs for and delivery of presentations to project steering committees and Annual Stock-taking Meetings* • *Providing inputs to MedPCU for technical elements of project reports, information for MedProgramme knowledge management platform and for communication purposes*	*Cross-cutting (all IW workplan activities)*

Execution at National Level: The Beneficiaries Countries will designate a National Project Focal Point (NPFP) during the inception phase. The NPFP will act as the liaising person between the government, the EA and EP. The NPFP will be fully involved in the selection of the national consultants and experts which will support the execution of activities on ground under Components 1 and 2 of the Project. The NPFP will also facilitate collaboration with other country offices, as well as the MedProgramme Coordinating Unit (MedPCU). Moreover, special attention will be given in all countries to overcoming fragmentation across sectors in decision making related to project's goals and activities.

Executing Partners (EP): The MED POL Programme for the Assessment and Control of Marine Pollution in the Mediterranean (MED POL) of UN Environment/MAP will execute technical activities under Component 1 and Component 2 of the project. Additional EPs will execute activities of the project that fall within their core areas of expertise, based on cooperation agreements, including for the engagement of national partners as identified to manage and deliver project activities as per the Stakeholder Table in section A.3 above (e.g. Centre National des Technologies de Production Plus Propre in Algeria). These arrangements will be established with full consideration of the applicable UN Environment and GEF principles and procedures, including cost-efficiency and effectiveness.

The technical work on disposal of POPs and mercury (Component 1) will be executed in full coordination with the UN Environment Chemicals and Health Branch dealing with the Stockholm and Minamata conventions. For technical work on prevention of POPs and mercury, MED POL will work in coordination with MAP's Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) identified on the basis of its mandate and broadly recognized role and comparative advantages and with WHO on prevention of mercury in hospitals.

Component 2 will be entirely executed by MED POL in coordination with the Plan Bleu and 22 Contracting parties of the Barcelona Convention which indicated the development of an updated TDA as a priority for the region.

The responsibilities and roles of each of the Executing Partners is described in the current document and linked to specific actions, outcome and outputs.

The EPs will report on the project implementation progress to the EA and will take part in and contribute to the PSC as observers. The main roles of Executing Partners are to:

- Provide technical advice and engage with the countries for all aspects of the execution of activities under the relevant Components of the Child Project 1.1;
- Provide staff time and expertise in guiding their respective project activities;
- Supervise experts hired to ensure on time, high-quality deliverables;
- Manage the flow of financial resources earmarked for the implementation of activities;
- Review technical and substantive inputs by partners and countries on workplans etc.;
- Support the MedPCU and provide inputs for the preparation of the CP1.1 workplans, budgets, reports and other documents as relevant;
- Review the technical quality of the Child Project 1.1 outputs in coordination with the MedPCU.

The EP will meet periodically with the MedPCU to: 1) discuss emerging issues and challenges in rode to prepare timely contingency plans and measures; 2) update the MedPCU and the other EP on the progress made in the execution of their respective activities; 3) to prepare the working and information documents for the PSC and key events of the Project and the MedProgramme; and 5) to ensure effective coordination during the execution of the activities

A.7 Benefits.

Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The project design includes disposal activities in Algeria, Lebanon, Morocco, and Tunisia and allows for potential activities to be carried out (based on the PSC decision in the implementation phase, and in close coordination with Child Project 1.3) in Albania, Bosnia and Herzegovina, Egypt and Montenegro and Turkey. In these countries, local communities around activities sites will be recipients of both health and environmental benefits, as POPs pesticides, PCBs, Mercury and new POPs will be removed, and therefore mitigating any further risk of exposure to humans and ecosystems. The project will also improve regulatory controls on new POPs and mercury which are still used in key sectors, including health care. More broadly, these activities will have national and regional socioeconomic benefits through decreased pollutant loads being released into the Mediterranean watershed.

Under Component 1, the project will remove sources of land based pollution, thus directly improving both health and the local environment. Given the reliance of the region on tourism, a cleaner littoral and marine environment will bring socio-economic benefits to local populations who will be less exposed to harmful pollutants and will also benefit from improved perception of the location for tourism and investment.

The project will also support industries in the region, including small and medium sized and local enterprises, to adopt alternatives to industrial POPs that are either already banned or will be banned in the future. By investing now the MedProgramme will support current users of POPs to shift their production and procurement practices in coordination with regulators, thus reducing costs of inaction and potential future regulatory action. The replacement of industrial POPs in middle and low income countries is lagging, with many users continuing to use these ingredients, so the project will allow the beneficiary countries to become leaders and be widely promoted through case studies, thus increasing their visibility and reputation in the region and beyond.

Under Component 2 (International Waters), MED POL will work with Plan Bleu to support a set of inter-related activities in all the GEF-eligible Mediterranean countries to enable them to better monitor and assess the state of marine and coastal environment, analyse causes of environmental degradation, and to prioritise issues necessitating actions. The TDA update in particular will include a gender assessment and strengthen the knowledge base in areas such as impacts of climate change on natural and socio-economic systems, impact of pollution on marine ecosystems, potential for blue economy development, etc. Capacities to identify trends and measure progress will be enhanced, including progress with the achievement of GES and SDGs on regional and national levels. This will in turn lead to increased environmental and socioeconomic benefits in the region where a large share of population depends (directly or indirectly) on the economic activities related to the sea.
The annual economic value of sea-related economic activities in the Mediterranean has been assessed at US$ 450 billion, characterising the 'Mediterranean economy' as one of the largest in the region (following national GDPs of France, Italy, Spain and Turkey). According to available estimates, international tourist arrivals in the Mediterranean are expected to reach 500 million in 2030 . Current level of benefits and potential for future growth are directly dependent on the health and integrity of marine and coastal ecosystems, to which the project activities will contribute through the TDA update, preparation of report on progress to impact, upgrade of IMAP to also cover offshore areas, and development/ implementation of data sharing policy in the region.

By improving the information and knowledge base for coordinated responses to priority pressures and their root causes, Component 2 activities will contribute significantly to preservation of the unique ecosystems and economic assets on the regional and national levels, contributing at the same time to the achievement of SDGs. Regional cooperation will be strengthened and further developed to ensure synergies and maximise efficiency. Improved availability and accessibility of data will enable stronger stakeholder participation and engagement on both national and regional levels, thus strengthening governance mechanisms. Economic benefits for the coastal

populations of GEF-eligible Mediterranean countries will be secured through the project's contribution to preservation of resource base and ecosystems value, referring also to the long term. Moreover, the project will create conditions for better management of priority transboundary pressures which is expected to generate health benefits for the affected populations. Gender assessment to be conducted within the TDA update process is expected to contribute to MedProgramme gender mainstreaming overall, as well as to generate direct benefits on the local level by providing data and forums for better understanding and addressing the crosscutting issues of gender, water and environmental security.

A.8 Knowledge Management.

Elaborate on the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

Child Project 1.1 will be managed under the umbrella of the MedProgramme, which is composed of eight child projects addressing the GEF focal areas of International Waters, Chemicals and Waste, and Biodiversity. Effective knowledge management (KM) is a core leveraging mechanism of the MedProgramme to achieve up scaling of approaches, policies and technologies promoted by the Programme at multiple scales. The Knowledge Management Strategy (Annex H[68]) will be implemented under Child Project 4.1 and will support the KM activities of all Child Projects, maximizing their effectiveness in providing opportunities for south-south learning, fostering intergovernmental cooperation, using monitoring and evaluation (M&E) tools and geospatial services, applying best practices and developing portfolio-wide training and communication strategies.

The results achieved through this project will be highly relevant for policy-making in the region, directly supporting the contracting parties of the Barcelona, Minamata, Basel and Stockholm Conventions. Ensuring and strengthening the science-policy interface (SPI) is of paramount importance in this project: it will require that technical and scientific findings are properly digested and shared with relevant decision-makers and that a two-way dialogue is reinforced to ensure that interventions are fittingly contributing to national priorities. The MedProgramme KM system implemented through the Support Child Project 4.1 will support this objective by facilitating sharing of information among project countries and showcasing progress towards impact regionally.

The data and information produced under Component 1 of the project will be translated and shared in a variety of means according to the intended recipients. For example, visualization tools (GIS and story maps) will be used to timely and effectively illustrate progress and achievements on pollution reduction in hot spots . Successful case studies will be published on the MedProgramme platform and shared widely through the identified communication channels. Messages and recommendations emanating from results of phase I and II of the project will be disseminated to support informed policy-making and encourage broader adoption of replicable innovative practices for wastes and hazardous chemicals reduction.

The outputs foreseen by Component 2 of the project will provide invaluable policy instruments to environmental decision-makers to identify pressures of transboundary nature and set a basis for integrated and effective solutions through strengthened regional cooperation. Updating the Transboundary Diagnostic Analysis of the

[68] Annex H, the Knowledge Management strategy, was jointly developed across all the Child Projects of the MedProgramme and is referenced in other CP documents as Annex P.

Mediterranean (first done in 2005) will improve the state of coastal and marine ecosystems in the Mediterranean. A targeted strategy to disseminate its findings will be supported by Child Project 4.1 to make sure that each direct and indirect stakeholder group will be engaged and informed. The process to prepare a proposal for a Data sharing policy for the Mediterranean, thus enhancing the implementation of IMAP at national level, will be supported at all levels of the KM strategy. Moreover, the KM tools implemented through Child Project 4.1 will be used to assess progress and provide inputs for reporting.

The above-mentioned specific activities supported by Child Project 4.1 are not exhaustive and a more detailed plan will be agreed during the inception phase of the MedProgramme.

The stakeholders identified by the analysis in section A.3 will be considered as both knowledge providers and knowledge beneficiaries, and they will be engaged in all relevant activities at the MedProgramme level. These groups could be further enriched during project execution with potential new partners at the international and national level. The legacy of the project will also be ensured through the KM system which will provide a permanent repository for the project in the MedProgramme platform and the active dissemination of its findings beyond the project life (the Barcelona Convention Secretariat will bring forward the results of the MedPogramme and promote its contribution to enhanced environmental security in the region).

A centralized system coordinated by the MedProgramme Coordination Unit (Med PCU) is designed to capture, digest and share the vast amount of information and knowledge generated across the MedProgramme portfolio with its intended audiences and stakeholders. Each Child Project participates in the common knowledge management (KM) strategy in order to maximize efficiency, ensure good governance of the portfolio and achieve greater impact at the different functional levels identified (portfolio level, general public level and policy- and decision-making level). While specific needs related to the diverse outputs of the individual projects will be analyzed on a case-by-case basis, all Child Projects are expected to contribute to the overall MedProgramme KM activities as described in the following text (included in the project documents of each Child Projects).

KM Platform

A web-based knowledge hub comprised of a data and information management system (with both public and restricted access) and a combination of visualization tools to serve the portfolio's needs will be implemented by the MedPCU in close consultation with all Child Projects. The integrated platform will host: (1) a project management/coordination tool; (2) a public portal including sub-webpages for each Child Project; (3) visualization tool(s) to display digitalized representation of data through GIS and other suitable means; and (4) a database for raw/primary data.

Child Projects are expected to contribute to each of these components as follows:

1. Upon initiation of the MedProgramme, every Child Project will receive specific training on how to use the project management tool selected by the Med PCU. Features powered by this tool include (but are not limited to): automated reporting, task monitoring, calendars, live editing, Gantt–Charts, time tracking, encrypted security, back-ups, file management and cloud repository, integration with other products, role-based access control, mobile apps, email integrations, and discussion boards. Project managers (and designated project collaborators) are expected to use the tool to facilitate communication and information exchange throughout the MedProgramme, promote knowledge sharing and peer-to-peer learning, ensure tracking and monitoring of progress, and meet their reporting requirements for the Med PCU.
2. The outward-facing portal will be populated with key information showcasing progress towards impact and the contribution of the MedProgramme to global and regional environmental goals. In addition to the umbrella portal, each Child Project will have dedicated sub-pages for their specific projects. The Child Projects are expected to provide regular information (in different multimedia formats) to generate content for their

respective project sub-pages and the overall programme portal. The Med PCU will be responsible for curating the information provided and packaging them for the intended audiences.

3. One or more visualization tools will be used to display information generated by each project. Different types of data (be them quantitative, normative or qualitative) are best visualized through a variety of ways, such as GIS, story maps, map dashboards, infographics, trend line charts, etc. Child Projects will be prompted to submit their inputs on a rolling basis to make sure that every result/achievement is captured through one or more of these tools.
4. A shared data model/protocol will be agreed at the beginning of the MedProgramme to ensure that projects will compile relevant data with a standardized approach and enable a harmonized data entry system. Issues related to open data, ownership, quality and review of data will be addressed in this exercise; a mapping of voluntary standards will help to evaluate feasible options. Raw/primary data will be stored in a database with flexible restricted/public access.

Milestone Events

- *Annual Stocktaking Meetings*: All project partners are expected to attend, and meaningfully participate in, the Annual Stocktaking Meetings of the MedProgramme. These are major regional events organized by the Med PCU in cooperation with all Child Projects and country representatives and will take place on a rotation basis in different project countries. The meeting will involve: all Child Projects and Governments of the participating countries, the MedProgramme's implementing and executing agencies, the GEF Secretariat and Independent Office of Evaluation (IOE), Convention Secretariats, the UN Environment Global Program of Action (GPA), as well as major regional and global NGOs, representatives of those Mediterranean countries not participating in the MedProgramme, bilateral and multi-lateral donors, IFIs, the UfM, other regional intergovernmental organizations (Sahara and Sahel Observatory, etc.), and major private sector coastal area actors, water users, tourism associations and the shipping industry. Representatives of faith-based leaders, women's organizations, youth organizations, fashion/art/sport testimonials, media specialists, among other relevant groups will also be invited to participate in these events, following a dedicated stakeholders' analysis.

  These meetings aim to establish synergistic interactions among Child Projects, and with other relevant initiatives and stakeholders, including with all other Mediterranean countries not participating in the MedProgramme. The Annual Stocktaking Meetings will provide an opportunity to all Child Projects to showcase their implementation advancement, progress towards impacts and problems encountered, and to engage with a broad audience of peers and stakeholders sharing similar objectives within the overarching goal of achieving environmental security in the Mediterranean Basin. The Annual Stocktaking Meetings will be an occasion for face-to-face knowledge exchanges, south-south and north-south learning, and promotion of the broader adoption of MedProgramme approaches and solutions. The participation of regional and global media will raise public awareness across the Mediterranean countries and beyond. The design, objectives and architecture of the Annual Stocktaking Meetings will be defined during the first year of MedProgramme operation and approved at the Child Project 4.1 Steering Committee level. Child Projects will be informed about modalities for their contributions in detail. The first Annual Stocktaking Meeting will be held during the second year of MedProgramme execution.
- *GEF events*: The MedProgramme will be featured in all relevant GEF events and activities involving the four focal areas addressed by the Programme (International Waters, Chemical and Waste, Biodiversity and Climate Change). For the IW focal area see "Synergies with IW:LEARN".
- *Global events*: Experiences and lessons learned from the MedProgramme will be of relevance for a number of global processes shaping polices related to the sustainable management of natural resources in coastal areas. Participation in selected global and regional events, as well as in significant ongoing awareness raising campaigns, will be evaluated by the Med PCU according to relevance and impact criteria. Child Projects will contribute to these events in different forms, ranging from physical attendance, production of specific products, content and multimedia material to be packaged in suitable products.

- *Launching/Closing events of the MedProgramme*: The design and practical details of these events will be planned during the inception phase of the MedProgramme. Considering the staggered initiation timeframes of the different Child Projects, a launching event of the MedProgramme could be organized in the form of a press conference to coincide with the kick-off of the Support Child Project 4.1. Basic communications material about the objectives of the MedProgramme (such as visual identity, slogan, mission statement, description of Child Projects, informative brochure, short promo video, basic online pages, etc) should be prepared prior to the launching event. Project managers will be timely informed about practical details of these events and modalities for contribution.

Sharing knowledge and building capacity

One of the objectives of the MedProgramme is to improve the capacity of key regional stakeholders and build socio-economic resilience of impacted communities. To this end, a series of knowledge exchanges will take place at different levels taking inspiration and practical lessons learned from the GEF Partnership (reflecting the wealth of experience and examples from projects and programs around the world) and other relevant Organizations involved. At the portfolio level, the MedPCU will capacitate Child Project teams with knowledge and training that can help them to deliver better project results and achieve greater impact. The identification of topics and modalities of exchange (face-to-face, virtual meetings, Communities of Practice, Expert visits, Study Tours, manuals, among others) will be defined at the beginning of the Programme implementation. Preliminary topics could include:

1. Gender mainstreaming and stakeholders' engagement;
2. Scientific communication: bridging the gap between scientists/technical practitioners and media specialists;
3. Lessons learned from the MedPartnership and the ClimVar and ICZM projects.

It is expected that these knowledge exchanges will further empower project stakeholders, enhance cooperation, strengthen the institutions they represent and ultimately influence policies and norms for better management of natural resources in coastal areas. Additionally, Child Projects will participate in learning exchanges by twinning with other relevant GEF IW projects as facilitated by the GEF IW:LEARN Project (see more below). Moreover, the MedPCU will support specific capacity building activities foreseen by each Child Project by taking stock and amplifying results through the programme-wide outreach.

Communication, outreach and awareness raising

- *MedProgramme identity:* In terms of visibility, the MedProgramme will be presented in a holistic and coherent way (i.e. clear vision statement and positioning, visual identity, logo design, etc.) showing consistency and integration across the portfolio. At the same time, each Child Project will be granted individual identities within the overall MedProgramme-branding in order to promote specific activities and benefit from ad hoc services. This will entail the design of consistent logos for each Child Project, creation of sub-websites within the MedProgramme web-portal, organization of tailor-made trainings, preparation of specific publications, social media services, among others. To this end, the med PCU will develop, in close consultation with project managers of all Child Projects, a proposal and, once adopted, all Child Projects are encouraged to use it consistently.
- *Newsletters(Med Bulletin):* Periodic MedProgramme Bulletins will be published (every six months or on a quarterly basis) to showcase progress of the Programme as a whole and of individual Child Projects, including highlights of results, success stories and project events, and relevant global, regional and national relevant meetings and events. It will be one of the primary tools for tracking achievement of targets and milestones for all Child Projects, based upon the corresponding results frameworks. Bulletins will feature a "journalistic" style making the content appealing for a wide range of audiences. Therefore, all CPs are expected to contribute to these Bulletins with different types of inputs in order to document their activities and progress, such as high-quality pictures, articles, statistics, quotes, interviews, footage, among others. The Med PCU will inform all Child Projects about the format of these bulletins and the corresponding timelines for submission.

- *Storytelling for advocacy*: A number of traditional storytelling instruments will be blended with innovative and creative approaches to increase dissemination and advocacy efforts. Particular emphasis will be given to the preparation of high-quality short movies and animations, graphic novels, documentaries, podcasts/radio programmes, infographics, digital interactive stories/articles/interviews, microblogging, e-books, art exhibits, among others. The Med PCU will inform Child Projects about the type of multimedia material that will be necessary to collect for the preparation of these products. Translations of key communications outputs will be carried out in English, French and Arabic to ensure ample dissemination in the participating countries. Specific translations in other national languages will be considered in light of budget constraints and upon due evaluation of stakeholders' needs.
- *Social Media*: Facebook, Instagram, YouTube and Twitter are four social media tools suggested for use by the MedProgramme. Development of timely and appropriate content and material to populate these channels is indispensable to achieve the desired impact. CPs will be prompted to contribute with relevant and ad-hoc information, pictures, statistics and other data to enrich the social media campaign. The use of hashtags will be coordinated with the GEF IAs and EAs and project and country representatives of the Programme in support also of other related initiatives and campaigns. The registration on the above-mentioned channels (or a selection of them) will take place at the beginning of the Programme and content population will start as soon as data and information from the projects becomes available.
- *Engagement with media and testimonials*: To maximize impact of the MedProgramme and share its findings and results with the widest possible audience, the Med PCU aims to reach out to a different number of media outlets and journalists with a view to establish long-lasting collaborations. To this end, Child Projects will be asked to facilitate contacts with national and local media of the countries where the activities are implemented (for instance, by providing the Med PCU with a list of relevant contacts). A series of direct interactions with communications specialists, media experts and social media influencers is foreseen by the KM Strategy throughout the duration of the Programme to increase mutual understanding and flow of information.
- *Goodwill ambassadors*: The Med PCU also aims to reach out to renowned personalities from different realms (such as art, sports, entertainment or fashion) to act as ambassadors for the MedProgramme and raise awareness about the main environmental challenges (and solutions) in the coastal areas of the Mediterranean. The Child Projects will be prompted to suggest names, and facilitate contacts when possible, of suitable and potential "goodwill ambassadors" of relevance in the region.

Synergies with the GEF IW:LEARN and LME:LEARN Projects

The MedProgramme will closely collaborate with the GEF International Waters Learning and Resource Exchange Network (IW:LEARN) Project[69] to facilitate uptake of lessons learned and knowledge exchange from/to the MedProgramme portfolio.

Cooperation in the following activities will be particularly addressed:

- Participation to the GEF International Waters Conferences (landmark biannual events of the IW portfolio). The first MedProgramme contribution is expected for the 10th edition of the IWC in 2020.
- Production of Experience Notes (short case studies) produced by Child Projects to showcase worthy results and disseminated through IW:LEARN channels and the MedProgramme KM platform. The format of Experience Notes is standard (https://iwlearn.net/documents/experience-notes)
- Participation to IW:LEARN Twinnings with other GEF relevant projects and programs.
- Contribution to IW:LEARN.net with specific content (i.e. data visualization).
- Contribution to social media, news, events, etc.
- Participation to GEF Communities of Practice (CoPs) on IW, CW, when relevant.

[69] More info at www.iwlearn.net

Strengthening the Science-Policy Interface (SPI) and Influencing Decision-Making

- *Replication Atlases*: A number of highly informative National Replication Atlases, translated in relevant languages, will be produced to stimulate replication of successful practices demonstrated by the Programme and encourage regional and global dialogue. Broader adoption and replication of the successful policies, practices and technologies implemented under the Programme will be promoted through these means, highlighting areas and situations where replication of the Programme's demonstrations should preferentially occur. Relevant results of Child Projects will be featured in the Atlases and the MedPCU will inform about the participatory process to collect and present the inputs.
- *Technical reports and scientific publications*: The MedPCU will ensure that relevant scientific reports and scientific peer-reviewed publications are prepared by the various CPs providing technical information about the achievements of the Programme.

Specific guidance on how to concretely contribute (format, frequency, purpose, etc.) to each of the aforementioned activities will be provided during the initial phase of the MedProgramme as a result of targeted consultations carried out by the MedPCU.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 Consistency with National Priorities.

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.:

Country	Stockholm Convention NIP Priority	Mediterranean Action Plan NAP Priority
Albania	Improving national capacities for management, treatment, monitoring, removal and disposal of oil and equipment contaminated with PCBs Inventory and disposal of PCBs contaminated equipment and oil	Rehabilitation of six hotspots with historic pollution (in Elbasam, Berat and Lushnje) Pollution reduction and control, in particular for the areas assessed as priority hot spots (Erzeni Ishmi river basin and Seman river basin).
Algeria	Elimination of remaining POPs quantities in the country; Preventing emissions of new POPs; Remediation of contaminated sites.	Reducing pollution affecting hot spots (seven coastal regions assessed as hot spots: Tlemcen, Oran, Chlef, Alger, Béjaïa, Skikda, and Annaba). Gradual reduction of total releases of mercury from chlor alkali plants and their decommissioning/ change of technological process by 2020
Bosnia and Herzegovina	Improving legal framework, eliminating discrepancies between entities' regulations Improving data on equipment containing or contaminated with PCBs, as well as on contaminated sites Improving management of PCBs and of equipment containing PCBs	Reduction of pollution affecting hot spots, in particular from inadequate urban wastewater and solid waste management
Lebanon	Strengthening of legal framework for improved PCB management, capacity building and disposal of remaining quantities of PCBs; remediation of contaminated sites. Management of new POPs	Reduction of pollution affecting eight priority hot spots (all located along the coast), including sites with pronounced PCBs contamination (e.g. Baouchrieh transformers repair and storage site in Beirut) Safe storage and containment of mercury waste produced by healthcare sector by 2025
Montenegro	Development of capacities for environmentally safe use and disposal of PCBs containing equipment; preparation of plans on replacement of PCBs containing equipment and its disposal	Remediation of sediment contamination (heavy metals, PAHs and PCBs) at Bijela shipyard hot spot
Morocco	Improved POPs management, including new POPs; disposal of remining quantities of PCBs and utilization of PCBs decontamination platform	Reduction and control of mercury related pollution, including: Reduce mercury concentrations in the discharges of COELMA company by 20% annually; Decontamination of sites polluted with mercury; and Improve management of mercury containing waste
Tunisia	Elimination of remaining stocks of POPs (pesticides, PCBs) and remediation of contaminated sites. Management of new POPs	Elimination of POPs and elimination and rational management of mercury; remediation in hot spot areas (Golfe de Tunis and Golfe de Gabes)
Turkey	Inventory of emissions, releases, stockpiles and contaminated sites (for POPs of both Conventions) Reduction of releases of intentionally and unintentionally produced POPs and elimination of	Strengthening corporate/local capacities in terms of the management of POPs Description of present POP stocks and removing the ones, which are prohibited

	POPs stockpiles Capacity building in the regulating and permitting governmental sector and also in private sector (i.e. POPs management and BAT/BEP implementation in waste incineration, ship recycling, chemical industry, BFR producers and users, etc.)	Updating the inventory related to equipment with PCB Performing 4 pilot studies to identify potential area contaminated by POPs and to clean these areas. Decrease of POPs pollution emissions by applying current best techniques in industry (MET) Determination of country status related to mercury

Two of the project countries have additionally completed their Minamata Initial Assessments (Bosnia and Herzegovina and Montenegro) which confirm the priorities expressed in the baseline tables above (Table 7). A further two MIAs are underway in Albania and Morocco.

Project interventions (Component 2) will directly support national priorities related to: improvements of environmental data and abilities to track and assess progress towards set goals; IMAP implementation; and national SDGs implementation, monitoring and reporting. Measures aimed at strengthening of national monitoring and reporting programmes are prioritized in the Barcelona Convention NAPs for all the GEF eligible Mediterranean countries, including identification of indictors to track progress towards fulfilment of NAP operational objectives. Moreover, the Mediterranean countries are developing national IMAP monitoring programmes in compliance with the Decision IG.22/7 of the Barcelona Convention Contracting Parities on IMAP implementation. National SDGs reporting is also being progressively developed across the region, in line with the Agenda 2030 and national sustainable development strategies.

C. DESCRIBE THE BUDGETED M &E PLAN

Project M&E will be conducted in accordance with established UNEP and GEF procedures and will be provided in the context of MedProgramme execution framework. The M&E plan includes inception report, annual review and final evaluations. It also includes provision for ongoing monitoring of the execution of gender-disaggregated monitoring by a Gender Specialist based in the Programme Coordination Unit at MAP. The project's M&E Plan will be presented and finalized in the Project's Inception Report following a collective fine-tuning of indicators, means of verification, etc. Please refer to Annex Q for further details of each proposed M&E activity.

TABLE 13: MONITORING AND EVALUATION PLAN

M&E activity	Purpose	Responsible	Budget (US$)	Time-frame
Inception workshop and Annual Stocktaking meetings	Full 5-year workplans, budgets, procurement plans etc will be confirmed. Inception report to be finalized as key project document.	EA	20,000 for 1 Inception workshop and 80,000 for 3 Annual Stocktaking meetings (total 100,000)	Inception workshop within 8 months of project start. Annual Stocktaking meetings once a year starting from the 2nd year of execution.
Project Steering Committee	Annual review of project activities, outputs and intended outcomes; and detailed annual implementation and budget planning The first year's SC meeting is also the Inception Workshop where the	EA	125,000 for 5 meetings	At least annually Additional component-specific coordination/ advisory meetings will also be held to support

				preparation of recommendations to PSC.
Gender Specialist (MedPCU)	This activity will be ongoing on an as-needed basis, and will provide support to the development and implementation of gender-disaggregated M&E tools and reports	EA	Included in PMC and component budgets	Ongoing
Travel for project monitoring	Monitoring and support to the technical activities under Components 1 and 2)	EA and regional consultants	Included in component budgets	1-2 missions per year, depending on needs e.g. to unlock bottlenecks or support partners
Lessons sharing and KM	Knowledge management strategy implementation, including contribution to IW:LEARN and consumables	EA	191,000	Throughout implementation
Midterm Review	Reviews progress and draws lessons on execution issues and impact of project activities to midterm. Proposes corrective actions as required.	IA-Consultant	80,000	At the midterm of the project
Terminal report	Reviews effectiveness against implementation plan Highlights technical outputs Identifies lessons learned and likely design approaches for future projects, assesses likelihood of achieving design outcomes	EA	Included in EA fee	At the end of project implementation
Independent Terminal evaluation	Reviews effectiveness, efficiency and timeliness of project implementation, coordination mechanisms and outputs Identifies lessons learned and likely remedial actions for future projects Highlights technical achievements and assesses against prevailing benchmarks	UNEP Evaluation Office	140,000	At end of project implementation
Total indicative Monitoring &Evaluation cost			**636,000**	

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies[70] and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address

[70] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

ANNEX A: PROJECT RESULTS FRAMEWORK

Child Project 1.1. **Reducing pollution from harmful chemicals and wastes in Mediterranean hotspots and measuring progress to impacts**[71]

Project Objective/ Outcome	Objective/Outcome level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS reference* and link to SDGs
Project Objective: To achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas.	Capacity in project countries to address land-based sources of pollution in Mediterranean catchments (POPs and mercury) and monitor pollution levels	Despite extensive regional and national activities in Mediterranean countries to safeguard, collect and dispose of PCBs, significant stock of PCB contaminated oil and equipment and mercury remain, and new POPs are widely used in the project countries.	Capacity of national authorities to eliminate PCB and POPs stockpiles Updated legislation and greater awareness of decision-makers on new POPs Updated assessment and monitoring arrangements	MapX – national stockpiles visualization Regulations and procurement procedures Monitoring station records	Stocks are confirmed during project inventory process, and made available to the project for removal Effective alternatives to new POPs are available in project countries	EA1 and EA2 SDG3.9 on deaths from hazardous chemicals[72] SDG 12.4 on sound management of chemicals and wastes[73]
Component 1: Chemicals and Waste						
Outcome 1. Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas	-No. of tonnes of POPs waste and new POPs eliminated - No. of tonnes of POPs prevented	POPS = 3,346 tonnes inventoried during PPG (refer to Table 9 – Quantified summary table of potential GEB by country	<u>Mid-Point Target:</u> 586 t POPs removed <u>End of project Target</u> Disposal of 2000 tonnes of POPs, including estimated 650 tonnes new POPs prevented	Waste destruction/ disposal certificates	Export of wastes is effectively tendered and completed Results of pilot activities show alternatives to new POPs exist and are effective	EA1 and EA2
	-No. of tonnes of Hg waste disposed	Mercury wastes= 84.7 tonnes inventoried during PPG	<u>End of project Target</u> Reduction and safe	Waste stabilisation and long term	Owners of metallic mercury avail stocks to	EA 1 and EA2

[71] Forms part of Component 1: Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts (Child Project 1.1)
[72] By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
[73] By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

Project Objective/ Outcome	Objective/Outcome level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS reference* and link to SDGs
	of/safely stored - No. of tonnes of Hg prevented	(refer to Table 9 – Quantified summary table of potential GEB by country	storage of 50 tonnes of mercury wastes 300 Tonne of Hg containing equipment prevented	storage certificates	project for disposal	
Output 1.1: Management and disposal of 2,000 tonnes of POPs	No. of national POPs inventories completed Number of Environment Management Plans approved for stockpiles and contaminated sites Number of tenders awarded for POPs management/ disposal	Project preparation activities verified 532 t of PCB contaminated oil and equipment in Algeria and Lebanon, ready for safeguarding, collection and disposal. Baseline research also identified 2,596 t of potentially PCB contaminated oil and equipment and POPs pesticides, which requires verification prior to safeguarding and disposal in Albania, Algeria, Tunisia, Morocco, and Lebanon.	<u>Mid-Point Target:</u> 1 tender awarded for disposal of Phase 1 stocks (from Algeria, Lebanon) 5 national Phase 2 inventories available EMPs drafted in at least 3 countries <u>End project Target:</u> 5 national EMPs approved Minimum 2 tenders awarded covering Total of 2000 tonnes of POPs	Tender documentation Inventory spreadsheets/ GIS EMPs publicly disclosed Tender documentation	Political stability required for collection, repackaging and disposal activity, especially for Algeria.	EA2 and EA3
Output 1.2: Management and safe storage of 50 tonnes of mercury wastes	Number of Environment Management Plans approved for stockpiles and contaminated sites	Baseline research shows 0.27t of elemental Hg in Tunisia, as well as 30t of mercury contaminated construction waste in Tunisia and 20t in Bosnia and Herzegovina. .	<u>Mid-Point Target:</u> 4 EMPs drafted for mercury waste removal <u>End project Target:</u> Assessment and management plan for Tunisia site	Inventory; Clean up report;	Owners of metallic mercury will be willing to make it available to the project for disposal	EA1 and EA2
Output 1.3: New POPs reduction and alternatives pilot projects completed	No. of new POPS alternatives demonstrated through pilot projects No of trained staff	TOTAL: Up to 1302 tonnes of New POPs used / imported per year in three countries (Lebanon, Morocco, Tunisia, see Table 10 in Proposed Alternative Scenario section).	<u>Mid-Point Target:</u> 3 new POPs inventories and databases completed <u>End project Target:</u>	Updated inventories and baseline included in the SoEr/TDA report	Users of new POPs able and willing to share data and commercial practices	EA1 and EA2

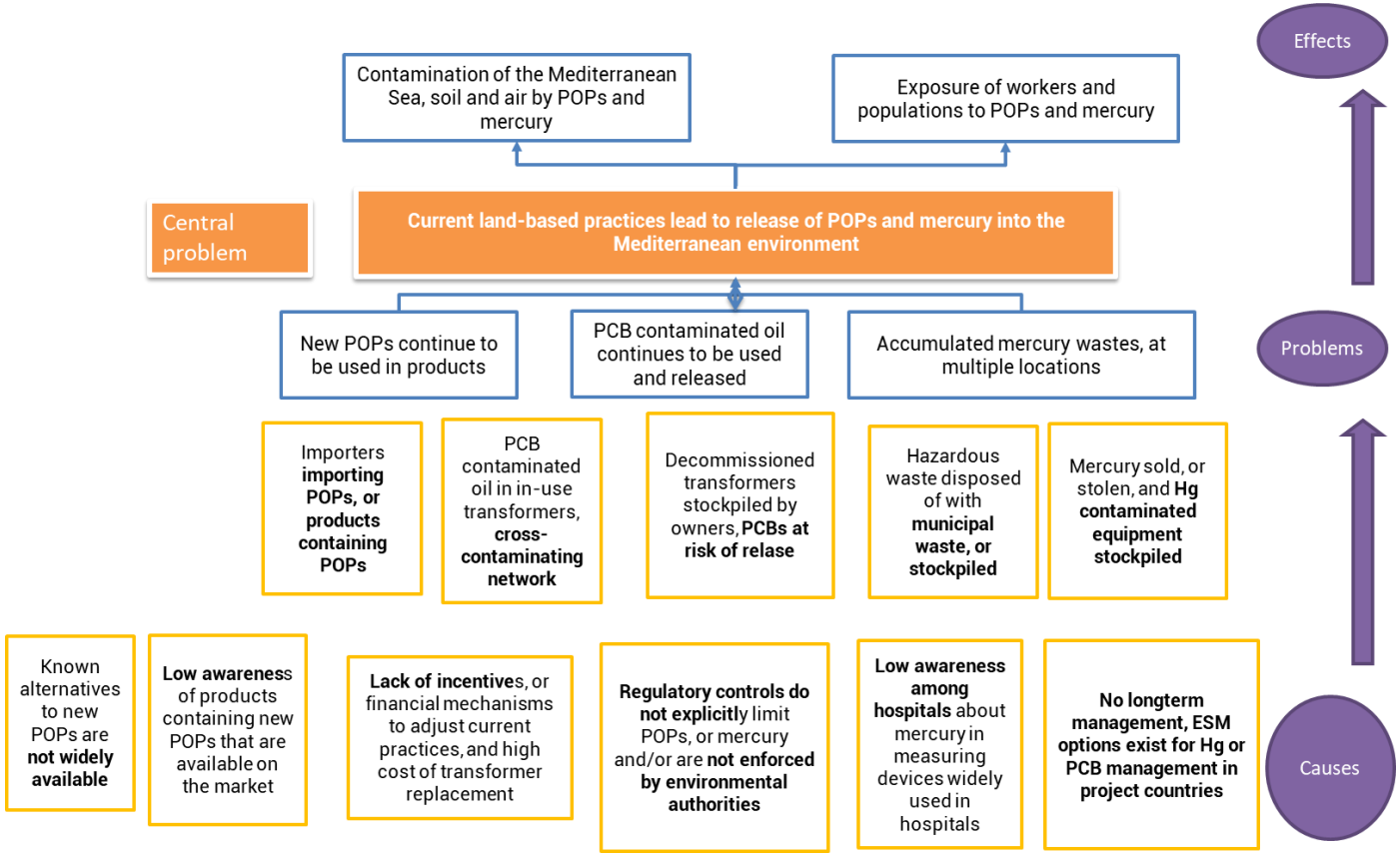
Project Objective/ Outcome	Objective/Outcome level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS reference* and link to SDGs
	applying new POPs approaches on regulation, procurement, and adoption of alternatives		At least 30 trained individuals actively support pilot projects Three case studies published on pilot projects			
Output 1.4: Mercury reduction through pilot activities on mercury alternatives	No of detailed national mercury stock-takes at hospitals and health centres No. of pilot project approaches developed to replace mercury in health care	National inventories of mercury containing devices in use in hospitals and health centres does not exist. No disposal of mercury containing equipment in either country (Lebanon or Tunisia)	<u>Mid-term target:</u> 2 national inventories of mercury medical devices (Lebanon, Tunisia) <u>Final target:</u> 3 national inventories completed 3 national pilot projects completed	Inventories published Pilot project case studies	Ministries of Health and hospitals are willing to share data Wastes can be effectively treated at disposal facilities	EA1 and EA2
Component 2: International Waters (3 M USD, IW)						
Littoral countries enabled to identify trends and progress to impacts	Updated TDA including gender assessment	Changed context in the Mediterranean since previous TDA	TDA is updated by the end of the programme	Final TDA document Analyses and reports prepared in the course of TDA update	Cooperation between technical, scientific and policy stakeholders and TDA working groups is maintained	
	Report on progress to impacts	Data gaps affect quality and applicability of assessments, ability to track progress and formulate adequate responses	Report on progress to impacts and on the achievement of relevant SDGs is prepared	Report on progress to impacts		
	Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations	Monitoring programs focused on areas close to coasts	Minimum 20 locations for offshore monitoring stations identified	Project Steering Committee meetings minutes PIRs, midterm and final evaluations	Commitment of key stakeholders to identify priorities and to strengthen regional responses towards achievement of GES	

Project Objective/ Outcome	Objective/Outcome level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS reference* and link to SDGs
					and SDGs implementation is maintained and strengthened	
	Data sharing policy for the Mediterranean	Availability of synchronized datasets and accessibility of data need to be improved with the view to improve knowledge on the Mediterranean marine environment	Data sharing regional policy prepared for the deliberation of the Contracting Parties to the Barcelona Convention	Working documents and decisions of the Barcelona Convention governing bodies	Countries and data owners continue upgrading monitoring and information system and reporting to the regional level	
Output 2.1: Updated TDA including gender assessment	Multi-disciplinary TDA team representing key stakeholders Thematic assessments (including gender) Meetings and capacity building workshops	Existing TDA from 2005 (with 2015 climate change related supplements) outdated Gender issues not addressed in the previous TDA Numerous assessments and data collection processes (completed and planned) available to support TDA update, nevertheless significant knowledge gaps remain	Transboundary issues prioritized, and causal chain analysis performed Thematic assessments completed Final TDA document approved by the Project Steering Committee	Final TDA document Analyses and reports prepared in the course of TDA update Project Steering Committee meetings minutes PIRs, midterm and final evaluations	Cooperation and coordination within TDA team and strong involvement of countries is maintained throughout the TDA process Countries/ data owners provide necessary data and information	
Output 2.2: Report on progress to impacts	Report on progress towards project's impacts and on the achievement of relevant SDGs	Capacities to track impacts of implemented policies, programmes and projects are insufficient SDGs reporting is at an early stage of development	By the end of the Programme, report on progress to impacts is prepared	Report on progress to impacts MedProgramme knowledge management products PIRs, midterm and final evaluations	Structured quantitative and qualitative data on the implementation of the project is available and enables identification of its impacts National SDGs reporting is	

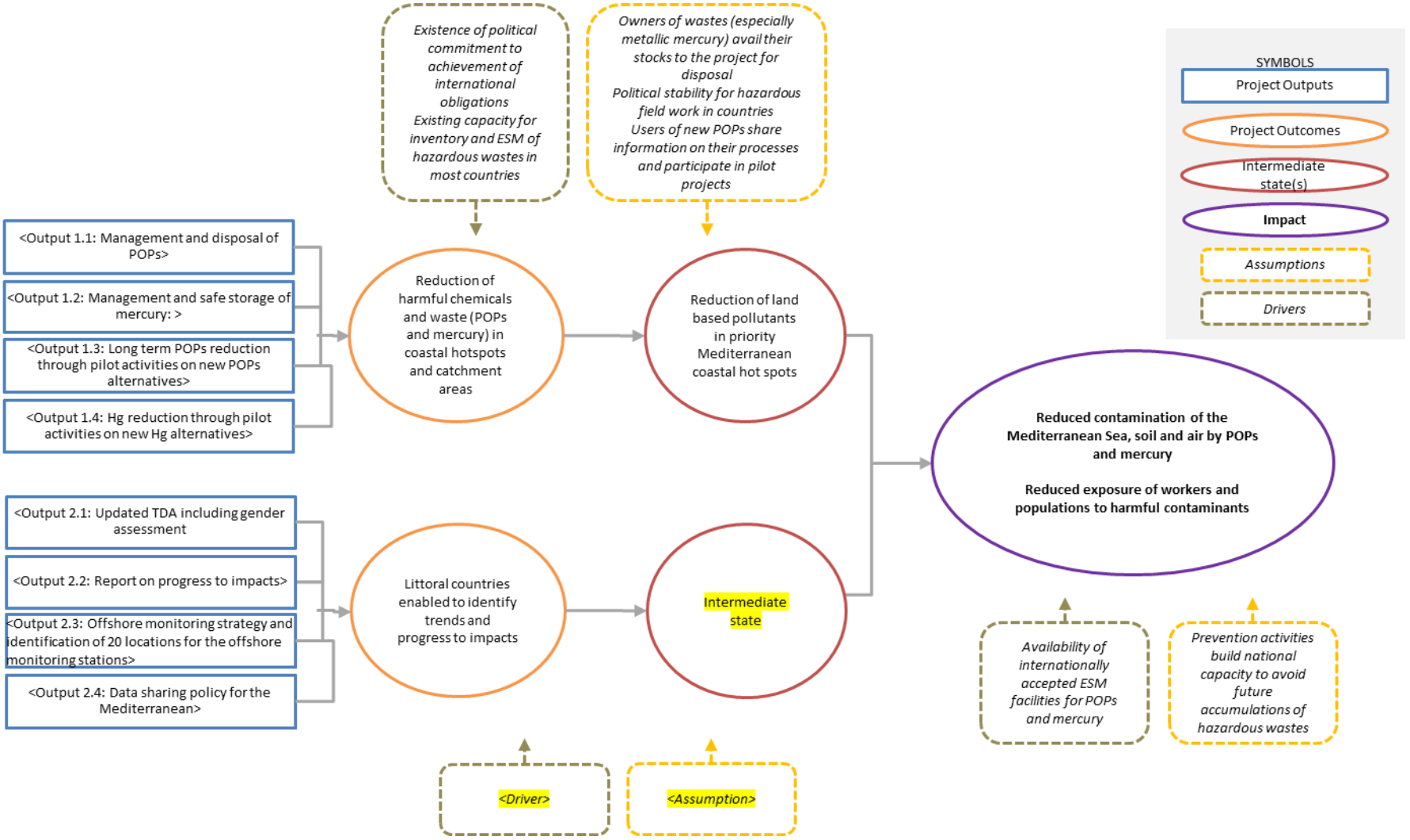
Project Objective/ Outcome	Objective/Outcome level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS reference* and link to SDGs
					strengthened	
Output 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations	Number of additional monitoring stations Offshore monitoring strategy outlining rational and methodology for selection of stations and providing guidance for IMAP compatible offshore monitoring Up to 5 pilots to support IMAP implementation (selected indicators) at offshore monitoring stations	Monitoring programs focused on areas close to coasts Gaps identified as regards national IMAP implementation	At least 20 offshore monitoring stations defined and guidance for IMAP compatible offshore monitoring prepared Countries assisted with IMAP implementation at selected offshore monitoring stations	PIRs, midterm and final evaluations Working documents and decisions of the Barcelona Convention governing bodies	Commitment to enhanced IMAP implementation is maintained Cooperation on sub-regional level is strengthened	
Output 2.4: Data sharing policy for the Mediterranean	Assessment of national and regional databases Recommendations on the design of the IT model to connect national with regional network/ platforms Proposal of a data sharing policy	SEIS principles not fully implemented across the region There is a need to integrate existing national and regional databases	Data sharing regional policy prepared as an input for the deliberation of the Contracting Parties to the Barcelona Convention	PIRs, midterm and final evaluations Working documents and decisions of the Barcelona Convention governing bodies	Willingness of Barcelona Convention Contracting Parties to accept and implement regional data sharing policy Commitment to achieve compatibility of national databases/ IT platforms with MAP Info-System	
Component 3: Monitoring and Evaluation and information dissemination (IW and CW)						
Outcome 3 Project results and knowledge are effectively	Project delivery is effective and responsive to beneficiary and	N/A	<u>Mid-term target:</u> Mid-term review results endorsed by project partners	Project Steering Committee report (y3)		

Project Objective/ Outcome	Objective/Outcome level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks	UNEP MTS reference* and link to SDGs
disseminated and used to adaptively manage the project	stakeholder needs		End of project target: Terminal evaluation results endorsed by project partners	Responses by IA and partners		
3.1 Knowledge Management strategy shares knowledge from Child Project 1.1	Number of knowledge products from CP 1.1 disseminated and used by stakeholders	GIS map of Phase 1 PCB stocks produced during PPG phase (Algeria and Lebanon) Knowledge management strategy developed for Programme	Mid-term target: National POPs and Hg inventories available on MapX End of project target: Pilot project case studies disseminated	MapX platform KM platform	Project results are achieved according to the workplan Countries agree for information to be shared via KM platforms	EA1 and EA2
3.2 Regular monitoring and evaluation of project progress and results	Quarterly reports on expenditure and progress Annual PIR submitted Evaluations done at mid-term and project end	N/A	Mid-term target: Quarterly and annual PIR reports Mid-term review complete End of project target: Terminal evaluation complete	MTR consultant report TE report	Project documentation and reporting managed by project management unit	EA1 and EA2

PROBLEM TREE & THEORY OF CHANGE (CHEMICALS AND WASTE COMPONENT 1)



THEORY OF CHANGE:



ANNEX B: RESPONSES TO PROJECT REVIEWS *(from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).*

Comments received during the Programme Framework Document (PFD) approval process are summarized in the following table.

Comment received	**Response at CEO Endorsement**
PFD Review Sheet	
The majority of comments received in the Review Sheet for the PFD were all addressed at that time and were recorded as 'Addressed' in the Review Sheet. Some comments that remained are summarized below:	
Please change the submission in the country section, where it is noted to be a GLOBAL project. The project is regional, with participating countries having included endorsement letters.	Done in the portal submission.
In regard to chemicals and waste, please provide a description of the baseline projects in relation to PCBs and POPs chemicals	Please refer to the National Baseline tables and Baseline sections in the CEO Endorsement Request
A detailed M&E plan should be presented at the time of CEO endorsement.	Please refer to Section C of the CEO Endorsement Request and budget.
STAP Review	
The need for the proposed Programme is understood by STAP to be a demand for a coordinating mechanism for the implementation of actions identified through the MedPartnership project.	The actions that will be addressed in the MedProgramme were defined by the Countries after a long and complex participatory TDA-SAP process leading to the National Action Plans where all the major stakeholders at national level were involved along with the major decision makers and political institutions. The MedPartnership was instrumental in supporting the final phase of this process in order to ensure that the NAPs were developed by the countries in a coordinated and efficient sound manner.
The updating of the TDA proposed in Child Project 1.1 should not be permitted to distract from the implementation of the two agreed SAPs and various NAPs.	It will not, activities which address the SAPs and NAPs will be mainly implemented under CP1.2, 1.3, 2.1, 2.2 and 3.1. The CP 1.1 will work on POP and Hg, moreover it will ensure to put in place all the diagnostic tools that can help us to measure the progress to impact; being the updated TDA one of those.
It is not clear from the PFD that the child projects proposed have been designed in a participatory manner with national and local stakeholders, particularly with civil society representatives and community groups. The PFD still reads as largely a top-down document and proponents need to address this deficit, regarding roles, responsibilities and accountabilities of stakeholders especially at sub-national level.	As stated in the STAP "the Programme followed the successful implementation of the MedPartnership". The MedProgramme has been developed by request fo the countries and with an approach that considers all the major stakeholders who will be instrumental to the implementation of the proposed activities. For example, for the investment component, both EIB and EBRD, will use the NAPs which has been endorsed at national level with a bottom-up approach involving a wide number of stakeholders at national and local level. The same applies to the conjunctive surface and groundwater management which will be implemented in those countries that recognized its importance through processes which involved (under the MedPartnership) the main stakeholders.
It is not clear from the PFD that the child projects proposed have been designed in a participatory manner with national and local stakeholders, particularly with civil society representatives and community groups. The PFD still reads as largely a top-down	As stated in the STAP "the Programme followed the successful implementation of the MedPartnership". The MedProgramme has been developed by request of the countries and with an approach that considers all the

document and proponents need to address this deficit, regarding roles, responsibilities and accountabilities of stakeholders especially at sub-national level.	major stakeholders who will be instrumental to the implementation of the proposed activities. For example, for the investment component, both EIB and EBRD, will use the NAPs which has been endorsed at national level with a bottom-up approach involving a wide number of stakeholders at national and local level. The same applies to the conjunctive surface and groundwater management which will be implemented in those countries that recognized its importance through processes which involved (under the MedPartnership) the main stakeholders.
Therefore, the entire Programme design should provide for sufficient flexibility and appropriate adaptive management strategies to counteract political instability and continuously changing circumstances of the countries in the Mediterranean region	The adaptive management strategy at the MedProgramme level relies on one major tool, the Annual Stocktaking Meetings, part of CP 4.1 (output 2.2). Through these major meetings all issues of concern related to changes in political will or instability in the recipient countries will become manifest and allow for timely adaptive management responses at both the Child Project and at the Program levels.
During the further preparation of the Programme and its individual projects, STAP strongly recommends using a common analytical approach using scenarios to explore possible futures and identify specific intervention points for most impactful programme/project interventions.	Done. In the selection of the many hot spots addressed by MedProgramme, a homogeneous approach has been adopted including future scenarios, whenever necessary.
Ecosystem-based adaptation solutions could be explored.	Done. Nature based solutions, and circular economy approaches inform a number of CPs, in Particular CP 1.2 and 2.1.
Recognizing the current regional security context, STAP recommends developing further cooperative and transboundary infrastructure to protect human security of refugees and migrants by e.g., supporting livelihoods diversification among human traffickers.	The implementing and executing partners of the MedProgramme fully recognize such much needed actions, however based on discussion with the GEF Secretariat during the development phase such kind of actions do not seem to be under GEF mandate. Nevertheless, we believe that by increasing environmental security, the MedProgramme will indirectly strive improve the conditions of migrants, and regional stability.
Many of the Programme interventions are best described in the framework of the Source to Sea concept. Programme proponents are advised to consult the recently released Source to Sea conceptual framework to consolidate and design further often loosely connected activities of the Programme (available at: http://www.thegef.org/council-meeting-documents/conceptual-framework-governing-and-managing-key-flows-source-sea-continuum).	The source to sea conceptual framework, coupled with the GPA guidelines, has clearly inspired the MedProgramme design, which builds on the 40 years' experience, data, information and country ownership produced by the Barcelona Convention.
A priority not dealt with in Component 4 is provision of support to participating countries to incentivize application of IMAP to policy reform or implementation.	The IMAP has been endorsed by the Contracting Parties to the BC in February 2016. All the countries made provision for its implementation at national level. The intention of the MedProgramme is to support and coordinate part of this process at regional level. This will happen especially under CP1.1. Moreover, CP4.1 will implement a KM Strategy which on top of bring benefit to the Programme is also helping the countries to manage the data and information produced by the child project and transfer them, as needed, to the Barcelona Convention IMAP process.
The PFD does not provide substantive evidence of ownership (the	On the contrary, the Programme builds on over 20 years of

word is missing from the entire document), beyond the formal country endorsements, and as is the case with regional projects in general, an emphasis on the demand side needs to be more fully demonstrated, especially for the proposed child projects.	GEF IW involvement in supporting the TDA-SAP-NAPs process, and on the actions of the Barcelona Convention and of its Regional Activities Centres. This has ensured a level of country ownership rarely achieved in previous efforts globally.
There should also be consideration of potential non industrial sources of POPs and other toxic chemicals, and seeking out of the potential role of Integrated Pest Management (IPM) techniques to minimise use of pesticides in agriculture, horticulture, general pest control, vector control, structural preservation treatments and others.	The Chemicals and Waste component addresses non-industrial use of PFOS by fire fighting services, in line with the priorities expressed by countries in their NIPs. Country NIPs do not prioririze
Where there are data gaps as relates to chemicals pollution, there should be careful retention of such data in the course of implementing this project, as well as key lessons learned in the course of implementation of methods to curtail chemicals pollution from various sources, including the impacts of climate change and variability on the concentration and behaviour of harmful chemicals.	The Child Project 1.1 includes data compilation using a GIS platform on waste inventories and for tracking of disposal progress. It also proposes collection of data on gender aspects of exposure to these waste sites. Finally it will produce lessons learnt on prevention of new POPs and mercury. Through the links with Child Project 4.1 these knowledge products will be retained systematically in the wider KM systems and made available for stakeholders.
GEF Council	
Germany on OUTCOME 1: Reduction of land-based pollution in priority coastal hotspots and measuring progress to impacts. Germany suggests expanding the suggested focus on chemicals pollution (in particular POPS, PAHs, and mercury) to include also non-industrial sources of POPs of high relevance. Furthermore, a more detailed analysis for each country (how effective support and coordination will be reached) is recommended for better monitoring and evaluation purposes.	The reduction of land Bases Sources of pollution (LBS) and measuring of progress to impact in the Mediterranean Sea is based on a 15 years cycle stated with the Transboundary Diagnostic Analysis, followed by the preparation and endorsement by the countries of the Strategic Action Plan (SAP) for LBS (SAP-MED) and for Biodiversity (SAP-BIO). The implementation of the two SAPs led to the definition of national Action Plans were the hotspots of intervention in terms of LBS are clearly indicated and agreed upon by the countries. Unfortunately, this process did not included the tracking, monitoring and identification for POPs, PAHs and Mercury. , Nevertheless, the Child Project 1.1 (GEF ID 9684) of the MedProgramme addresses non-industrial use of PFOS by firefighting services, in line with the priorities expressed by countries in their NIPs. Country NIPs do not prioritize. Moreover, the work done by the Barcelona Convention on defining stocks of POPs and Hg in the Mediterranean countries, together with the further development of this information under the MedProgramme will allow a huge step forward in the region to support the countries in their effort of addressing this issue.
Germany on OUTCOME 4: Germany welcomes the promotion of an integrated coastal zone management (ICZM). Participatory management, thus the empowerment of user groups into the management decisions as well as the surveillance and monitoring is crucial for the projects' success. A stronger emphasis on alternative livelihoods for fishing communities is recommended.	Child Project 2.1 (GEF 9687) focuses on major coastal wetlands, lagoons, humid zones and coastal habitats, providing very valuable services and contributing to coastal livelihoods and biodiversity, are all in part or totally dependent on groundwater regimes. This included livelihoods for fishing communities. Moreover, being the MedProgramme executed under the umbrella of the Barcelona Convention, it will benefit of the ongoing partnership between the Convention and the General Fishery Commission of the Mediterranean which will introduce elements related to fishing in the Programme.

Germany on OUTCOME 7: Germany welcomes the improvement of management capacity as well as the expansion of the Libyan Marine Protected Areas (MPA). It is recommended to incorporate the high importance of artisanal fisheries for local food security and livelihoods. The MPA management plan should imply buffer zones between the MPA and fishing areas. In these small strips local fishermen communities can use an exclusive access (ban for industrial fisheries) and benefit from extensive fisheries. Involvement of fishermen in the management of marine protected areas is crucial for their sustainability.	Artisanal fisheries is included in Child Project 3.1 (GEF ID 10158), concretely in its output 31 where the importance of artisanal fishery is recognized and supported by several activities such as the preparation and dissemination of a set of communication material to promoting artisanal sustainable fishery heritage in and around the selected MPAs.
Germany on the MedProgramme: Lobbying for a higher political prioritization of the implementation of national fishery policies and frameworks promoting sustainable marine resource management.	Although this activity is not directly included in the MedProgramme (which mainly addresses the priorities defined by the Mediterranean Countries under the Protocols of the Barcelona Convention), implementation of national fishery policies and frameworks promoting sustainable marine resource management it is focus of the collaboration partnership between the Convention and the General Fishery Commission of the Mediterranean. Outcomes and outputs of this partnership will be linked to the MedProgramme.
Germany on the MedProgramme: 'Blue Carbon' offsets as an economic potential for coastal villages.	Although we recognize the importance of the comment made by Germany, 'Blue Carbon' offsets as an economic potential for coastal villages is not in the scope of the MedProgramme. However, being the Programme executed in the wider framework of the Barcelona Convention process linkages with Blue Carbon offset and related matter will be explored and certainly made if appropriate.
Germany on the MedProgramme: Decentralized adaption strategies for the intrusion of saline groundwater into aquifers. In sunny areas PV-driven small-scale desalination plants could allow local approaches.	Although we recognize the importance and tehcnial relevance of the comment made by Germany, desalination plan/processes/standards are not eligible under GEF 6 therefore have been removed by the Programme. Nevertheless, under Child project 1.2 (GEF ID 9717), the Barcelona Convention will develop common environmental standards on desalination for the Mediterranean Region by using NON-GEF funds. These standards will be submitted to the Conference of Contracting Parties of the Convention for consideration. If approved they will be the first step to support the approach suggested by Germany.
Germany on the MedProgramme: The involvement of wastewater reuse and freshwater consumption reduction strategies.	Child Project 1.2 (GEF ID 9717) is promoting investments at national level will focus on WWTP Extension and upgrade including treated wastewater reuse/reinjection (MAR) to decrease water consumption in the countries where national actions will take place (Egypt, Lebanon and Tunisia). Moreover the same Child Project will develop regional standards on wastewater management (including reuse) for deliberation of the Contracting Parties of the Barcelona Convention.
Germany on the MedProgramme: More investments into wastewater-treatment facilities for the reduction of heavy metals, endocrine disrupters, plastic and other pollutants as runoff in the Mediterranean Sea.	Under Child Project 1.2 (GEF ID 9717) EIB will mobile more than USD 600M in investments on WWT facilities in Egypt, Lebanon and Tunisia. Moreover, the MedProgramme is already generating interest of other potential investors to engage in advanced WWTP in the region to achieve reduction of LBS of pollution and increase climate change adaptation resilience.

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS74

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: **TOTAL PPG GRANT USD 300,000** Chemicals and Waste (POPs and Mercury) – USD 228,000 International Water -USD 72,000			
Project Preparation Activities Implemented	***GETF/LDCF/SCCF/CBIT Amount ($)***		
	Budgeted Amount	***Amount Spent Todate***	***Amount Committed***
International CW Consultant - Child Projects Formulation Specialist for CW (6 months)	11,400	11,400	
Knowledge Management Specialist	12,400	12,400	-
International CW Consultant - PPG Planning for CP 1.1 and 1.2	50,850	64,483	-
International CW Consultant -Technical expert on POPs and PCB	31,800	43,878	-
Technical IMAP Expert	39,600	12,489	-
Travels to support the preparation of CW related Child Projects	7,450	14,334	-
SSFA with Plan Blue to support the preparation of CP 1.1 and 2.1	15,000	6,500	-
SSFA with SCP RAC to support the preparation of CP 1.1	93,000	90,499	-
1st Regional PPG meeting (March 2018)	14,000	13,646	-
2nd regional PPG mid-term meeting (September 2018)	19,000	9,063	1,937
Meetings: PPG kick-off workshop	5,500	-	-
Total	300,000	267.292	1,937

[74] If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

ANNEX E: CALENDAR OF EXPECTED REFLOWS (IF NON-GRANT INSTRUMENT IS USED)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

ANNEX F: OUTPUT BASED GEF AND COFINANCE BUDGET AND PROJECT WORKPLAN

See separate attachment (Excel)

ADDITIONAL ANNEXES (AS SEPARATE FILE)

ANNEX G: COFINANCE LETTERS
ANNEX H: KNOWLEDGE MANAGEMENT STRATEGY
ANNEX I: GENDER MAINSTREAMING STRATEGY AND GENDER ASSESSMENT AND ACTION PLAN
ANNEX J: ENVIRONMENTAL MANAGEMENT PLANS FOR PHASE 1 DISPOSAL (ALGERIA AND LEBANON)
ANNEX K: MAPPING OF SDGS AND TDA INDICATORS
ANNEX L: ESERN CHECKLIST
ANNEX M: ACRONYMS AND ABBREVIATIONS
ANNEX N: PROPOSED TDA TABLE OF CONTENTS
ANNEX O: IMPLEMENTATION ARRANGEMENTS
ANNEX P: REPORTS OF TWO REGIONAL CONSULTATION MEETINGS HELD DURING PPG
ANNEX Q: M&E PLAN

ANNEX R: GEF PROJECT TAXONOMY WORKSHEET

Use this Worksheet to list down the taxonomic information required under Part I, item G by ticking the most relevant keywords/ topics/themes that best describe this project.

Level 1	Level 2	Level 3	Level 4
☒**Influencing models**			
	☒**Strengthen institutional capacity and decision-making**		
	☒**Convene multi-stakeholder alliances**		
	☒**Demonstrate innovative approaches**		
☒**Stakeholders**			
	☒**Private Sector**		
		☒Large corporations	
		☒SMEs	
	☒**Communications**		
		☒Awareness Raising	
☒**Capacity, Knowledge and Research**			
	☒**Knowledge Generation and Exchange**		
	☒**Innovation**		

	☒**Knowledge and Learning**		
		☒Knowledge Management	
☒**Gender Equality**			
	☒**Gender Mainstreaming**		
		☒Sex-disaggregated indicators	
		☒Gender-sensitive indicators	
	☒**Gender results areas**		
		☒Knowledge generation	
☒**Focal Areas/Theme**			
	☒**International Waters**		
		☒Transboundary Diagnostic Analysis and Strategic Action Plan preparation	
	☒**Chemicals and Waste**		
		☒Mercury	
		☒Persistent Organic Pollutants	
		☒Disposal	
		☒New Persistent Organic Pollutants	
		☒Polychlorinated Biphenyls	
		☒Best Available Technology / Best Environmental Practices	
	☒**Climate Change**		
		☒**Climate Finance (Rio Markers)**	☒Sustainable Development Goals

ANNEX S: GEF 7 Core Indicator Worksheet

Core Indicator 7	**Number of shared water ecosystems (fresh or marine) under new or improved cooperative management**					***(Number)***
Indicator 7.1	Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
		Mediterranean LME		*4*		
Indicator 7.2	Level of Regional Legal Agreements and Regional Management Institutions to support its implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
		Mediterranean LME		*4*		
Indicator 7.3	Level of National/Local reforms and active participation of Inter-Ministerial Committees					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
				1		
Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products					
		Shared water ecosystem	Rating (scale 1-4)			
			Rating		Rating	
			PIF stage	Endorsement	MTR	TE
				1		
Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)					
POPs type			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
(select)	(select)	Polychlorinated biphenyls (PCB)		*1,350*		
(select)	Perfluorooctane sulfunic acid/salts/PFOS	(select)		*20*		
(select)	Hexabromocyclododecane (HBDC)	(select)		*630*		
Indicator 9.2	Quantity of mercury reduced					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
	Mercury wastes at contaminated sites		*50*	*50*		
Indicator 9.4	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
	Regulators prevent import and use of new POPs in 3 project countries			*3*		
Indicator 9.5	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities					
		Technology	Number			

			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
	3 country pilot demonstration projects on alternatives to new POPs in manufacturing			*3*		
Indicator 9.6	Quantity of POPs/Mercury containing materials and products directly avoided					
			Metric Tons			
				Expected		Achieved
			PIF stage	Endorsement	PIF stage	Endorsement
	Mercury-containing equipment in hospitals			*300*		
Core Indicator 11	**Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**					***(Number)***
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		Female		*2000*		
		Male		*2000*		
		Total		*4000*		

Project title: Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts (CP 1.1)
Project number: 9684
Executing Agency: UN Environment/MAP
Project implementation period:
From: 2019
To: 2024

UMOJA CODE		Component 1: Chemicals and Waste				Component 2: International Waters				Component 3: M&E		PMC		Grand Total	
		Output 1.1 POPs disposal	Output 1.2 Mercury disposal	Output 1.3 POPs prevention	Output 1.4 Mercury prevention	Output 2.1 Updated TDA	Output 2.2 Progress to impacts	Output 2.3 Offshore monitoring	Output 2.4 Data sharing policy	Chemicals and Waste (60%)	International Waters (40%)	Chemicals and waste	International waters	Chemicals and waste	International waters
FT30_010	**STAFF AND PERSONNEL**														
1001	MedPCU - MedProgramme Coordinator (P5)	-	-	-	-	-	-	-	-	-	-	-	128,000	-	128,000
1002	MedPCU - Programme Officer CW (P3)	169,750	72,750	145,500	97,000	-	-	-	-	-	-	465,000	-	950,000	-
1003	MedPCU - Programme Financial Assistant (G5)	-	-	-	-	-	-	-	-	-	-	28,000	-	28,000	-
1004	MedPCU - Programme and Administration Assistant (G5)	-	-	-	-	-	-	-	-	-	-	28,000	-	28,000	-
1005	Regional consultants CW (capacity building / training)	-	87,500	-	87,500	-	-	-	-	-	-	-	-	175,000	-
1007	Regional Technical Experts/Consultants (CW - POPs)	125,000	-	125,000	-	-	-	-	-	-	-	-	-	250,000	-
1010	Regional Technical Experts/Consultants (CW - Hg)	-	125,000	-	125,000	-	-	-	-	-	-	-	-	250,000	-
1008	Tech Support from MED POL P4 TDA (25% salary)	-	-	-	-	68,750	68,750	68,750	68,750	-	-	-		-	275,000
1006	Regional consultants IW - TDA	-	-	-	-	304,500	43,500	43,500	43,500	-	-	-	-	-	435,000
1011	Gender Specialist	-	10,000	-	-		10,000			-	-	-	-	10,000	10,000
	subtotal	294,750	295,250	270,500	309,500	373,250	122,250	112,250	112,250	-	-	521,000	128,000	1,691,000	848,000
FT30_120	**CONTRACTUAL SERVICES**														
1201	Phase 1 POPs disposal	1,100,000	-	-	-	-	-	-	-	-	-	-	-	1,100,000	-
1202	Phase 2 POPs and mercury disposal	2,338,295	2,436,650			-	-	-	-	-	-	-	-	4,774,945	-
1203	SCPRAC - POPs (PFOS, SCCP, HBCD) prevention (assess., training/	-	-	200,000		-	-	-	-	-	-	-	-	200,000	-
1204	SCPRAC - Mercury prevention pilots	-	-	-	500,000	-	-	-	-	-	-	-	-	500,000	-
1205	POPs inventories - lab analyses	429,455	-	-	-	-	-	-	-	-	-	-	-	429,455	-
1206	SSFA with MapX for visualization and assessment of inventories	20,000	-	-	-	-	-	-	-	-	-	-	-	20,000	-
1207	SSFA Algeria (national consultants and PCBs inventorying)	159,000	36,000	-	-	-	-	-	-	-	-	-	-	195,000	-
1208	SSFA Lebanon (national consultants)	80,000	-	-	-	-	-	-	-	-	-	-	-	80,000	-
1209	SSFA Tunisia (national consultants and POPs inventorying)	30,000	38,400	-	-	-	-	-	-	-	-	-	-	68,400	-
1210	SSFA Bosnia and Herzegovina (national consultants)	-	36,000	-	-	-	-	-	-	-	-	-	-	36,000	-
1211	SSFA Albania (national consultants and PCBs inventorying)	95,000	-	-	-	-	-	-	-	-	-	-	-	95,000	-
1212	SSFA Montenegro (national consultants)	24,000	-	-	-	-	-	-	-	-	-	-	-	24,000	-
1213	SSFA Morocco (national consultants and POPs inventorying)	20,000	19,200	-	-	-	-	-	-	-	-	-	-	39,200	-
1216	Remediation Lebanon	250,000	-	-	-	-	-	-	-	-	-	-	-	250,000	-
1217	Assessment Montenegro	120,000	-	-	-	-	-	-	-	-	-	-	-	120,000	-
1218	Assesment and mngt plan Kasserine Tunisa	-	380,000	-	-	-	-	-	-	-	-	-	-	380,000	-
1219	Mercury wastes removal EIAs	-	240,000	-	-	-	-	-	-	-	-	-	-	240,000	-
1220	SSFA Plan Bleu - Thematic assessments Socio-economic/Driver TDA I	-	-	-	-	250,000	-	-	-	-	-	-	-	-	250,000
1221	Other Thematic assessments TDA IW	-	-	-	-	460,000	-		-	-	-	-	-	-	460,000
1222	Equipment pilot offshore monitoring stations IW	-	-	-	-		-	220,000	-	-	-	-	-	-	220,000
1223	SSFAs with 5 coutries for TDA IW	-	-	-	-		-	200,000	-	-	-	-	-	-	200,000
	subtotal	4,665,750	3,186,250	200,000	500,000	710,000	-	420,000	-	-	-	-	-	8,552,000	1,130,000
FT30_160)	**TRAVEL**														
1601	MedPCU travel to support the project	-	-	-	-	-	-	-	-	-	-	14,000	14,000	14,000	14,000
1602	MED POL technical staff and regional consultants	20,000	15,000	-	-	20,000	-	15,000	15,000	-	-	-	-	35,000	50,000
1603	Participants capacity buidling workshops CW	228,000	267,000	-	-	-	-	-	-	-	-	-	-	495,000	-
1604	Workshops and meetings IW	-	-	-	-	240,000	-	150,000	150,000	-	-	-	-	-	540,000
1605	SCPRAC	-	-	75,000	-	-	-	-	-	-	-	-	-	75,000	-
1606	Gender site assessments travel and DSA	10,000	-	-	-	-	10,000	-	-	-	-	-	-	10,000	10,000
	subtotal	258,000	282,000	75,000	-	260,000	10,000	165,000	165,000	-	-	14,000	14,000	629,000	614,000
FT30_	**OPERATING AND OTHER DIRECT COSTS**														
3001	Knowledge management strategy	-	-	-	-	-	-	-	-	75,000	50,000	-	-	75,000	50,000
3002	Annual Stocktaking meeting	-	-	-	-	-	-	-	-	60,000	40,000	-	-	60,000	40,000
3003	Steering Committee for CP 1.1	-	-	-	-	-	-	-	-	75,000	50,000	-	-	75,000	50,000
3004	Office premises, supplies, consumables, equipments	-	-	-	-	-	-	-	-	20,000	16,000	-	-	20,000	16,000
3005	Contribution to IW:LEARN (1% IW grants)	-	-	-	-	-	-	-	-	20,000	10,000	-	-	20,000	10,000
3006	Publications - TDA	-	-	-	-	120,000	30,000	-	-	-	-	-	-	-	150,000
3007	Midterm review	-	-	-	-	-	-	-	-	48,000	32,000	-	-	48,000	32,000
3008	Terminal Evaluation	-	-	-	-	-	-	-	-	80,000	60,000	-	-	80,000	60,000
	subtotal	-	-	-	-	120,000	30,000	-	-	378,000	258,000	-	-	378,000	408,000
TOTAL		**5,218,500**	**3,763,500**	**545,500**	**809,500**	**1,463,250**	**162,250**	**697,250**	**277,250**	**378,000**	**258,000**	**535,000**	**142,000**	**11,250,000**	**3,000,000**

	POPs	Mercury	Total CW	IW	TOTAL
Total available	6,250,000	5,000,000	11,250,000	3,000,000	**14,250,000**
Total budgeted above, see cells below	6,250,000	5,000,000	11,250,000	3,000,000	**14,250,000**
Component 1 (1.1 + 1.3)	*5,764,000*	-	*5,764,000*	-	**5,764,000**
Component 1 (1.2 + 1.4)	-	*4,573,000*	*4,573,000*	-	**4,573,000**
Component 2 (2.1, 2.2, 2.3, 2.4)	-	-	-	*2,600,000*	**2,600,000**
M&E	*189,000*	*189,000*	*378,000*	*258,000*	**636,000**
PMC	*297,000*	*238,000*	*535,000*	*142,000*	**677,000**
	4.99%	***5.00%***	***4.99%***	***4.97%***	***9.96%***

8,155,055

Cofinance budget GEF ID 9684

	Component 1 - CW		Component 2 - IW		Component 3 - M&E		PMC		***Total***		**Total**
	In-kind	Cash	In-kind	Cash	In-kind	Cash	In-kind	Cash	*Inkind*	*Cash*	
Algeria	22,352,977	-	-	-	-	-	-	-	*22,352,977*	-	**22,352,977**
Lebanon	10,000,000	-	5,000,000	-	-	-	-	-	*15,000,000*	-	**15,000,000**
Libya	910,000	-	390,000	-	-	-	-	-	*1,300,000*	-	**1,300,000**
Morocco	7,600,000	-	400,000	-	-	-	-	-	*8,000,000*	-	**8,000,000**
Tunisia	1,043,000	-	447,000		-	-	-	-	*1,490,000*	-	**1,490,000**
UNEP MAP	-	-	-	-	-	-	386,032	-	*386,032*	-	**386,032**
Plan Bleu	-	-	542,000	-	-	-	-	-	*542,000*	-	**542,000**
SCP RAC	1,798,120	-	1,798,120	-	-	-	479,478		*4,075,718*	-	**4,075,718**
Total	43,704,097	-	8,577,120	-	-	-	865,510	-	53,146,727	-	**53,146,727**

		Year 1				Year 2				Year 3				Year 4				Year 5			
Activity/Quarter	**Responsible**	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Component 1: Chemicals and Waste																					
Output 1.1 Management and disposal of POPs																					
Activity 1.1.1: Phase 1 POPs disposal	MED POL, Algeria, Lebanon			x	x	x	x														
Activity 1.1.2: Phase 2 POPs inventory and prioritization	MEDPOL, Other countries				x	x	x	x	x	x											
Activity 1.1.3: Phase 2 POPs disposal	MEDPOL, countries											x	x	x	x	x	x	x			
Activity 1.1.4: POPs remediation and assessment	MED POL, Lebanon, Montenegro, CHB							x	x	x	x	x	x	x	x	x	x				
Output 1.2: Management and safe storage of mercury																					
Activity 1.2.1: Confirmation of mercury stocks for disposal	MED POL, countries, CHB				x	x	x	x	x												
Activity 1.2.2: Planning and disposal of mercury	MED POL, countries, CHB								x	x	x	x	x	x							
Output 1.3: Long term POPs reduction through pilot activities on new POPs alternatives																					
Activity 1.3.1: Pilot demonstration projects in three countries	MED POL, SCP RAC, countries, CHB			x	x	x	x	x	x	x	x	x	x								
Activity 1.3.2: Replication and expansion of prevention pilot projects	MED POL, SCP RAC, countries, CHB												x	x	x	x	x	x	x		
Output 1.4: Mercury reduction through pilot activities on new mercury alternatives																					
Activity 1.4.1: Identification/ verification of national institutions and hospitals and detailed stock-take of mercury containing wastes	MED POL, WHO, countries			x	x	x	x	x	x												
Activity 1.4.2: Development of awareness and training activities	MED POL, WHO, countries					x	x	x													
Activity 1.4.3: Update legislation/ provisions on mercury in articles and phase-out;	MED POL, WHO, countries, CHB				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Activity 1.4.4: Techical support to substitution of mercury devices in hospitals	MED POL, WHO, countries								x	x	x	x	x	x	x	x	x	x			
Component 2: International Waters																					
Output 2.1: Updated TDA including gender assessment																					
Activity 2.1.1 Establishment of TDA team, TDA training	MAP/ MED POL, GEF IW, countries		x	x	x																
Activity 2.1.2 Identification and prioritisation of transboundary issues, determination of impacts, causal chain analysis	MAP/ MED POL, Plan Bleu, REMPEC, countries			x	x	x	x	x	x												
Activity 2.1.3 Carrying out thematic assessments, preparation of thematic reports	MAP/ MED POL, Plan Bleu					x	x	x	x	x	x										
Activity 2.1.4 Synthesising analytical work, TDA drafting	MAP/ MED POL, Plan Bleu, countries							x	x	x	x	x	x								
Activity 2.1.5 Capacity building - assisting countries with indicators development, socio-economic assessments	MAP/ MED POL, Plan Bleu				x	x	x	x	x	x	x										
Output 2.2: Report on progress to impacts																					
Activity 2.2.1 Utilisation of Programme's knowledge management tools and data to assess progress	MAP/MED POL/MedPCU							x	x	x	x	x	x	x	x	x	x	x	x	x	
Activity 2.2.2 Combining MAP/ Mediterranean and SGDs reporting to assess progress and identify project's impacts	MAP/MED POL									x	x	x	x	x	x	x	x	x	x	x	
Activity 2.2.2 Preparation of the report	MED POL																x	x	x	x	

Output 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations, and																					
Activity 2.3.1 Offshore monitoring strategy preparation	MAP/ MED POL, countries					x	x	x	x	x	x	x									
Activity 2.3.2 Identification of at least 20 sites for offshore monitoring stations	MAP/ MED POL, countries									x	x	x	x	x							
Activity 2.3.3 Piloting IMAP implementation for selected indicators at up to 5 offshore monitoring stations	MAP/ MED POL, countries													x	x	x	x	x	x		
Output 2.4: Data sharing policy for the Mediterranean																					
Activity 2.4.1 Assessment of the existing regional databases, governance mechanisms and data sharing approaches	MAP/ MED POL, INFO/RAC							x	x	x											
Activity 2.4.2 Review of structure, functions and content of national databases/ IT platforms	MAP/ MED POL, INFO/RAC , countries							x	x	x											
Activity 2.4.3 Recommendations on the design of IT model to connect national into a regional network/ platform	MAP/ MED POL, INFO/RAC										x	x	x	x							
Activity 2.4.4 Development of regional data sharing policy to facilitate reporting and use of IMAP data	MAP/ MED POL													x	x	x	x				

Component M&E and information dissemination

Output 3.1: Knowledge Management strategy shares knowledge from Child Project 1.1																					
Activity 3.1.1 Interactive visualizations of chemicals inventories across the 8 countries using interface provided by MapX	MedPCU/MED POL				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Activity 3.1.2 Case studies in different formats including video for the prevention pilots	MedPCU/MED POL					x	x	x	x	x	x	x	x	x	x	x	x	x			
Activity 3.1.3 Data sharing protocol, analysis and management (IW)	MedPCU/MED POL			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Output 3.2: Regular monitoring and evaluation of project progress and results																					
Activity 3.2.1: Quarterly financial reports and annual progress reports monitoring status of project execution	MedPCU/MED POL		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Activity 3.2.2: Midterm and Terminal evaluations of project .	MedPCU/MED POL											x	x	x					x	x	x

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REPUBLIC OF ALBANIA
MINISTRY OF ENVIRONMENT

Adress: Rr.Norbert Jokl, Tirana, Albania, www.moe.gov.al

June 23, 2016

To: Ms. Brennan Van Dyke, Executive Coordinator
United Nation Environment Programme
Gigiri, P.O. Box 30552-00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Program (Med Programme)

In my capacity as GEF Operational Focal Point for Albania, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nation Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPo, etc).

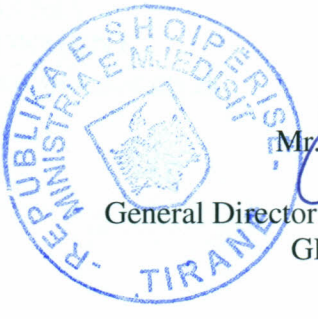
The total financing[1] being requested for the child projects under this Program is US$ 47,390,000 inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US$ 1,500,000 of Biodiversity STAR earmarked by Libya.

Trust Fund	Agency	Focal Area	Programming of Funds	Amount (in US$)			
				GEF Project Financing	Expected PPG	Agency Fee	Total
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500

[1] "Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.

GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000
Total Financing				42,376,147	1,200,000	3,813,853	47,390,000

Sincerely,



Mr. Pellumb Abeshi

General Director of Environment,
GEF OFP, Albania

Copy to: Convention Focal Point for Stockholm (PoPs)

Convention Focal Point for Minamata

الجمهوريـــــة الجزائريـــــة الديمقراطيـــــة الشعبيـــــة

PEOPLE's DEMOCRATIC REPUBLIC OF ALGERIA

وزارة البيئـــــة والطاقات المتجددة

Ministry of Environment and Renewable Energies

REF: 09/0FP-GEF-ALG/MEER/2017 Algiers, November, 16th 2017

To: Ms.Kelly West, Executive Coordinator
United Nation Environment Programme
Gigiri, P.O. Box 30552-00100 Nairobi, Kenya.

Subject: Endorsement for Mediterranean Sea Program (Med Programme).

In my capacity as GEF Operational Focal Point for ALGERIA, I confirm that the above Program proposal is in accordance with my governrnent's national priorities and our commitment to the relevant global environmental conventions; and was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nation Environment Programme. lf approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing partner (UNIDO, IUCN, UNESCO, EIB and WWF MedPo, etc).

The total financing' being requested for the child projects under this Program is **US$ 47,390,000** inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown reque ted for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US$ **1,500,000** of Biodiversity STAR earmarked by Libya.

Trust Fund	Agency	Focal Area	Programming Funds	Amount (in US$)			
				GEF Project Financing	Expected PPG	Agency Fee	Total
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GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500
GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000
Total Financing				42,376,147	1,200,000	3,813,853	**47,390,000**

Sincerely,
Mr Karim BABA
GEF Operational Focal Point

مديرية السياسة البيئية الصناعية
بالنيابة
بابا كريم

Copy to: General Secretariat *(Ministry of Environment and Renewable Energies).*
GEF Political Focal Point *(Ministry of Foreign Affairs).*
Stockholm (POPs) Convention Focal Point.

BOSNA I HERCEGOVINA
MINISTARSTVO VANJSKE
TRGOVINE I EKONOMSKIH ODNOSA

БОСНА И ХЕРЦЕГОВИНА
МИНИСТАРСТВО СПОЉНЕ ТРГОВИНЕ
И ЕКОНОМСКИХ ОДНОСА

BOSNIA AND HERZEGOVINA
MINISTRY OF FOREIGN TRADE AND
ECONOMIC RELATIONS

No: 06-3-50-1976- 3/16
Sarajevo, 22 july 2016

To: Ms- Brenan Van Dyke, Executive coordinator
United Nations Environment Programme
Gigiri, P.O Box 30552 – 00100 Nairobi, Kenya

Subject: Endorsement for Mediteraanean Sea Programme (MedProgramme)

In my capacity as GEF Political Focal Point for Bosnia and Herzegovina, I confirm that the above Program proposal is in accordance with my government's national priorities and our commitment to the relevant global environmental conventions.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc.).

The MedProgramme follows the successful implementation of the "MedPartnership" and "ClimVar & ICZM" GEF funded projects in Bosnia and Herzegovina. Among other successful activities, the development of a PCB inventory and disposal of PCB in Bosnia and Herzegovina, has been one of the most relevant achievements of the above mentioned projects during the period 2009 and 2015.

The total financing[1] being requested for the child projects under this Program is US$ 47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program.

Kindly note that by endorsing the MedProgramme Bosnia and Herzegovina is not committing co-financing to the Programme at this stage.

Sincerely,

MINISTER
Mirko Šarović

Copy to: Convention Focal Point for Stockholm (POPs)

[1] "Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.

Мусала 9, 71 000 Сарајево, тел: +387 33 220 093 факс: +387 33 33 220 091
Musala 9, 71 000 Sarajevo, tel: + 387 33 33 220 093 faks: +387 33 33 220 091
www.mvteo.gov.ba

Arab Republic of Egypt
Cabinet of Ministers
Ministry Of environment
Egyptian Environmental Affairs Agency

جمهورية مصر العربية
رئاسة مجلس الوزراء
وزارة البيئة
جهاز شئون البيئة

4/7/2016

To: Ms. Brennan Van Dyke, Executive Coordinator
United Nations Environment Programme
Gigiri, P.O. Box 30552 - 00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Egypt, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing patners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc.).

The total financing[1] being requested for the child projects under this Program is US$47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US$ 1,500,000 of Biodiversity STAR earmarked by Libya.

Trust Fund	Agency	Focal Area	Programming of Funds	Amount (in US$)			
				GEF Project Financing	Expected PPG	Agency Fee	Total
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500
GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000
Total Financing				42,376,147	1,200,000	3,813,853	47,390,000

Sincerely,
Ahmed A. Elseoud
Eng. Ahmed Abou Elseoud
Chief Executive Officer
GEF National Focal Point

[1] "Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.

٣٠ طريق مصر حلوان الزراعى - خلف فندق سوفيتل المعادى - القاهرة الرقم البريدى ١١٧٢٨ ت : ٢٥٢٥٦٤٥٢ فاكس : ٢٥٢٥٦٤٩٠
30,Misr Helwan El-Zyrae Rd., Maadi - Cairo Egypt. P.O. 11728 Tel. : 25256452 - Fax : 25256490

GEF Unit
<gefunitegypt@gmail.com
>

07/06/2016 02:59 PM

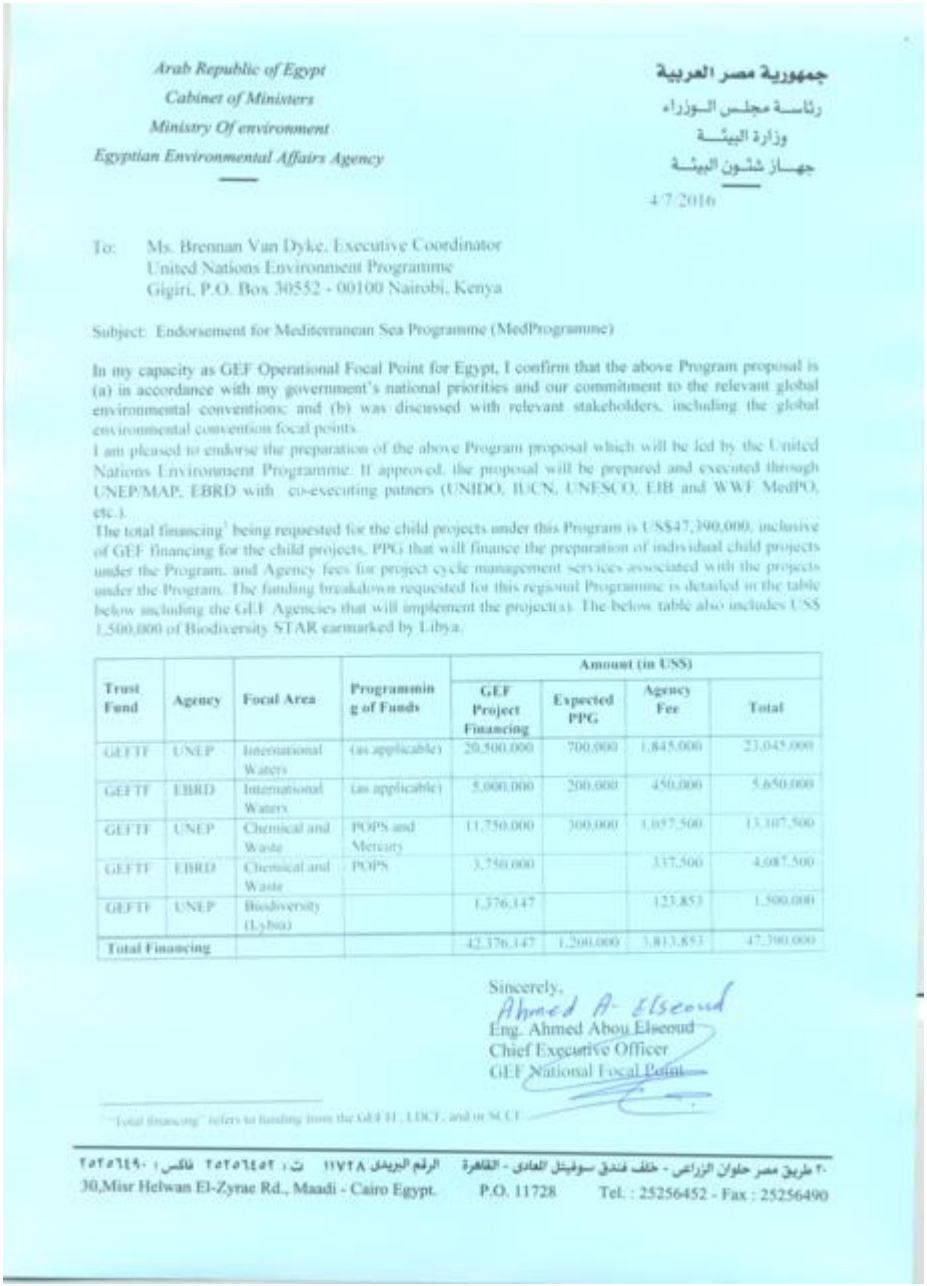
To Shelley.Farrington@unepmap.gr, hoda.elturk@unepmap.gr, Lorenzo.Galbiati@unepmap.gr,
cc "ceo.eeaa@eeaa.cloud.gov.eg" <ceo.eeaa@eeaa.cloud.gov.eg>
bcc

Subject MedProgramme

Dear All,

Hope this email find you well, As agreed with Eng. Abou Elseoud, kindly find below the signed endorsement letter for the MedProgramme.

Best regards
Hoda
Gef unit director at EEAA



Arab Republic of Egypt
Cabinet of Ministers
Ministry Of environment
Egyptian Environmental Affairs Agency

جمهورية مصر العربية
رئاسة مجلس الوزراء
وزارة البيئة
جهاز شئون البيئة

4/7/2016

To: Ms. Brennan Van Dyke, Executive Coordinator
United Nations Environment Programme
Gigiri, P.O. Box 30552 - 00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Egypt, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.
I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing patners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc.).
The total financing' being requested for the child projects under this Program is US$47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US$ 1,500,000 of Biodiversity STAR earmarked by Libya.

Trust Fund	Agency	Focal Area	Programming of Funds	Amount (in US$)			
				GEF Project Financing	Expected PPG	Agency Fee	Total
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500
GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000
Total Financing				42,376,147	1,200,000	3,813,853	47,390,000

Sincerely,
Ahmed A- Elseoud
Eng. Ahmed Abou Elseoud
Chief Executive Officer
GEF National Focal Point

"Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF

٣٠ طريق مصر حلوان الزراعى - خلف فندق سوفيتل المعادى - القاهرة الرقم البريدى ١١٧٢٨ ت : ٢٥٢٥٦٤٥٢ فاكس : ٢٥٢٥٦٤٩٠
30,Misr Helwan El-Zyrae Rd., Maadi - Cairo Egypt. P.O. 11728 Tel. : 25256452 - Fax : 25256490

--

GEF Unit / Egypt
Mobile: +2- 0122- 3352319
Fax: +2- 02 -25256454

Pl. Consider the Environment before printing this email

REPUBLIC OF LEBANON
MINISTRY OF ENVIRONMENT

Beirut, 11-07-2016
Our Ref: 3513/B

THE MINISTER

Ms. Brennan Van Dyke
Executive Coordinator
United Nations Environment Programme
Gigiri, P.O. Box 30552 - 00100
Nairobi, Kenya

Dear Ms. Van Dyke,

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Lebanon, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.
I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD and co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc.).
The total financing being requested for the child projects under this Program is US$47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US$ 1,500,000 of Biodiversity STAR earmarked by Libya.

Trust Fund	Agency	Focal Area	Programming of Funds	Amount (in US$)			
				GEF Project Financing	Expected PPG	Agency Fee	Total
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500
GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000
Total Financing				42,376,147	1,200,000	3,813,853	47,390,000

AA-F-16-V.1- 1/1

Sincerely yours,

Mohamad Al Mashnouk
Minister of Environment

Republic of Lebanon Ministry of Environment

Cc: - Registrar
- Convention Focal Point for Stockholm (POPs),
- Convention Focal Point for Minamata

Ministry of Environment, Lazarieh Center, 7th Floor, Block A-4 Old
P.O.Box: 11/2727; Beirut-Lebanon. Tel: +(961)-1-976555 or 4-Digit Number: 1789; Fax: +(961)-1-976530
Home Page: www.moe.gov.lb

Libyan interim government
Government of Libya
Environmental General Authority

الحكومة الليبية المؤقتة
رئاسة مجلس الوزراء
الهيئة العامة للبيئة

التاريخ: 28.06.2016

الموافق: .....

الرقم الإشاري: .....

To: Ms. Brennan Van Dyke, Executive Coordinator
United Nations Environment Programme
Gigiri, P.O. Box 30552 - 00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Libya, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing patners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc.).

The total financing[1] being requested for the child projects under this Program is US$47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s).
The below table also includes US$ 1,500,000 of Biodiversity STAR earmarked by Libya.

Trust Fund	Agency	Focal Area	Programming of Funds	Amount (in US$)			
				GEF Project Financing	Expected PPG	Agency Fee	Total
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500
GEFTF	UNEP	Biodiversity (Libya)		1,376,147		123,853	1,500,000
Total Financing				42,376,147	1,200,000	3,813,853	47,390,000

I consent to the utilization of Libya's allocations in GEF-6 as defined in the System for Transparent Allocation of Resources (STAR). For projects outside the STAR, I am endorsing funding from the focal area envelopes.

Sincerely,

Dr. Mustafa Soliman
Operational and Political Focal point

الهيئة العامة للبيئة
نقطة الاتصال
مرفق البيئة العالمية

Copy to: Convention Focal Point for Stockholm (POPs)
Convention Focal Point for Minamata

[1] "Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.

092.248.8790 egalibya2015@gmail.com العنوان / شحات - ليبيا

MONTENEGRO

MINISTRY OF SUSTAINABLE DEVELOPMENT
AND TOURISM

Montenegro
A DECADE
OF INDEPENDENCE
A MILLENNIUM
OF STATEHOOD
MONTENEGRO
2016

May Montenegro live forever

Podgorica, June 27th 2016

Ref/No: 111-66/33

To: Ms. Brennan Van Dyke, Executive Coordinator
United Nations Environment Programme
Gigiri, P.O. Box 30552- 00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Montenegro, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc).

The total financing[1] being requested for the child projects under this Program is US$ 47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US$ 1,500,000 of Biodiversity STAR earmarked by Libya.

[1] "Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.

IV proleterske brigade broj 19, 81000 Podgorica
Tel: (+382) 20 446 362; (+382) 20 446 225; Fax: (+382) 20 446 215
Web: www.mrt.gov.me

MONTENEGRO

MINISTRY OF SUSTAINABLE DEVELOPMENT AND TOURISM

Montenegro

A DECADE OF INDEPENDENCE
A MILLENNIUM OF STATEHOOD
MONTENEGRO 2016

May Montenegro live forever

Trust Fund	Agency	Focal Area	Programming of Funds	Amount (in US$)			
				GEF Project Financing	Expected PPG	Agency Fee	Total
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500
GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000
Total Financing				42,376,147	1,200,000	3,813,853	47,390,000

Sincerely,

Ms. Marija Vukcevic
Operational Focal Point
Director General for EU Integration and International Cooperation
Ministry of Sustainable Development and Tourism

Copy to: Convention Focal Point for Stockholm (POPs)
Convention Focal Point for Minamata

IV proleterske brigade broj 19, 81000 Podgorica
Tel: (+382) 20 446 362; (+382) 20 446 225; Fax: (+382) 20 446 215
Web: www.mrt.gov.me

المملكـــة المغربـــية
ⵜⴰⴳⵍⴷⵉⵜ ⵏ ⵍⵎⵖⵔⵉⴱ
Royaume du Maroc

Ministère délégué auprès du Ministre de l'Energie,
des Mines, de l'Eau et de l'Environnement,
chargé de l'Environnement

الوزارة المنتدبة لدى وزير الطاقة والمعادن
والماء والبيئة، المكلفة بالبيئة
ⵜⴰⵎⴰⵡⴰⵙⵜ ⵜⴰⵎⴰⵡⴰⵙⵜ ⵖⵓ ⵜⵎⴰⵡⴰⵙⵜ ⵏ ⵜⵣⵎⵔⵜ ⴰ ⵙⵏⵙⴰⵡⴰⵏ
ⴰ ⵡⴰⵎⴰⵍ ⴰ ⵜⵍⵍⴰⴹ ⵜⵜⵜⵓⵎⴰⵔⵏ ⵙ ⵜⵍⵍⴰⴹ
م.ش.ت.ب

DPCC
0PP444

24 JUIN 2016

To: Ms Brennan Van Duke,
Executive Coordinator,
United Nations Environment Programme
Gigiri,P.O.Box 30552-00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Morocco, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing patners (UNIDO, IUCN, UNESCO, EIB and WWF MedPo, etc.)

The total financing from the GEFTF, LDCF, and/or SCCF being requested for the child projects under this Program is US$ 47 390 000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US$ 1,500,000 of Biodiversity STAR earmarked by Libya.

Trust Fund	Agency	Focal Area	Programming of Funds	Amount (in US$)			
				GEF Project Financing	Expected PPG	Agency Fee	Total
GEFTF	UNEP	International Waters	(as applicable)	20 500 000	700 000	1 845 000	23 045 000
GEFTF	EBRD	International Waters	(as applicable)	5 000 000	200 000	450 000	5 650 000
GEFTF	UNEP	Chemical and Waste	POPs and Mercury	11 750 000	300 000	1 057 500	13 107 500
GEFTF	EBRD	Chemical and Waste	POPS	3 750 000		337 500	4 087 500
GEFTF	UNEP	Biodiversity (Lybia)		1 376 147		123 853	1 500 000
Total Financing				42 376 147	1 200 000	3 813 853	47 390 000

Sincerely,

GEF Operational Focal Point

Le Directeur du Partenariat, de la Communication et de la Coopération

Mohamed BENYAHIA

Copy to: Convention Focal point for Stockholm (POPs)
Convention Focal point for Minamata

REPUBLIC OF TUNISIA

—o—

MINISTRY OF ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

—o—

Tunis, 27/06/2016

To: Ms. Brennan Van Dyke, Executive Coordinator
United Nations Environment Programme
Gigiri, P.O. Box 30522 – 00100 Nairobi, Kenya

Subject: Endorsement for Mediterranean Sea Programme (MedProgramme)

In my capacity as GEF Operational Focal Point for Tunisia, I confirm that the above Program proposal is (a) in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and (b) was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the preparation of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD with co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPO, etc.).

The total financing[1] being requested for the child projects under this Program is US$47,390,000, inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s). The below table also includes US$ 1,500,000 of Biodiversity STAR earmarked by Libya.

Trust Fund	Agency	Focal Area	Programming of Funds	Amount (in US$)			
				GEF Project Financing	**Expected PPG**	**Agency Fee**	**Total**
GEFTF	UNEP	International Waters	(as applicable)	20,500,000	700,000	1,845,000	23,045,000
GEFTF	EBRD	International Waters	(as applicable)	5,000,000	200,000	450,000	5,650,000
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,750,000	300,000	1,057,500	13,107,500
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500
GEFTF	UNEP	Biodiversity (Lybia)		1,376,147		123,853	1,500,000
Total Financing				42,376,147	1,200,000	3,813,853	47,390,000

Sincerely,
Sabria Bnouni

GEF Operational Focal Point

[1] "Total financing" refers to funding from the GEFTF, LDCF, and/or SCCF.

Copy to : Convention Focal Poin for Stockholm (POPs)
Convention Focal Point for Minamata

REPUBLIC OF TURKEY
MINISTRY OF AGRICULTURE AND FORESTRY
Directorate General for EU and Foreign Relations

27/03/2019

To: Ms.Kelly West, Executive Coordinator
United Nations Environment Programme
Gigiri, P.O. Box 30552-00100 Nairobi, Kenya.

Subject: Endorsement for Mediterranean Sea Program (Med Programme).

In my capacity as GEF Operational Focal Point for Turkey, I confirm that the above Program proposal is in accordance with my government's national priorities and our commitment to the relevant global environmental conventions; and was discussed with relevant stakeholders, including the global environmental convention focal points.

I am pleased to endorse the chemicals and waste components of the above Program proposal which will be led by the United Nations Environment Programme. If approved, the proposal will be prepared and executed through UNEP/MAP, EBRD, with co-executing partners (UNIDO, IUCN, UNESCO, EIB and WWF MedPo, etc).

The total financing being requested for the Program Component 1 (*Reduction of Land based Pollution in Priority Coastal Hotspots and measuring progress to impacts*) on chemicals and waste under this Program is US$ 16,650,000 inclusive of GEF financing for the child projects, PPG that will finance the preparation of individual child projects under the Program, and Agency fees for project cycle management services associated with the projects under the Program. The funding breakdown requested for this regional Programme is detailed in the table below including the GEF Agencies that will implement the project(s).

Trust Fund	**Agency**	**Focal Area**	**Programming Funds**	**Amount (in US$)**			
				GEF Project Financing	**Expected PPG**	**Agency Fee**	**Total**
GEFTF	UNEP	Chemical and Waste	POPS and Mercury	11,250,000	300,000	1,012,500	12,562,500
GEFTF	EBRD	Chemical and Waste	POPS	3,750,000		337,500	4,087,500
Total financing				**15,000,000**	**300,000**	**1,350,000**	**16,650,000**

Sincerely,

Akif ÖZKALDI
Deputy Minister
GEF Operational Focal Point of Turkey

Mediterranean Action Plan Coordinating Unit
Barcelona Convention Secretariat

United Nations
Environment Programme

Date: 5 February 2019

Subject: In-kind contribution to the GEF ID 9684 project "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts." – Child Project 1.1 of the MedProgramme.

In my capacity as Coordinator of the Barcelona Convention Secretariat, Coordinating Unit for the Mediterranean Action Plan (UN Environment/MAP), I wish to confirm that UN Environment/MAP will coordinate the execution of the child project of the MedProgramme "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts" which will contribute to achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas.

I am hereby pleased to confirm that UN Environment/MAP will support the project with an in-kind contribution of 386,032 USD which will be allocated over the 60 months of the project duration starting from its approval by the GEF Secretariat. The in-kind contribution will be allocated as follows:

- 381,032 USD: Staff time in support of the project (Management of the Barcelona Convention Secretariat, Coordinating Unit for the Mediterranean Action Plan, Programme Officer and Monitoring & Assessment Officer of MED POL, Administration/Fund Management Officer, Human Resources Officer and Administrative Staff);
- 5,000 USD: In-kind contribution for Sundry and communication costs.

Yours sincerely,

Gaetano Leone
Coordinator

GEF Coordination Office
United Nations Environment Programme (UNEP)
United Nations Avenue
P O Box 30552-00100

UN environment
United Nations Environment Programme

Mediterranean Action Plan
Barcelona Convention

Plan Bleu

Ms. Naoko Ishii
Chief Executive Officer and Chairperson
Global Environment Facility (GEF)

Ref.: 1821/19/ELC/SD
Followed by: Jean-Pierre GIRAUD

Marseille, 18/02/2019

Subject: **Co-financing contribution from Plan Bleu for Child Project 1.1 of the MedProgramme**

Dear Ms. Ishii,

I wish to reiterate Plan Bleu's interest in and support to the GEF in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). The Plan Bleu is committed to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, especially those of Child Project 1.1.

Co-financing for Child Project 1.1

Child Project 1.1 is devoted to "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts". As a co-executing agency of this Child Project, the Plan Bleu will undertake activities on the socio-economic status and trends for the Transboundary Diagnostic Analysis (TDA). More specifically, the Plan Bleu will develop this part of the TDA in relation with the State of the Environment and Development Report (SoED) 2019, the MED 2050 Foresight Study on the Environment and Development in the Mediterranean and the Horizon 2020 Assessment (in the framework of the Shared Environmental Information System/SEIS project).

To inform and reinforce the activities foreseen in Child Project 1.1, the Plan Bleu will bring an important set of data and knowledge generated from several complementary initiatives, including the following:

- H2020 - Shared Environmental Information System (SEIS) principles and practices in the ENP South region – SEIS Support Mechanism Phase I: 2010-2015
- H2020 - Shared Environmental Information System (SEIS) principles and practices in the ENP South region – SEIS Support Mechanism Phase II: 2016-2020
- MAVA/ "A blue economy for a healthy Mediterranean": 2015-2017

The value of all related complementary initiatives, staff time and institutional support is estimated at USD 542,000, which represents the Plan Bleu's in-kind co-financing to Child Project 1.1.

Yours sincerely,

Elen Lemaitre-Curri
Director

2000 route des Lucioles – Les Algorithmes – Aristote A – CS 90029 – 06410 Biot Sophia Antipolis – France | Tel.: +33 (0)4 84 08 00 50
www.planbleu.org

الجمهوريـــة الجزائريـــة الديمقراطيـــة الشعبيـــة

République Algérienne Démocratique et Populaire

Ministère de l'Environnement
et des Energies Renouvelables

وزارة البـــيـئـــــة
والطاقات المتجددة

Réf : 32 / IGE / 2018

17 DEC 2018

Ms. Naoko Ishii

Chief Executive Officer and Chairperson

Global Environment Facility (GEF)

Subject: Co-financing contribution from Algeria for Child Project 1.1 of the MedProgramme

Dear Ms. Ishii,

The Ministry of Environment and Renewable Energies welcomes the forthcoming collaboration between the Government of Algeria and the GEF in the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). We reiterate our commitment to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Algeria in support of Child Project 1.1. In keeping with the GEF's policy on co-financing, the Government of Algeria will contribute to the successful implementation of this Child Project (PCBs Elimination/ Mercury) through a combination of in-kind institutional support and complementary initiatives.

Co-financing for Child Project 1.1

Child Project 1.1 is primarily devoted to the reduction of pollution from POPs and mercury, with a complementary action to update the transboundary diagnostic analysis (TDA) for the Mediterranean Sea. The pollution reduction measures for this project – which include actions for both disposal and prevention – will be implemented in a two-phase process, with final decisions on the national activities for each phase to be taken by the Project Steering Committee at the appropriate stage of implementation. The national activities identified for Algeria during the project preparation phase include an inventory of transformers suspected of contamination by PCBs and the potential disposal of up to 1,968 tons of PCBs and 17 tons of metallic mercury from the coastal region. Algeria will also participate in the regional activity on the update of the TDA and in efforts intended to improve the integration and sharing of monitoring and research data across the region. Algeria will also participate in the regional activity on updating the TDA and efforts to improve the integration and sharing of surveillance and research data in the region.

The Algerian government will support activities related to the elimination of in-kind PCBs that may include, coordination, issuance of autorisation and access to sites, provision of information, supervision, safeguarding of equipment, transportation according to possibility , possible help

with repackaging (personal supply, etc.) and a project related to the control of industrial pollution.

These activities will also benefit from the dedicated technical assistance of the Algerian National Center for Clean Technology Production and its regional center of the Stockholm Convention, as well as the construction of a regional forum on the updating of the TDA: sharing of monitoring data, relevant socio-economic information,... In addition, the pollution prevention activities of the Enfant 1.1 nouveau project will build on a significant set of initiatives implemented by the Algerian government to support the sound management and safe disposal of chemicals and wastes. . These initiatives include:

• National initiatives on POPs management, mercury.

• Any project not funded by the GEF on the management / clearance of POPs / mercury.

The value of all related in-kind support and complementary initiatives is estimated at ***22, 352,977*** **USD**, which represents the in-kind co-financing contribution of the Government of Algeria to Child Project 1.1.

We would like to take this opportunity to request that the execution by UNEP/MAP through MED POL of national activities of Algeria on POPs and Mercury as well as the update of the Transboundary Diagnostic Analysis for the Mediterranean Sea be conducted in full coordination with our Ministry who work closely with the competent authorities.

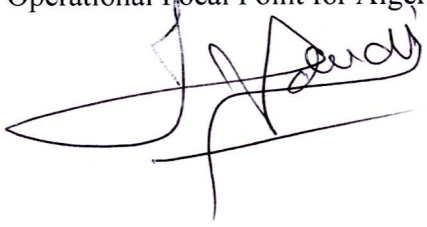
Algeria is one of the Contracting Parties to the Barcelona Convention, and as such we have benefitted from a longstanding and successful collaboration with UNEP/MAP and MED POL. This institutional arrangement provides a strong regional framework for the successful completion of the Child Project, as well as the technical knowledge, guidance and capacity to successfully execute the Project, as agreed, in the framework of the Barcelona Convention Protocols for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities and of the Programme of Work on the Mediterranean Action Plan. We are confident that this approach would be most effective to execute Child Project 1.1 of the MedProgramme and to support [Country] in efforts to achieve the Child Project's ambitious objective.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

Ms.Samira HAMIDI

GEF Operational Focal Point for Algeria



REPUBLIC OF LEBANON
MINISTRY OF ENVIRONMENT

THE MINISTER

Beirut, 12-02-2019
Our ref: 785/B

Ms. Naoko Ishii
Chief Executive Officer and Chairperson
Global Environment Facility (GEF)
1899 Pennsylvania Ave NW, Washington, DC 20006, USA

Subject: Co-financing contribution from Lebanon for Child Project 1.1 of the MedProgramme

Dear Ms. Ishii,

The Ministry of Environment welcomes the forthcoming collaboration between the Government of Lebanon and the GEF in the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607).

We reiterate our commitment to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Lebanon in support of Child Project 1.1.

In keeping with the GEF's policy on co-financing, the Government of Lebanon will contribute to the successful implementation of this Child Project through a combination of in-kind institutional support and complementary initiatives.

Co-financing for Child Project 1.1

Child Project 1.1 is primarily devoted to the reduction of pollution from POPs and mercury, with a complementary action to update the transboundary diagnostic analysis (TDA) for the Mediterranean Sea. The pollution reduction measures for this project – which include actions for both prevention and disposal – will be implemented in a two-phase process, with final decisions on the national activities for each phase to be taken by the Project Steering Committee at the appropriate stage of implementation. The national activities identified for Lebanon during the project preparation phase include the disposal of up to 1,050 tons of PCBs, the de-chlorination of 126 tons of PCBs contaminated oil, priority remediation actions and pilot actions to prevent the future consumption of mercury and certain POPs and the generation of wastes containing these substances.

Ministry of Environment, Lazarieh Center, 8th Floor, Block A-4 New
P.O.Box: 11/2727; Beirut-Lebanon. Tel: +(961)-1-976555 or 4-Digit Number: 1789; Fax: +(961)-1-976534
Home Page: www.moe.gov.lb

The Government of Lebanon will support these national and regional activities. For the national activities through the coordination, facilitation of issuance of permits and access to sites, provision of information, supervision, safeguarding of equipment, possible centralization/transport and potential assistance with repackaging (i.e., provision of equipment and staff, etc.). Whereas for the regional activity on the TDA update through the share of monitoring data and relevant socioeconomic information to update the baseline situation.

Furthermore, the pollution prevention activities of Child Project 1.1 will build upon and benefit from an important set of initiatives implemented by the Government of Lebanon to support the sound management and safe disposal of harmful chemicals and wastes. These initiatives include the following:

- National initiatives on the management of POPs/mercury.
- Any non-GEF funded projects on POPs/mercury management/remediation of POPs/mercury contaminated sites.

The value of all related in-kind support and complementary initiatives is estimated at USD *185,059,000*, which represents the in-kind co-financing contribution of the Government of Lebanon to Child Project 1.1.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

Minister of Environment
Fady Jreissati
GEF Operational Focal Point

Enclosed:
Annex 1: Co-financing for Child Project 1.1

c.c: Mr. Gaetano Leone - Coordinator of the UN Environment Mediterranean Action Plan-Barcelona Convention Secretariat.
Ministry of Environment: Service of Natural Resources.
Ministry of Environment: Service of Environmental Technology.
Ministry of Environment: Registry-Department of Public Relations and External Affairs.
Ministry of Environment: Service of Urban Environment-Department of Urban Environmental Protection..

State of Libya
Government of National Accord
Environment General Authority

دولة ليبيا
حكومة الوفاق الوطني
الهيئة العامة للبيئة

التاريخ : / / 143
الموافق : 22/ 11 /2018

الرقم الإشاري : _____

Draft co-financing letter for the State of Libya

Ms. Naoko Ishii
Chief Executive Officer and Chairperson
Global Environment Facility (GEF)

Subject: Co-financing contribution from the State of Libya for Child Projects 1.1 and 3.1 of the MedProgramme

Dear Ms. Ishii,

The Environment General Authority welcomes the forthcoming collaboration between the State of Libya and the GEF in the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). We reiterate our commitment to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in the context of Child Projects 1.1 and 3.1. In keeping with the GEF's policy on co-financing, the State of Libya will contribute to the successful implementation of these Child Projects through a combination of in-kind institutional support and complementary initiatives.

Co-financing for Child Project 1.1

The value of all related in-kind support and complementary initiatives is estimated at 1.3 million USD, which represents the in-kind co-financing contribution of the State of Libya to Child Project 1.1.

Co-financing for Child Project 3.1

Child Project 3.1 is devoted exclusively to management support and expansion of Marine Protected Areas (MPAs) in Libya. The activities that will be undertaken in Libya in this context include the establishment of a governance structure for MPAs, a national inventory of marine and coastal sites of conservation interest, the creation of on-site MPA management units and management plans, capacity building on the governance and management of MPAs, and awareness raising campaigns on the value and importance of MPAs in Libya, amongst other activities. The State of Libya will support these activities through the time of its staff, the provision of relevant data, coordination with relevant institutions and Ministries and logistic support. In addition, activities of Child Project 3.1 will build upon and contribute to any complementary initiatives implemented by the State of Libya, which related to protection of marine areas, assessments of marine and coastal biodiversity, governance of natural resources, etc.}.

الهيئة العامة للبيئة
نقطة الاتصال
مرفق البيئة العالمي

العنوان : الغيـــران - طـــرابلس 83618: (021) 487 3761: (021) 487 0266:
www.environment.org.ly

State of Libya
Government of National Accord
Environment General Authority

دولة ليبيا
حكومة الوفاق الوطني
الهيئة العامة للبيئة

الرقم الإشاري : _____

التاريخ : / / 143
الموافق : / / 201

The value of all related in-kind support and complementary initiatives is estimated at 2.5 million USD, which represents the in-kind co-financing contribution of the State of Libya to Child Project 3.1.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

M. Soliman

GEF Operational Focal Point for the State of Libya

العنوان : الغيـــران - طـــرابلس 83618: (021) 487 3761: (021) 487 0266:
www.environment.org.ly

المملكة المغربية
ⵜⴰⴳⵍⴷⵉⵜ ⵏ ⵍⵎⵖⵔⵉⴱ
Royaume du Maroc



Secrétariat d'Etat auprès du Ministre de l'Energie,
des Mines et du Développement Durable,
Chargé du Développement Durable

كتابـــة الدولة لدى وزير الطاقة و المعادن
و التنمية المســـتدامة المكلفة بالتنمية المســـتدامة
ⵜⴰⵙⴷⴰⵡⵜ ⵏ ⵓⵙⵏⵓⵍ ⵖⵔ ⵓⵙⵜⵉⵔⵉ ⴷ ⵜⵎⵙⵙⵓⵔⵉ ⵏ ⵓⵙⵜⵉⵔⵉ ⴰⵎⵙⵙⵓⵔⵉ
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012085 م.ش.ت.ت

D.P.C.C 20 DEC. 2018

To Madame Naoko Ishii
CEO and Chairperson of Global Environment Facility

Subject: Co-financing commitment from the Kingdom of Morocco for Child Projects 1.1 and 2.2 of the Mediterranean Sea Programme: Enhancing Environmental Security" (GEF ID9607)

Dear Ms. Ishii,

The Secretariat of State in Charge of Sustainable Development welcomes the forthcoming collaboration between the Kingdom of Morocco and the GEF in the context of the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security". We reiterate our commitment to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Morocco in support of Child Projects 1.1 and 2.2. In keeping with the GEF's policy on co-financing, the Kingdom of Morocco will contribute to the successful implementation of these Child Projects through a combination of in-kind institutional support and complementary initiatives.

Co-financing for Child Project 1.1

Child Project 1.1 is primarily devoted to the reduction of pollution from POPs and mercury, with a complementary regional action to update the transboundary diagnostic analysis (TDA) for the Mediterranean Sea. The pollution reduction measures for this project – which include actions for both disposal and prevention – will be implemented in a two-phase process, with final decisions on the national activities for each phase to be taken by the Project Steering Committee at the appropriate stage of implementation.

The national activities identified for Morocco during the project preparation phase include the potential inventory and disposal of 32 tons of POPs wastes, the potential disposal of 2 tons of metallic mercury and pilot actions to prevent the future consumption of certain POPs and the generation of new POPs wastes. Morocco will also participate in the regional activity on the update of the TDA and in efforts intended to improve the integration and sharing of monitoring and research data across the region. The Kingdom of Morocco will support these activities through Coordination, facilitation of issuance of permits and access to sites, provision of information, supervision, safeguarding of equipment, possible centralization/transport, potential assistance with repackaging (i.e., provision of equipment and staff, etc.), and sharing of monitoring data, relevant socioeconomic information to update the baseline situation.

Furthermore, the pollution prevention activities of Child Project 1.1 will build upon and benefit from an important set of initiatives implemented by the Kingdom of Morocco, including the private sector, to support the sound management and safe disposal of harmful chemicals and wastes. These initiatives include among others the National Solid Waste Program (PNDM); the Updated National Implementation Plans (NIPs) for Stockholm Convention and the National MedPol Programme.

The value of all related support and complementary initiatives is estimated at USD 8 million, which represents the in-kind co-financing contribution of the Kingdom of Morocco to Child Project 1.1.

We would like also, in context of the Child Project 1.1 to take this opportunity to request that the execution by UNEP/MAP through MED POL of national activities of Morocco on POPs and Mercury as well as the update of the Transboundary Diagnostic Analysis for the Mediterranean Sea be conducted in full coordination with our Ministry and competent authorities. Morocco is one of the Contracting Parties to the Barcelona Convention, and as such we have benefitted from a longstanding and successful collaboration with UNEP/MAP and MED POL. This institutional arrangement provides a strong regional framework for the successful completion of the Child Project, as well as the technical knowledge, guidance and capacity to successfully execute the Project, as agreed, in the framework of the Barcelona Convention Protocols for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities and of the Programme of Work on the Mediterranean Action Plan. We are confident that this approach would be most effective to execute Child Project 1.1 of the MedProgramme and to support Morocco in efforts to achieve the Child Project's ambitious objective.

Co-financing for Child Project 2.2

Child Project 2.2 will foster water, food and energy security and the reduction of land-based nutrient pollution and other pressures, through the adoption of the water-food-energy-ecosystems nexus approach. The interventions in Morocco foreseen in this project include demonstration activities to build capacity and to test the effectiveness of the nexus approach in the relevant institutional settings, which will then feed into the development of a nexus strategy and action plan for a priority coastal area in the country. The Kingdom of Morocco will support these activities through the time of its staff, the provision of relevant data, coordination with relevant institutions and Ministries and logistic support.

Furthermore, a number of complementary initiatives in Morocco will produce knowledge and tools that can contribute to the activities of Child Project 2.2, including the Nexus Regional Dialogues (NRD) with UpM and Arab Countries League (2019-2022), The national agricultural plan (Plan Maroc Vert), Project on Promotion of Energy Efficiency in Agriculture in Morocco (2016-2020) with GIZ, ongoing project case studies "The Role of the Water-Energy-Food Nexus in Implementing the SDGs in Morocco" with cooperation of Texas University, National Rural Wastewater Programme (PNAR), National Project addressing integrated water resources management, agricultural practices, ecosystem services and the sectorial activities for implementing the Action Plans Of Sustainable Development in Water, energy and Agriculture.

The value of all related support and complementary initiatives is estimated at USD 6.5 million, which represents the in-kind co-financing contribution of the Kingdom of Morocco to Child Project 2.2.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

The GEF Operational Focal Point

Directeur du Partenariat, de la
Communication et de la Coopération

Rachid FIRADI

REPUBLIC OF TUNISIA
--0--
MINISTRY OF LOCAL AFFAIRS AND ENVIRONMENT

13 MARS 2019

- 2450

Tunis:.....

Ms. Naoko Ishii
Chief Executive Officer and Chairperson
Global Environment Facility (GEF)

Subject: Co-financing contribution from Tunisia for Child Project 1.1 of the MedProgramme.

The Ministry of Local Affairs and Environment welcomes the forthcoming collaboration between the Government of Tunisia and the GEF in the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607). We reiterate our commitment to joining forces with the GEF to reduce environmental stress on the Mediterranean Sea through the diverse activities foreseen in the multi-focal area MedProgramme, including those that will be undertaken in Tunisia in support of Child Project 1.1. In keeping with the GEF's policy on co-financing, the Government of Tunisia will contribute to the successful implementation of this Child Project through a combination of in-kind institutional support and complementary initiatives.

Co-financing for Child Project 1.1

Child Project 1.1 is primarily devoted to the reduction of pollution from POPs and mercury, with a complementary action to update the transboundary diagnostic analysis (TDA) for the Mediterranean Sea. The pollution reduction measures for this project – which include actions for both disposal and prevention – will be implemented in a two-phase process, with final decisions on the national activities for each phase to be taken by the Project Steering Committee at the appropriate stage of implementation. Tunisia will also participate in the regional activity on the update of the TDA and in efforts intended to improve the integration and sharing of monitoring and research data across the region. The Government of Tunisia will support these national and regional activities through coordination, facilitation of issuance of permits and access to sites, provision of information, supervision, safeguarding of equipment, possible centralization/transport, potential assistance with repackaging (i.e., provision of equipment and staff, etc.). Furthermore, the activities of Child Project 1.1 will build upon and benefit from an important set of initiatives implemented by the Government of Tunisia and the private sector, as appropriate to support the sound management and safe disposal of harmful chemicals and wastes. These initiatives include the following:

- Development of contaminated sites monitoring network (50,000 USD).
- Implementation of national hazardous chemicals database including POPs (100,000 USD).
- Implementation of database on monitoring of hazardous waste management authorized companies (50,000 USD).
- Elaboration of 2020 strategy on hazardous waste management (50,000 USD).
- Implementation of national data base on national hazardous waste inventory (90,000 USD).
- Review of the hazardous waste list (15,000 USD).

- Project of rehabilitation of the hazardous waste treatment center of Jradou and transfert centers of Sfax and Gabès (100,000 USD dedicated to wastes containing POPs and mercury).
- Project of rehabilitation and decontamination of the pulp paper plant of Kasserine (National budget: 1,000,000 USD).
- Elaboration of decree on POPs management in Tunisia (50,000 USD).
- Elaboration of national communication awareness plan on the risks of chemicals (20,000 USD).
- Elaboration of a draft law on the harmonized general system for the labeling and classification of chemicals (15,000 USD).

For the regional activity on the TDA update, the Government of Tunisia will support the project activities through sharing of monitoring data and relevant socioeconomic information to update the baseline situation.

The value of all related in-kind support and complementary initiatives is estimated to USD 1,490,000 which represents the in-kind co-financing contribution of the Government of Tunisia to Child Project 1.1.

We would also like to take this opportunity to request that the execution by UNEP/MAP through MED POL of national activities of Tunisia on POPs and Mercury as well as the update of the Transboundary Diagnostic Analysis for the Mediterranean Sea be conducted in full coordination with our Ministry and competent authorities. Tunisia is one of the Contracting Parties to the Barcelona Convention, and as such we have benefitted from a longstanding and successful collaboration with UNEP/MAP and MED POL. This institutional arrangement provides a strong regional framework for the successful completion of the Child Project, as well as the technical knowledge, guidance and capacity to successfully execute the Project, as agreed, in the framework of the Barcelona Convention Protocols for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities and of the Programme of Work on the Mediterranean Action Plan. We are confident that this approach would be most effective to execute Child Project 1.1 of the MedProgramme and to support Tunisia in its efforts to achieve the Child Project's ambitious objective.

We look forward to working together with the GEF on these important new activities in the Mediterranean.

Yours sincerely,

Le Ministre des Affaires Locales
et de l'Environnement

Mokhtar HAMMAMI

Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC)
Sant Pau Recinte Modernista. Pavelló de Nostra Senyora de la Mercè
Carrer de Sant Antoni Maria Claret, 167.
08025 Barcelona, Catalunya (Spain)
Tél. +34 93 553 87 90 - Fax +34 93 882 36 37
www.scprac.org

Ms. Naoko Ishii
Chief Executive Officer and Chairperson
Global Environment Facility (GEF)

Subject: Co-financing contribution from SCP/RAC for MedProgramme Child Project 1.1 - Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts

Dear Ms Ishii,

I wish to confirm SCP/RAC's interest in and support to the "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (GEF ID 9607) and in particular to its Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts".

We look forward to our collaboration with the GEF in the context of this project which will substantially contribute to the implementation of the Stockholm Convention and the LBS Protocol of the Barcelona Convention. The Regional Action Plan on Sustainable Consumption and Production in the Mediterranean, under the LBS Protocol, and adopted by the Contracting Parties in 2016 identifies a number of actions related to the reduction, substitution and prevention of hazardous chemicals that are fully in line with activities of Child Project 1.1. to be developed by SCP/RAC.

SCP/RAC will execute the activities of Child Project 1.1 on reduction, substitution and prevention of POPs and mercury in at least four countries of the Mediterranean basin. The results of these activities will be disseminated throughout the Mediterranean and opportunities will be sought to promote their visibility and use within the Region and beyond, including through the mechanisms of the Stockholm Convention (SCP/RAC is a Regional Centre for Spain under that Convention).

I am pleased to inform you that SCP/RAC will support the Project activities with an in-kind contribution of 4,075,718 USD that will be allocated in the following way:

- SwitchMed I Policy Component (EU): 1,418,367 USD;
- SwitchMed II activities under OUTCOME II - Enabling environment for a Resource Efficient and a Circular Economy created at regional and national level: 996,569 USD;
- Activities under the "SWIM and H2020 Supporting Mechanisms" project: 237,473 USD;

Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC)
Sant Pau Recinte Modernista. Pavelló de Nostra Senyora de la Mercè
Carrer de Sant Antoni Maria Claret, 167.
08025 Barcelona, Catalunya (Spain)
Tél. +34 93 553 87 90 - Fax +34 93 882 36 37
www.scprac.org

- Activities supporting the implementation of the Regional Action Plan on Sustainable Consumption and Production in the Mediterranean, based on the 2018-2019 Mediterranean Action Plan Programme of Work and the current estimation for the period 2020-2024: 855,291 USD;
- Activities with the Secretariat of the Basel, Rotterdam and Stockholm Conventions (prevision for 2019): 88,540 USD; and
- Programme, administrative and finance staff time: 479,478 USD (Mediterranean Trust Fund 2018-219 and the current estimated amount for the period 2020-2024).

With kindest regards,

Josep Maria Tost i Borràs

The Government of Lebanon will support national and regional initiatives and actions in support of the MedProgramme's Child Project 1.1 (GEF ID 9684): Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts.

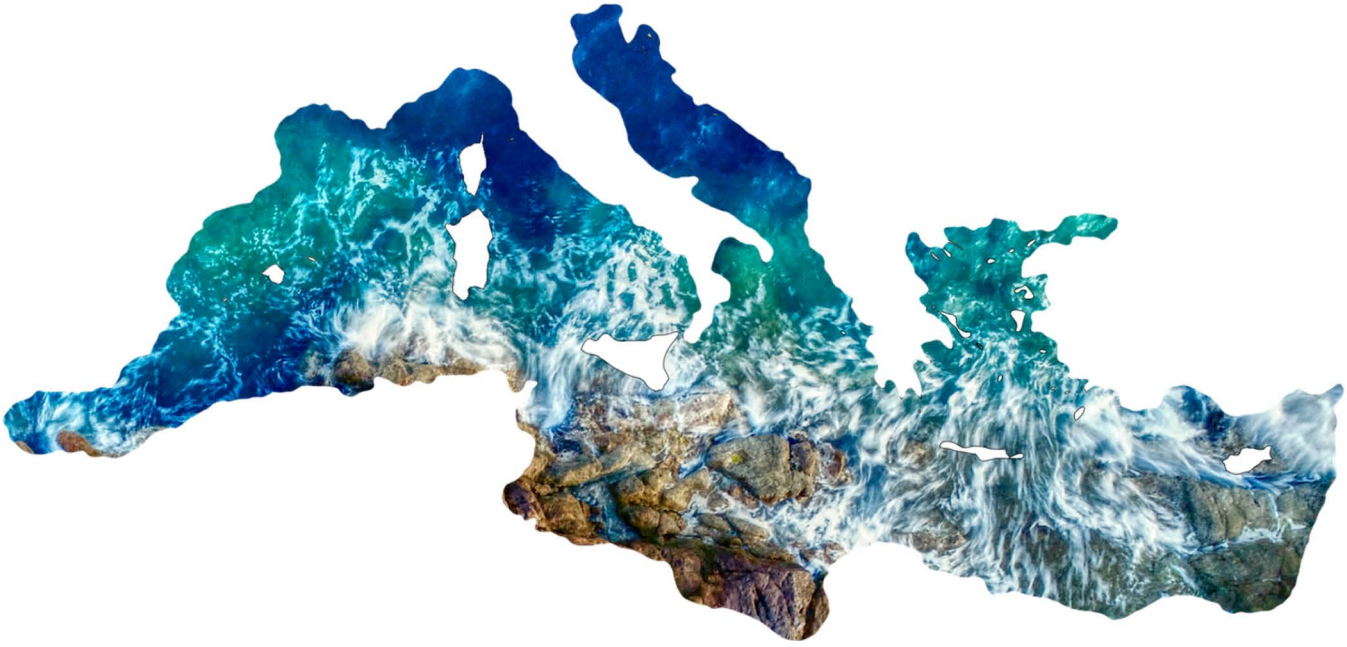
The Government of Lebanon will contribute to Child Project 1.1 through a set of initiative that will be deployed during the 5 years lifespan of the project's execution. These actions are supporting the sound management and safe disposal of harmful chemical and waste.

During the preparation phase of Child Project 1.1, Lebanon made a pledge of 189,059,000 USD in support of national initiatives on the management of POPs/mercury and diagnostic analysis of the Mediterranean Sea and coastal ecosystems of Lebanon. As indicated in the co-financing letters these investments should materialize in the period 2019-2024. However, due to the time passed between the approval of the MedProgramme (October 2016), and the finalization of the preparation phase for Child Projects 1.1, the country agreed on providing an update on its commitment with the view of reporting new figures for the co-financing to be monitored during the execution of the Project.

As of 30 August 2019, the level of delivering of the above-mentioned initiatives is approx. 2 M USD. By applying the same ratio and considering usual challenges to be tackled in this kind of complex investment at national level, the commitment of Lebanon for this initiative is updated to 15 M USD to be delivered during the 5 years execution period of Child Project 1.1 – GEF ID 9684.

KNOWLEDGE MANAGEMENT(KM) STRATEGY

GEF/UN Environment
"Mediterranean Sea Programme (MedProgramme)
Enhancing Environmental Security"
(2019- 2024)



gef

UN environment
United Nations Environment Programme

Mediterranean Action Plan
Barcelona Convention

The strategy was developed in the framework of the Project Preparation Grant (PPG) of the MedProgramme by Lucilla Minelli, UN Environment/Mediterranean Action Plan (MAP) consultant. June-October 2018

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1. Overview and background

1.1 Purpose

The purpose of the present Knowledge Management (KM) strategy[1] is to offer a structured and integrated approach to leverage and systematically share knowledge assets generated by the Child Projects of the MedProgramme with the intended beneficiaries and audiences. In doing so, the strategy aims to maximize the MedProgramme's impact by: strengthening operational coherence; harnessing synergies and pooling resources, including time; inform policy makers and key stakeholders about the MedProgramme (its activities, needs, outputs, meetings, results, etc.) and of the benefits arising from the Programme interventions. It will also contribute to the objectives of the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention), the Minamata Convention on Mercury and the Stockholm Convention on Persistent Organic Pollutants by fostering a broader culture of learning, cooperation and environmental sustainability in the region.

1.2 Context

The present KM strategy is designed to support the implementation of the GEF/UN Environment "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" (2019- 2024)[2].The MedProgramme represents the first GEF programmatic multi-focal area initiative in the Mediterranean Sea aiming to operationalize priority actions to reduce major transboundary environmental stresses in its coastal areas while strengthening climate resilience and water security and improving the health and livelihoods of coastal populations. The MedProgramme is implemented in nine beneficiary countries sharing the Mediterranean basin: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia. Its eight Child Projects[3] cut across four different Focal Areas of the Global Environment Facility (International Waters [IW], Biodiversity [BD], Chemicals and Waste [CW], and Climate Change [CC]) and involve a wide spectrum of developmental and societal sectors, ranging from banking institutions, the private sector, governmental and non-governmental bodies, industry, research, media, and various other organizations. It builds on the MedPartnership and ClimVar & ICZM[4] GEF projects which have enriched the knowledge on the Mediterranean environment and unraveled the implications of climate change and variability; strengthened countries' mutual trust, cooperation and common purpose; consolidated the partnership among countries,

[1] The strategy is illustrated in relevant sections of MedProgramme Child Project 4.1. The full document is annexed to individual MedProgramme Child Project documents to provide a harmonized and consistent reference across the entire portfolio of interventions.

[2] GEF Lead Implementing Agency: UN Environment. Other GEF Implementing Agency: European Bank for Reconstruction and Development (EBRD). Leading Executing Agency: UN Environment/MAP. Executing partners: UNESCO International Hydrological Programme (IHP), European Investment Bank (EIB), Global Water Partnership – Mediterranean (GWP-Med), WWF Mediterranean Programme Office (WWF MedPO), IUCN, Priority Actions Programme Regional Activity Centre (PAP/RAC), Plan Bleu Regional Activity Centre (Plan Bleu), Specially Protected Areas Regional Activity Centre (SPA/RAC) and the Sustainable Consumption and Production Regional Activity Centre (SCP/RAC).

[3] At the time of its approval in October 2016, the MedProgramme was comprised of seven Child Projects. Subsequently, a Mediterranean climate change adaptation project was developed by UN Environment/MAP for financing through the Special Climate Change Fund (SCCF). It was agreed by the UN Environment/MAP, UN Environment and the GEF Secretariat that this SCCF project would be managed for all intents and purposes as an additional Child Project of the MedProgramme. Hence the reference to eight Child Projects of the MedProgramme.

[4] More info on MedPartnership, ClimVar and ICZM (Integration of climatic variability and change into national strategies to implement the ICZM Protocol in the Mediterranean) projects: http://www.themedpartnership.org/, https://iwlearn.net/iw-projects/2600 and https://iwlearn.net/iw-projects/3990. Some partners to the MedPartnership developed a series of dedicated websites for their activities. For instance, PAP/RAC activities on MedPartnership can be found at: https://pap-thecoastcentre.org/medpartnership ; https://pap- thecoastcentre.org/climvar/ and https://pap-thecoastcentre.org/projects/

UN bodies, civil society organizations, bilateral donors and the European Union (EU); and tested on the ground the feasibility and effectiveness of technical and policy instruments aimed at addressing major present and future threats to environmental sustainability and climate related impacts.

The Mediterranean countries have worked together with GEF IW support since the late 1990s to set priorities related to national, as well as transboundary environmental concerns (Transboundary diagnostic analysis [TDA] for the Mediterranean Sea[5]) and have jointly agreed on the interventions needed to address these priorities in two Strategic Action Programmes (SAPs): 1) The Strategic Action Programme to Address Pollution from Land-Based Activities (SAP-MED); and 2) the Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean Region (SAP-BIO).

Following the formal adoption by the Barcelona Convention of the SAP-MED and SAP-BIO (2005 and 2003), the Mediterranean countries translated the SAP priorities into National Action Plans (NAPs), and benefited from international support in moving towards on the ground implementation. The MedPartnership project (2010-2015) supported countries in the initial implementation of the SAPs and of the newly developed Protocol on Integrated Coastal Zone Management (ICZM), which was adopted in 2011.

More recently, the 2015 – 2016 update of the NAPs associated with the SAP-MED has succeeded in creating additional momentum at local, national and regional levels, with a remarkable level of involvement and participation of all stakeholders. In each country, national and local authorities, the industrial sector and Non-governmental Organizations (NGOs) discussed priorities, possible actions and opportunities for investment thus making the NAPs a realistic initiative. These significant achievements, while not yet bringing about measurable changes in the levels of environmental stress or in degradation trends, have however created the indispensable foundation and the enabling conditions for initiating national actions targeting major causes of marine and coastal transboundary degradation. To confront the challenge of implementation, to execute the SAPs and to reinforce implementation of the NAPs thereby achieving concrete and lasting results, are the raisons d'être of MedProgramme.

The Barcelona Convention provides the policy framework under which the MedProgramme will operate and the UN Environment Mediterranean Action Plan (MAP) system will ultimately carry forward the legacy of the outcomes of the MedProgramme's Child Projects, and in particular of its knowledge management mechanisms, approaches and tools. The MAP Regional Activity Centers (RACs) will play a crucial role in sustaining and amplifying these efforts. Moreover, regular reporting to the Meeting of Contracting Parties to the Barcelona Convention on the progress made by the MedProgramme will be ensured through the UN Environment/Mediterranean Action Plan-Barcelona Convention Secretariat.

[5] Transboundary diagnostic analysis (TDA) for the Mediterranean Sea, UNEP/MAP, 2005 - https://wedocs.unep.org/bitstream/handle/20.500.11822/598/medtda.pdf?sequence=2&isAllowed=y

Box 1 The Barcelona Convention and the MAP system

The Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (referred to as the Barcelona Convention) is a regional convention adopted in 1976 to prevent and abate pollution from ships, aircraft and land-based sources in the Mediterranean Sea. It is developed under the UN Environment Regional Seas Programme which was established in 1974 with the scope of coordinating activities aimed at the protection of the marine environment through a regional approach. The Mediterranean Action Plan (MAP) was the first UN Environment initiative to be developed under the Programme and became the model for other seas across the globe. Since 1975, MAP has provided the institutional framework for cooperation in addressing common challenges of marine environmental degradation adopted by the Mediterranean States and the European Union.

There are 22 Contracting Parties (Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, the European Union, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia, Turkey) and they decide on MAP strategies, budget and programme of work in pursuit of MAP's goal at their Ministerial level meetings, held every two years. They appoint Focal Points to review the progress of work and ensure the implementation of recommendations at the national level. A rotating Bureau of six representatives of the Contracting Parties guides and advises the MAP Secretariat (located in Athens) in the interim period between the biannual meetings.

More information on the Coordinating Unit for the Mediterranean Action Plan, Secretariat to the Barcelona Convention and its Protocols at: http://web.unep.org/unepmap/.

The Minamata Convention on Mercury[6], the Stockholm Convention on Persistent Organic Pollutants[7], the Basel Convention[8] and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activity (GPA)[7] are also among the key guiding frameworks for the Child Projects focusing on reduction of land-based pollution (Component 1 of the MedProgramme).

In terms of knowledge management (KM), the MedProgramme holds a tremendous opportunity to generate new information and consciousness, encourage transboundary cooperation, scale up needed investments and raise general awareness about the benefits arising from good governance and management of natural resources in coastal areas.

The eight Child Projects (CP) of the MedProgramme are expected to deliver a set of complementary results embracing the categories of priorities identified by the TDA for the Mediterranean Sea which are translated into three components of the program: i) Reduction of Land-Based Pollution in Priority Coastal Hotspots and measuring progress to impacts; ii) Enhancing Sustainability and Climate Resilience in the Coastal Zone; and iii) Protecting Marine Biodiversity (see Table 2, MedProgramme Components, Child Projects and GEF Focal Areas, page 16).

[6] The Minamata Convention on Mercury is a global treaty to protect human health and the environment from the adverse effects of mercury. It entered into force on 16 August 2017. More info: http://www.mercuryconvention.org

[7] The Stockholm Convention on Persistent Organic Pollutants is an international environmental treaty, signed in 2001 and effective from May 2004, that aims to eliminate or restrict the production and use of persistent organic pollutants (POPs). More info: http://chm.pops.int

[8] The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal is an international treaty that was designed to reduce the movements of hazardous waste between nations, and specifically to prevent transfer of hazardous waste from developed to less developed countries (LDCs). The Convention was opened for signature on 22 March 1989 and entered into force on 5 May 1992. As of February 2018, 185 states and the European Union are parties to the Convention. More info: http://www.basel.int

[9] The UNEP Global Programme of Action (UNEP/GPA) aims at preventing the degradation of the marine environment from land-based activities by facilitating the realization of the duty of States to preserve and protect the marine environment. It is unique in that it is the only global initiative directly addressing the connectivity between terrestrial, freshwater, coastal and marine ecosystems. More info: https://www.unenvironment.org/nairobiconvention/unep- global-programme-action-unepgpa

The fourth component (Knowledge Management and Programme Coordination) includes Child Project 4.1 "Mediterranean Sea LME Environment and Climate Regional Support Project" which plays a key role within the MedProgramme as it "implements mechanisms for Programme-wide learning and dissemination of knowledge, monitoring the Programme's progress to impacts, and fostering synergistic interactions among Child Projects". Within the GEF programmatic approaches there is a need to ensure programme coherence and impact through coordination among diverse sets of multi-focal area Child Projects contributing to the same programme outcomes. A Support Project functions as a trait d'union (a common link) among Child Projects by providing overall coordination of the programme portfolio, resource-saving services, a robust system to managing knowledge effectively and a sound action plan for gender mainstreaming.

The present strategy provides the context and the boundaries within which KM will operate in the MedProgramme, essentially answering the strategic questions: where are we now? (baseline and project needs), what do we want to achieve? (vision and objectives), and how to get there? (framework for processes, tools, activities and governance).

The present strategy does not aim to provide a final definition of the tools, software and instruments that will be used to reach its goals. Although a wide range of them is considered and analysed, their selection will take place during the inception phase of the MedProgramme together with its stakeholders (countries and executing partners). This process will be driven by the specific needs of the stakeholders and will follow a competitive process for selection ensuring an efficient use of resources.

1.3 Where are we? (Baseline Scenario)

A baseline scenario in the context of this strategy was built through a detailed scanning of existing initiatives related to KM and the objectives of the MedProgramme, and a survey addressed to project designers aimed at diagnosing needs and expectations related to KM and outreach of Child Projects.

The overview of regional (and global when relevant) initiatives on knowledge/ information management focusing on pollution reduction, biodiversity, water resources (fresh water and marine) and climate change revealed that there is a great potential for cross-fertilization and incremental innovation. At the same time, the analysis brought to light some challenges, such as fragmentation, the inability of some projects to sustain their results, insufficient resources or attention devoted to KM approaches, gaps in information sharing, among others, which point to the need to clearly address these challenges at the onset of the MedProgramme.
The responses to the web-based survey served to inform the design of the strategy and its levels, in terms of target audiences, objectives, tools and activities.

1.4 What do we want to achieve? (KM Vision and Objectives)

The MedProgramme strives to become a knowledge hub in the Mediterranean region to scale up successful practices, encourage broader adoption, promote knowledge sharing and support the common objectives of the parties to the Barcelona Convention.
In this effort, it also pioneers a new integrated KM methodology for GEF-financed programs in line with GEF programmatic approaches. The strategy puts in place a framework that will underpin and guide the MedProgramme knowledge-sharing activities and support the achievement of the programme outcome(s), reflecting the complexity of its portfolio while ensuring that its findings are effectively translated, shared and delivered to the intended audiences.

The strategy aims to maximize the MedProgramme impact by (the KM strategy objectives):

- Strengthening coordination and operational coherence among Child Projects and their partners;
- Monitoring the execution of the activities under the entire Programme to assess progress to impact;
- Leveraging and systematically sharing knowledge assets generated by the Child Projects with the intended beneficiaries and audiences;
- Strengthening the science-policy interface (SPI) and influencing decision making through data and information sharing, capacity building, and regional stakeholder engagement;
- Supporting the objectives of the Barcelona Convention and the work of the MAP system through effective stocktaking and scaling up of programme results; and
- Fostering incremental innovation within GEF programmatic approaches and enriching the knowledge base of GEF Implementing and Executing Agencies.

1.5 How to get there?

In order to achieve this vision and related objectives, three interconnected functional levels[10] have been identified to articulate the KM strategy:

1. at the **PORTFOLIO LEVEL** to support the work of project managers and executing partners by providing project management tools and training to key regional stakeholders;
2. at the **GENERAL PUBLIC LEVEL** to share results, inform and influence target audiences by reaching out to and engaging with civil society, media, and representatives of non-scientific community;
3. at the **POLICY and DECISION-MAKING LEVEL** to support the Contracting Parties of the Barcelona Convention, relevant decision makers in the region and the work of GEF Implementing and Executing Agencies by contributing to relevant regional policy processes and related GEF initiatives (particularly the IW:LEARN project).

Organizational coherence and strong synergies among MedProgramme Child Projects are considered critical to sustain effective knowledge sharing and ensure the successful achievement of the KM objectives. Careful consideration was given to the different types of knowledge that will be generated throughout the lifespan of the programme to ensure that intangible assets (tacit knowledge, intended as human and intellectual capital) as well as technical and codified information (explicit knowledge) are properly valued and managed.

1.6 Methodology

The strategy was prepared during the period June - September 2018 in the framework of the Project Preparation Grant (PPG) phase of the MedProgramme (October 2017- December 2018) in close coordination with the senior staff of the UN Environment/Mediterranean Action Plan Secretariat. It is based on the analysis of the Program Framework Document (PFD) of the MedProgramme[11] various background documentation (including the Report from the First Regional Consultation held on 7-8 March 2018 in Athens which confirmed the decision of the countries to prepare a KM strategy), the results of a dedicated online survey, exchanges

[10] Activities and tools outlined in this strategy contribute to one or more of these operational levels.

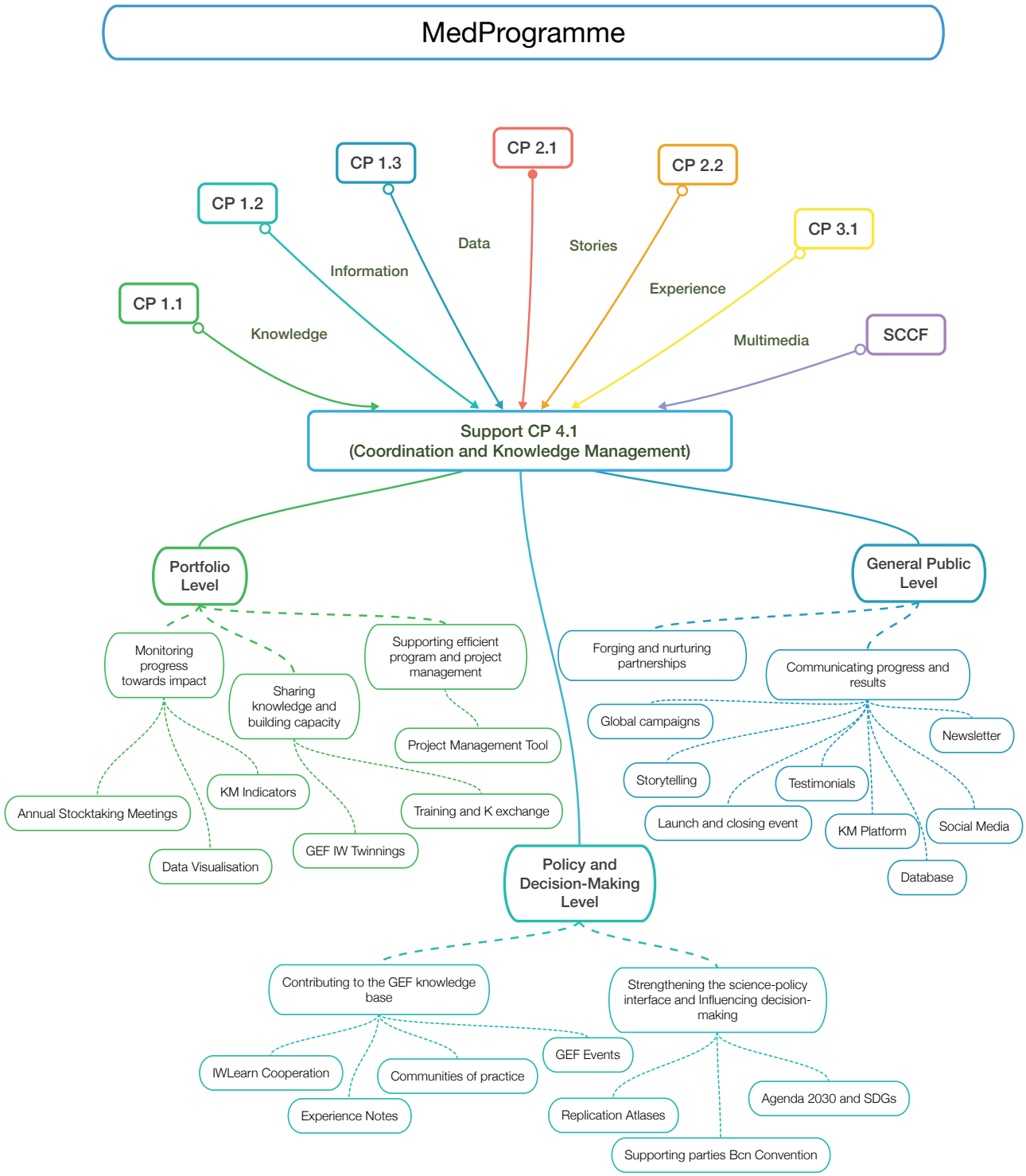
[11] The Program Framework Document (PFD) was approved by the GEF Council on 26 October 2016. More info: https://www.thegef.org/project/mediterranean-sea-programme-medprogramme-enhancing-environmental-securitynairobiconvention/unep- global-programme-action-unepgpa

with project designers (with in-depth review of available drafts of Child Project documents), desk research, contact with relevant technical counterparts (i.e. for project management tool, visualization, etc). Further inputs were collected during the Second Regional Consultations for the MedProgramme held on 20 and 21 September 2018 at UNESCO HQ in Paris. Moreover, the design of the strategy took into account lessons learned from the predecessor project of the MedProgramme, the MedPartnership Project.
The approach illustrated in the present strategy will be operationalized during the MedProgramme inception phase in 2019.

1.7 Implementation

The overall KM strategy is built within the MedProgramme Support Child Project 4.1 and executed by the MedProgramme Coordinating Unit (MedPCU) in close coordination with all Child Projects. Outcomes and outputs of Child Project 4.1 are closely aligned with the present strategy, which, in addition to the logframe in the project document, also envisions actions to be possibly undertaken in the course of the execution of the Programme. The final detailed list of tools, activities and initiatives (and their costs) will be validated during the MedProgramme inception phase and fully agreed with the countries, executing partners and stakeholders of the Programme.

Fig. 1 Knowledge production, management and dissemination in the MedProgramme



2. Baseline scenario and projects needs

2.1 Overview of regional KM initiatives

> *Connection, not collection: that's the essence of knowledge management*. –Tom Stewart

As the MedProgramme cuts across four different GEF Focal Areas (Biodiversity, Chemicals and Waste, International Waters and Climate Change), its results will be relevant for many different sectors and activities in the Mediterranean region. A review of the existing initiatives related to knowledge management in these domains was carried out with the purpose to: 1) avoid unnecessary duplication; 2) replicate and build on successful practices; and 3) establish potential synergies and partnerships. The research included knowledge platforms, databases, initiatives and projects on knowledge/information sharing in the Mediterranean region (or globally when relevant) focusing on pollution reduction, biodiversity, water resources (fresh and marine) and climate change.

The result is a detailed knowledge map that will be useful during the execution of the MedProgramme to: establish collaborations (for content sharing and use of respective networks to increase impact and dissemination), benefit from existing collected data and technical information, make reference to relevant policy and legal frameworks, get inspiration from effective data visualization examples and platform designs, and replicate/ participate in successful awareness raising campaigns and capacity building activities (see legend in Table 1 "Relevance for the MedProgramme").

Against this baseline, the MedProgramme will generate new data and develop additional capacity of beneficiary countries to reduce pollution in marine and freshwater coastal bodies, increase resilience to climate change, improve the governance of water resources, promote the nexus approach and protect biodiversity and ecosystems.

The analysis of the knowledge map shows that there is an existing wealth of information in these domains. This poses a number of challenges as well as opportunities for effective knowledge sharing. The risk of fragmentation is high, and coordination among similar or complementary initiatives is not always optimal. Often, the results of projects are not fully sustained after their closure (possibly due to lack of funds after project execution is completed, insufficient ownership of results by key stakeholders and partners, or inadequate emphasis and instruments dedicated to KM). Another crucial issue remains the integration of different environmental datasets. Aware of these challenges, the MedProgramme is tackling KM at the very outset identifying possible solutions to overcome them. Moreover, there is ample room for cross-fertilization and learning: one must avoid the temptation to reinvent the wheel, and build instead on existing knowledge useful for incremental innovation. Lastly, the wealth of partners involved in the MedProgramme and especially the MAP system, can prevent pitfalls due to lack of ownership by leveraging and sustaining the KM efforts through their networks.

Legend Table 1

Potential Collaboration for Content Sharing and use of Respective Networks to Increas Impact and Dissemination	Relevant Scientific Data and Technical Information	IW BD CW CC GEF Focal Areas (International Waters, Biodiversivity, Chemical and Waste, Climate Change)
Reference to Key Policy and legal Frameworks	Effective Example(s) of Dat Visualisation, Web Design and UX	Succesful Awareness Raising, Outreach and Capacity Building

Table 1 Overview of selected knowledge platforms and initiatives relevant for the MedProgramme (2018)

A selection of platforms, databases, initiatives and projects on knowledge - and information - sharing in the Mediterranean region (or globally when relevant) focusing on pollution reduction, biodiversity, water resources and climate change compiled for the purpose of drawing a KM baseline scenario for the GEF/UN Environment "MedProgramme".

Initiative Name and URL	Organizations	Where - When - What	Relevance for MedProgramme
AMAre https://amare.interreg-med.eu https://bit.ly/2BxKG9J	**Executing Partners:** CNR, Interreg Mediterranean **Donors:** ERDF, IPA	**Geographical Area:** Mediterranean Sea **Activity Period:** 36 months (ongoing) **Description:** The objectives of this project are 1- to develop shared methodologies and geospatial tools for multiple stressors assessment, coordinated environmental monitoring, multi criteria analyses and stakeholders' engagements; 2- to translate these guidelines into concrete pilot actions and coordinated strategies in selected Marine Protected Areas (MPAs) to solve hot spots of conflicts affecting marine biodiversity and the services it provides.	BD CW
AQUACROSS http://dataportal.aquacross.eu	**Executing Partners:** IOC-UNESCO **Donors:** EU	**Geographical Area:** Europe **Activity Period:** 2018 - ongoing **Description:** Aquacross Information Platform aims to provide open access to a wide range of resources related to aquatic (freshwater, marine and coastal) ecosystem and biodiversity management at the European level. The primary focus is on data used in the various project Case Studies and Work packages, and resulting maps, model outputs and tools.	IW BD
Aquastat http://www.fao.org/nr/water/aquastat/main/index.stm	FAO	**Geographical Area:** Global (particular focus on Africa, Asia, Latin America, and the Caribbean) **Activity Period:** 1994 - ongoing **Description:** AQUASTAT started with the aim to contribute to FAO's goals through the collection, analysis and dissemination of information related to water resources, water uses and agricultural water management, with an emphasis on countries in Africa, Asia, Latin America, and the Caribbean. AQUASTAT is FAO's global water information system, developed by the Land and Water Division. It is the most quoted source on global water statistics. We collect, analyze and disseminate data and information by country on water resources, water uses, agricultural water management.	IW CW CC
Basel, Rotterdam and Stockholm Conventions Joint Clearing House Mechanism http://synergies.pops.int/Implementation/KnowledgeManagementandOutreach/Clearinghousemechanism/tabid/5382/language/en-US/Default.aspx	UN and UN Environment	**Geographical Area:** Global **Activity Period:** 2001 - ongoing **Description:** The joint clearing-house mechanism is a multi-stakeholder global system that facilitate the exchange of information and expertise relevant for the Basel, Rotterdam and Stockholm conventions. To achieve such an objective the Secretariat has developed, and is continuously enhancing, a global knowledge base made of *information* and *tools*, fed and used by all members of the clearing-house *community*.	IW CW
Biodiversity Information System for Europe (BISE) https://biodiversity.europa.eu/	European Commission, European Environment Agency	**Geographical Area:** Europe **Activity Period:** Ongoing **Description:** BISE is a single entry point for data and information on biodiversity supporting the implementation of the EU strategy and the Aichi targets in Europe.	IW BD CW
Blue Med Virtual Knowledge Centre http://www.bluemed-initiative.eu/virtual-knowledge-centre/	**Executing Partners:** UfM, EU Commission, EIB, IMO **Donors:** EU Commission	**Geographical Area:** Mediterranean Area **Activity Period:** 2014 - ongoing **Description:** The Digi-gate for Marine and Maritime Knowledge in the Mediterranean. The Virtual Knowledge Centre (VKC) was launched with the objective to provide a centralised platform for marine and maritime information and to improve synergies across different initiatives and projects in the Mediterranean region.	IW
Climate-ADAPT https://climate-adapt.eea.europa.eu	EU Commission, European Environment Agency	**Geographical Area:** Europe **Activity Period:** 2012 - ongoing **Description:** Climate-ADAPT aims to support Europe in adapting to climate change. It is an initiative of the European Commission and helps users to access and share data and information on: Expected climate change in Europe; Current and future vulnerability of regions and sectors; EU, national and transnational adaptation strategies and actions; Adaptation case studies and potential adaptation options; Tools that support adaptation planning.	CC
CONSUME-LESS Consume Less in Mediterranean Touristic Communities https://consume-less.interreg-med.eu		**Geographical Area:** Mediterranean Area **Activity Period:** 2016 - 2019 **Description:** Consume-Less aims to develop integrated sustainable energy, water and waste management strategies and to promote sustainable tourism models in Mediterranean cities. Six pilot areas are involved: Gozo, Vélez-Málaga, Saranda, Ragusa, Realmonte and Naxos.	CW
COPERNICUS Marine Environment Monitoring Service http://marine.copernicus.eu	**Executing Partners:** EU Commission, ESA, EUMETSAT, ECMWF **Donors:** EU Commission	**Geographical Area:** Global **Activity Period:** 2015 - ongoing **Description:** The Copernicus Marine Environment Monitoring Service (CMEMS) provides regular and systematic reference information on the physical state, variability and dynamics of the ocean and marine ecosystems for the global ocean and the European regional seas.	IW BD CW CC
COPERNICUS Land Monitoring Service https://land.copernicus.eu/ https://scihub.copernicus.eu/ https://www.sentinel-hub.com/	**Executing Partners:** EU Commission, ESA, EUMETSAT, ECMWF **Donors:** EU Commission	**Geographical Area:** Global **Activity Period:** 2015 - ongoing **Description:** Copernicus Land Monitoring Service (CLMS) provides geographical information on land cover to a broad range of users in the field of environmental terrestrial applications. This includes land use, land cover characteristics and changes, vegetation state, water cycle and earth surface energy variables.	BD CW CC

EMODnet http://www.emodnet.eu/	**Executing Partners:** EU **Donors:** EU Commission DG MARE	**Geographical Area:** Europe Marine Environment **Activity period:** 2013 - ongoing **Description:** The European Marine Observation and Data Network (EMODnet) consists of more than 160 organisations that together work on assembling, harmonising and making marine data, products and metadata more available to public and private users. The main purpose of EMODnet is to unlock fragmented and hidden marine data resources and to make these available to individuals and organisations (public and private), and to facilitate investment in sustainable coastal and offshore activities through improved access to quality-assured, standardised and harmonised marine data which are interoperable and free of restrictions on use. EMODnet provides access to European marine data across seven discipline-based themes: Bathymetry; Geology; Seabed habitats; Chemistry; Biology; Physics; Human activities. EMODnet motto is 'collect data once and use it many times'.						IW	BD	CW	
Environment LIVE https://environmentlive.unep.org	UN Environment	**Geographical Area:** Global **Activity Period:** Ongoing **Description:** Environment Live provides the UN Member States open access to information and knowledge on the environment at the global, regional and national levels. Environment Live is a dynamic on-line platform for sharing contextualized data and knowledge to keep the environment under review.						IW	BD	CW	CC
Euro-Mediterranean Information System on know-how in the Water sector (EMWIS) http://www.semide.net/; http://www.emwis.org	**Executing Partners:** UfM, EEA, GWP, WWC, Lebanese Minister of Energy and Water, INBO-MENBO, MED-EUWI, IME, ACWUA, AQUAMADRE, EcoMENA, MEDRC, UNU-INWEH, L'Ambassade de l'Eau **Donors:** EU Commission, EuropeAid Co-operation Office & EC DG Environment, France, Italy and Spain	**Geographical Area:** Mediterranean Sea **Activity Period:** 1999 - 2020 **Description:** EMWIS is an initiative of the Euro-Mediterranean Partnership. It provides a strategic tool for exchanging information and knowledge in the water sector between and within the Euro Mediterranean partnership countries. All the countries involved in the Union for the Mediterranean (UfM) are concerned: The 27 EU member states of the EU and the 16 Mediterranean Partner Countries (Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Jordan, Israel, Lebanon, Mauritania, Monaco, Montenegro, Morocco, Palestinian Authority, Syria, Tunisia, Turkey).						IW			
European MSP Platform https://www.msp-platform.eu/	**Executing Partners:** EASME on behalf of DG MARE **Donors:** EU Commission under the EMFF	**Geographical Area:** Europe **Activity Period:** Ongoing **Description:** The European MSP Platform is an information and communication gateway designed to offer support to all EU Member States in their efforts to implement Maritime Spatial Planning (MSP) in the years to come. Funded by the EU Directorate General for Maritime Affairs and Fisheries (DG MARE), the European MSP Platform acts as the central exchange forum for the rich knowledge generated in past, current and upcoming MSP processes and projects.						IW			
European Ocean Biogeographic Information System – EurOBIS http://www.eurobis.org	EMODnet, MarBEF, LifeWatch, Flanders Marine Institute (VLIZ)	**Geographical Area:** Mediterranean Area **Activity Period:** 2004 - ongoing **Description:** EurOBIS - the European Node of the international Ocean Biogeographic Information System (OBIS) - publishes distribution data on marine species, collected within European marine waters or collected by European researchers outside European marine waters. EurOBIS is an online marine biogeographic database compiling data on all living marine creatures. The principle aims of EurOBIS are to centralize the largely scattered biogeographic data on marine species collected by European institutions and to make these data freely available and easily accessible.						IW	BD		
FATE and impact of pollutants in terrestrial and aquatic ecosystems http://fate.jrc.ec.europa.eu/rational/home.html	**Executing Partners:** EU Commission, JRC, Institute for Environment and Sustainability **Donors:** EU, JRC	**Geographical Area:** Europe **Activity Period:** 2009 - 2015 **Description:** FATE is the ensemble name for the pool of activities related to the assessment of fate and impacts of pollutants in terrestrial and aquatic ecosystems carried out at the Institute for Environment and Sustainability (IES) of the Joint Research Centre (JRC). Contaminants spread across different environmental media through atmospheric deposition, leaching from soil to groundwater, accumulation in rivers and lakes, and discharge into the sea. FATE addresses the fate and impacts of pollutants across a range of temporal and spatial scales depending on the policy question and making the best use of available data. The results are pollution risk and vulnerability maps, which are very useful to assess the impact of EU policies, raise public awareness and facilitate planning of management scenarios.							BD	CW	
GBIF | Global Biodiversity Information Facility https://www.gbif.org	EMODnet, EU, EU BON, Japan Ministry of Environment	**Geographical Area:** Global **Activity Period:** 1999 - ongoing **Description:** GBIF—the Global Biodiversity Information Facility—is an international network and research infrastructure funded by the world's governments and aimed at providing anyone, anywhere, open access to data about all types of life on Earth. Coordinated through its Secretariat in Copenhagen, the GBIF network of participating countries and organizations, working through participant nodes, provides data-holding institutions around the world with common standards and open-source tools that enable them to share information about where and when species have been recorded.							BD		
General Fisheries Commission for the Mediterranean (GFCM) http://www.fao.org/gfcm/data/en/	FAO	**Geographical Area:** Mediterranean Sea and Black Sea **Activity Period:** 1997 - ongoing **Description:** The General Fisheries Commission for the Mediterranean (GFCM) is a regional fisheries management organization (RFMO) established under the provisions of Article XIV of the FAO Constitution. The GFCM initially started its activities as a Council in 1952, when the Agreement for its establishment came into force, and became a Commission in 1997. The main objective of the GFCM is to ensure the conservation and the sustainable use, at the biological, social, economic and environmental level, of living marine resources as well as the sustainable development of aquaculture in the Mediterranean and in the Black Sea (GFCM area of application).						IW	BD		
Geo-referenced information system for coastal aquifers in the Mediterranean (INWEB) http://www.inweb.gr/index.php?option=com_wrapper&view=wrapper&Itemid=220#	**Executing Partners:** UNESCO Chair and Network/International Network of Water-Environment, Centres for the Balkans (INWEB), Aristotle University of Thessaloniki. **Donors:** UNESCO	**Geographical Area:** Mediterranean Area **Activity Period:** 2003 - 2015 **Description:** The UNESCO Chair/INWEB is a network of academic and non-academic institutions. Each of the ten Balkan member countries has a focal point for its own country's members. Concentrating mainly on transboundary issues, the UNESCO Chair/INWEB promotes a multi-disciplinary approach to water resources management issues, involving scientists, engineers, economists, legal experts and sociologists. It encourages initiatives on water resources management issues from the bottom up, and promotes joint training projects and the sharing of expertise. The objectives of INWEB are to: 1. Establish an open international network of communication and shared expertise in the Balkans and other developing countries to facilitate the exchange of information and expertise in the field of water and the environment; 2. Promote the services to the region of an international body of recognised experts in water and environmental issues; 3. Create and maintain a database on transboundary water and the environment by developing an inventory of existing transboundary monitoring systems for water resources and the environment.						IW			

GODEM - Optimised Management of Waste in the Mediterranean https://lra4dev.cor.europa.eu/portal/EN/coopmonth/Pages/GODEM.aspx	EU Commission	**Geographical Area:** Mediterranean Basin **Activity Period:** 2010 - 2012 **Description:** The project is aimed at settling a network for the exchange of information and experiences between European local/regional authorities and institutions of the southern Mediterranean on the sustainable management of waste treatment.									CW	
Green Growth Knowledge Platform - GGKP http://www.greengrowthknowledge.org	**Executing Partners:** GGGI; OECD; World Bank; UNEP. **Donors:** MAVA, Swiss, Netherlands, Germany	**Geographical Area:** Global **Activity Period:** 2012 - ongoing **Description:** The GGKP is a global community of organisations and experts committed to collaboratively generating, managing and sharing green growth knowledge and data to mobilise a sustainable future.									CW	CC
H2020/SEIS Info system https://eni-seis.eionet.europa.eu/south https://www.h2020.net/	**Executing Partners:** EEA, UN Environment MAP **Donors:** EU	**Geographical Area:** South Mediterranean (Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Tunisia) **Activity Period:** 2015 - ongoing **Description:** ENI SEIS II South Project aims to contribute to the reduction of the marine pollution in the Mediterranean by developing a Shared Environmental Information System (SEIS) supporting the regular production and sharing of quality assessed environmental data, indicators and information.							IW		CW	
ICZM Platform http://www.iczmplatform.org	**Executing Partners:** PAP/RAC **Donors:** MTF	**Geographical Area:** Mediterranean Area **Activity Period:** 2018 - ongoing **Description:** This interactive space is designed as a multi-disciplinary "bank" of information, documentation and good practices related to ICZM in the Mediterranean (and elsewhere), as well as a place for networking and exchange. This platform provides information on the legal and policy framework, capacity building, awareness raising, data base of projects, library and the resources for networking.							IW			CC
IMAP Info Pilot System (website under development as of 11/2018)	**Executing Partners:** UN Environment MAP, InfoRAC **Donors:** UN Environment MAP, EC	**Geographical Area:** Mediterranean Basin **Activity Period:** **Description:** Pilot IMAP compatible Data and Information System, connected to MAP Components' information systems and other relevant regional knowledge platforms, will provide data based on data standards and data dictionaries for ten selected IMAP Common Indicators.							IW			
INSPIRE Knowledge Base https://inspire.ec.europa.eu	Member States of the EU	**Geographical Area:** EU **Activity Period:** 2007 - ongoing **Description:** The INSPIRE Directive aims to create a European Union spatial data infrastructure for the purposes of EU environmental policies and policies or activities which may have an impact on the environment. This European Spatial Data Infrastructure will enable the sharing of environmental spatial information among public sector organisations, facilitate public access to spatial information across Europe and assist in policy-making across boundaries. INSPIRE is based on the infrastructures for spatial information established and operated by the Member States of the European Union. The Directive addresses 34 spatial data themes needed for environmental applications. The Directive came into force on 15 May 2007 and will be implemented in various stages, with full implementation required by 2021.										
INTEGRATED COASTAL WATER MANAGEMENT FOR MED (ICWM) https://business.esa.int/projects/icwm-for-med	ESA; Planetek	**Geographical Area:** Tyrrhenian Sea **Activity Period:** 2015 - ongoing **Description:** The objective of ICWM for MED is to demonstrate the benefits of a service based on the integration of Earth Observation based products, Satellite Communication and Navigation solutions together with Terrestrial assets and crowdsourcing features, for the set-up of an improved coastal surveillance and water quality monitoring service.							IW		CW	
Interreg Mediterranean https://interreg-med.eu; http://forum.interreg-med.eu/en/med-community/(Forum)	European Regional Development Fund, IPA fund	**Geographical Area:** Mediterranean Basin **Activity Period:** 2014 - 2020 **Description:** 13 countries are working together in the transnational European Cooperation Programme for the Mediterranean area towards low carbon economy, the protection of natural and cultural resources and the strengthening of innovation The main objective of the Interreg MED Programme is to promote sustainable growth in the Mediterranean area by fostering innovative concepts and practices and a reasonable use of resources and by supporting social integration through an integrated and territorially based cooperation approach. In the period 2014-2020, Interreg MED Programme will promote cooperation between a varied typology of actors of these thirteen Mediterranean countries.							IW	BD		CC
IODE https://www.iode.org	**Executing Partners:** UNESCO IODE **Donors:** UNESCO	**Geographical Area:** Global **Activity Period:** 1961 - ongoing **Description:** The programme "International Oceanographic Data and Information Exchange" (IODE) of the "Intergovernmental Oceanographic Commission" (IOC) of UNESCO was established in 1961. Its purpose is to enhance marine research, exploitation and development, by facilitating the exchange of oceanographic data and information between participating Member States, and by meeting the needs of users for data and information products.							IW			
IW:LEARN (Global Environment Facility's International Waters Learning Exchange and Resource Network) www.iwlearn.net	**Executing Partners:** UNDP; UN Environment. **Donors:** GEF	**Geographical Area:** Global (GEF IW portfolio) **Activity Period:** 2004 - ongoing **Description:** IW:LEARN is the Global Environment Facility's (GEF) International Waters Learning Exchange and Resource Network. The IW:LEARN project was established to strengthen transboundary water management around the globe by collecting and sharing best practices, lessons learned, and innovative solutions to common problems across the GEF International Waters portfolio. It promotes learning among project managers, country official, implementing agencies, and other partners.							IW			
IW:LEARN Groundawater Community of Practice http://groundwatercop.iwlearn.net	**Executing Partners:** UNDP, UN Environment (Implementing Agencies); UNESCO International Hydrological Programme (Executing Agency) **Donors:** GEF	**Geographical Area:** Global (GEF IW portfolio) **Activity Period:** 2012 - ongoing **Description:** The GW CoPs aims to accelerate learning from and within the GEF IW portfolio, and promote replication of good practices in transboundary freshwater management. The CoP acts as a catalytic coalition among GEF IW projects to promote learning that meets project-level priorities. It is designed to build on existing knowledge from inside and outside the GEF portfolio and be responsive to the learning needs of the GEF IW projects .The COP provide an opportunity to build capacity on groundwater resources management and promote the conjunctive management with surface freshwater and marine waters.							IW	BD	CW	

MAMIAS - Marine Mediterranean Invasive Alien Species http://www.mamias.org	UNEP/MAP, RAC/SPA	**Geographical Area:** Mediterranean Sea **Activity Period:** 2012 - ongoing **Description:** The Database includes among Alien species, cryptogenic ones. Tropical Atlantic species, which have expanded their geographic distribution in the Mediterranean, are noted as range expansion, or vagrant. The Database includes also species that have been occasionally reported as alien but were subsequently excluded from lists, along with the reasoning of their exclusion.								BD		
MAPAMED http://www.rac-spa.org/mapamed	MedPAN and SPA/RAC	**Geographical Area:** Mediterranean Sea **Activity Period:** 2012 - ongoing **Description:** MAPAMED (Marine Protected Areas in the Mediterranean) is a GIS database that gathers information on marine protected areas of the Mediterranean, and more generally on sites of interest to the conservation of the marine environment. It is developed and jointly administered by the MedPAN association and SPA/RAC. MAPAMED (i) facilitates the access and the sharing of data on Mediterranean MPAs, (ii) allows the analysis and the evaluation of the status and trends of the MPA network and (iii) identifies ecological and management issues at a supra-AMP scale.							IW	BD		
MapX https://www.mapx.org	UN Environment, World Bank, GRID-Geneva	**Geographical Area:** Global **Activity Period:** Ongoing **Description:** MapX was developed by UN Environment, the World Bank and the Global Resource Information Database (GRID-Geneva) to capitalize on the use of new digital technologies and cloud computing in the sustainable management of natural resources. One of the founding principles was to equalize information held by different stakeholders as a prerequisite to better dialogue, decision making and monitoring. MapX evolved from an initial focus on extractive resources to include a range of different resource types and themes. Of particular relevance for the MedProgramme are the data layers in MapX developed by UN Environment for MapX to support countries in meeting their reporting obligations on mercury use and emissions under the Minamata Convention, and to manage spatial information regarding PCBs and facilitate reporting for the Stockholm Convention.							IW	BD	CW	CC
Marine Biodiversity and Ecosystem Functioning EU Network of Excellence - MarBEF http://www.marbef.org	EU	**Geographical Area:** Europe Marine Environment **Activity Period:** 2004 - 2009 **Description:** A key task of the MarBEF Network is the integration of different resources related to marine biodiversity. The inventory of these resources can be found on this website. At the moment, this relational database includes information on different European marine biodiversity research sites and European marine biodiversity datasets. The European Register of Marine Species, ERMS and the European node of the Ocean Biogeographic Information System, EurOBIS is also accessible through this website. The terms of use of data are formulated in the MarBEF data policy.							IW	BD		
MED POL Info System http://www.info-rac.org/en/activities/infomap	UNEP/MAP	**Geographical Area:** Mediterranean Sea **Activity Period:** 2001 - ongoing **Description:** MED POL Info System is an online portal that allows Contracting Parties to submit their quality assured data generated from the implementation of the national marine pollution programmes designed in accordance with LBS Protocol.							IW		CW	
MED-3R Euro-Mediterranean Strategic Platform for a Suitable Waste Management - Recycle, Reduce, Reemploy http://www.med-3r.org/index.php/en/about/the-med-3r-project	**Executing Partners:** Mediterranean Sea Basin Programme ENPI CBCMED **Donors:** 90% European Union, 10% Partners	**Geographical Area:** Mediterranean Basin **Activity Period:** 2012 – 2015 **Description:** MED-3R sets up an institutional innovation of multi-level governance, implemented on the basis of strategic platform: "The Euro-Mediterranean Strategic Platform for a Suitable Waste Management" to the benefit of technical managers and experts on waste management over the Mediterranean basin.									CW	
MEDACES - Mediterranean Database of Cetacean Strandings medaces.uv.es/home_eng.htm	**Executing Partners:** RAC/SPA, ICBIBE **Donors:** Spanish Ministry of the Environment, and Rural and Marine Affairs (MMA)	**Geographical Area:** Mediterranean Sea **Activity Period:** 2001 - ? **Description:** In November 2001, the 12th Ordinary Meeting of the Contracting Parties to the Convention for the Protection of the Mediterranean Sea against Pollution and its Protocols, within the "Biological Diversity and Specially Protected Areas" section, recommended for implementing the Action Plan for the Conservation of Cetaceans in the Mediterranean Sea, to approve the offer by Spain with regard to the establishment in Valencia of a Mediterranean database on cetacean strandings (MEDACES).								BD		
MedICIP http://medicip.grid.unep.ch	**Executing Partners:** UNEP/MAP, Plan Bleu, GWP, PAP/RAC **Donors:** GEF	**Geographical Area:** Mediterranean Basin **Activity Period:** 2009 - 2015 **Description:** MedICIP is an online multi countries effort to share data and information on Climate Change in the Mediterranean coastal areas. It is a "portal of portals" which gathers data, information and web links towards other institutions (national and regional), in support the implementation of the ICZM protocol.							IW			CC
Mediterranean Basin Biodiversity Hotspot http://www.birdlife.org/cepf-med/hotspot	**Executing Partners:** CEFP (Critical Ecosytem Partnership Fund); Bird's Life; LPO; DOPPS. **Donors:** CEPF (GEF, World Bank, AFD, CI, EU, Japan Gov.)	**Geographical Area:** Mediterranean Basin **Activity Period:** 2012 - 2022 **Description:** During the initial investment, 108 grants were awarded to 84 different organizations in 12 countries. This first investment phase demonstrated that civil society organizations do exist in each hotspot country, and that adequate financial support, combined with technical support, has the potential to build strong constituencies able to tackle conservation issues at the local level. CEPF's second phase of investment will focus on protecting plants, promoting regional networking and preserving three ecosystems—coastal, freshwater and traditionally managed landscapes. CEPF is a joint initiative of l'Agence Française de Développement, Conservation International, the European Union, the Global Environment Facility, the Government of Japan, the MacArthur Foundation and the World Bank.								BD		CC
MEDITERRANEAN OBSERVATORY ON ENVIRONMENT AND SUSTAINABLE DEVELOPMENT http://obs.planbleu.org/en/	**Executing Partners:** Plan Bleu, UNEP/MAP **Donors:** MAVA, UN Environment	**Geographical Area:** Mediterranean Basin **Activity Period:** Ongoing **Description:** Plan Bleu, acting as a Mediterranean Observatory on Environment and Sustainable Development, has developed an experience in collecting, managing and disseminating data on Sustainable development issues in the Mediterranean Region. One of Plan Bleu's mission is to provide the Contracting Parties of Barcelona Convention with environmental and sustainable development statistics, indicators and assessments to support their action and decision making process.							IW			CC

Mediterranean Water Knowledge Platform (MWKP) http://www.emwis.net/initiatives/MWKP	International Office for Water (IOWater); Institut Méditerranéen de l'Eau (IME); Union for the Mediterranean (UfM)	**Geographical Area:** Mediterranean Basin **Activity Period:** (Phase 1) 2013-2016 - (Phase 2) 2016-2018 **Description:** The regional project towards a Mediterranean Water Knowledge Platform got the UfM label on 8 April 2014, at the unanimity of 43 countries members of the Union for the Mediterranean. The project has two components: the 1st one, coordinated by the International Office for Water (IOWater), aims at strengthening the National Information Systems on Water in line with the regional approach taken implemented by the Euro-Mediterranean Information System on know-how in the Water sector (EMWIS); the 2nd one, coordinated by the Institut Méditerranéen de l'Eau (IME), is based on the exploitation of data and information on water for the preparation of a Mediterranean White Paper on Water. This White Paper is part of logical showcasing best practices for integrated water resources management.		✓	✓			IW			
MEDLEM (MEDiterranean Large Elasmobranchs Monitoring) PROGRAM www.arpat.toscana.it/medlem	ARPAT (agenzia regionale per la protezione ambientale della Toscana)	**Geographical Area:** Mediterranean Sea **Activity Period:** 2002 - ongoing **Description:** MedLem is a monitoring programme on the captures and sightings of the large cartilaginous fishes occurring in the Mediterranean Sea. A tool for storing and sharing the large shark's data collected in the mediterranean countries. The database is under maintenance: it will be on line again at the end of 2017.							BD		
MedOpen http://www.medopen.org	**Executing Partners:** PAP/RAC **Donors:** UNEP	**Geographical Area:** Mediterranean Area **Activity Period:** Ongoing **Description:** MedOpen aims at assisting Mediterranean countries in building capacities for coastal management. The training programme has been created to share ideas, knowledge and strategies to forward the art of designing and implementing local, national and regional place-based integrated coastal zone management (ICZM), as well as to enhance a policy dialogue and build / improve capacities on implications of climate variability and change (CV&C) considerations. The MedOpen training is completely free of charge.	✓		✓		✓	IW			
MedPAN - The network of Marine Protected Areas managers in the Mediterranean http://medpan.org	**Executing Partners:** UNEP RAC/SPA, WWF, IUCN **Donors:** EU Commission, UNEP, WWF and others	**Geographical Area:** Mediterranean Sea **Activity Period:** 2008 - ongoing **Description:** The MedPAN network's mission is to promote, through a partnership approach, the sustainability and operation of a network of Marine Protected Areas in the Mediterranean which are ecologically representative, connected and effectively managed to help reduce the current rate of marine biodiversity loss.	✓		✓			IW	BD		CC
NBB PRTR (website under development as of 11/2018)	**Executing Partners:** UN Environment MAP, InfoRAC **Donors:** UN Environment MAP, EC	**Geographical Area:** Mediterranean Basin **Activity Period:** **Description:** Provides information on pollution load from sectors and activities in accordance with the requirements LBS Protocol of Barcelona Convention	✓	✓	✓			IW		CW	
OBIS - Ocean Biogeographic Information System http://www.iobis.org/	IOC-UNESCO, IODE	**Geographical Area:** Global **Activity Period:** 1997 - ongoing **Description:** OBIS is a global open-access data and information clearing-house on marine biodiversity for science, conservation and sustainable development. Its aim is to build and maintain a global alliance that collaborates with scientific communities to facilitate free and open access to, and application of, biodiversity and biogeographic data and information on marine life. Obis mission is to build and maintain a global alliance that collaborates with scientific communities to facilitate free and open access to, and application of, biodiversity and biogeographic data and information on marine life.	✓	✓	✓	✓		IW	BD		
OpenChannels https://www.openchannels.org/	**Executing Partners:** Open Communication for The Ocean and Partners **Donors:** Gordon and Betty Moore Foundation	**Geographical Area:** Global **Activity Period:** 2012 - ongoing **Description:** OpenChannels aims to foster a vibrant online community of ocean planners and managers sharing experience, knowledge, and advice with peers. In doing so, we can speed the advancement of sustainable ocean management and conservation. OpenChannels is designed to be highly focused on user needs. We want to provide access to all the information that ocean planners and managers need to do their jobs most effectively, including existing high-quality content and new information products and services.	✓		✓	✓	✓	IW			
PANACeA project https://biodiversity-protection.interreg-med.eu	**Executing Partners:** Malaga University, Interreg Mediterranean, Plan Bleu **Donors:** ERDF, IPA	**Geographical Area:** Mediterranean Basin **Activity Period:** 36 months (ongoing) **Description:** Devised as a one entry point to scientific evidence supporting best practice on protected area management and environmental policymaking in the region, the Mediterranean Biodiversity Protection Platform (BPP) gathers the expert knowledge generated by the Mediterranean biodiversity protection community as main providers of content. The MedBiodiversity Knowledge platform will open in 2018.	✓						BD		CC
Pegaso Project - People for Ecosystem-based Governance in Assessing Sustainable development of Ocean and coast http://pegasosdi.uab.es/	Universitat Autònoma de Barcelona (UAB)	**Geographical Area:** Mediterranean Sea and Black Sea **Activity Period:** 2010 - 2014 **Description:** The main objective of PEGASO is to build on existing capacities and develop common novel approaches to support integrated policies for the coastal, marine and maritime realms of the Mediterranean and Black Sea Basins in ways that are consistent with and relevant to the implementation of the ICZM Protocol for the Mediterranean. The PEGASO SDI is a distributed sharing infrastructure made up of GeoNodes and with three main components: a map viewer, map services and a spatial catalog.		✓				IW			
Protected Planet https://www.protectedplanet.net/marine	**Executing Partners:** UNEP-WCMC, IUCN **Donors:** UNEP, IUCN	**Geographical Area:** Global **Activity Period:** 2014-ongoing **Description:** Protected Planet is the most up to date and complete source of information on protected areas, updated monthly with submissions from governments, non-governmental organizations, landowners and communities. It is managed by the United Nations Environment World Conservation Monitoring Centre with support from IUCN and its World Commission on Protected Areas (WCPA). It is a publicly available online platform where users can discover terrestrial and marine protected areas, access related statistics and download data from the World Database on Protected Areas (WDPA).	✓		✓	✓	✓	IW	BD		
SPACE ALBORAN http://www.iucn-geoportalboran.org/	**Executing Partners:** IUCN Center for Mediterranean Cooperation **Donors:** IUCN, EU, MAVA, POCTAFEX	**Geographical Area:** Alboran sea (Gibraltar strait) **Activity Period:** 2007 - ongoing **Description:** The geoportal's aim is to promote governance of the natural resources of the Alboran sea. A space for governance that promotes the exchange of knowledge, participation, management and learning.		✓		✓	✓	IW	BD		

Strategic Approach to International Chemicals Management (SAICM) http://www.saicm.org/Home/tabid/5410/language/en-US/Default.aspx	**Donors:** UN Environment, ICCA, EU + 15 countries	**Geographical Area:** Global **Activity Period:** 2006 - ongoing **Description:** SAICM was developed by a multi-stakeholder and multi-sectoral Preparatory Committee and supports the achievement of the 2020 goal agreed at the 2002 Johannesburg World Summit on Sustainable Development. SAICM overall objective is the achievement of the sound management of chemicals throughout their life cycle so that by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.									CW	
The Mediterranean Biodiversity Platform http://data.medchm.net/en/	**Executing Partners:** SPA/RAC **Donors:** MAVA Foundation	**Geographical Area:** Mediterranean Sea **Activity Period:** 2017 - ongoing **Description:** The Mediterranean Biodiversity Platform is an online tool to inventory, catalog and store data on marine and coastal biodiversity in the Mediterranean, and view them on maps.							IW	BD		
The MPA Action Agenda https://www.mpaaction.org/	WWF and partners	**Geographical Area:** Global **Activity Period:** 2014 - ongoing **Description:** The MPA Action Toolkit is an online platform designed for MPA managers and establishers, marine researchers and other MPA advocates. The objective of this online platform is to share knowledge on MPAs and tools that can contribute to MPA advocacy. On this toolkit you find infographics, videos, academic articles, reports and other types of material that can be used for MPA advocacy and relating activities.							IW	BD		
The Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership) Project http://themedpartnership.org	**Executing Partners:** UNEP/MAP **Donors:** GEF, EU, others	**Geographical Area:** Mediterranean Basin (Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, Lebanon, Libya, Morocco, Montenegro, Palestine, Syria, Tunisia and Turkey) **Activity period:** 2010 - 2015 **Description:** The Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem (MedPartnership) is a collective effort of leading environmental institutions and organizations together with countries sharing the Mediterranean Sea to address the main environmental challenges that Mediterranean marine and coastal ecosystems face. The goals include: to improve environmental conditions of pollution and biodiversity hotspots and other priority areas under stress, to promote the sustainable use of marine and coastal resources through integrated approaches, to reduce pollution from land-based sources, to enhance the protection of 'critical' habitats and species, and to integrate climate considerations into national marine and coastal planning.							IW	BD		
UN Environment World Conservation Monitoring Centre https://www.unep-wcmc.org/	UNEP, WCMC	**Geographical Area:** Global **Activity Period:** Ongoing **Description:** The UN Environment World Conservation Monitoring Centre (UNEP-WCMC) works with scientists and policy makers worldwide to place biodiversity at the heart of environment and development decision-making to enable enlightened choices for people and the planet. Our 100-strong international team are recognised leaders in their field and have unrivalled understanding of the institutional landscape surrounding biodiversity policy and ecosystem management. Based in Cambridge, UK, UNEP-WCMC is a collaboration between UN Environment and the UK charity, WCMC. By working with expert partners worldwide, we draw together, analyse and interpret information on biodiversity, and strengthen the ability of others to do so.							IW	BD		
Water Information Network System (WINS) http://ihp-wins.unesco.org/	UNESCO IHP	**Geographical Area:** Global **Activity Period:** 2017 - ongoing **Description:** Launched in January 2017 by the International Hydrological Programme of UNESCO, WINS is an open-access and participatory platform to share, access and visualize water-related information at all levels. It provides also a networking hub through online working groups, which aims to facilitate exchange among stakeholders. As of june 2018, 40 Member States have joined the platform.							IW			
WISE - Water Information System for Europe https://water.europa.eu; https://water.europa.eu/freshwater; https://water.europa.eu/marine	**Executing Partners:** DG-ENV, JRC, EEA, Eurostat **Donors:** EU Commission, European Environmental Agency (EEA)	**Geographical Area:** Europe Marine Environment **Activity Period:** 2007 - ongoing **Description:** The Water Information System for Europe (WISE) is a partnership between the European Commission (DG Environment, Joint Research Centre and Eurostat) and The European Environment Agency. WISE is a gateway to informations on European marine issues in support of ocean governance and ecosystem based management							IW	BD	CW	
WOCAT - World Overview of Conservation Approaches and Technologies https://www.wocat.net/en/about	Universitat Bern, SDC, GIZ, CIAT, ICARDA, FAO, ISRIC, ICIMOD	**Geographical Area:** Global **Activity Period:** 1992 - ongoing **Description:** The World Overview of Conservation Approaches and Technologies (WOCAT) is a Network that was established in 1992. The WOCAT Network launched efforts to compile, document, evaluate, share, disseminate, and apply sustainable land management (SLM) knowledge. It was far ahead of others in recognizing the vital importance of SLM and the pressing need for corresponding knowledge management. In early 2014, WOCAT's growth and ongoing improvement culminated in its being officially recognized by the UNCCD as the primary recommended database for SLM best practices.							IW		CW	CC
World Resource Institute http://www.wri.org	WRI	**Geographical Area:** Global **Activity Period:** 1982 - ongoing **Description:** World Resources Institute (WRI) is a global research organization that spans more than 60 countries. Our more than 700 experts and staff turn big ideas into action at the nexus of environment, economic opportunity and human well-being. We start with data, creating user-friendly information systems, protocols and standards. We conduct independent, unbiased research to analyze relationships and design solutions, and communicate our findings in a compelling manner.							IW	BD		CC
World Water Quality Portal http://www.worldwaterquality.org	**Executing Partners:** UNESCO-IHP, IIWQ (International Initiative on Water Quality), EOMAP **Donors:** UNESCO-IHP	**Geographical Area:** Global **Activity Period:** Ongoing **Description:** UNESCO, through its International Initiative on Water Quality (IIWQ) under IHP, has launched the first comprehensive worldwide water quality online portal for freshwater systems, lakes and rivers, retrieved from satellite-based earth observation data, to assist with global water quality assessment and capacity building.							IW		CW	

2.2 Analysis of preliminary survey results

Every project creates knowledge. Every project depends on knowledge. –Unknown

The eight Child Projects of the MedProgramme are expected to produce different sets of outputs and results while contributing to the overarching goal of enhancing environmental security in the region, embracing three categories of transboundary concern (components 1, 2 and 3) as illustrated in Table 2. The fourth component hosts the Support Child Project on coordination and knowledge management.

Table 2 MedProgramme Components, Child Projects and GEF Focal Areas

Mediterranean Sea Programme (MedProgramme)		
MedProgramme Component	**Child Project**	**GEF Focal Areas**
1. Reduction of Land Based Pollution in Priority Coastal Hotspots, and measuring progress to impacts.	1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts"	**IW and CW**
	1.2 "Mediterranean Pollution Hot Spots Investment Project"	**IW**
	1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"	**IW**
2. Enhancing Sustainability and Climate Resilience in the Coastal Zone.	2.1 "Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection"	**IW**
	2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS"	**IW**
	SCCF "Enhancing regional climate change adaptation in the Mediterranean Marine and Coastal Areas"	**CC**
3. Protecting Marine Biodiversity	3.1 "Management Support and Expansion of Marine Protected Areas in Libya"	**BD**
4. Knowledge Management and Programme Coordination	4.1 "Mediterranean Sea Basin Environment and Climate Regional Support Project"	**IW and CW**

In order to diagnose KM-related needs and expectations of Child Projects (CP), a preliminary survey[12] was prepared and shared with project designers (July-August 2018). The designers of all projects participated in the web-based survey (27 questions), sometimes with representation of more than one person per CP. The analysis of the answers helped building the KM approach, identifying tools and levels of intervention particularly related to:

- Target audiences
- Project / Programme management
- Managing and Visualizing the data
- Information and Knowledge Management

Relevant results of the survey are presented below by cluster topics, however overall the following can be observed:

- The Child Projects of the MedProgramme will produce a rich and heterogenous amount of data and results (quantitative, qualitative, normative). A responsive system to manage the information flow is therefore needed to: capture, store and digest raw data; ensure smooth reporting and coordination; offer a digital representation of the progress through visualization tools for both spatial and non-spatial information; and use the collective information to package appropriate products and knowledge-sharing assets for the intended target audiences of the MedProgramme.

- Data sharing and data collection modalities are critical for generating and managing knowledge. Defining how projects will prepare and make available their data should be addressed at the beginning of the Inception phase of the MedProgramme, once indicators are selected for all Child Projects. A dedicated workshop should be organized to identify sharing standards, protocols and practices for data collection and reporting, including to ensure data quality, respect of privacy and compatibility with data visualization tools on the MedProgramme portal.

- The primary audience of the MedProgramme CPs are policy- and decision-makers in the region. However, in order to influence policy making there is a need to engage and involve a large number of diverse stakeholders to inform them about the findings and benefits arising from the MedProgramme interventions. To this end, three different functional levels (see page 32) and groups of audiences/ stakeholders have been identified to articulate the KM strategy.

- Technical practitioners are among the principal consumers of scientific reports and detailed assessments; therefore, each Child Project shall consider specific groups of technical practitioners in their stakeholder analysis to make sure that the KM strategy can incorporate these views at the programme level.

- The mapping of stakeholders and related engagement plan is crucial to ensure the impact of the KM strategy and of the MedProgramme as a whole. It is important to identify knowledge suppliers/ brokers, knowledge recipients/ beneficiaries and potential change agents at the project level (to be done during the inception phase) and then make sure that these are involved and engaged at the Programme level (see more page 25).

- During the Project Preparation Grant (PPG) phase (June-September 2018) details on activities, stakeholders, outputs and indicators of every Child Project were not available due to the staggered timeframes in preparing the individual project documents. However, through the survey (and several bilateral consultations) it was possible to collect enough insights into the planning of each CP to suggest appropriate solutions and frameworks to manage knowledge holistically across the MedProgramme portfolio.

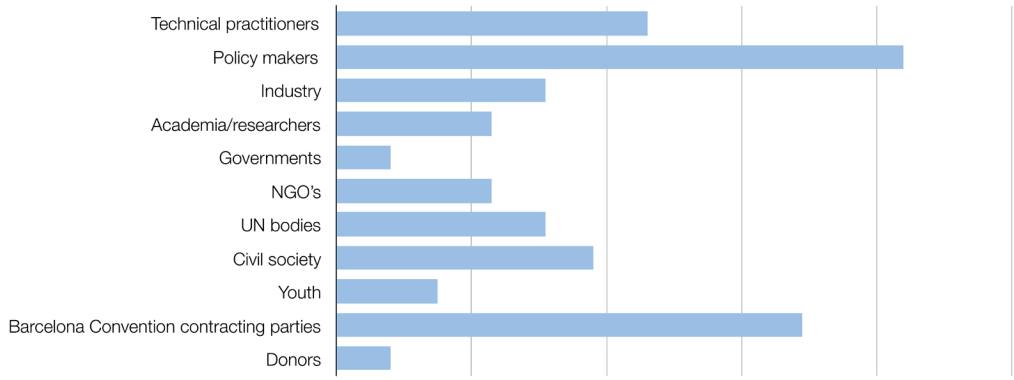
[12] Ref. The preparation of the survey benefitted from the expert and kind advice of staff from UN Environment, Plan Bleu and PAP/RAC. The full questionnaire, which was shared through Google Forms, is annexed in .pdf

Target audiences

[Q2] Who will the primary target audience for your project results be?

The respondents identify as their principle target audience policy makers and the parties to the Barcelona Convention, followed by technical practitioners and civil society. Other relevant audiences are: industry, academia and other UN bodies are: industry, academia and other UN bodies.

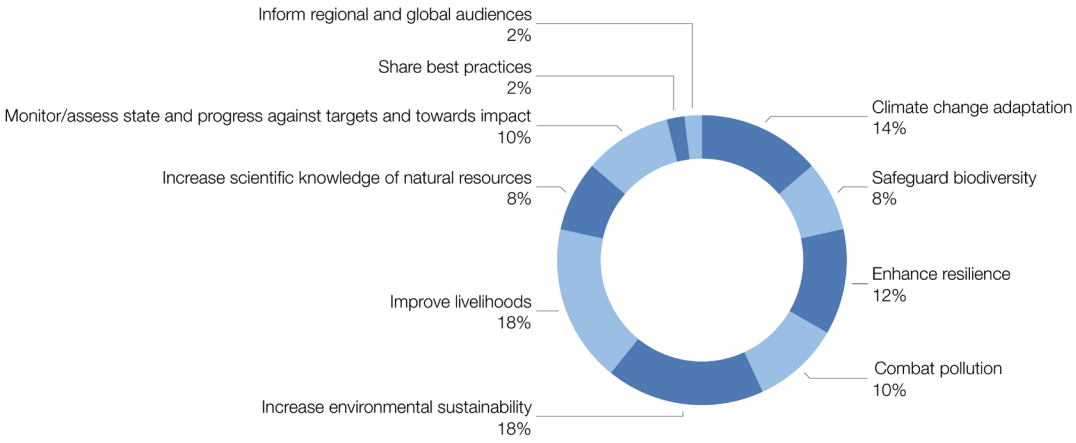
Chart 1



[Q4] Why is your data important?

The data produced will have different objectives, including the priorities to enhance environmental sustainability, increase livelihoods, and adapt to climate change.

Chart 2

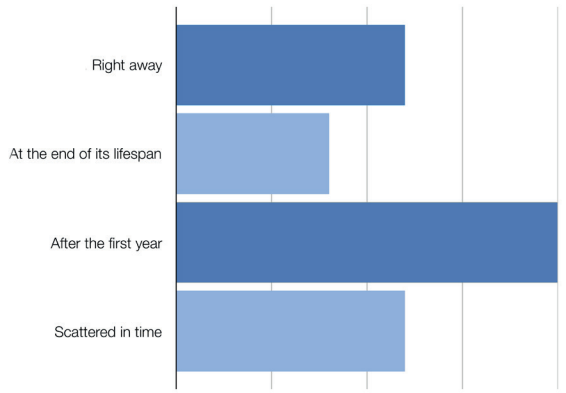


Project/Programme management

[Q3] When will your project start to produce data/results?

Three projects will start producing data right away while other projects will produce data at different times.

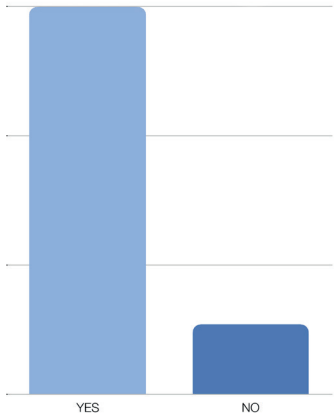
Chart 3



[Q7] Will you and your collaborators be willing to adopt the selected project management tool?

85% of respondents are willing to adopt a web-based project management tool with initial training provided.

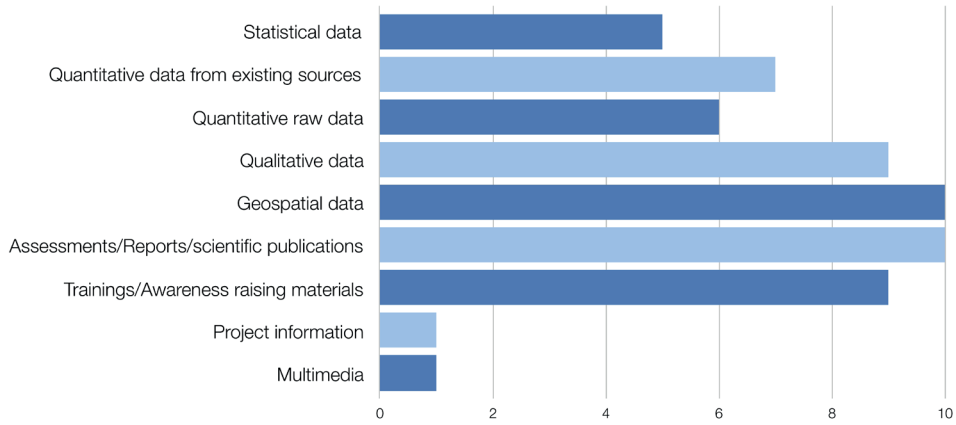
Chart 4



Managing and Visualizing the Data

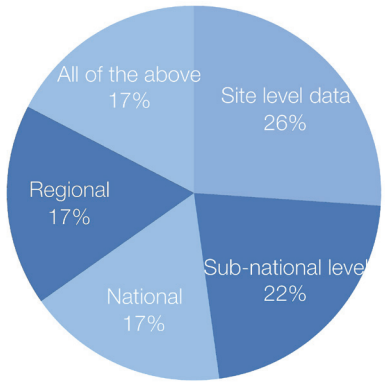
[Q10] What type of data will you collect and manage as part of your project?

Chart 5



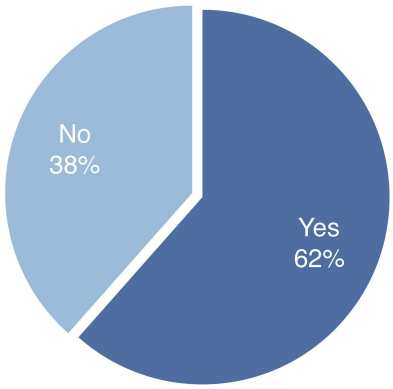
[Q11] If your project works with geospatial data, what scale do you work at?

Chart 6



[Q13] Does your project include the collection and management of time series data?

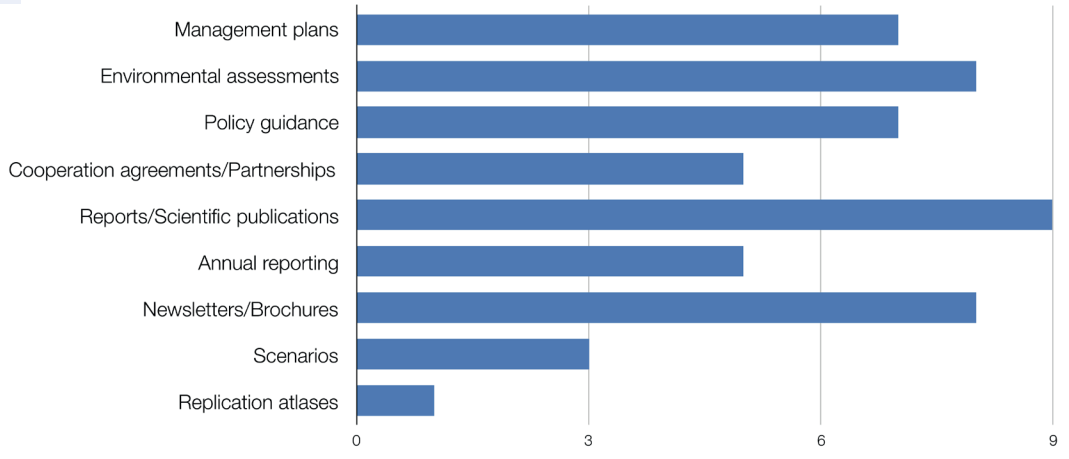
Chart 7



[Q10,11,13,14] Six of the CPs will produce geospatial data from site to regional levels, five will produce qualitative data (see also [16], data from surveys), four will use existing data from external sources, and three will generate new raw data, some of which will be in the form of time series with varying update frequency.

Chart 8 [Q12] If your project produces qualitative data, what kind is it?

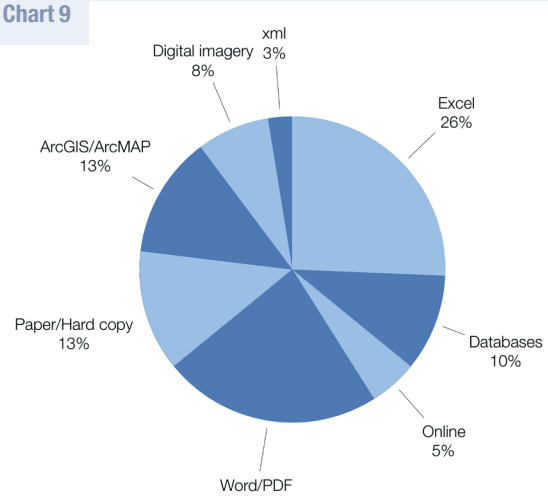
Chart 8



[Q16] What format will you prepare your data in?

A majority of respondents will use Excel to manage their data. Four will use MS Access or similar. Most projects will also manage (qualitative) data in Word, xml and even hard copies (e.g. from questionnaires and surveys). Five projects will manage ArcGIS or ArcMap files and three expect to generate digital images.

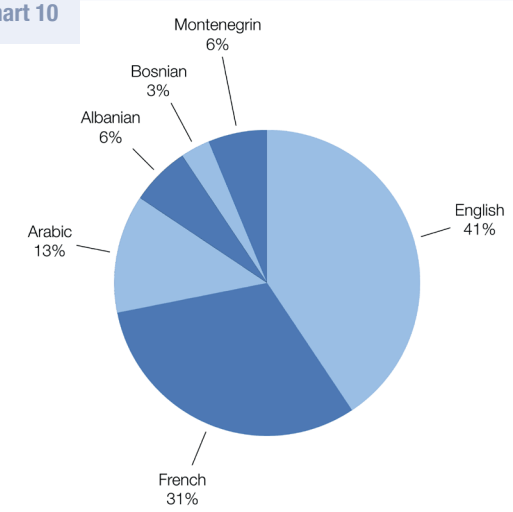
Chart 9



[Q5] What language(s) will your data be produced in?

Data will be produced in six different languages, with the vast majority producing data in English (41%) and/or French (31%) and Arabic.

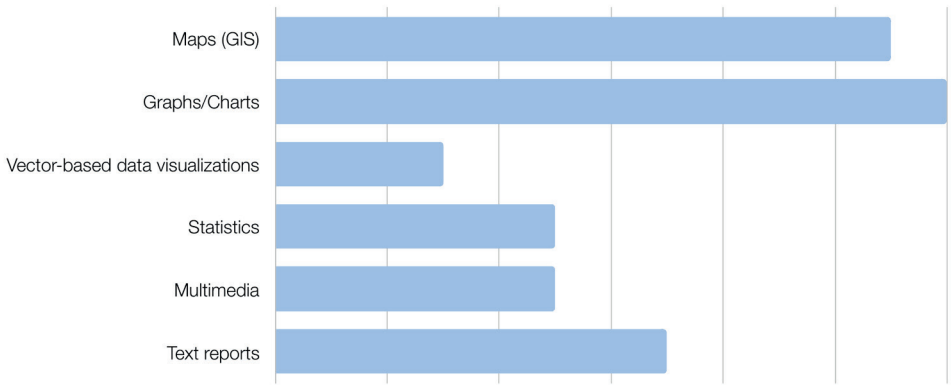
Chart 10



[Q17] Within your Organization/Institution, what type of online visualization tools have you been using so far (if any)?

Most respondents have used charts/graphs and GIS to visualize their data in the past while a smaller number use reports, multimedia and statistics.

Chart 11

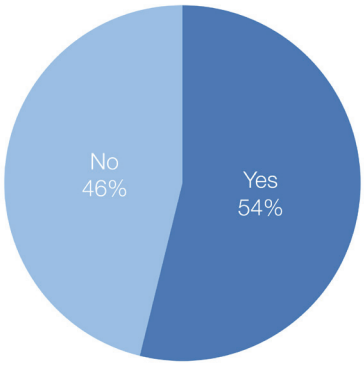


Information and Knowledge Management

[Q8] Have you ever used a Knowledge and Information Management platform?

About half of the respondents have used information and knowledge management platforms before.

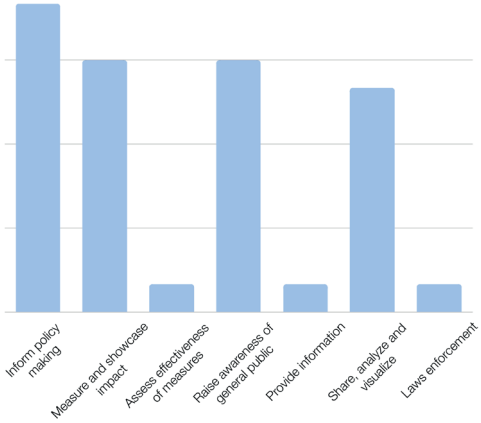
Chart 12



[Q23] What is your key objective for an online (geospatial) platform?

Respondents' expectations in relation to the platform are multiple and include an internal dimension related to data management and information/knowledge sharing among projects, and a public dimension related to showcasing impact, raising awareness and informing policy making in a transparent way. The platform should also help gather the elements that will be needed to tell engaging stories over the lifespan of the programme.

Chart 13



[Q26] What is your key objective for an online (geospatial) platform?

To this open question, respondents illustrated a variety of needs including:

- Engage partners from the beginning so they know they have a channel to promote their work (addressed at the 3 functional levels);
- Help track progress towards set goals (addressed at the portfolio level);
- Improve the internal work between executing partners and the way to communicate (addressed at the portfolio level);
- Facilitate reporting to the GEF (e.g. by timely gathering relevant information from executing partners) (addressed at the portfolio and policy levels);
- Effectively manage documents collaboratively among the co-executing partners (addressed at the portfolio level);
- Provide a roster of environmental experts (addressed at the portfolio level and policy levels);
- Provide a solid and centralized structure as well as cost-effective tools to collect, assess and share data and information (addressed at the portfolio level);
- The strategy should be designed in a way to primarily serve the governments of the contracting parties who have the executive powers to manage the environment, coast, biodiversity, natural resources (addressed at the policy level);
- The strategy should timely inform partners about expectations regarding their contributions to the communication strategy and the amount of work expected (addressed at the portfolio level); and
- The KM strategy should become a best practice for other programmatic approaches and projects.

2.3 MedProgramme Stakeholders

Stakeholder participation is an inherent part of the structure of MAP and the Barcelona Convention where all countries (represented by the MAP focal points) form the Contracting Parties to the Barcelona Convention. In addition, about 100 NGOs and Intergovernmental Organizations (IGOs), termed "partners" are participants to the meetings of the Barcelona Convention. It should also be stressed that stakeholders participated in the formulation of the TDA-MED, SAP-MED, SAP-BIO and the NAPs of the countries, on which the MedProgramme is based. In summary, the key stakeholders that CP 4.1 will strive to involve at national level include:

- Public Sector: ministries responsible for water resources; environment; spatial and development planning; transport; tourism; fisheries; industry; maritime affairs; health; fire-fighting; community development; education; culture and local government authorities.

- Private Sector: national and regional organizations representing: farmers; fisher folk; manufacturers/ industrialists; tourism and aquaculture sector; banks; insurers.

- Non-governmental Organizations (NGOs): national trusts; conservation associations; women's organizations; community-based organizations (CBOs);

- Scientific community: researchers; sociologists; environmental managers; engineers (water, civil, environmental); environmental economists; biologists; climatologists, geographers, oceanographers; teachers; curriculum specialists; media practitioners;

- General public such as the entire coastal population of the Mediterranean Basin (in particular those living in identified hotspots and sensitive areas) and the 176 million tourists visiting the Mediterranean annually.;

At a regional and global level, the stakeholders will be the various signatories to the relevant Multilateral Environmental Agreements (e.g. Barcelona Convention and its Protocols, Convention on Biological Diversity, Basel Convention, United Nations Convention to Combat Desertification, Rotterdam Convention, Stockholm Convention) and all individuals and organizations associated with the achievement of the 2030 Sustainable Development Goals.

The Terminal Evaluation of MedPartnership observed that in spite of the wide stakeholder engagement during implementation of the MedPartnership, the involvement of NGOs, private sector, and Mediterranean countries that are not eligible for GEF funding could have been greater. In the implementation of MedProgramme and its Child Projects, the Lead Implementation and Executing Agencies will foster opportunities to more closely involve NGOs and the private sector in project activities and to engage more closely with non-GEF eligible countries that share the Large Marine Ecosystem (LME) of the Mediterranean Sea. Child Project 4.1 will play an important role in this effort by broadly disseminating information on, and the progress and results of the MedProgramme, stimulating all other Child Projects to design and implement effective stakeholder participation strategies, and promoting involvement in the project's milestone events of relevant NGOs, of the private sector (in particular the tourism industry), and of all non-beneficiary Mediterranean countries.

As regards to specific stakeholders, each Child Project shall undertake its own research and analysis based on respective project objectives to identify partners, target groups and beneficiaries. This analysis is essential to understand who the different players are, their expectations and interest, their characteristics, commitment and constraints, their influence over others, etc. The MedProgramme KM Strategy will support the jump-start and continuous engagement of these groups at the programme level with targeted actions and outreach tools.

Box 2 Glossary: Stakeholders, Beneficiaries, Target groups, Partners

Stakeholders: groups that have a role and interest in the objectives and implementation of a programme or project; they include target groups, direct beneficiaries, those responsible for ensuring that the results are produced as planned, and those that are accountable for the resources that they provide to that programme or project.

Target groups: the main stakeholders of a programme or project that are expected to gain from the results of that programme or project; sectors of the population that a programme or project aims to reach in order to address their needs based on gender considerations and their socio- economic characteristics. When the target group is not sufficiently differentiated, the problem analysis tends to be superficial or too broad and does not allow the effect of the core problem within the various subgroups to be captured.

Direct beneficiaries: usually institutions and/or individuals who are the direct recipients of technical cooperation aimed at strengthening their capacity to undertake development tasks that are directed at specific target groups. In micro-level interventions, the direct beneficiaries and the target groups are the same.

Ultimate (or indirect) Beneficiaries: This is the target group that is expected to be better off as result of the project. The project may provide services directly to this group or more commonly target this group through the strengthening of institutions and organizations (i.e., the direct recipients), which support, increase awareness, or advocate on behalf of the ultimate beneficiaries. The distinction between direct recipients and ultimate beneficiaries is particularly important for donor-funded technical cooperation projects, where donors are primarily concerned with the impact of the project on the latter group. As a result, the project proposal should spell out the intended results of the project beyond just the direct recipients.

Partners: The individuals and/or organizations that collaborate to achieve mutually agreed upon objectives. Note: The concept of partnership connotes shared goals, common responsibility for outcomes, distinct accountabilities and reciprocal obligations. Partners may include governments, civil society, non-governmental organizations, universities, professional and business associations, multi- lateral organizations, private companies, etc.

Source: adapted from UNDP and ILO

2.4 Contributing to the Programme-wide KM

Each Child Project is expected to participate in the common knowledge management (KM) strategy to maximize efficien , ensure good governance of the programme and achieve greater impact at the diffe ent functional levels identified (portfolio level, general public level and po icy- making level).

While specific needs related to the diverse outputs of the individual projects will be analyzed on a case-by-case basis, all CPs are evenly contributing to the various activities illustrated in this document. A standard text included in each Child Project document reflects this approach and is aimed at harmonizing individual contributions. The synergetic approach is also reflected in the allocation of evenly distributed budget under each CP that will be used to support KM activities, production of knowledge and data. CP 4.1 will cover for example the costs of developing the KM platform (including the project management tool), organizing activities and events and producing communications material. Each CP will use the dedicated allocation of funds to, for instance, feed the platform with processed data, produce specific information for the preparation of advocacy material, etc.

3. Why a KM strategy?

> *Much of knowledge management is common sense, but not common practice.* –Unknown

3.1 KM in the literature

Since the early 1990s there has been growing attention to the process of managing knowledge within organizations and businesses, mostly with the objective of improving performance and capitalizing on lessons learned. Pioneering professors Ikujiro Nonaka and Hirotaka Takeuchi, were among the first to investigate the benefits of Knowledge Management in organizations and popularize the concepts of "tacit" and "explicit" knowledge. In their 1991 groundbreaking article "The Knowledge-Creating Company", they affirm that: "In an economy where the only certainty is uncertainty, the one sure source of lasting competitive advantage is knowledge". Through the work of dedicated scholars, knowledge management (KM) has gained a consolidated reputation leading to its establishment as a recognized discipline. KM is now viewed as an organization's most valuable and strategic asset deserving to be treated accordingly.

There are many definitions of KM (see Box. 2) but it can be commonly described as the "systematic process to identify, capture, structure, value, leverage, and share an organization's intellectual assets to enhance its performance and competitiveness through a multidisciplinary approach".

Box 3 Definitions

Knowledge Management (KM): the systematic processes, or range of practices, used by organizations to identify, capture, store, create, update, represent, and distribute knowledge for use, awareness and learning across and beyond the organization.

Knowledge Management Systems (KMS): any kind of IT system that stores and retrieves knowledge, improves collaboration, locates knowledge sources, mines repositories for hidden knowledge, captures and uses knowledge, or enhances the KM process.

Knowledge Products and Services: these refer to outputs such as databases, publications, visual material, maps (knowledge products) and outcomes such as awareness raising, information sharing, and capacity building (knowledge services).

Knowledge Assets: are the accumulated intellectual resources of an organization in the form of information, ideas, learning, understanding, memory, insights, cognitive and technical skills, and capabilities.

Source: Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC.

Knowledge Sharing: A subset of knowledge management encompassing the exchange of knowledge (information, skills, experiences, or expertise) within and across organizations. Although it can be one- directional, knowledge sharing in most cases is a two-way or multilateral exchange in which the parties learn from each other. Knowledge sharing is more than mere communication because much knowledge in organizations is hard to articulate. In development work, some knowledge sharing has a regional aspect. For example, South-South knowledge sharing refers to exchanges among partners and peers across developing countries.

Source: Steffen Soulejman Janus. 2016. Becoming a Knowledge-Sharing Organization: A Handbook for Scaling Up Solutions through Knowledge Capturing and Sharing. Washington, DC: World Bank. doi:10.1596/978-1-4648-0943-9. License: Creative Commons Attribution CC BY 3.0 IGO

KM is based on two critical activities:

1. the capture and documentation of explicit (technical and codified information) and tacit knowledge (intangible assets intended as human and intellectual capital);

2. their dissemination amongst the intended audiences and stakeholders.

There are two key challenges: knowledge is difficult to assemble, and it is difficult to encourage its use. Many managers see it as a time-consuming distraction from their core role. However, proper knowledge management can reduce risks and increase efficiency through the re-use of proven approaches and avoidance of known pitfalls. It can also produce a virtuous circle as individuals and teams see their contributions recognised and re-used, thus encouraging further participation in the process. Accurate knowledge management is a powerful enabler of organizational learning and an indispensable ally for strengthening the science-policy interface. Writing a report or producing scientific data is only a part of the broader effort to promote environmental sustainability, because without effective sharing of information (in terms of language, tools, channels, etc) and dialogue among all stakeholders involved, the impact of the knowledge produced remains very limited. Considerable progress in raising awareness and improving scientific dissemination has been achieved in recent decades, but the urgency posed by challenges worldwide calls for accelerated and renewed efforts to raise the awareness of policy makers and the public at large about the measures needed to achieve sustainable development and the protection of natural resources.

3.2 KM under GEF programmatic approaches

The policy recommendations emanating from the GEF-7 replenishment[13] clearly refer to knowledge as a "critical asset of the GEF Partnership" and commend "the steps taken to build the GEF's knowledge management systems and practices in GEF-6, as well as the increasing attention to learning and knowledge exchange in GEF projects and programs, notably the integrated approach pilot programs, and in outreach to recipient countries".
The call for more investments in knowledge management systems and practices also stems from recent GEF OPS (Overall Performance Studies) which have found that "the relevance of knowledge management to the GEF mandate has been increasingly recognized, and efforts to improve knowledge management in the partnership have been made on several fronts". The GEF2020 Strategy emphasizes "strategically generating knowledge" as a priority. In 2014, the policy recommendations in the GEF-6 Replenishment Document similarly emphasized "the importance of developing a knowledge management (KM) system that aims to improve the GEF partnership's ability to learn by doing and thereby enhance its impact over time".[14]

At the same time, the GEF-7 Programming Directions commend programmatic approaches (see Box 3) to tackle environmental degradation, making the case for better performance and higher impact of projects within a program. It is noted that "Child projects generally performed better than stand-alone projects on all rating dimensions, especially on execution quality, sustainability and M&E design. Child projects have also improved in design and are now better linked to the overall program in terms of objectives, result based

[13] Ref. GEF-7 Replenishment, Policy Recommendations, Fourth Meeting for the Seventh Replenishment of the GEF Trust Fund, GEF/R.7/18, p.9,www.thegef.org/council-meeting-documents/gef-7-policy-recommendations

[14] Ref. Global Environment Facility Independent Evaluation Office (GEF IEO), OPS6 Final Report: The GEF in the Changing Environmental Finance Landscape. Washington, DC: GEF IEO, 2018, p. 147 www.thegef.org/sites/default/files/council-meeting-documents/GEF.A6.07_OPS6_0.pdf

management and M&E."[15] In addition, OPS6 reports that "multi-focal area projects are better at achieving global environmental and socio- economic outcomes at completion compared to single-focal area projects"[16]. A recent IEO brief[17] further noted that country stakeholders cite "improved knowledge sharing and synergies with other GEF projects among the incentives for joining a program.

Box 4 GEF Programmatic approaches

Programmatic approaches, formalized in 2008[18], are particularly relevant to the Global Environment Facility (GEF), given the long-term nature of the environmental problems the GEF addresses. The GEF-7 Replenishment Programming Directions[19] reaffirms this approach noting that "more complex programs and sets of child projects will tend to offer more entries for development links due to multi-sectoral approach, multi-stakeholder engagements and platforms, and potential for delivering socio-economic co-benefits, along with enhancing the sustainability of the associated investments."

Managing knowledge holistically within programs is a key undertaking, posing additional challenges due to the extra complexity and number of partners and stakeholders involved. The STAP[20] notes that "as the GEF moves further towards integrated approaches, multi-focal projects and impact programs, it is increasingly important to facilitate acquisition of formal and tacit knowledge, organize knowledge assets from complex situations and make them available to inform future investments. The Integrated Approach Pilot (IAP) programs and Impact Programs impose greater needs for connections between 'child' projects and program objectives. KM is the obvious means to tie these connections together, to collect evidence-based learning, and to achieve sustained impact that deliver benefits far into the futu e."[21]

This emphasis from the GEF on both integrated knowledge management systems and holistic multi-focal area programmes, clearly sets the ground for a purposeful, concrete and action- orientated KM strategy for the MedProgramme. During its execution, the MedPCU will make sure that actions are closely aligned with GEF KM-related guidelines[22].

[15] Ref. GEF-7 Replenishment, Programming Directions, Fourth Meeting for the Seventh Replenishment of the GEF Trust Fund, GEF/R.7/19, p.6, https://www.thegef.org/council-meeting-documents/gef-7-programming-directions

[16] Ibid

[17] Evaluation of Programmatic Approaches in the GEF, IEO Brief, The Independent Evaluation Office (IEO) of the GEF, 2017. Full brief at: http://www.gefieo.org/sites/default/files/ieo/signposts/files/programmatic-approaches-2016- brief.pdf

[18] "Programs have been part of the GEF since its establishment. [...] In 2008, the Council endorsed the objectives and principles for programmatic approaches. For the first time, detailed procedures for designing pro- grams were approved, including the introduction of the program framework document (PFD). This resulted in an increase in the submission of programs to the Council and a change in their nature from phased to clustered ones. Importantly, a stimulus to program ownership was introduced by defining programs as "a more strategic level interaction with the GEF" for countries. [...] Until GEF-5, Council discussions about programs centered more on administrative than technical matters. This changed in 2014, when the Council approved a re- vised modality based on program scope: (1) thematic—the program addresses an emerging issue (e.g., a driver of environmental degradation), and (2) geographic— the program focuses on a particular geography. In GEF-6, the GEF introduced the IAPs, which focus on drivers of environmental degradation through supporting broad stakeholder coalitions and scalable activities." IEO BRIEF, Evaluation of Programmatic Approaches in the GEF, January 2018

[19] The full document of the GEF-7 Replenishment Programming Directions is available at: https://www.thegef.org/sites/default/files/council-meeting-documents/GEF-7%20Programming%20Directions%20- %20GEF_R.7_19.pdf

[20] STAP stands for the Scientific and Technical Advisory Panel of the Global Environment Facility. More info: http://www.stapgef.org

[21] Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 3

[22] At the time of the PPG phase (June-September 2018) final GEF guidelines on KM were not yet available. However, due consideration of provisions contained in the GEF Knowledge Management Approach Paper (2015, https://www.thegef.org/sites/default/files/council-meeting- documents/EN_GEF.C.48.07.Rev_.01_KM_Approach_Paper.pdf) and other relevant documents was taken into account when preparing this strategy.

4. Getting there: a modular architecture

> *Knowledge is the new capital, but it's worthless unless it's accessible, communicated, and enhanced.*
> –Hamilton Beazley

In order to achieve the objectives of the KM strategy, three interconnected functional levels have been identified to structure actions, activities and tools:

1. at the **PORTFOLIO LEVEL**;
2. at the **GENERAL PUBLIC LEVEL**;
3. at the **POLICY** and **DECISION-MAKING LEVEL**

Each level is articulated along different objectives. Activities and tools contribute to one or more KM levels and to the two Components of Child Project 4.1 (see Table 3, page 32). They are presented associated with objectives (such as "Monitoring progress towards impact"), but in most cases they are meant to respond to the needs of more than one KM level.

Table 3 Contribution of activities and tools to KM levels and CP 4.1 Components

Activity/Tools	Portfolio Level	General Public Level	Policy Level	CP 4.1 Component 1 Knowledge Sharing and Dissemination	CP 4.1 Component 2 Coordination and Synergies
Project/Program Management Tool	X				X
Database and Visualization tools	X	X	X	X	X
Public portal		X	X	X	
Annual Stocktaking Meetings	X	X	X	X	X
Replication Atlases		X	X	X	X
Trainings for portfolio	X				X
MedProgramme identity	X	X		X	
Med Bulletin/Newsletter	X	X	X	X	X
Storytelling (movies, graphic novels, podcasts, infographics, ...)		X	X	X	
Social media		X	X	X	
Technical reports and scientific publications, IW:LEARN Experience Notes		X	X	X	
MedProgramme Launching event and Final Conference	X	X	X	X	X
IW:LEARN IWC and twinnings, GEF events	X		X	X	X
Global campaigns and processes		X	X	X	
Engagement with testimonials		X		X	
Partnerships	X	X	X	X	

4.1 Portfolio Level

The work of project managers and executing partners is supported through provision of project management tools, monitoring frameworks, trainings and knowledge exchanges. A series of IT- based solutions and knowledge-mining and -sharing techniques are used to capture codified information as well as intangible assets.

4.1.1 Supporting efficient project management

4.1.1.1 Project Management Tool

A multilingual online project management tool[23] (integrated in the KM platform) can respond to the need of supporting efficien project (and programme) management by facilitating communication and information exchange among key actors of the Programme; promote knowledge sharing and peer-to-peer learning; facilitate tracking and monitoring of progress; and meet reporting requirements. A review of options currently available on the market (such as Asana, Freedcamp, Wrike, Slack, Microsoft Project, Basecamp, among others) has been carried out in the preparatory phase of the MedProgramme with a view to inform the selection of the most suitable tool to serve the needs of the portfolio. The final selection and adoption of the tool will occur during the inception phase of CP 4.1.

This decision-support system employs effective data-mining techniques and can be customized to suit the programme's needs, and project managers (and designated project collaborators) will receive specific training on its use and adoption to ensure portfolio-wide consonance.

Key features for such a tool include (but are not limited to): automated reporting, shared calendars, live editing/ collaboration on document development, workflow and task monitoring, Gantt–Chart, time tracking, file management and cloud repository, encrypted security, back-ups, integration with email and other products, mobile apps, and role-based access control and discussion boards.

The majority of respondents to the online survey on projects needs welcomed the idea of utilizing a PMT (and benefitting from ad hoc training). Previous experience from MedPartnership showed little use of a similar tool, however since then these online tools have greatly improved their features and levels of customization, and have been adopted widely to manage complex, multi- partner and multi-lingual projects.

4.1.2 Sharing knowledge and building capacity

One of the objectives of the MedProgramme is to improve the capacity of key regional stakeholders and build socio-economic resilience of impacted communities. To this end, a series of knowledge exchanges will take place at diffe ent levels taking inspiration and practical lessons learned from the GEF Partnership (reflecting the wealth of experience and examples from projects and programs around the world) and other relevant Organizations involved. A milestone activity in this sense is represented by the series of MedProgramme Annual Stocktaking Meetings (see next section).

[23] Project management tools (PMT) are aids to assist an individual or team to effectively organize work and manage projects and tasks. PMTs can either be desktop software, web-based and as a mobile app. Most of the tools are web- based only with a few providing also desktop and mobile based versions, regardless of the kind of version all the work is updated instantly across all devices and accounts.

4.1.2.1 Knowledge Exchanges

At the portfolio level, the MedPCU will capacitate Child Project teams with knowledge and training that can help them to deliver better project results and achieve greater impact. The identification of topics and modalities of exchange (face-to-face, virtual meetings, Communities of Practice, Expert visits, Study Tours, manuals, among others[24]) will be defined at the beginning of the Programme implementation. Preliminary topics could include:

1. Gender mainstreaming and stakeholders' engagement;
2. Scientific communication: bridging the gap between scientists/technical practitioners and media specialists;
3. Lessons learned from the MedPartnership and the ClimVar and ICZM projects.

It is expected that these knowledge exchanges will further empower project stakeholders, enhance cooperation, strengthen the institutions they represent and ultimately influence policies and norms for better management of natural resources in coastal areas.

Additionally, Child Projects will participate in learning exchanges by twinning with other relevant GEF IW projects as facilitated by the GEF IW:LEARN Project (see more at page 44).

Moreover, the MedPCU will support specific capacity building activities foreseen by each Child Project by taking stock and amplifying results through the programme-wide outreach.

4.1.3 Monitoring progress towards impact

4.1.3.1 Annual Stocktaking Meetings (ASM)

The Annual Stocktaking Meetings (ASM)[25] are one of the milestone activities of the MedProgramme. They are major regional events aiming to establish synergistic interactions among Child Projects and with other relevant initiatives and stakeholders, including with all other Mediterranean countries not participating in the MedProgramme.

ASMs hold a two-fold objective: 1) provide a forum for peer-to-peer learning among the Programme portfolio, and 2) catalyze regional and global attention on the progress made towards impact in the entire Mediterranean region.

The ASMs will be an occasion for face-to-face knowledge exchanges, south-south and north- south learning, and promotion of the broader adoption of MedProgramme approaches and solutions. Project managers, stakeholders and beneficiaries will have the opportunity to learn from each other, tap into respective tacit knowledge, and at the same time benefit from experiences and expertise generated by GEF and non-GEF projects and other relevant experts in diffe ent disciplines with diverse backgrounds. Moreover, Child Projects will have the chance to showcase their implementation advancement, discuss problems encountered, and engage with a broad audience of peers and stakeholders. The participation of regional and global media

[24] Useful guidance can be found in the following publications: ""The Art of Knowledge Exchange. A Results-Focused Planning Guide for the GEF Partnership" 2015 (https://www.thegef.org/sites/default/files/publications/GEF_WB_AoKE_English.pdf); "Becoming a Knowledge-Sharing Organization"2016 (http://documents.worldbank.org/curated/en/306761478498267644/pdf/109809-PUB- Box396311B-PUBLIC-DOCDATE-11-2-16.pdf); and

[25] The importance of, and need for stocktaking meetings emerged during the execution of the Strategic Partnership for the Danube and Black Sea Basin, the first GEF experiment in multi-project programs.

will raise public awareness across the Mediterranean countries and beyond. These knowledge exchanges will further enhance cooperation, strengthen the institutions they represent and ultimately influence policies and norms for better management of natural resources in coastal areas. The meetings will involve: all Child Projects and Governments of the participating countries, the MedProgramme's implementing and executing agencies, the GEF Secretariat and Independent Offic of Evaluation (IOE), Convention Secretariats, the UN Environment Global Program of Action (GPA), as well as major regional and global NGOs, representatives of those Mediterranean countries not participating in the MedProgramme; bilateral and multi-lateral donors, IFIs, the UfM, other regional intergovernmental organizations (OSS, etc.), and major private sector coastal area actors, water users, tourism associations and the shipping industry. Representatives of faith- based leaders, women's organizations, youth organizations, fashion/art/sport testimonials, media specialists, among other relevant groups will also be invited to participate in these events, following a dedicated stakeholders' analysis.

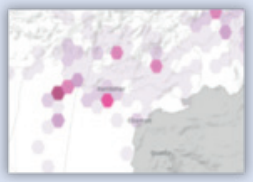
All project partners are expected to attend, and meaningfully participate in, the ASMs. They will be organized by the MedPCU in cooperation with all CPs and country representatives and will take place on a rotation basis in diffe ent project countries.

The ASM design, objectives and architecture will be defined during the first year of MedProgramme operation and approved at the CP 4.1 Steering Committee level. The first ASM will be held during the second year of MedProgramme operation.

4.1.3.2 Data visualization

Data visualization tools effectively support monitoring and reporting through easy visualization of selected data thus taking stock of progress. The table below illustrates possible types of visualization for geospatial and other types of data[26].

Table 5 Visualization examples for geospatial data and other types of data

GEOSPATIAL DATA		
Type of visualization	**Type of data example**	**Visual example**
Pin, symbol (with or without color or icon coding)	Coastal contamination hotspots, industrial wastewater treatment plants, etc.	
Polygon (with or without color coding, with or without color following a scale)	Number of water system clients connected to modern wastewater facilities, Coastal contamination hotspots, Concentration of mercury in coastal waters, Landscape and seascape under improved management, etc.	
Proportional symbol (color and/or size follow a scale)	Amounts of POPs disposed of /recycled on-site, Amounts of Mercury/ disposed of recycled on-site, Volume of industrial wastewater receiving secondary treatment, Volume of treated industrial wastewater reused, etc.	

GEOSPATIAL DATA		
Type of visualization	**Type of data example**	**Visual example**
Heatmap	Concentration of POPs in coastal waters, etc.	
Choropleth maps	Countries implementing comprehensive Integrated Coastal Zone Management, Countries implementing sustainable consumption and production (SCP) approaches, Countries having completed inventories of submarine groundwater discharges, etc.	

OTHER TYPES OF DATA		
Type of visualization	**Type of data example**	**Visual example**
Animated gauge	Real-time progress towards target of 3,250 tonnes reduction in POPs contamination, progress towards target of 50 tonnes reduction in mercury contamination, etc.	
Pie chart	Training distribution by type of training and by gender, etc.	

Note: For each geospatial visualization above, more information could be displayed in overlays (which appear when hovering the mouse).

4.1.3.3 Measuring Knowledge Management impact

> *Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted.* –Albert Einstein

Unlike other activities that can be justified in terms of explicit and measurable monetary savings, the added value of knowledge management is more difficult to quantify. Knowledge management benefits are both far reaching and hard to measure as they relate primarily to preventing the waste of money, time and human resources. It is difficult to quantify the expense – in terms of time and money – of finding the right information or reproducing knowledge that already exists, or of using obsolete rather than up-to-date information. The prevention of errors and the savings that are often achieved through better use and reuse of existing knowledge are practically invisible in accounting terms[27].

Nevertheless, it is important to assess the performance of KM efforts and measure the impact of the KM strategy. Measurement, benchmarking and incentives are essential to accelerate the learning process and to drive cultural change. When distilling recommendations to improve the systematic treatment of the need for KM, the STAP recommends that "knowledge management progress indicators should be included in the GEF Results-Based Management system"[28] .

A menu of indicators (both quantitative and qualitative) will be considered by the MedPCU in order to monitor knowledge-related activities (Table 5). Once indicators are discussed and approved during the inception phase of the MedProgramme, related targets can be developed to measure the achievement of the objectives.

Table 6 Possible KM Indicators

What to measure	Indicators	Means of verification
How often are internal users I) accessing, II) contributing to, or III) using the knowledge assets and sharing processes at their disposal?	• Number of connections per day/week/month • Number of knowledge assets downloaded • Number of discussions or messages shared, etc.	Usage data will be provided by the MedProgramme portal analytics
What is the level of internal user satisfaction with the MedProgramme project management tools and how is it impacting their work?	• User friendliness of the tool from 1 to 5 (e.g. interface, design, navigation, etc.) • Technical quality of the tool from 1 to 5 (features, speed, etc.) • Overall level of satisfaction from 1 to 5 • Has facilitated collaboration within your CP from 1 to 5 • Has facilitated collaboration with other CPs from 1 to 5 • Has helped you save time by giving your access to resources from 1 to 5	This can be measured through internal satisfaction surveys that will also provide a venue for users to suggest improvements, (virtual) meetings, etc. Stakeholders should be engaged in a structured manner, for example through interviews, focus groups, or peer learning activities.

[27] Steffen Soulejman Janus. 2016. Becoming a Knowledge-Sharing Organization: A Handbook for Scaling Up Solutions through Knowledge Capturing and Sharing. Washington, DC: World Bank. doi:10.1596/978-1-4648-0943-9. License: Creative Commons Attribution CC BY 3.0 IGO

[28] Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 5

What to measure	Indicators	Means of verification
How often are public users IV) accessing the MedProgramme portal, and V) accessing the knowledge assets?	• Number of visits, • Average time spent • Number of downloads • Pages visited • Number of recipients opening the newsletter • Ease of finding knowledge esources on the portal from 1 to 5, etc.	Usage data will be provided by the MedProgramme portal analytics. A feedback form can also be available at all time on the portal.
Is MedProgramme producing quality knowledge assets?	• Level of satisfaction of stakeholders with knowledge asset • Are stakeholders using knowledge assets in their work	This can be measured through a stakeholder survey.
Is MedProgramme contributing to the GEF knowledge base?	• Knowledge assets shared on other GEF platforms (IW:LEARN and others)	This will be monitored by the MedPCU.
Is MedProgramme building the capacity of key regional stakeholders?	• Key regional stakeholders have been identifie • Number of knowledge exchange activities implemented • Number of participants at the Annual Stocktaking meetings	This will be monitored by the MedPCU.
Is MedProgramme participating / contributing to global and regional campaigns, events and processes?	• Number of regional and global events with MedProgramme participation (as presenter) • Number of #MedProgramme mentions on SDG social media channels	This will be monitored by the MedPCU.
Is MedProgramme getting the attention of the media?	• Number of media hits in target languages / countries • Number of media hits in first tier media outlet • Number of Op-eds placed, etc.	This can be monitored by a media agency for a fee or with free tools such as Google Alerts.
Are Parties to the Barcelona, Stockholm, Minamata, and Basel Conventions VI) aware of the MedProgramme outputs / outcomes? VII) using the MedProgrammes outputs?	Number of briefing o ganized with Parties to the Barcelona Convention Number of countries attending the briefin Number of countries using MedProgramme outputs	This will be monitored by the MedPCU and country representatives can be surveyed through face-to-face interviews, etc.

4.2 General Public Level

Civil society, media, and representatives of non-scientific community are informed about MedProgramme's results and engaged in knowledge sharing activities both as brokers and beneficiaries

4.2.1 Communicating progress and results

The KM strategy foresees a large component on communications and outreach aimed at ensuring that results are properly shared with the intended audiences to maximize, replicate and scale up best practices and lessons learned.
A number of traditional communications activities (such as newsletters, brochures, etc.) will be blended with innovative and creative approaches (graphic novels, documentaries, podcasts, etc). to ensure visibility of the Programme.

4.2.1.1 Knowledge Management Platform

The engine of the KM strategy is enshrined in a powerful web-based knowledge hub comprised of a

data and information management system (with both public and restricted access) and a combination of visualization tools to serve the portfolio's needs.

The platform will serve as central repository of all the data generated by the Child Projects and will be designed with a view to the following strategic knowledge management objectives:

- Facilitate information sharing and promotion of the Programme achievements among the partners and the regional stakeholders.
- Reflect the indicators of all Child Projects in the establishment of the relevant tools and frameworks, and seek coherence with efforts underway in the GEF's Chemicals and Waste Focal Area to create a platform to assist countries in meeting the reporting requirements of the Stockholm and Basel Conventions.
- Support policy development through its data collection and management tools.
- Strengthen the science-policy interface, incorporating relevant data already generated by the countries, with the clear understanding that no data would be disseminated without the permission of its owner.
- In the long term, become a tool of the Contracting Parties of the Barcelona Convention.
- Assist countries in meeting their IMAP reporting requirements.
- Ensure that the highly valuable legacy of the MedPartnership, which produced a substantial volume of knowledge and information as well as a number of tools and guidelines, lessons, and experiences, is carefully preserved and easily accessible, including translations of key documents.

Such an integrated platform should host: 1) a project management tool; 2) a public/outward-facing portal, including sub-webpages for each CP; 3) visualization tool(s) to display a digitalized representation of data through GIS and other suitable means; and 4) a database for raw/primary data.

1. The project management tool was described previously (page 33)
2. The outward-facing MedProgramme portal will be populated with key information showcasing progress towards impact and the contribution of the MedProgramme to global and regional environmental goals. The portal will serve as a gateway for information related to international waters, coastal zones, biodiversity and climate resilience in the Mediterranean sea basin, bringing together information from GEF and non-GEF projects (for example results from the MedPartnership project will be made available and possibly re-packaged in new material) for broad dissemination and cross-fertilization (several platforms identified in the Baseline can be cross-referenced from the MedProgramme platform to reach out to vaster audience and stakeholders). It will closely dialogue with the GEF's new portal (corporate database for projects, reports, and documentation) and the IW:LEARN website. The MedProgramme portal will feature a highly user-friendly interface including effective search functions, filters (such as drop-down menus) and analytical capabilities. Each Child Project will have dedicated sub-pages about their specific activities. CPs are expected to provide regular information (in diffe ent multimedia formats) to generate content for their respective project sub-pages and the overall programme portal. The MedPCU will be responsible for curating the information provided and packaging them for the intended audiences.

3. Visualization tools[29] will be used to display spatial and non-spatial data (be they quantitative or qualitative) generated by the projects. Data need to be stored and mined in a way that makes them readily available not only to track progress but also to support decision making by the diffe ent stakeholders. GIS (geographic information system[30]) will be largely used as well as textual information, photos, story maps, pie charts, graph charts, infographics, map dashboards, trend line charts, among others (see examples in Table 5). Users can build a query based on specific criteria such as geographic area, data layer or specific indicators. Alternatively, users can simply browse for information using the icons provided. There are a number of visualization software tools available both as open source and commercial options. A number of products (with license or open access) could be suitable for integration in the MedProgramme knowledge platform, such as Esri ArcMap and ArcGis, Geonode, QGIS, MapX[31] and Google Earth Outreach[32] . The final selection will be made during the inception phase.

4. Raw/primary data will be stored in a database with flexible restricted/public access. A shared data model/protocol should be agreed at the beginning of the Programme to ensure that projects will compile relevant data with a standardized approach and enable a harmonized data entry system (the INSPIRE directive[33] could be taken as reference to harmonize the process). Issues related to open data, ownership, quality and review of data will be addressed in this exercise; a mapping of voluntary standards can help to evaluate feasible options. Contributors of data are all stakeholders of the MedProgramme, including the Executing Partners. Child Projects are responsible for producing their own data.

4.2.1.2 MedProgramme identity

In terms of visibility, the MedProgramme will be presented in a holistic and coherent way through the development of clear vision statement and positioning, visual identity, logo design, etc. showing consistency and integration across the portfolio. At the same time, each Child Project will be granted individual identities within the overall MedProgramme-branding in order to promote specific activities and benefit from ad hoc services. This will entail the design of consistent logos for each CP, creation of sub-websites within the Programme platform, organization of tailor-made trainings, preparation of specific publications, social media services, among others.

The MedPCU will develop a proposal[34] in close consultation with project teams and, once adopted at the Steering Committee level, Child Projects are expected to use it consistently.

[29] Data visualization is the presentation of data in a pictorial or graphical format, and a data visualization tool is the software that generates this presentation. Data visualization provides users with intuitive means to interactively explore and analyse data, enabling them to effectively identify interesting patterns, infer correlations and causalities, and supports sense-making activities.

[30] The information about location associated with observation and statistical analysis is called geographic information.

[31] MapX was developed by UN Environment, the World Bank and the Global Resource Information Database (GRID-Geneva) to capitalize on the use of new digital technologies and cloud computing in the sustainable management of natural resources. More info: www.mapx.org

[32] A recent partnership has been established between UN Environment and Google.

[33] The INSPIRE Directive aims to create a European Union spatial data infrastructure for the purposes of EU environmental policies and policies or activities which may have an impact on the environment. This European Spatial Data Infrastructure will enable the sharing of environmental spatial information among public sector organisations, facilitate public access to spatial information across Europe and assist in policy-making across boundaries. INSPIRE is based on the infrastructures for spatial information established and operated by the Member States of the European Union. The Directive addresses 34 spatial data themes needed for environmental applications. The Directive came into force on 15 May 2007 and will be implemented in various stages, with full implementation required by 2021. More info: https://inspire.ec.europa.eu

[34] In line with both UN Environment and GEF policies on branding and use of logos.

4.2.1.3 Newsletters (Med Bulletin)

Periodic MedProgramme Bulletins will be published (every six months or on a quarterly basis) to showcase progress of the Programme as a whole and of individual Child Projects, including highlights of results, success stories and project events, and relevant global, regional and national relevant meetings and events. It will be one of the primary tools for tracking achievement of targets and milestones for all Child Projects, based upon the corresponding results frameworks. Bulletins will feature a "journalistic" style making the content appealing for a wide range of audiences. Therefore, all CPs are expected to contribute to these Bulletins with diffe ent types of inputs in order to document their activities and progress, such as high-quality pictures, articles, statistics, quotes, interviews, footage, among others.

4.2.1.4 Storytelling for advocacy

A number of traditional storytelling instruments will be blended with innovative and creative approaches to increase dissemination and advocacy efforts. Particular emphasis will be given to the preparation of high-quality short movies, animations and documentaries, graphic novels[35], documentaries, podcasts[36]/ radio programmes, infographics, art exhibitions, digital interactive stories/articles/interviews, professional photos, microblogging, e-books, art exhibits, among others. The MedPCU will collect diffe ent multimedia material from the CPs necessary to prepare these products. Translations of key communications outputs will be carried out in English, French and Arabic to ensure ample dissemination in the participating countries. Specific translations in other national languages will be sought pending budget constraints and upon due consideration of stakeholders' needs.

4.2.1.5 Social Media

Facebook, Instagram, YouTube and Twitter are four social media tools suggested for use by the MedProgramme. Development of timely and appropriate content and material to populate these channels is indispensable to achieve the desired impact. CPs will be prompted to contribute with relevant and ad-hoc information, pictures, statistics and other data to enrich the social media campaign.

The use of hashtags will be coordinated with the GEF IAs and EAs and project and country representatives of the Programme in support also of other related initiatives and campaigns.

The registration on the above-mentioned channels (or a selection of them) will take place at the beginning of the Programme and content population will start as soon as data and information from the projects becomes available.

4.2.1.6 Participation to global campaigns, events and processes

Experiences and lessons learned from the MedProgramme will be of relevance for a number of global processes shaping polices related to the sustainable management of natural resources in coastal areas. In turn, global processes are important for the MedProgramme to align with national, regional and global priorities and be receptive to new "waves" (policies, socio-economic trends, tech advances, etc). MedProgramme activities in this sense will build on existing successful campaigns, for example the "ICZM Mediterranean awareness-raising Strategy (MARS)". Contribution to these events will take diffe ent forms, ranging from physical attendance, production of specific products, content and multimedia material to be packaged in suitable products, among others. Examples of processes and events that could be relevant for the MedProgramme include the Agenda 2030 and SDGs conferences, the United Nations Environment Assembly (UNEA), Mediterranean-wide policy-dialogues, the UN Environment campaigns against chemical and plastic pollution, the EU Development Days

[35] Graphic novel or graphic journalism" is an increasingly popular literary genre that uses comics and poignant texts to explain complex matters. It is a compelling way of storytelling for scientific dissemination.

[36] A mix of radio and audiobooks, podcasts are a very incisive and entertaining way of sending messages across and inform and spark debate on pressing issues. They are easy to share and can reach a vast and varied audience.

and other key gatherings at the EU level, International Days (such as Coast Day, Environment Day, World Water Day, Health Day, etc), among others.

4.2.1.7 Engagement with media and testimonials

The MedPCU will reach out to a diffe ent number of media outlets and journalists with a view to establish long-lasting collaborations. To this end, CPs will be asked to liaise with national and local media of the project countries (for instance, by providing the MedPCU with a list of relevant contacts). A series of direct interactions with communications specialists, media experts and social media influencers is foreseen throughout the duration of the Programme to increase mutual understanding and flow of information. The MedPCU will also reach out to renowned personalities from diffe ent realms (such as art, sports, entertainment or fashion) to invite them to serve as ambassadors for the Programme and raise awareness about the main environmental challenges (and solutions) in the coastal areas of the Mediterranean. CPs will be prompted to suggest names, and facilitate contacts when possible, of suitable and potential "goodwill ambassadors" of relevance in the region.

4.2.1.8 Launching/Closing events of the MedProgramme

The design and practical details of these events will be planned during the inception phase of the MedProgramme. Considering the staggered initiation timeframes of the diffe ent Child Projects, a launching event of the MedProgramme could be organized in the form of a press conference to coincide with the kick-o` of the Support Child Project 4.1. Basic communications material about the objectives of the MedProgramme (such as visual identity, slogan, mission statement, description of Child Projects, informative brochure, short promo video, basic online pages, etc) should be prepared prior to the launching event. Participation to these events will not necessarily be open to the large public, however the information and messages emanating by these two occurrences will be relevant for a general audience as well.

4.2.2 Forging and nurturing Partnerships

> *If you want to go fast, go alone. If you want to go far, go together.* –African Proverb

Opportunities to enlarge the existing partnership of the MedProgramme should not only be welcomed, but actively sought. By reaching out to diffe ent stakeholders – individuals, organizations or companies – and engaging them directly in selected MedProgramme activities, a series of distinct advantages will be produced. These include:

- Contributing to transformational change: groups that are likely to evade the radar of "usual suspects" mapping (intended as classic stakeholders for environmental projects) will be intentionally targeted, moving away from the old-fashioned top-down view of passive beneficiaries of knowledge to a new vision in which conscious citizens are regarded as source of knowledge and potential allies in the strive against environmental degradation. For example, a collaboration with Faith-Based Organizations[37] to prepare a workshop or joint statements disseminated through their networks would tremendously increase the chances to inform and influence a large portion of general public that is not reached by traditional channels. Another possibility is a partnership with a fashion magazine to sensitize readers about sustainable business in coastal areas.

[37] Faith-Based Organizations could be a very important stakeholder group to engage in environmental decision-making. "Religion plays a significant role in the understanding and shaping of attitudes, opinions and behaviours including for management and use of the environment and natural resources". UN Environment Foresight Brief 008, April 2018.

- Facilitating a more rapid achievement of the Programme results: for example, a partnership with tourism institutions in the diffe ent participating countries could accelerate the adoption of more sustainable touristic habits to reduce pollution load into water bodies and increase the acceptance and reuse of treated freshwater for human consumption.

- Raising the profile of the GEF investments in the Mediterranean and of the countries and partners participating to the effort. A partnership with National Geographic for instance, or with national TVs and radio stations, could enhance the dissemination of knowledge and results generated by the MedProgramme as well as by related initiatives and policy-frameworks, like the Barcelona Convention.

- Further stimulating a sense of ownership and contributing to the sustainability of Programme results: making tight connections for example with the Bibliotheca Alexandrina to host a permanent or temporary exhibition about the MedProgramme, which could then travel around museums of the entire Mediterranean basin (starting with participating countries), and thus ensure that the legacy of the MedProgramme will continue to inspire people even after the programme closure.

- Providing additional means to further expand Programme activities: by adding ad hoc co-financing (cash or in-kind) to produce, for example, through a publication or a short movie for the general public, the MedProgramme could gain positive returns in terms of resources and reputation. Bringing together renown artists from project countries and the private sector to jointly produce a graphic novel on the MedProgramme, for instance, could be rewarding in many regards.

The MedProgramme holds the possibility to create a fertile hub for diffe ent partners to come together and share experiences and solutions to common challenges related to environmental degradation and pollution of freshwater/marine waters in the region. The private sector is a prime stakeholder in this effort and should be always engaged to cross-fertilize the MedProgramme's interventions. As emphasized in the GEF 2020 strategy: "Coordination failures abound in environmental management, in part because of the prevalence of 'tragedy of the commons' issues. Moreover, the complexity of environmental challenges requires that actions be taken simultaneously by many diffe ent stakeholders to be effective; [...] Partnerships with the private sector, civil society, research groups, and indigenous and local communities are vital in this regard."[38]

The importance of tightening relations with the private sector is again stressed in the GEF 2020 strategy: "The IAPs (Integrated Approach Pilots) will give special attention to engaging the private sector and improving evidence-based design and implementation to enhance learning and the effectiveness of the IAP interventions."[39]

Furthermore, in strengthening collaboration with a vast and diverse, yet relevant, groups of stakeholders, the MedProgramme will contribute to the vision encapsulated in the Sustainable Development Goal 17: "A successful sustainable development agenda requires partnerships between governments, the private sector and civil society. These inclusive partnerships built upon principles and values, a shared vision, and shared goals that place people and the planet at the centre, are needed at the global, regional, national and local level."

[38] 2020 Strategy for the GEF, April 2015. p.27 Full document: https://www.thegef.org/sites/default/files/publications/GEF-2020Strategies-March2015_CRA_WEB_2.pdf

[39] 2020 Strategy for the GEF, April 2015. p.22 Full document: https://www.thegef.org/sites/default/files/publications/GEF-2020Strategies-March2015_CRA_WEB_2.pdf

4.3 Policy and Decision-Making Level

The Contracting Parties of the Barcelona Convention, relevant decision makers in the region, technical practitioners as well as GEF Implementing and Executing Agencies are supported in their work through contributions to relevant regional policy processes and related GEF initiatives (particularly through the IW:LEARN project).

4.3.1 Strengthening the Science-Policy Interface (SPI) and Influencing Decision-Making

4.3.1.1 Replication Atlases

A number of highly informative National Replication Atlases, translated in relevant languages, will be produced to stimulate replication of successful practices demonstrated by the Programme and encourage regional and global dialogue. Broader adoption and replication of the successful policies, practices and technologies implemented under the Programme will be promoted through these means, highlighting areas and situations where replication of the Programme's demonstrations should preferentially occur.

Relevant results of Child Projects will be featured in the Atlases and the MedPCU will inform about the participatory process to collect and present the inputs.

4.3.1.2 Agenda 2030 and the Sustainable Development Goals

The MedProgramme will produce regional environmental benefits contributing to the Sustainable Development Goals, in particular the goals on responsible consumption and production (SDG 12), climate action (SDG 13), life below water (SDG 14), and life on land (SDG 15), which reflect to a large extent the GEF's core mission. By fighting environmental degradation in coastal areas and improving livelihoods, the MedProgramme is supporting beneficiary countries, and all populations living in the Mediterranean basin, to increase their capacity to build climate resilience, reduce pollution from nutrients and persistent toxic substances (POPs and Mercury), sustainably manage coastal freshwater and marine resources, protect biodiversity, and restore coastal ecosystems. Moreover, its focus on improving freshwater quality and quantity will directly contribute to SDG 6 on water and sanitation, while a dedicated gender strategy will ensure compliance with the SDG 5 on gender equality and women's empowerment.

4.3.1.3 Supporting countries to implement IMAP

Since the 2005 Mediterranean TDA, the situation in the Mediterranean in terms of transboundary issues in the marine and coastal areas has evolved. In terms of monitoring, the adoption in 2008 of the EU Marine Strategic Framework Directive (MSFD) led to the development in EU countries of national monitoring plans based on a set of detailed common criteria and indicators. UN Environment/MAP initiated the Ecosystem Approach in 2008, which led to the adoption of 11 Ecological Objectives, 61 indicators and definition of GES and targets in 2012 at the COP17of the Barcelona Convention. This led to the Integrated Monitoring and Assessment Programme (IMAP) for the Mediterranean, which was adopted in 2016 at the Barcelona Convention COP19. IMAP is the best available common set of tools for informing the science-policy interface (SPI) which is critical to achieve meaningful progress on stress reduction. Now the challenge is for countries, especially the non-EU countries, to redesign their national monitoring programs in line with IMAP and the 23 common indicators covering also the areas beyond national jurisdiction. Regarding monitoring of pollution, countries will build upon their MED POL monitoring program and database that has been in existence since 1999, with agreed parameters and stations in key hotspots and coastal areas. However, very few data exist for the majority of the common indicators, other than some contaminants, nutrients and chlorophyll data, particularly in the GEF eligible countries of the Mediterranean.

4.3.2 Contributing to the GEF knowledge base

The results produced by the MedProgramme (hot spots of coastal/marine pollution and habitat degradation, implementing ICZM and nexus planning, conjunctive surface water and groundwater management, protecting coastal groundwater-related ecosystems and coastal/marine biodiversity) will substantially contribute to the GEF knowledge base and to relevant GEF process, events and activities involving the four focal areas of International Waters, Chemicals and Waste, Biodiversity, Climate Change. Technical practitioners and scientists are also addressed as direct consumers of technical reports and assessments, and they are key agents to strengthen the science-policy interface.

4.3.2.1 Technical reports and scientific publications

The MedPCU will ensure that relevant scientific reports and scientific peer-reviewed publications are prepared by the various CPs providing technical information about the achievements of the Programme.

4.3.2.2 Synergies with the GEF IW:LEARN and LME:LEARN Projects

The MedProgramme will closely collaborate with the GEF International Waters Learning and Resource Exchange Network (IW:LEARN) Project[40] to facilitate uptake of lessons learned and knowledge exchange from/to the MedProgramme portfolio.

Cooperation in the following activities will be particularly addressed:

- Participation to the GEF International Waters Conferences (landmark biannual events of the IW portfolio). The first MedP ogramme contribution is expected for the 10th edition of the IWC in 2020.
- Production of Experience Notes (short case studies) produced by Child Projects to showcase worthy results and disseminated through IW:LEARN channels and the MedProgramme KM platform. The format of Experience Notes is standard (https://iwlearn.net/documents/experience-notes)
- Participation to IW:LEARN Twinnings with other GEF relevant projects and programs.
- Contribution to IW:LEARN.net with specific content (i.e. data visualization).
- Contribution to social media, news, events, etc.
- Participation to GEF Communities of Practice (CoPs) on IW, CW, when relevant.

4.4 Governance

Both the strategy and its implementation are critical to successful exploitation of knowledge. Many KM strategies fail not because there is something intrinsically wrong with them, but because they are not well implemented.
There must be a good strategy, but also appropriate organizational structure, systems, resources and the right people to execute it.
It is crucial to create teams that are centers of excellence for their specific knowledge skills and experience. Also, the appropriate technical equipment (hardware and software) and adequate expertise are key ingredients to ensure expected results. The GEF STAP concurs with the need for adequate resources noting that “KM delivers cost-efficiencie and savings, for example, reduced failure of projects, and it needs up-front resourcing to cover for additional time, specific tools and database needs. [...] KM professionals are essential in applying the discipline, including creating tools and products that help establish KM as a standard practice throughout the organization[41]” .

[40] More info at www.iwlearn.net

The KM strategy of the MedProgramme will require diffe ent sets of expertise for its execution. It is anticipated that the following professional profiles will be required throughout the duration of the programme (either full-time and/or part-time):

- Knowledge Management Specialist (to coordinate the implementation of the KM strategy)
- Communications assistant (to support the execution of the communications plan)
- Data Analyst (to help harmonize data produced by Child Projects and maintain the database)
- Web Developer (to develop the KM platform)
- IT Specialist (to administer the IT-based platform and systems)
- Experts in copy-editing, video-making, graphic design, translations, etc. to be contracted as needed.

These and other services will be provided by the staff of the MedPCU, consultants hired to carry out specific tasks and by outsourcing the work to companies (such as for the project management tool, hosting providers, licenses, etc).

"Knowledge-sharing is at the crossroads of core and support functions"[42] . Knowledge-sharing tasks and responsibilities should be as much as possible integrated in the jobs descriptions and terms of reference of projects' executing teams.

As efforts leading to an effective knowledge management system can be seen as time-consuming and not immediately benefitting the project outputs, there must be a good system in place to incentivize project teams to dedicate time and resources to KM. As noted by the GEF Strategic Technical Advisory Panel (STAP[43]): "there needs to be better recognition for KM inputs, achievements and publicity. Rewarding projects at mid-term, for example, for demonstrating the use of knowledge to improve and/or adapt the project to meet project objectives may be an effective incentive". The form of these rewards can vary, but in the case of the MedProgramme they can range for instance from prizes announced at the Annual Stocktaking Meetings, to public recognition mentions (internally or externally the portfolio, such as in the Med Bulletins), among others.

[41] Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 9

[42] Steffen Soulejman Janus. 2016. Becoming a Knowledge-Sharing Organization: A Handbook for Scaling Up Solutions through Knowledge Capturing and Sharing. Washington, DC: World Bank. doi:10.1596/978-1-4648-0943-9. License: Creative Commons Attribution CC BY 3.0 IGO, p. 24.

[43] Stocking, M. et al. 2018. Managing knowledge for a sustainable global future. Scientific and Technical Advisory Panel to the Global Environment Facility. Washington, DC. p. 9

5. Legacy and Sustainability

> *Share your knowledge. It is a way to achieve immortality.* –Dalai Lama XIV

The benefits arising from managing knowledge properly are both far reaching and hard to measure. This strategy represents one of the first attempts to manage knowledge holistically within a GEF-financed program with multi-focal areas Child Projects, and the role played by the Support Child Project 4.1 in implementing the programme-wide KM strategy is innovative yet challenging. The envisaged result is to effectively support portfolio coordination, provide beneficiary countries with long-lasting capacity and tools to improve national and transboundary coastal ecosystems, and enrich the GEF Partnership with replicable solutions and lessons learned for future interventions in the Mediterranean region. Its success will be determined by the commitment and ownership of all executing partners and stakeholders, in addition to adequate resources and means in place. Its sustainability will translate into reinforced capacity (information, expertise, awareness...) of MedProgramme stakeholders to address environmental challenges making use of a modular knowledge hub which will continue to evolve after the programme ending.

The contracting parties of the Barcelona Convention will be the custodians of the KM structure implemented for the MedProgramme and will carry forward the legacy of the MedProgramme by supporting informed decision-making, paving the way for more investments and interventions, and encouraging broader adoption and knowledge transfer to improve environmental security in the coastal areas of the Mediterranean.

GEF/UN Environment "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security" GEF ID 9607

Implementing Agencies

UN environment

European Bank for Reconstruction and Development

Leading Executing Agency

UN environment
United Nations Environment Programme

MAP
Mediterranean Action Plan
Barcelona Convention

Executing Partners

UNESCO
United Nations Educational, Scientific and Cultural Organization

International Hydrological Programme

European Investment Bank

IUCN

WWF

Global Water Partnership Mediterranean

PAP/RAC

Regional Activity Centre for Sustainable Consumption and Production

Plan Bleu

SPA/RAC

THE MEDITERRANEAN SEA PROGRAMME:
ENHANCING ENVIRONMENTAL SECURITY (2019 – 2024)

GENDER MAINSTREAMING STRATEGY

UN ENVIRONMENT/MEDITERRANEAN ACTION PLAN
OCTOBER 2018

This strategy was prepared during the Project Preparation Grant (PPG) phase of the MedProgramme (June – September 2018)

by: Debasmita Boral
Gender Consultant, Mediterranean Action Plan
e: debasmita.boral@gmail.com
t: (+254) 0700-225-234

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1. *Introduction*

1.1 *Defining Gender Mainstreaming – from 1997 to 2017*

In 2017, shortly after the 23rd Conference of the Parties (COP) in Bonn concluded with the 'Fiji Momentum for Implementation', the United Nations Framework Convention on Climate Change (UNFCCC) announced its pioneering Gender Action Plan. The COP23 Presidency underscored the priority of the Plan[1] to increase awareness of, and generate support for the development and effective implementation for, gender-responsive climate and environmental action. Showcasing not only the consensus of the State Parties on these key issues, this critical achievement encapsulates the growing international efforts towards gender mainstreaming and the integration of gender equality perspectives in sectoral policies and programs, since articulated by the UN Economic and Social Council (ECOSOC) twenty years ago.

In July 1997, the Group of Specialists on Mainstreaming, appointed by the ECOSOC, laid out the tenets of gender mainstreaming, which continue to spur and inform UN action:
"Gender Mainstreaming is the process of assessing the implications for women and men of any planned action, including legislation, policies or programs, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and social spheres so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal is to achieve gender equality".[2]

Elaborating upon this definition, the Division for the Advancement of Women on Gender Mainstreaming, added:
"Gender Mainstreaming requires more than a quantitative change in numbers of women and men participating in, or benefiting from, policies and programs. It requires a transformation of all sectoral policies at all levels, and of institutions, organizational practices, attitudes and systems that shape them so that they fully consider the realities, needs, and views of women."[3]

The conceptualization and definition of Gender Mainstreaming, as presented above, derives from, and builds on, the preceding conversation of inclusion of women and gendered considerations in development policy. To elucidate, it does not represent a 'totally' new approach – but rather, a unique take on gender and developmental policy antecedents dating back to the early 1970s. Functioning as a pivot, gender mainstreaming builds on the Gender and Development (GAD) approach, which differentiates itself from the preceding Women in Development (WID) and Women and Development (WAD) approach, by discarding the notion that gender perspectives should automatically entail the demarcation of women as a target group. The image below[4] visualizes the timeline of these different approached leading up to gender mainstreaming, the approach chosen for the Mediterranean Sea Program (MedProgramme): Enhancing Environmental Security Gender Strategy towards

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1 See *Recommendations of the Subsidiary Body of Implementation on Gender and Climate Change* (Agenda No. 20). UNFCCC. (2017)

2 See *Gender Mainstreaming: An Overview* for more. United Nations. (2002)

3 *Ibid.*

4 The image was developed by the author from: Rathgeber, E. "WID, WAD, GAD: Trends in Research and Practice". International Development Research Centre (Ottawa). Paper Presentation at the meetings of the Canadian Institute for the Advancement of Women held in Quebec City. (1988)

incorporating gender-responsive project outcomes, gender-sensitive policy formulations, and gender-aware decision-making.

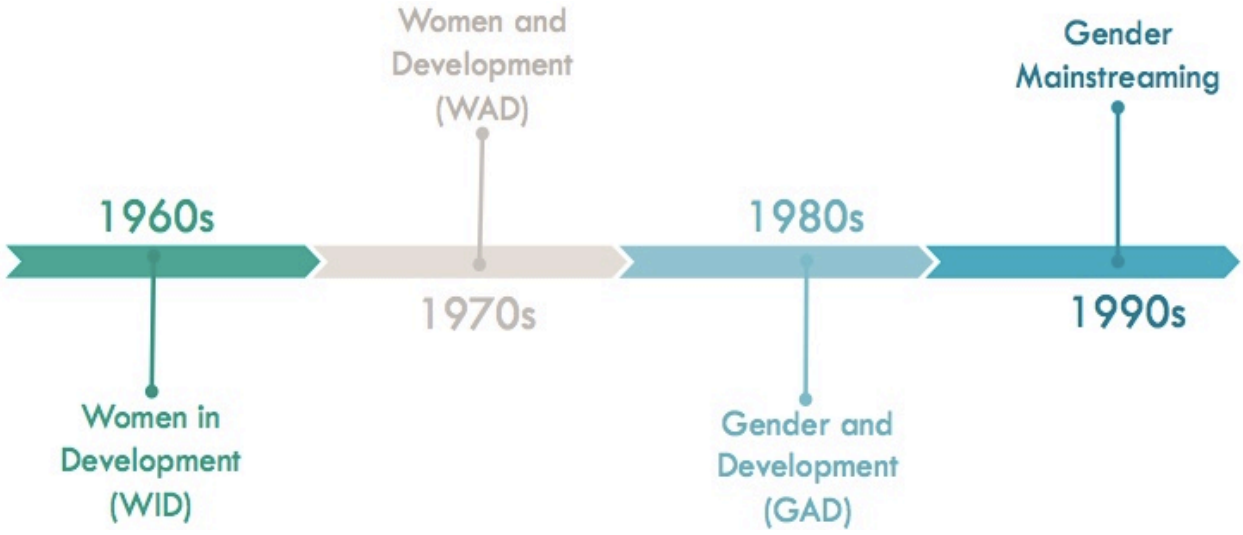


Figure 1: Timeline towards present-day Gender Mainstreaming approach. (adapted from Rathgeber [1988] by author)

1.2 *Global Environment Facility (GEF) and UN Environment*

Keeping with the above mandate of gender mainstreaming and promoting women's empowerment, both the GEF and UN Environment have prioritized delivering inclusive and gender-responsive environmental results, and adaptation and mitigation solutions towards climate risks.

Having launched its initial gender policy in 2011, the GEF approved a reinforced policy in November 2017[5] at the 53rd Council Meeting, shifting the focus from a *'gender-aware, do no harm'* approach to a *'gender-responsive, do good'* approach. This requires robust standards in the design, implementation and evaluation of GEF activities, and introducing measures that will allow the GEF, over time, to better leverage strategic opportunities to address gender gaps critical to the achievement of global environment benefits.[6] More recently, the GEF-7 Programming Directions, prepared by the Secretariat in the April 2018 Stockholm meeting further clarifies the GEF's evolving and progressive gender strategy – by providing action points for each GEF focal point.[7] It lays out clear gender standards for each domain under the GEF, and for the MedProgramme, gender directives of the:

a. Biodiversity focal area (such as: assessments to understand gender-disaggregated biological resource, providing women and other natural resource-dependent groups equal partnership in protection management);
b. Climate Change focal area (such as: incorporating action points to address the different climate risks faced by men, women, boys and girls and providing adaptation alternatives that improve the status quo);

[5] See here for the latest GEF Gender Mainstreaming guide (EN). GEF. (2017) (publication)
[6] "A new Policy on Gender Equality for the GEF". GEF official website. (2017) (news update)
[7] GEF-7 Replenishment – Programming Directions. Meeting Report from the 4th meeting held at Stockholm, Sweden for the Seventh Replenishment of the GEF Trust Fund, in April 2018.

c. Chemicals and Waste focal area (such as: understanding the socioeconomic dynamics that expose men and women to different chemicals, as well as their biological implications),

d. IW focal area (such as: gender assessments and social analysis during project preparation, and differentiated reporting of output indicators and additional measures based on the GEF's Gender Action Plan[8])

are particularly relevant and have been incorporated as action points for the operationalization for this Strategy.

UN Environment recognizes the role of gender equality as a 'driver of sustainable environment development'[9], particularly to enhance environmental security and climate resilience; to assuage the stresses on natural resources and dependent communities, including unsustainable management of coastal resources; and to preserve the health of large marine ecosystems (like the Mediterranean) which provide environmental and economic services to coastal populaces. Overall, the organization focuses on the increased visibility and capacity of vulnerable groups in sustainable development policy- and decision-making. To that end, the agency has produced a lessons-learnt report[10], through gender case study compilation, on issues homologous with the overall MedProgramme agenda: gender integration in Integrated Coastal Zone Management (ICZM) and Integrated Water Resources Management (IWRM), marine and coastal pollution, coastal disaster risk reduction and climate change adaptation, coastal developmental planning, and advocacy for gender-inclusive marine ecosystem management and research.

1.3 *The MedProgramme Gender Mainstreaming Strategy*

The MedProgramme represents a pioneering effort, being the first GEF programmatic multi-focal initiative in the Mediterranean region, aiming to operationalize agreed-upon priority actions to reduce major transboundary environmental stresses in its coastal areas, while strengthening climate resilience and water security, as well as improving the health and livelihoods of coastal populations. The MedProgramme will be implemented in nine beneficiary countries sharing the Mediterranean basin: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia. The Lead GEF Agency is UN Environment[11]. Its eight Child Projects[12] cut across four different Focal Areas of the GEF (Biodiversity, Chemicals and Waste, Climate Change, and International Waters), and involve a wide spectrum of developmental and societal sectors, ranging from banking institutions, the private sector, government and non-government bodies, industry, research, media, and various other organizations.

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[8] *Ibid*, p. 55.

[9] *Gender Equality and the Environment: Policy and Strategy*. UN Environment. (2015)

[10] *Regional Seas Reports and Studies No. 207* (forthcoming). Marine and Coastal Ecosystems Unit. UN Environment. (2018)

[11] GEF Lead Agency: UN Environment. Other GEF Agencies: European Bank for Reconstruction and Development (EBRD). Executing Partners: UNEP/MAP, European Investment Bank (EIB), UNESCO International Hydrological Program (IHP), Global Water Partnership (GWP) Med, World Wildlife Fund (WWF), MEDPOL, UNIDO, and IUCN.

[12] At the time of its approval in 2016, the MedProgramme comprised of seven Child Projects. Subsequently, UN Environment/MAP developed a Mediterranean-focused climate change adaptation project, for financing through the Special Climate Change Fund (SCCF). It was agreed by the UN Environment/MAP, UN Environment and the GEF that this SCCF project would be managed, for all intents and purposes, as an additional Child Project of the MedProgramme. Hence, the number of Child Projects now stands at eight.

Seeking to maintain funding agency (GEF) and lead agency (UN Environment) organizational priorities outlined above, as well as preparing for a proactive GEF-7 ready portfolio, this Gender Mainstreaming Strategy, developed in the Project Preparation Grant (PPG – between June to September, finalized in October) phase, will: provide tailored action points to improve the gender status quo in the countries; place gender-responsive activities and gender-aware policy-making at the core of the MedProgramme agenda; and partake as well as further the existing efforts on gender equality, to leverage opportunities for inclusive and accessible environmental and social co-benefits.

2. *Methodology*

This Gender Mainstreaming Strategy (GMS), as contextualized above, has been tailored for the MedProgramme. Developed with a two-fold framework, the Strategy is informed by: (a) political ecology and gender studies literature[13](presented below) to establish a mixed methodology, and (b) Program component- and country-level diagnostics to identify the baseline scenario (Section 3), which the Strategy expects to positively impact with strategic, selective and appropriate mainstreaming measures in project-specific contexts.

At the outset, this Strategy adopts a political ecology lens, which aims to influence policy development, environmental action and investment programs by 'offering chains of explanations' rather than single and disjointed root causes. This perspective, when combined with a gender-lens, highlights the socio-political dimensions of coastal and natural resource access, control, distribution and agency, which further govern issues such as environmental degradation, climate risks and resource management policies.
In the words of Rocheleau (1996), gender is relevant to a political ecology perspective as:
"A critical variable in shaping resource access and control, interacting with class, caste, race, culture and ethnicity, to shape process of ecological change, the struggle of men and women to sustain ecologically viable livelihoods, and the prospects of community for sustainable development."[14]

Thus, as the Gender Mainstreaming Strategy for the MedProgramme, this Strategy will espouse and embed the use of a combined political ecology- and gender-lens for the constituent projects. This will create a Program-wide focus (albeit, in different site-specific contexts) on understanding the spatially and temporally contingent ways in which gender issues, social relations, and the environment interact. This programmatic approach will, then, be able to consider the gamut of gendered dimensions present in the Mediterranean, such as: gender division of labor, male and female participation in labor, gendered environmental rights and responsibilities, environmental politics and governance, and collective action and resilience.

Secondly, the importance of gender-relevant and vetted data to provide empirical evidence to the policy and program needs is prioritized. Thus, available data indicators (particularly,

[13] Bauhardt, C. & Harcourt, W. *Feminist Political Ecology and the Economics of Care*. (2018) has been a critical influence on this Gender Mainstreaming Strategy.
[14] Rocheleau, D. E. *Gender and Environment: A Feminist Political Ecology Perspective.* (1996)

from the World Bank Gender Data Portal and UNDP indices) and country-specific (and where available, local site-specific) statistics have been extensively used to justify the concerns raised by the Strategy. The data on each country has been collated through gender diagnostics of desk-reviewed literature and secondary statistics, which has further revealed the existing inconsistency and low relevance accorded to gender considerations and corresponding statistics within on-going environmental projects, programs and policies.

Thus, by using gender-relevant data to contextualize its priorities, the Strategy will attempt to set an example and highlight both the need to incorporate targeted and selective gender actions based on empirical data within the MedProgramme, as well as the urgency to bolster internal and country-level monitoring systems for the collection and reporting of sex-disaggregated, environmentally-related data from project, sub-national and national levels.

3. *Baseline Scenario for MedProgramme Components*

The MedProgramme builds on the significant achievements of the MedPartnership[15] and ClimVar & ICZM[16] GEF Projects. The latter have enriched the knowledge on the Mediterranean environment and unraveled the implications of climate change and variability in the region; strengthened countries' mutual trust, cooperation and common purpose; consolidated the partnership among countries, UN bodies, Civil Society Organizations, bilateral donors and the European Union; tested on the ground feasibility and effectiveness of technical and policy instruments aimed at addressing major present and future threats to environmental sustainability and climate-related impacts. However, despite these different successes, the two projects were limited by the lack of adequate gender-responsive planning in their sectoral strategies and programs. This represents a 'missed opportunity', as incorporating the gender-lens from project preparation phase through to the monitoring and evaluation phase aid in the mapping of links between gender and environment, as well as identifying positive synergy and improve social/gender and environment outcomes from the outset. This Gender Mainstreaming Strategy, which has been developed as an input in the MedProgramme's preparation phase with the scope of scaling up in parallel with the advancement of the program cycle, thus addresses the gender-blind baseline represented by earlier initiatives.

The MedProgramme represents a comprehensive and powerful response to the environmental and socioeconomic challenges faced by the Mediterranean, in light of continued degradation of coastal zones, growing impacts of climate variability, and loss of livelihoods and deterioration of social conditions. Its objective is to kick-start the implementation of agreed-upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas, while

[15] Strategic Partnership for the Mediterranean Large Marine Ecosystem-Regional Component: Implementation of Agreed Actions for the Protection of the Environmental Resources of the Mediterranean Sea and its Coastal Areas (MedPartnership) – GED ID 2600

[16] Integration of climatic variability and change into national strategies to implement the ICZM protocol in the Mediterranean (ClimVar & ICZM) – GED IF 3990.

strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations. The focus will be primarily on hotspots of land-based pollution, harmful chemicals and wastes (POPs and mercury), and excess nutrients; critical sections of the coastal zone particularly affected by climatic variability, freshwater stress and habitat degradation the efficient and sustainable management of priority marine protected areas; measuring progress to impacts and overall Program coherence. Dedicated Child Projects (eight) will prioritize each of these key issues. The Child Projects will be entry points for gender mainstreaming actions through gender assessments and action plans that determine targeted gender-responsive action through project objectives and outcomes at the project, local and national level.

The following table posits the hypothetical effects of a gender-blind approach to the MedProgramme components (the tentative child project – CP – is mentioned alongside), as opposed to mainstreaming robust gender outcomes within the same:

TABLE I: GENDER-BLIND v. GENDER-RESPONSIVE APPROACH

MedProgramme Component	CP	What is a *gender-blind* approach?	What is a *gender-responsive* approach?
Reduction of land-based pollution in priority coastal hotspots, and measuring progress to impacts	1.1	Top sources of land-based pollution, contaminating marine and coastal hotspots, result out of anthropogenic activities such as usage of heavy metals and untreated dumping in river systems, sewage, litter, plastic pollution, usage of pesticides and fertilizers and synthetic organic compounds.[17] Due to the ubiquitous access and usage of marine resources, the coastal populace is vulnerable to the detrimental effects of	Oxfam's *Handbook of Development and Relief* provides one of the pioneering accounts of the connections between poverty and environmental degradation, noting a *'downward spiral of cause and effect' – 'poverty can cause environmental degradation, as poor people over-exploit already strained resources, and environmental degradation causes further poverty as people are unable to find the resources to meet their daily needs.'*[18] Environmental change, climate disruptions and damage to marine systems and coastal zones have gendered impacts, and women and men shoulder these burdens differently. In what is identified as the *'feminization of poverty'* or women's increasing burden of and share in global poverty, economists and development analysts have observed that '*women constitute an estimated 70% of the world's poor people, and households headed by*

[17] Windom, H. L. "Contamination of marine environment from land-based sources" in *Marine Pollution Bulletin,* (Vol. 25, No. 1-4). (1992)

[18] Eade, D. & Williams, S. *The Oxfam Handbook of Development and Relief.* (1994)

	1.2	land-based pollutants, and therefore, marine pollutants, both in health and livelihood indicators.	*women alone…. are the world's poorest households as a general trend.*'[19] For example, environmental degradation-induced livelihood impacts are differentiated in coastal areas – fishing communities, based on local gender norms and informal nature of work, relegate remunerative activities (which often tend to be associated with risk, like 'going out to the waters) to the men, while women perform post-harvest work, which may not always be remunerated properly, if at all. The gendered allocation of remuneration, thus, creates a disparity in economic capital, and in turn impedes the capacity to adapt to environmental change and climate disruptions. Marine contaminants threaten both human health and the health of marine organisms. However, health impacts are gender-differentiated as well. Many marine and coastal contaminants are particularly dangerous for pregnant women and lactating mothers, as well as for fetal development.[20]
	1.3		

19 *Ibid.*

20 See*Global Gender Environment Outlook,* Section 2.5 for more. UN Environment. (2016)

Enhancing sustainability and climate resilience in coastal zones	2.1	According to a recent report[21], ocean-related activities in the Mediterranean Sea generate an annual economic value of 450 billion dollars with economic assets for coastal economies and communities amounting to 5.6 trillion dollars. The need for enhancing sustainability and climate resilience in the region is crucial, as the Mediterranean is experiencing a number of immediate coastal problems, which require both short-term and long-term coastal management. Regional scale studies indicate that the Mediterranean is particularly vulnerable to increased flooding and saltwater intrusion as sea levels rise.[22] The region has also been marked out as a 'hot spot of climate change', with an increase in air temperature range of 2.2°C to 5.1°C predicted over the period of 2080 – 2099.[23]	While impacts of environmental degradation and climate risks are undoubtedly severe for the entire coastal populaces, men and women, privileged and vulnerable communities, young and the elderly shoulder burdens unequally. Often the vulnerable and marginalized groups are limited by the exclusion of their needs and perspectives from regional negotiations and management policies. The immediate and long-term coastal problems being faced by the Mediterranean have implications for complex gender relations in the region, which are a kaleidoscope[24] of overlapping social, economic and cultural roles, spread across a diverse multitude of countries and communities. The European Mediterranean countries have distinct social patterns and gender norms, which differ from the Middle East and North Africa (MENA) Mediterranean countries, for example. Additionally, the varying political situations in the region also determine how women and men are able to access and leverage sustainable development opportunities to be able to cope with environmental degradation, pressures on natural resources and coastal and marine ecosystems, and climate risks. For the northern Mediterranean countries (the Western Balkan nations), labor market dynamics exhibit a significant gender gap: women's employment rates (especially for marginalized communities such as Romas) are lower, along with an existing gender wage gap. Since economic capital is among the important determinants of coping capacities to external shocks (in this case, water stress, degradation of coastal aquifers, loss of

[21] See *Reviving the Economy of the Mediterranean Sea: Actions for a Sustainable Future* for more. WWF and The Boston Consulting Group. (2017)

[22] Nicholls, R. J. & Hoozemans, F. M. N. "The Mediterranean: vulnerability to coastal implications of climate change" in *Ocean and Coastal Management,* (Vol. 31, No. 2-3). (1996)

[23] See *Climate Change and Energy in the Mediterranean* for more. European Investment Bank. (2008)

[24] See this report by the Union for the Mediterranean (UfM) regarding an action plan towards investing in gender equality in the region.

	2.2		coastal livelihoods, climate impacts et al), women (and other marginalized groups, including ethnic minorities) are more likely to be vulnerable. The 'double disadvantage' of the situation should also be reckoned with: due to lack of viable economic capital, vulnerable groups are often excluded from socio-political control over coastal zone and water resources (coastal aquifers, particularly) management policies – increasing the possibilities of exposure to the threats looming in the Mediterranean region. For MENA countries, coupled with barriers to the labor market and employment opportunities, women face institutionalized exclusion from civil society and political spheres. Decision-making power within the household and the polity is limited, reducing women's capacities to engage in the public sphere and gear development opportunities to safeguard their interests. In recent years, however, women have been capitalizing on opportunities presented by pluralistic interpretations of traditional gender norms and entering both the work force and the public space. The gains achieved through social change in this region may not keep pace with the risks and threats arising from the lack of proper management policies for natural resources and the coastal zone, and growing threats of climate change and environmental degradation in the region. As with the European Mediterranean countries, burdens of emerging risks and shocks may fall on the vulnerable groups. *(Refer to footnote 12, for more information on the SCCF Project – and why it is a Child Project under the MedProgramme)*
	SCCF		
Protecting marine biodiversity	3.1	The Mediterranean's biodiversity underpins the ability of ecosystems	Until recently, there was a lacuna in the empirical and normative literature on gender and marine biodiversity. However,

		to provide humans with the services they require to survive – although as Hooper shows, delineating the role of biodiversity in ecosystem services and relative roles of difference functional groups has been extremely complex. The Mediterranean's predominantly coastal population is increasingly threatened by the loss of biodiversity, due to mismanagement and unsustainable use, and this situation is projected to worsen with the coupled effects of human-induced climate impacts, such as warming sea surface temperatures, altering ocean chemistry and increasing run-off of land-based pollutants and sediments.[25] Resuscitating and protecting these marine ecosystems, which form the resource base for coastal economic and social activities, requires all possible expedition.	with reviewed studies on the role of gender with respect to conservation, particularly that of mangroves and their ecological significance, brought to light the clear link between gender and biodiversity and conservation outcomes. According to the Convention on Biological Diversity, considering gender issues in relation to biodiversity involves identifying the gender roles and relations have on the use, management and conservation of biodiversity. To begin with, this MedProgramme component should address the knowledge gap regarding gendered biodiversity practices in the region, through extensive data and information collection, stakeholder consultations and focused-group discussions. This would contribute towards gender-responsive policies within marine resource management and biodiversity conservation plans that can increase the sustainability of outcomes by incorporating artisanal and traditional knowledge gathered from both women and men. Exposing gender-differentiated biodiversity practices[26] will also help demarcate the different levels of harm caused by different groups (income-generating activities, traditionally relegated to men, may be more exploitative in some instances), as well as the inequalities in control of resources. Biodiversity conservation plans can be truly effective if they address poverty, inequality and resource access dynamics among coastal communities.[27]
Knowledge management and program coordination	4.1	Knowledge management and program coordination, if carried out with a top-down approach and without a stakeholder-facing participatory approach, risks excluding the needs	Robust coordination and knowledge management strategies panning the MedProgramme have to be operationalized to ensure its success. Given the breadth and value of the initiative, as well as the numerous partners and focus points, these strategies will ensure: stakeholder representation

[25] Lockwood, M. et al. "Marine biodiversity conservation governance and management: Regime requirements for global environmental change" in *Ocean and Coastal Management,* (Vol. 69). (2012)

[26] See the gender tab on *Convention on Biological Diversity*for more.

[27] The Secretariat of the Convention on Biological Diversity hosted a meeting in Bangkok (December 2017) to develop training material to advance gender inclusion in biodiversity planning in the Asia-Pacific region. See the reporting here.

		and concerns of beneficiaries. Additionally, procedural and red tape hurdles tend to disproportionately affect those with limited resources and access to governing mechanisms, support organizations and implementing agencies.	and engagement, technical and administrative coordination of the program; establish a commune of practice and initiative among different stakeholders and partners; management of knowledge generated on an accessible platform (both data and normative) as well as dissemination of lessons learnt and best practices in later stages of the program cycle; high-quality and timely systems for monitoring of the Program's progress to impacts. In tandem with a knowledge management and program coordination strategy, a gender mainstreaming strategy for the MedProgramme will be developed to provide critical gender-responsive research inputs for Programme components, as well as to espouse a gender-aware policy in the region, taking stock of the existent inequities and gender norms of the Mediterranean. Gender mainstreaming shall be pursued within the different Child Projects, with tailored gender assessments and action plans determining strategic and selective action to improve the baseline inequality within project- and country-specific dimensions. This will safeguard the interests and priorities of the vulnerable and marginalized communities among the Mediterranean coastal populaces, as well as increase the sustainability and inclusion of the MedProgramme's priorities in the region and contribute to the regional conversation on decreasing inequality, poverty and vulnerability.

4. *Baseline Scenario for MedProgramme Countries*

The nine Mediterranean countries participating in the MedProgramme (Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Libya, Montenegro, Morocco and Tunisia), face different developmental challenges and socioeconomic disparities, as seen from the country profiles, developed for this Gender Mainstreaming Strategy.. These data profiles borrow from UNDP's Human Development Index, Gender Inequality Index, and Gender

Development Index. Additionally, they refer to the Global Gender Gap Index (World Economic Forum) and compiles national-level poverty statistics (conducted by national authorities of the nine countries, as well as the World Bank, in some cases). These indices have differing methodologies, and are being employed, at the outset, as indicative (and *not* conclusive) measures of current levels of development, gender equality, and poverty and labor force participation.

As Booysen's research[28] shows, composite indices present both challenges and advantages. It should be noted that numerous fallacies have been identified in the methodologies employed in composite indexing. These indices are mainly quantitative, and present empirical and aggregate measures of complex development phenomena, making values apparently objective, at the cost of subjective nuances. Yet, these also remain invaluable as useful supplements to income-based development indicators, understanding relative degrees of development, simplifying complex measurement constructs as well as providing access to non-technical audiences. To balance this dichotomy, ranks have been removed in certain indices and have been linked in the footnoting, and the broader development categories (high/medium/low development) have been used.

TABLE II: HUMAN DEVELOPMENT INDEX (HDI)[29]

(out of 188 countries – United Nations Development Program – UNDP, 2018)

Defining the HDI: This index measures and combines three basic dimensions of human development (long and healthy life, knowledge and decent standard of living) and provides an overall socioeconomic landscape of a country.
Relevance of the HDI: Since socioeconomic capital and security are crucial determinants of the capacities to adapt towards natural resource stress, loss of coastal livelihoods, marine and environmental degradation, and climate risks, this index indicates how poised each country may be to consider different resource management, resilience, adaptation and mitigation options.
Indicative, not conclusive: In line with Booysen's argument, the HDI should be treated as indicative, not conclusive. It provides an overview of relative degree of development in a particular country but remains a 'synthetic indicator'. Recent research has shown the need to supplement the HDI with other indicators associated with economic and social cohesion, sound development strategies, and sustainability in growth models.[30]

Country	Rank	Relevance
Albania	68th	With 'high human development', Albania's capacity to adapt to climate risks and variability is pegged well. However, due to regional variation in poverty rates (high in the Kukës prefecture – 22% v. Gjirokastër prefecture (qarks) – 8%, in particular[31]) in the country, environmental services and social co-benefits may not be equitably shared.

[28] Booysen, F. "An Overview and Evaluation of Composite Indices of Development" in *Social Indicators Research,* (Vol. 59 No. 2). (2002)
[29] UNDP. (2018)
[30] Bilbao-Ubillos, J. "The Limits of *Human Development Index"* in *Sustainable Development,* (Vol. 21 No. 6). (2011)
[31] *Portraits of Poverty and Inequality in Albania.* INSTAT (Albanian Institute of Statistics) & World Bank. (2015)

Country	Rank	Relevance
Algeria	85th	With 'high human development', Algeria wields capital, largely derived from its oil economy, in readiness against climate shocks. However, due to high inequality in consumption, high unemployment rates (particularly, women and youth) and largely informal workforce[32], environmental services and social co-benefits may not be equitably shared.
Bosnia and Herzegovina (BiH)	77th	With 'high human development', BiH's capacity to adapt to climate risks and variability is pegged high and similar to Algeria. As a post-conflict nation, however, educational attainment and labor market access continue to be determined by poverty status[33] in the country, thus, environmental services and social co-benefits may not be shared.
Egypt	115th	With 'medium human development', Egypt's readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritize other pressing developmental pursuits.[34] With a volatile political climate, and entrenched gender inequality, environmental services and social co-benefits may not be equitably shared.
Lebanon	80th	With 'high human development', Lebanon's capacity to adapt to climate risks and variability is pegged well. However, due to high concentration of income and wealth in the country[35] and the spill-over effects of the Syrian civil war, environmental services and social co-benefits may not be equitably shared.
Libya	108th	With 'medium human development', Libya's readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritize other seemingly pressing developmental pursuits. With a volatile political climate challenging economic stability[36], dependence on oil production and entrenched gender inequality, environmental services and social co-benefits may not be equitably shared.
Montenegro	50th	With 'very high human development', Montenegro is poised to adapt well to climate risks. However, due to historic ethnic exclusionism (the Roma population, in particular[37]) in the country, environmental services and social co-benefits may not be equitably shared.
Morocco	123rd	With 'medium human development', Morocco's readiness towards adopting climate risk mitigation and adaptation opportunities might be limited, wherein the government may prioritize other seemingly pressing developmental pursuits. Pronounced gender inequality in the country slows economic growth[38], environmental services and social co-benefits may not be equitably shared.
Tunisia	95th	With 'high human development', Tunisia's capacity to adapt to climate risks and variability is pegged well. However, due to concentration of income and wealth in the country[39], high unemployment rates (particularly, youth) and economic unrest challenging political stability, environmental services and social co-benefits may not be equitably shared.

32 "Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)
33 *Poverty and Inequality in BiH.* World Bank. (2011)
34 *Inequalities, Uprisings and Conflicts in the Arab World. MENA Monitor.* World Bank. (2015)
35 Assouad, L. "Rethinking the Lebanese Economic Miracle". WID. (2017)
36 *Libya Economic Outlook.* World Bank. (2018)
37 *Gender at a Glance: Montenegro.* World Bank. (2015)
38 "Reducing gender inequality in Morocco can boost growth". IMF. (2017)
39 *Tunisia: Economic Outlook.* World Bank. (2018)

TABLE III: GENDER INEQUALITY INDEX (GII)[40]

(out of 159 countries – UNDP, 2018)

Defining the GII: This index, showing inequality in achievement between men and women in three aspects (reproductive health, empowerment and labor market), provides a useful gender baseline in terms of health equity, economic capital and financial access, speaking to the gender opportunities of men and women in the countries. This baseline has been elaborated upon using existing gender studies literature on each country.
Relevance of the GII: This index provides a primary understanding of the different levels of achievements on basic development indicators between men and women. This displays useful features towards the gender status quo hypotheses, which could then be derived in the context of this project.
Indicative, not conclusive: In line with Booysen's argument, the GII should be treated as indicative, not conclusive. Pernmayer finds that the functional form of the index could be unclear, particularly the inclusion of indicators of relative performance of women vis-à-vis men, along with absolute women-specific indicators.[41]

Country	Rank	Relevance
Albania	52nd	In Albania, traditional beliefs continue to influence gender roles, particularly in the household setting. During socialist rule, although policies promoted women's presence in the public sphere (through education and work), the continued responsibility for unpaid domestic work remained with women (leading to time poverty or 'double shifts'). During the transition to a capitalist economy, gender equality laws were not put in place for private sector jobs, and thus, employment for Albanian women could not be safeguarded.[42]
Algeria	100th	In Algeria, social codes affect women's empowerment. Since labor force participation disparity is pronounced, women lag behind on economic capital needed to combat risks arising from environmental degradation, mismanagement of water and coastal resources, and climate shocks. According to the Arab Barometer, in 2017, compared to 2013, a greater number of Algerians regarded higher education as more important for men, as well as reinforced the notion that married women should be ideally relegated to household duties.[43] This also makes them dependent on the patrilocal structure of Algerian society.
Bosnia and Herzegovina (BiH)	37th	Despite progress in closing the gender gap in endowments - mainly in education among the younger generation - BiH still faces a number of gender issues, particularly in women's access to economic and employment opportunities. Alongside improved educational outcomes, significant gaps remain in labor market participation and employment in favor of men, as women continue to face challenges in accessing economic opportunities.[44] Additional obstacles continue to exist for women in exercising agency (the power to choose and decide options to preserve to act for oneself), particularly managing domestic work, lack of political representation and participation as well as widespread gender-based violence.

40 UNDP. (2018)
41 Pernmayer, I. "A Critical Assessment of the UNDP's Gender Inequality Index" in *Feminist Economics,* (Vol. 19 No. 2). (2013)
42 World Bank. (2012)
43 "Droits des femmes en Algérie: les lois progressent mais pas les mentalités". Middle East Eye. (2017)
44 *BiH: Economic Mobility, Jobs and Gender*. World Bank. (2016)

Country	Rank	Relevance
Egypt	101st	Political, social and economic capitals are not equitably distributed among Egyptian men and women. Without access to these vital resources, the risks identified by MedProgramme will only burden those at the lower echelons of society. Despite improvement of young women's education levels in recent times (Egypt's rank improved by 34 spots in the latest GII quoted here), the workforce participation and retention rates remain unperturbed, signaling a stagnated job market and scarce employment opportunities.[45] Egypt also faces some particular gender-specific barriers in high numbers, such as FGM and sexual harassment, arising out of sexual inequality between men and women in the country.
Lebanon	85th	Lebanese women face the least gender disparity in the Arab world with their male counterparts. Despite this, discriminatory social codes, particularly the focus on intersectional civil and family laws, continue to impede women's empowerment.[46] Although the gender gaps at higher levels of education are reversing, women continue to face entry barriers to the labor market as well as time poverty due to the predominance of unpaid care work.
Libya	38th	Women in Libya have had a long history of actively participating in the economic, social and political development of the country, going back to the 1950s. Yet, with Gaddafi's introduction of the *Declaration of the Authority of the People* in 1977 and the *Great Green Charter of Human Rights in the Age of the Masses* in 1988, these rights were compromised at a substantive level.[47] Furthermore, traditional family laws, as a general trend in the MENA region, continue to disadvantage women and exacerbate their time poverty. The 2011 uprisings signaled that women were entering the public space, yet changes in women's empowerment has been sluggish in the past seven years.
Montenegro	32nd	Montenegro is relatively advanced in terms of progress towards gender equality. This enhances the capacities of Montenegrin men and women to face climate-risks and capitalize on adaptation opportunities. However, gender-inequitable dynamics remain in important determinants such as access to labor markets, health equity et al, rendering certain demographics vulnerable.
Morocco	119th	Political, social and economic capitals are not equitably distributed among Moroccan men and women. Without access to these vital resources, climate risks will only burden those at the lower echelons of society. Gender equity in labor force participation is one of the lowest in the world[48], disadvantaging women further: women lag behind on economic capital needed to combat climate shocks and risks.
Tunisia	63rd	In Tunisia, traditional social codes affect women's empowerment. Since labor force participation disparity is thoroughly pronounced, women lag behind on economic capital needed to combat climate shocks and risks. This also makes them dependent on the patrilocal structure of Tunisian society. However, the January 2011 uprisings signaled that women were entering the public space, leveraging opportunities for their economic empowerment,[49] although it remains to be seen if the force of this societal shift can keep pace with climate risks.

45 *Egypt: Country Gender Assessment.* World Bank. (2010)
46 *Lebanon: Country Gender Assessment.* European Union. (2015)
47 *Libya: Country Profile.* Gender Concerns International. (2015)
48 *Morocco: Country Gender Assessment*. World Bank. (2015)
49 *Gender in MENA Projects: Tunisia*. World Bank. (2011)

TABLE IV: GENDER DEVELOPMENT INDEX (GDI)[50]

(grouped in 5 categories, 1: high equality to 5: low equality – UNDP, 2018)

& GLOBAL GENDER GAP INDEX (GGI)[51]

(out of 144 countries – World Economic Forum – WEF, 2017)

Defining the GDI & GGI: The GDI (UNDP) index shows the ratio of female to male HDI values. GDI expresses values in deviation, hence, in order to facilitate understanding GDI grouped categories have been used (as grouped by UNDP) to show the absolute deviation from gender parity in HDI values. This further reiterates the results of the HDI and GII (also by UNDP), and shows the real gender gap in human development achievements.

The GGI (WEF) benchmarks 144 countries on their progress towards gender parity on four thematic dimensions – economic participation and opportunity, educational attainment, health and survival, and political empowerment. The Index benchmarks national gender gaps on economic, political, education- and health-based criteria, and provides country rankings that allow for effective comparisons across regions and income groups, over time.

Relevance of the GDI & GII: Since the GDI and GGI use different methodologies, and are conducted by different agencies, this report does not suggest a causality between the two indices. However, a correlation is undeniable, and both indices pick up similar rates of gender disparity in the MedProgramme countries.

Indicative, not conclusive: In line with Booysen's argument, the GDI & GII should be treated as indicative, not conclusive. Geake Dijkstra and Hanmer find that although gender-related development indices have increased attention towards 'feminization of poverty and underdevelopment', more robust data needs and indicators are required to create aggregate indices that are sensitive to contemporary trends in gendered privation, particularly with the categorization of 'women'.[52]

Country	GDI – Group	GGI – Rank	Relevance
Albania	Medium-high equality	38th	Despite being categorized as a country with high HDI, a pronounced gender gap in Albania is evinced from the grouping and ranking.
Algeria	Low equality	127th	Algeria, with Tunisia, shows the greatest disparity in development and gender equity rankings. Despite being categorized as a country with high HDI, an entrenched gender gap is revealed.
Bosnia and Herzegovina (BiH)	Medium-low equality	66th	Despite being categorized as a country with high HDI, a pronounced gender gap in BiH is evinced from the grouping and ranking.
Egypt	Low equality	134th	The gender gap in Egypt is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Lebanon	Low equality	137th	The gender gap in Lebanon is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.

50 UNDP. (2018)

51 WEF. (2017)

52 Geske Dijkstra, A. & Hanmer, L. C. "Measuring Socio-Economic Gender Inequality: Towards an Alternative to the UNDP Gender Index" in *Feminist Economics,* (Vol. 6, No. 2). (2000)

Country	GDI – Group	GGI – Rank	Relevance
Libya	Medium-high equality	Not available	NA
Montenegro	Medium-high equality	77th	Although Montenegro features among the upper categories of the previous indices, this reveals a more entrenched gender gap. Women lag behind their male counterparts, in a greater amount than expected, despite very high human development achievements in the country.
Morocco	Low equality	136th	The gender gap in Morocco is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Tunisia	Medium-low equality	117th	Tunisia, with Algeria, shows the greatest disparity in development and gender equity rankings. Despite being categorized as a country with high HDI, an entrenched gender gap is revealed.

TABLE V: SOCIOECONOMIC FACTORS

Note: This table is compiled from various sources, and determines poverty levels (according to USAID income grouping), rural-urban divide and labor force participation parity in the MedProgramme countries.
***Poverty Level:** Environmental degradation and climate change is a threat multiplier, and often its impacts combine with poverty, hence this is an important indicator, corroborating HDI ranking. To illustrate this, the Multidimensional Poverty Index has been used. (The Oxford Poverty and Human Development Institute (OPHI), and UNDP calculate the MPI, for measuring acute poverty in developing countries. It complements traditional income-based poverty measures by capturing the severe deprivations with regard to different indicators: education, health, and living standards. The index not only identifies those living in multidimensional poverty, but the extent (or intensity) of their poverty. The MPI can help the effective allocation of resources by making possible the targeting of those with the greatest intensity of poverty; it can help address some SDGs strategically and monitor impacts of policy intervention.[53]
***Rural-Urban Divide:** Climate risks take different forms in rural and urban areas, but lack of development and investment in rural areas (particularly in the Mediterranean) often impedes adaptive capacities of vulnerable demographics, who also derive their livelihoods (in this case, coastal livelihoods) from managed and natural resources.
***Labor force participation parity (% of working age population active)[54]:** In the Mediterranean, one of the prime arenas of gender disparity is labor force participation parity. The region is plagued with high unemployment rates[55] (12.5% average), and this phenomenon remains a gendered one: women and youth are less likely to be employed than men, as a general trend. Additionally, the existing gap in labor force participation indicates that women possess less economic capital, and are limited to gendered (mostly unpaid care work) roles. This directly correlates to lessened participation in coastal economies and scarce or unstable livelihoods; lack of decision-making power both within the household and larger policy frameworks such as coastal resource use and water management; and, greater exposure to repercussions of marine environmental degradation, water stress and potential climate risks (which often acts as a threat multiplier, in this context).

53 See UNDP's Technical Notes (2016) for more.
54 *World Employment and Social Outlook: Trends for Women.* ILO. (2017)
55 "Unemployment: The Mediterranean Effect", World Bank. (2012)

Please find table contents on p. 21 (adjusted for footnoting).

Country	Poverty Indices	Rural-Urban	Labor Force Participation *(The gender gap is calculated as the difference between women's and men's labor force participation rates – simply, the number of working age men and women employed in a country, ILO 2016)*
Albania	**1.2%** below the **National Poverty Line.**[56] The Multidimensional Poverty Index reveals that 7.2% of Albanians are precariously 'near' poverty.	Diber and Kukes *qarks* (prefectures) show lowest rates of urbanization, and related issues: fragmentation, population decline, *et al.* Tirana and Durres, on the other hand, have the highest level of urbanization and best performance on demographic and geographic indicators.[57] Rural to urban migration is common, and often unbridled, leading to environmental complications as well as socioeconomic tussles.	**39.3% female** **60.7% male** During the socialist rule, the government policy of full employment boosted female participation and, as a consequence employment rates were higher than the average figures of the OECD countries. Policies such as investment in childcare facilities and female education stimulated women to enter and remain in the labor market. The market economy disadvantaged women by providing unstable employment opportunities, although education outcomes and employment sectoral options have improved in recent decades, leading to the widening of the gender gap in labor force participation.[58]

56 *Regional disparities in Albania.* UNDP. (2010)
57 *Regional disparities in Albania.* UNDP. (2010)
58 Garcia-Pereiro, T. "The Determinants of Female Employment in Albania". Open access on *ResearchGate*. (2016)

Algeria	**11.8%** below the **National Poverty Line.**[59] The MPI is unavailable for the country. However, the *Ligue Algérienne pour la Défense des Droits de l'Homme (LADDH)* reports that about 35% (14 million) of Algerians are in poverty.[60]	Poverty in Algeria has a distinctly urban face: 75% of the country's poor live in cities, undertaking informal jobs without access to social safety nets. Additionally, the disproportionate rates of urban poor show that the incidences of poverty in the Algerian Sahara are twice as much than among people living in the Steppe.[61]	**19.0% female** **70.4% male** Female labor force participation is low in Algeria, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.[62] However, according to ILO, the status quo is slowly altering (although not quite at an ideal pace), as there are marked difference between participation rates from 2011 to 2018.[63]
Bosnia and Herzegovina (BiH)	**15%** below the **National Poverty Line.**[64] The MPI reveals that 3.2% of the populace are precariously 'near' poverty.	BiH remains one of the most rural countries in Europe – with over 60% of its populace residing in rural areas.[65] The rural poverty rate is higher than urban areas, although income dynamics are similar.[66]	**34.4% female** **58% male** Between the years 1992-1995, Bosnia and Herzegovina went through a destructive war that resulted in mass emigration of around 50% of the total population. In the period after the war, although considerable number of refugees returned, it remains unclear how the jobs market was affected around the time. With the failing of the state's strong social protection services such as long-term care, child care and elderly care, and new categories of 'returnee refugees' and 'internally-displaced people', women bear the brunt of unpaid care work. Although more women attend university than men, they continue to face sociocultural barriers in entering the labor force.[67]

59 Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

60 See *Ligue Algérienne pour la Défense des Droits de l'Homme*(LADDH)for more.

61 "Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

62 Women face the highest proportion of legal restrictions (*de jure* discrimination) in the MENA region, as well as sociocultural norms (*de facto* discrimination) that stipulate limits to women's entry in the public, and working sphere. Young females are particularly discouraged from seeking employment.

63 This ILO report (2014) expounds on the factors affecting employment and labor force participation in Algeria.

64 *Poverty and Inequality in BiH.* World Bank. (2011)

65 *Rural Development in BiH: Myth and Reality.* UNDP. (2013)

66 *Poverty and Inequality in BiH.* World Bank. (2011)

67 This ILO report (2011) expounds on the factors affecting employment and gender in BiH.

Egypt	**27.8%** below the **National Poverty Line.**[68] Although extreme poverty has been virtually eradicated, Egypt is yet to turnaround the effects of the 2011 Arab Springs on its economy, leaving a third of Egyptians in precarious poverty. Particularly, high inflation over 2015-17 has lowered the purchasing power of households.[69]	Regional disparities continue to be a part of the country's landscape, with upper rural Egypt showing poverty rates three times higher than metropolitan Egypt.[70]	**22.8% female** **76.1% male** Female labor force participation is low in Egypt, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.[71] This is a significant loss as including women and enabling conditions to retain them in the workforce can boost the growth rate of the Egyptian economy.[72] In recent times, Egypt's performance on health and education indicators is improving, and this could change labor dynamics.
Lebanon	**30%** below the **Middle-Income-Country Poverty Line.**[73] Although GDP increase in Lebanon remains steady, the country faces the economic and social impact of the Syrian crisis. With the influx of 1.5 million refugees, Lebanon's public finances, service delivery, and the environment have been strained, increasing poverty headcount and unemployment.[74]	Lebanon's population is 87% urban, concentrated particularly in Beirut. The dynamics of urban poor show a pan-Mediterranean attribute: job creation is low, youth unemployment is high, and the vulnerable groups are trapped within the informal sector. In the rural areas, different causes entrench poverty: social protection and government service delivery are limited in these remote and mountainous regions.	**23.5% female** **70.3% male** Female labor force participation is low in Lebanon, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. This is a significant loss as including women and enabling conditions to retain them in the workforce can potentially boost the growth rate of the Lebanese economy.[75]Recent studies, however, show that Lebanon is leading the growth rate of female participation in labor force in the MENA region.[76]

68 *Egypt: Economic Outlook.*World Bank. (2018)
69 *Ibid.*
70 *Ibid.*
71 ILO. *Women in Business and Law.* (2014)
72 The Economic Research Forum (ERF), a regional forum on economic research in Arab countries, Turkey and Iran finds that encouraging the participation of women in the labor force, particularly the 'married women' demographic could usher in rapid growth for the Egyptian economy. See here.
73 *Lebanon: Rapid Poverty Assessment.* UNDP. (2016)
74 *Lebanon: Economic Outlook.* World Bank. (2017)
75 Find more on Lebanon on the ERF website.
76 See this AN-NAHAR coverage.

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Libya	**40%** below the **Middle-Income-Country Poverty Line.** Although economic growth is projected to rebound at around 15% in 2018, Libya's oil-dependence does not benefit the majority of the Libyan populace. High inflation coupled with weak basic service delivery have exacerbated socioeconomic exclusion in the country. Libya continues to experience conflict and insecurity.	Libya's population is 85% urban, concentrated particularly in Tripoli, Benghazi, Misrata and Bayda. The dynamics of urban poor show a pan-Mediterranean attribute: job creation is low, youth unemployment is high, and the vulnerable groups are trapped within the informal sector.	**27.8% female** **78.7% male** Female labor force participation is very low in Libya, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. Women often take on informal sector roles, particularly starting their own small business, despite receiving higher rates of advanced education than men (77% versus 63%). Movement in Libya for women is severely limited and is another deterrent to workforce participation.
Montenegro	**8.6%** below the **Middle-Income-Country Poverty Line.**[77] In Montenegro, there has been sustainable reduction in poverty in the last five years.	60.5% of the rural populace is classified poor.[78] In 2010, MONSTAT finds that not only are the rural populace are at a higher poverty risk, they also face more entrenched forms of poverty.[79]	**42.5% female** **55% male** As the country emerged from dirigisme, social property was privatized, and the economy sprouted 'grey areas' of undeclared or unregulated work. Post-conflict Montenegro is still reeling from the economic effects of war, which increased unemployment (17.8% in 2016)[80] and bolstered GDP loss. The Roma populace face entry barriers to the workforce, and employment rates are far below national averages: 47% Roma male and 8% Roma female are employed.
Morocco	**15.5%** below the **Lower-Middle-Income-Country**	3 million out of the 4 million poor live in rural areas[82]	**25% female** **74.1% male**

[77] The middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of $5.50/day. World Bank. (2017)

[78] MONSTAT. (2010)

[79] MIDAS Project, World Bank. (2016)

[80] World Bank. (2016)

[82] Fair Observer. (2017)

	Poverty Line.[81] In Morocco, there has been steady decline in poverty, though the underlying factors may be remittances, deceleration of population growth and macroeconomic stability. Inequalities between rich and poor are still abounding, and poverty essentially has a rural face in the country. The MPI also reveals that an additional 12.6% of Moroccans are dangerously 'near' poverty. Among the 15.5% poor, 5% are in 'severe' multidimensional poverty.	The subjective poverty rate has increased by 15% from 2004 figures in rural Morocco. Meanwhile, the urban poverty rate is half of the national average in 2001, and in 2014, stands at one-third.[83]	Female labor force participation is low in Morocco, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.[84] However, Morocco is entering a period potential demographic dividend, with the number of working-age population, relative to below 15 and above 64 years, increasing. This could either signal a potential economic boom or an unemployment crisis, if economic activity is not encouraged and made inclusive for the marginalized.[85]
Tunisia	**24.7%** below the **National Poverty Line.**[86] Poverty rates in Tunisia have seen a significant increase, from 15.5% (2010) to 24.7% (2018). Income disparities are high: the top 20% of Tunisians earn 46% of the national income, while the bottom 20% earn only 5.9%.[87] Civil unrest since the 2011	Rural areas in Tunisia remain marginalized and underprivileged, leading to high rates of rural to urban migration, particularly towards Greater Tunis and its agglomeration economies.[88]	**25.1% female** **71.3% male** Female labor force participation is low in Morocco, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.[89] Like Morocco, Tunisia faces crucial demographic transition in the coming years, yet barriers to the job market remain high. Young women are particularly vulnerable and face exclusion from economic activities.[90]

81 The lower-middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of $3.10/day. World Bank. (2017)

83 World Bank. (2018)

84 ILO. *Women in Business and Law.* (2014)

85 This IFAD report expounds on the factors affecting employment and gender in Morocco.

86 "Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

87 *Tunisia: Economic Outlook.*World Bank. (2018)

88 Amara, M., Jemmali, H. & Ayadi, M. "Rural-Urban Migration and Income Disparity in Tunisia". *Economic Research Forum.* (2017)

89 ILO. *Women in Business and Law.* (2014)

90 This ILO report expounds on the factors affecting employment and gender in Tunisia.

	has increased poverty and unemployment and discouraged entrepreneurs and private sector actors.		

TABLE VI: POLICY ENVIRONMENT, LEGAL TOOLS & INSTITUTIONS

This section explores the policy environment in the countries participating in the MedProgramme, and presents a potential list of gender stakeholders, relevant for the site-specific activities and collaborations during the project cycle. Legal tools, and enabling policies are crucial in ensuring gender inequality can be address through tangible and formal procedures. This table, compiled from various sources, particularly UN Women and the Equal Futures Partnership, thus, takes stock of international conventions, national laws and policies, and country-level stakeholders that can aid the MedProgramme in gender mainstreaming and narrowing socioeconomic gaps.

Country	Policy Tools, Legal Instruments, Institutions	Provisions
Albania	1994 – CEDAW	Albania signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1994.
	1998 (amended 2012) – Constitution of the Government of Albania	Article 18 establishes that all are equal before the law. No one may be unjustly discriminated against for reasons such as gender, race, religion, ethnicity, language, political, religious and philosophical beliefs.
	2016 - 2020 – National Strategy and Action Plan on Gender Equality	The Strategy and the Action Plan represent a commitment for 2016 – 2020, with concrete interventions towards economic empowerment of women and men, ensuring actual participation and engagement in political and public decision-making processes; reducing gender-based violence and domestic violence and strengthening the coordination and monitoring role of the national mechanism of gender equality.
	Institutions	Ministry of Social Welfare and Youth (with contribution of the Inter-Agency Working Group) Ministry of Justice National Referral Mechanisms
Algeria	1996 – CEDAW	Algeria signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1996.
	2008 – Constitution of the Government of Algeria	Under the Algerian Constitution, women enjoy the same civil and political rights as men and have the status of full citizens (Articles 29 and 31).
	Institutions	Ministry of National Solidarity, Family Affairs and Status of Women

Bosnia and Herzegovina (BiH)	1993 – CEDAW	BiH signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993.
	2006 – Law on Gender Equality	Bosnia's Gender Equality Law provides definitions for direct and indirect discrimination, as well as gender-based violence and sexual harassment. It mandates the creation of gender equality of gender equality strategies and programs in education, employment, access to resources, social protection, etc.
	2014 - 2017 – National Action Plan on Gender	The NAP addresses the gender rights principles laid out in the national law, and works towards improving women's participation in public life and decision-making, and particularly target the legacy of human trafficking and sexual slavery in the country's post-conflict context.
	Institutions	Agency for Gender Equality of Bosnia and Herzegovina Ministry of Human Rights and Refugees
Egypt	1981 – CEDAW	Egypt signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1981.
	2014 – Constitution of the Government of Egypt 1937 – Criminal Code of the Government of Egypt	The two main legislations protecting and supporting women are the Egyptian Constitution of 2014 (Articles 11, 53 and 214) and the Criminal Code of 1937. Crimes against women in Egypt are divided in two groups: misdemeanors and felonies. Misdemeanors, such as catcalling, are usually punished by fines with shortened trials. Felonies, like FGM and rape, are permanent criminal offences, punished by longer jail time.
	Integrated Gender Program (UNDP, UN Women and UNFPA)	The integrated program is helping to address multi-faceted challenges faced by women and young girl through three pillars of social, legal and economic empowerment. A similar EBRD project for the MENA region is active in Egypt as well.
	Institutions	National Council for Women

Lebanon	1997 – CEDAW 1936 – Constitution of the Government of Lebanon Women's International League for Peace and Feminism (WILPF) – ABAAD Resource Centre of Gender Equality Institutions	Lebanon signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in1997. The Lebanese legal system is primarily based on French Civil Code and Egyptian legal systems. Whilst there is no unified civil law in Lebanon, the Lebanese Constitution promulgated in 1926 articulates the principle of equality among all citizens (Articles 7 and 12). WILPF and ABAAD are leading national consultations to develop the first National Action Plan towards gender equality currently. The EU wrapped up its 'Gender Equity and Empowerment of Women in Lebanon' in early 2017, which has laid groundwork towards the adoption of a quota system for women in the country. National Commission for Lebanese Women
Libya	1989 – CEDAW 2011 - 2013 – Interim Constitutional Declaration of the Government of Libya	Libya signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1989. After the end of Gaddafi's rule, the UN-back interim government (Government of National Accord) has overseen the development of draft constitution. Women activists in Libya are currently in the process of including substantive demands[91] in the draft, which will be presented to the Libyan people for referendum. This Constitution will lay out the new framework for gender equality legal tools and policy environment in the coming years.
Montenegro	2006 – CEDAW 2007 – Law on Gender Equality 2008 – Action Plan to Achieve Gender Equality in Montenegro – PAPRR Institutions	Montenegro signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 2006. The first Law on Gender Equality was adopted in July 2007. The Law on Amendments to the Law on Gender Equality was adopted in June 2015, in line with international specifications of the UN, the EU, and the Council of Europe. This document was drafted in the context of the accession of Montenegro to the EU, based on CEDAW. Action Plan is updated every 4 years, and out of the critical areas covered in Beijing Declaration, Montenegro has opted for 9. The Ministry of Human and Minority Rights The Department of Gender Equality Affairs
Morocco	1993 – CEDAW 2011 – Constitution of the Government of Morocco	Morocco signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993. Article 19 establishes that men and women should enjoy equal rights and freedoms in all civil, political, economic, social, cultural and environmental matters.

[91] *Libya Women's Demands in the Constitution*(UNDP-led Cairo consultations). (2017)

	2013 – IKRAM	The Government Plan for Equality was developed by the Government of Morocco along with key stakeholders. .
	Institutions	The Ministry of Human Rights The Ministry of Family, Solidarity, Equality and Social Development
Tunisia	1985 – CEDAW	Tunisia signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1985. However, in April 2014, Tunisia officially lifted key reservations on the CEDAW.
	2014 – Constitution of the Government of Tunisia	The new constitution adopted in January 2014 includes strong protection for women's rights: Article 21 confirms equality of rights and duties; Article 34 guarantees women's representation in all elected bodies; and, Article 46 ensures protection of human rights.
	2015 - 2018 – Gender Equality Promotion Program in Tunisia (EU-Tunisia)	The financing agreement of the EU-Tunisia program was signed in April 2015. It aims to contribute to achieving gender equality in Tunisia by reducing inequalities at national, regional and local levels.
	Institutions	The National Council of Peers for Equality and Equal Opportunities between Women and Men Ministry of Women, Family and Children

5. *The MedProgramme's Gender Approach, Target and Components*

5.1 *Means to an End: Transformative Gender Mainstreaming Towards Gender Equality*

The conversation on gender mainstreaming to mobilize efforts on gender equality and reduction of discriminatory gender practices and social norms has gained currency as an intellectual concern, technical solution and international consensus. However, the discursive landscape of gender equality has shaped and reconfigured what gender mainstreaming could potentially achieve in different contexts, particularly– *the vision of equality* as sameness, which aspires to a gender-neutral world where women are treated according to the same principles, standards and norms as men, enjoying equal rights and opportunities; and, *the approach of difference or reversal*, which problematizes the existence of unquestioned patriarchal norms, reconstructing the political by seeking recognition of non-hegemonic gendered identities that have been treated as different in comparison to male normative identities and cultures.[92]

This Gender Mainstreaming Strategy adopts the latter transformative approach ('the approach of difference or reversal'), positing a gender equality vision for the MedProgramme that questions established categories and implements positive action measures towards gender-responsive actions in the Mediterranean region. In effect, gender mainstreaming is

[92] Verloo, M. *Multiple Meanings of Gender Equality: A critical frame analysis of gender policies in Europe*, p. 23. (2008)

therefore not an end (goal) of the MedProgramme– rather, a means (process) to an end. This approach reflects also the normative standards defined by the European Institute for Gender Equality (EIGE), which stipulates the importance of identifying gender mainstreaming as a process because it:

"Ensures that policy-making and legislative work is of higher quality and has a greater relevance for society, because it makes policies respond more effectively to the needs of all citizens – women and men, girls and boys. Gender mainstreaming makes public interventions more effective and ensures that inequalities are not perpetuated.

It does not only aim to avoid the creation or reinforcement of inequalities, which can have adverse effects on both women and men. It also implies analyzing the existing situation, with the purpose of identifying inequalities, and developing policies which aim to redress these inequalities, and undo the mechanisms that caused them".[93]

5.2 *Targets and Components of the MedProgramme's Gender Strategy*

Based on the above conceptual hinterland, this Strategy has identified three targets, that the eight Child Projects will address through their tailored assessments and action plans (Section 6):

a. Address *gender-blind* hurdles with *gender-differentiated* consequences.

Although formal gender equality rights and guarantees are almost ubiquitous in the Mediterranean nations, this Strategy recognizes that gender-neutral policy language may not result in gender-egalitarian outcomes, when implemented in a gendered environment, influenced by gender imbalances and biases.[94] The neutral policies and laws, which are veritably gender-blind, often work in concert with social tenets, traditional norms, constitutional interpretations, and cultural expectations in ways that may stymie the advancement of gender-responsive practices. Thus, in tandem with country partners and implementing agencies, the MedProgramme will stipulate the analysis of potential gender-neutral hurdles in project- and site-specific contexts to develop targeted action towards addressing the gender-differentiated consequences.

BOX 1: ***Female entrepreneurship in Mediterranean faces gender-blind hurdles.***

The World Bank reports that seemingly gender-neutral barriers such as cumbersome and costly procedures for opening a business and uncertain chances of recovering assets from a failed venture often have gender-differentiated consequences, notably deterring women's entrepreneurship in the Mediterranean region. Thus, gender-neutral laws, when implemented and interpreted in gendered contexts, often create ambiguities and unintended consequences for the disadvantaged. This also relates to legal inconsistencies and opaqueness afforded to gender-neutral policy language and laws by the fluid interpretation and precedence given to family law and measures, which are often derived from traditional sociocultural norms.

Source: The Environment for Women's Entrepreneurship in the Middle East and North Africa. The World Bank. (2008).

[93] See *Good Practices in Gender Mainstreaming,* a technical guide by EIGE.

[94] See *The Environment for Women's Entrepreneurship in MENA*, p. 52. The World Bank. (2008)

b. Mitigate *gender-specific* barriers and *discriminatory* norms.

Certain barriers and discriminatory norms are framed with gender-specificity, targeting one gender or more, against normative ideals that stipulate hegemonic social identities. Gender-specific barriers have tangible and invisible discriminatory outcomes, prejudices and stigma, and are often accepted, condoned and tolerated within the larger social framework. To address these barriers, attention, awareness and resources must be accorded to address the effects of the multiplicity of social differences and gender norms to usher in enduring change and assuage the gender burdens on specific demographic groups. The MedProgramme will, hence, develop dedicated project- and country-specific gender assessments and gender action plans for each of its constituent projects and from the preparation phase through to the concluding monitoring and evaluation stage of the project cycle, with objectives (relating to broader project objectives), transformative outcomes (relating to the wider focus of the project), means of verification and indicators.

BOX 2: ***Labor participation has gender-specific barriers in the Mediterranean.***

The Union for the Mediterranean, on the occasion of its Ministerial Conference in Barcelona (2015), brought the focus on the importance of fostering women's participation in economic life and on its obstacles in the region: women's low presence in paid labor, low wages – with lower wages of 10 – 40%, and a low level of access to positions of responsibility and decision-making, These gender-specific barriers are exacerbated by the current unequal share of care, domestic and reproductive unpaid labor performed by women in the Mediterranean. Women also face discrimination, violence and legal inequalities, which impede their ability to leverage opportunities towards empowerment and independence.

Source: Visions and Actions to Promote Gender Equality in the Mediterranean. The Union for the Mediterranean. (2017).

c. Scale up *gender-sensitive* policies and deliver *gender-responsive* outcomes.

Building on the knowledge and analysis of gender-blind and gender-specific barriers, the MedProgramme will have the imperative to use consultative and participatory tools to conduct gender-differentiated beneficiary assessments and formulate gender-sensitive policies to address the same. These gender-sensitive policies will provide the basis for gender-responsive outcomes within the results framework of the different projects, by bringing transformative change towards[95]: promoting equitable access to goods, services, status, and decision-making power (both within policy institutions and households); expanding the subjective and objective range of legal, social and psychological choices available to both men and women; breaking gender stereotypes, norms and patterns; and, providing the conducive environment, through capacity-building in policy institutions, governance structures and local bodies and awareness-raising among communities (particularly, male sensitization), for a pan-Mediterranean gender mainstreaming effort that is verifiable on all three accounts of accountability, transparency and incentive mechanisms.

To scale up and deliver these policies and actions, the MedProgramme will stipulate gender-budget lines within the constituent projects, as dedicated resources need to be mobilized for positive impacts on the gender gap in the region.

[95] See *Good Practices in Gender Mainstreaming,* a technical guide by EIGE.

BOX 3: *Agricultural reform requires gender-sensitive policies in the Mediterranean.*
Women's contribution to agricultural labor (particularly smallholder farming) in the Mediterranean Basin is significant: providing diversified income sources to households, creating empowerment opportunities, and boosting national agricultural and economic production. However, this contribution is often underplayed and misrepresented – although women undertake the time-consuming aspects of agricultural work, they often do so without or with scarce pay. Land ownership and tenure security in the Mediterranean displays gendered disparities as well, with succession laws and social customs in effect. FAO's reform framework for agriculture in the region, as highlighted in the May 2018 *Regional Conference for the Near East*, showcases these issues through the "Promoting Food Security, Blue Growth, and Empowerment of Small-Scale Farmers and Women in the MENA region" policy document.
Source: "Mediterranean Women in Rural and Agricultural Communities: Double Jeopardy, Multiple Opportunities". International Centre for Advanced Mediterranean Agronomic Studies. (2018).

5.3 *Visualization of the MedProgramme's Gender Strategy*

Based their justification and review of peer examples, this Strategy has identified the following components for the MedProgramme's gender targets, which reflect the types of actions that will be implemented by the Child Projects, visualized below:

Please see visual from p.14.

TARGETS AND COMPONENTS – MEDPROGRAMME GENDER STRATEGY



ADDRESS GENDER-BLIND HURDLES WITH GENDER-DIFFERENTIATED IMPACTS

- ENSURE GENDER-EQUITABLE PARTICIPATION THROUGH INCENTIVES AND CONDUCIVE MILIEUS FOR THE DISADVANTAGED
- INITIATE DIALOGUE ABOUT THE IMPACTS OF GENDER-BLIND HURDLES AND HOW TO ADDRESS THEM AMONG STAKEHOLDERS
- CAPACITY BUILD TOWARDS STRONGER ACCESS AND ASSOCIATION FOR WOMEN TO ENSURE BENEFITS FROM BENEFICIARY NETWORKS

MITIGATE GENDER-SPECIFIC BARRIERS AND DISCRIMINATORY NORMS

- IDENTIFY GENDER-DISCRIMINATORY BARRIERS TO PROGRAMME OUTCOMES AND ADDRESS THEM WITHIN PROJECT RESULTS
- PROVIDE ACCESS TO POLICY AND PLANNING TOWARDS MORE INCLUSIVE ENVIRONMENTAL GOVERNANCE, RESILIENCE STRATEGIES
- LIAISE WITH LOCAL AND NATIONAL STAKEHOLDERS ON REFORM ADVOCACY

SCALE UP GENDER-SENSITIVE POLICIES & DELIVER GENDER-RESPONSIVE OUTCOMES

- EARMARK RESOURCES (GENDER-BUDGETING) AND IMPLEMENT TAILORED AND TARGETED ACTION POINTS TO TRANSLATE GENDER RHETORIC INTO VERIFIABLE OUTCOMES
- BUILD UP GENDER-RELATED ASSETS AND CAPACITIES (such as LOCAL WOMEN'S GROUPS AND THEIR INCLUSION IN POLICY NEGOTIATIONS AND MANAGEMENT STRATEGIES)
- DEDICATE RESOURCES TOWARDS MONITORING AND EVALUATION OF GENDER RESULTS, GENDER-DISAGGREGATED AND SOCIOECONOMIC DATA, BEST PRACTICES AND LESSONS LEARNT FOR FUTURE INTERVENTIONS

6. *Operationalizing the Strategy – the MED Approach*

Devising a gender mainstreaming strategy denotes only the very outset of a multi-stage policy cycle that requires consistent efforts of integration and consideration of gender perspectives, in each phase of the program and by all actors involved, to succeed.
To operationalize the Strategy, therefore, three necessary elements ('MED' – 5.1) have to be present and inform the different stages of execution, even if the content changes in real time to adequately meet the necessities of project- and site-specific contexts for the different Child Projects, as described below.
Further, a map (5.2) is presented of how the MED Gender Mainstreaming approach is expected to function.

6.1 *Defining the MED Approach*

The approach to be used to operationalize the Strategy is defined below:

a. Multidimensional.

A multidimensional approach ensures that gender is used as a principal analytical category – however not without context or functioning in a void. Linkages between gender, poverty, environmental justice, socioeconomic inclusion, ethnic diversity and customary practices must be identified, analyzed and considered in the formulation of inclusive environmental action and policy. Child Projects, hence, will have the autonomy to identify gender issues relevant to the project objectives and outcomes (gender assessments), and devise strategic as well as appropriate gender action plans to address these.

b. Empowering

Integrating empowerment as an operational imperative ensures that program objectives and technical components are geared towards environmental and socioeconomic co-benefits. This is necessary to convert gender-aware rhetoric and gender-responsive analysis into actionable points within project logframes (logical frameworks), and with dedicated resource allocation (gender-budgeting) – which have positive ramifications for the gender status quo in project-specific contexts both nationally and locally. Child Projects, hence, will ensure gender assessments and action plans dovetail with the locale of project activities, stakeholders involved, and ensure budgetary allocations to translate rhetoric towards actions with verifiable results.

c. Durable.

Durability is the hallmark of a successful strategy/ intervention/project or program. Gender-responsive actions must ensure a shelf life beyond the duration of the project cycle, with positive uptake among national and local stakeholders. Directing investment towards institutional and technical capacity-building, and ensuring ownership of project by stakeholders, will warrant exit strategies for the different Child Projects. Particularly, it will be a program-wide imperative to generate information and data on the linkages between environmental security, climate risks and gender specifically on the Mediterranean region – while, building up capacities of national and local stakeholders to address these in a holistic manner, beyond the duration of the project cycle.

Please see the visualization of the MED approach – and what it entails for Child Projects and the overall MedProgramme below on p.36.

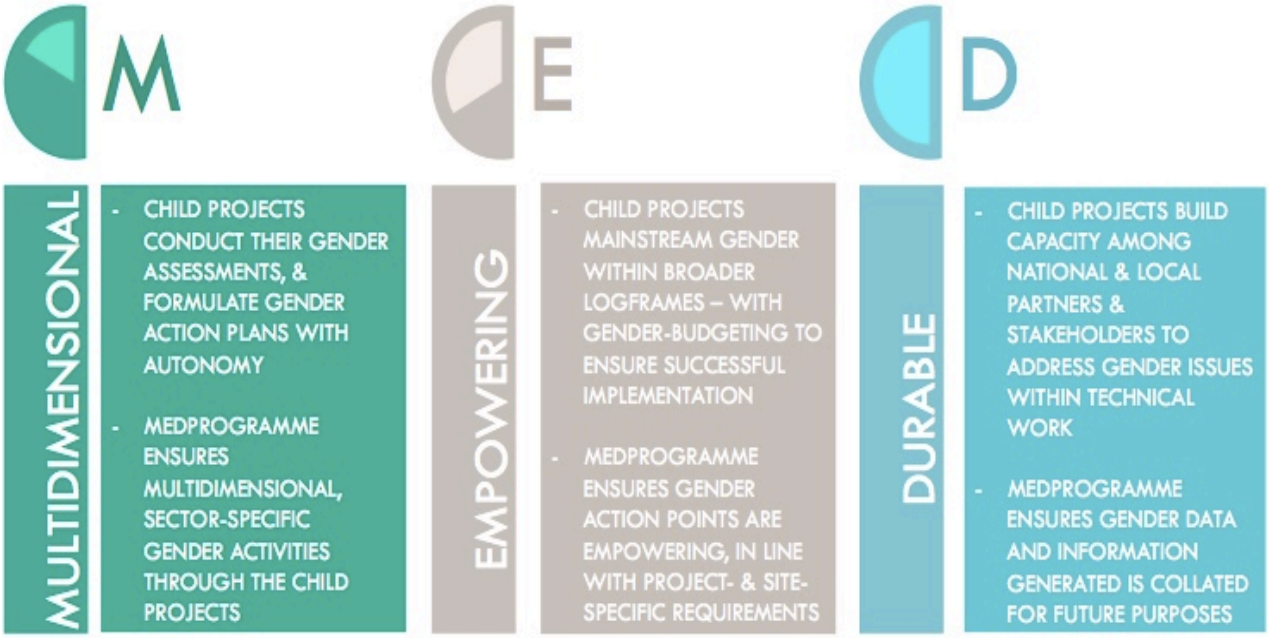


Figure 2: The 'MED' Approach –Child Projects and the MedProgramme (developed by author)

6.2 *Mapping the Programme-wide MED Approach with Child Projects*

Having defined the guiding tenets of Program-wide gender mainstreaming to be devolved for each Child Project, the map (presented as a visual) of how this Strategy will tentatively be operationalized is presented below:

a. Preparation Phase – Child Projects identify gender priorities and actions through Gender Assessments

The MED approach of this Gender Mainstreaming Strategy for the MedProgramme will allow for considerable autonomy, as Child Projects will conduct their own gender assessments. The process of conducting a successful gender assessment includes: identifying the gender directives from the GEF focal point of the Child Project, as well UN Environment's gender priorities with regard to the Child Project thematic; desk-reviews of available literature on the theme from – gender, social development, and political risk perspectives; collating relevant data for the gender considerations from international organizations, development banks, national authorities, and think tanks (economic development-focused); structuring a potential baseline upon which the Child Project can positively impact; and finally, gathering information on relevant gender stakeholders (ministries, independent activist groups, NGOs) and legal mechanisms (gender-progressive laws) who could participate during the implementation phase.

b. Preparation Phase – Child Projects develop Gender Action Plans based on assessments

The individual gender assessments conducted by each Child Project will form the basis for the development of a tailored and strategic Gender Action Plan, which will mainstream action points to positively impact upon the gender status quo under the broader project objective, outcomes and activities, as well develop means of verification indicators to measure progress to impacts at later stages. This will ensure that Child Projects are able to cater to their specific gender priorities and issues, pertaining to country- and site-specific contexts, and address them in holistic manner through their activities. Further, such an

approach will avoid the perils of establishing a 'one-size-fits-all' approach for the MedProgramme, and allow for a nuanced and focused mainstreaming effort spanning the different Child Projects.

c. *Inception and Implementation Phase – Child Projects will plan the execution of action points identified in the Action Plans*

Operationalizing the Action Plans will involve meticulous planning, as well as resource allocation. As the Child Projects move into the inception phase and ground realities of project implementation take shape – the execution of the action points with dedicated gender budgeting will guarantee that the gender rhetoric moves towards practical and verifiable results within the broader project objectives and outcomes. The steady maintenance of momentum of gender mainstreaming, at this stage, is very crucial – and, will require concerted efforts from different actors within Child Projects to ensure gender stakeholders are engaged, capacity and consensus are mobilized, and resources are used to target beneficiaries to leverage both socioeconomic and environmental co-benefits.

d. *Throughout the Project Cycle – Child Project 4.1*

This Gender Mainstreaming Strategy, intended to structure gender-responsive activities and to provide a coherent mainstreaming methodology, will be included as one of the three pillars of the Child Project 4.1 – the support project providing also the knowledge management and coordination pillars to the entire MedProgramme. This gives the Child Project 4.1 a unique position: at once, while providing a gender support structure to the pan-MedProgramme portfolio, it will also provide a platform for 'cross-fertilization' by pooling in gender-relevant research and data (from the different Child Projects) to facilitate Programme-wide learning and exchange.

e. *Reporting and Monitoring – Child Projects align gender results with indicators/ develop gender-specific indicators*

In keeping with the *durability* aspect of the MED approach – it is crucial to ensure a prolonged shelf life of the MedProgramme interventions. A step towards this begins in the inception and implementation phase by building capacity and consensus, while mobilizing adequate resources. Going into the reporting and monitoring stages, it will be important for Child Projects to measure progress to impacts against gender-specific indicators that are developed in the Gender Action Plans (in line with GEF gender indicators), to collate Programme-wide gender information and data, and report accordingly. This will also lay the ground for a potential 'extension' of the Gender Mainstreaming Strategy through future interventions – by ensuring these can benefit from the gender-responsive actions, policies and capacity building done in the region, and by expanding the entry points these new projects can take with the information and data generated towards cross-cutting issues such as poverty, water access, land and infrastructure etc.

7. *Conclusion*

This Strategy has stipulated the MedProgramme's gender priorities, targets and components, as well as the operationalizing approach towards achieving the same. The focus has been to usher a change and/or reversal perspective and posit a gender equality vision for the MedProgramme that hopes to question established social and gendered categories and implements positive action measures towards gender-responsive actions in the Mediterranean region. In effect, gender mainstreaming is therefore not an end (goal) of the MedProgramme– rather, a means (process) to an end (greater gender equality).

With international consensus, national priorities and organizational efforts (of the GEF and UN Environment – see 1.2) prioritizing gender mainstreaming as a solution to greater stakeholder involvement, improved environmental results and social outcomes of projects, and ensure inclusivity. In this milieu, this Strategy will generate regional cooperation and contribute to the pan-Mediterranean conversation on the importance of greater gender equality for the overall progress of society, improvement of economy and functioning of a healthy polity.

Gender Assessment and Action Plan
Child Project 1.1: Component 1 (Chemicals and Waste)

prepared by Debasmita Boral
Gender Consultant, UN Environment
Mediterranean Action Plan

1. Introduction

This Gender Assessment has been prepared as an input for the design of the GEF (Global Environment Facility)-funded project (also referred to as the Child Project 1.1 of the MedProgramme) titled 'Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts', specifically for Component 1 – Chemicals and Waste[1]. This project is being envisioned under the aegis of the Mediterranean Sea Programme (MedProgramme), a comprehensive and powerful response to the environmental and social challenges faced in the region. Comprising of regional components in tandem with national activities, this project will involve eight of the nine[2] MedProgramme beneficiary countries: Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Montenegro, Morocco and Tunisia.

For the broader context of the Child Project 1.1, it is important to understand the vision, breadth and capacity of the MedProgramme. The MedProgramme is the third step of 20 years of cooperation between UN Environment/MAP and GEF in the Mediterranean Region. It builds both on the successful implementation of previous GEF projects and on the legal framework provided by the Barcelona Convention and its protocols. The Programme encompasses a series of interconnected projects (Child Projects[3]) based on an overarching vision for change: 'A healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse, contributing to sustainable development for the benefit of present and future generations'.
Through the joining of forces of three GEF focal areas and of numerous partners[4] including UN agencies, development banks, MAP Regional Activity Centers, NGOs and others, under the leadership of UN Environment/MAP, the MedProgramme is expected to achieve large-scale impacts in improving livelihood and health of coastal populations, water security, and sustainability of marine and coastal ecosystem services. The Programme is, at once, a pioneering effort to generate dialogue, cooperation, and take action on a regional scale for greater gender equality; and will, therefore, strategically contribute to the sustainable development efforts and address gender gaps in the Mediterranean basin. CP 1.1's focus on Chemicals and Waste, thus, can provide a unique entry point for gender actions in the Mediterranean context – as explored in the following section.

2. Contextualizing CP 1.1 CW and Gender Actions in the Mediterranean

Gender relations in the Mediterranean region are a kaleidoscope[5] of overlapping social, economic and cultural roles, spread across a diverse multitude of countries and communities. The European Mediterranean countries have distinct social patterns and gender norms, which differ from the Middle

[1] Child Project 1.1 has two components, namely: Chemicals and Waste (CW) and International Waters (IW). This Gender Assessment pertains to the Chemicals and Waste portfolio, as the International Waters component is expected to mainstream gender within its TDA update process.
[2] Libya has been dropped due to security issues, and because the Stockholm Convention National Implementation Plan (NIP) could not be completed, leading to priority chemicals issues of concern as not being confirmed.
[3] At the time of its approval in 2016, the MedProgramme comprised of seven Child Projects. Subsequently, UN Environment/MAP developed a Mediterranean-focused climate change adaptation project, for financing through the Special Climate Change Fund (SCCF). It was agreed by the UN Environment/MAP, UN Environment and the GEF that this SCCF project would be managed, for all intents and purposes, as an additional Child Project of the MedProgramme. Hence, the number of Child Projects now stands at eight.
[4] GEF Lead Agency: UN Environment. Other GEF Agencies: European Bank for Reconstruction and Development (EBRD). Executing Partners: UNEP/MAP, European Investment Bank (EIB), UNESCO International Hydrological Program (IHP), Global Water Partnership (GWP) Med, World Wildlife Fund (WWF), MEDPOL, UNIDO, and IUCN.
[5] See this report by the Union for the Mediterranean (UfM) regarding an action plan towards investing in gender equality in the region.

East and North Africa (MENA) Mediterranean countries, for example. Additionally, the varying political situations in the region also determine how women and men are able to access and leverage sustainable development opportunities to be able to cope with environmental degradation, pollution risks, chemicals and waste hazards, and pressures on natural resources and coastal and marine ecosystems. To highlight the disparities in the region, the northern Mediterranean countries (in Europe), labour market dynamics, for example, exhibit a significant gender gap: women's employment rates (especially within marginalized communities such as the Romas) are lower, along with an existing gender wage gap. Since economic capital is among the important determinants of coping capacities to external shocks (in this case, land-based pollution, health risks arising from chemicals and waste), women (and other marginalized groups, including ethnic minorities) are more likely to be vulnerable. The 'double disadvantage' of the situation should also be reckoned with: due to lack of viable economic capital or socioeconomic rights, vulnerable groups are often excluded from, and limited by their lack of representation and agency, in chemicals and waste management policies– increasing the possibilities of exposure to the threats looming in the Mediterranean region.

Further, in MENA countries, coupled with barriers to the labour market and employment opportunities, women face institutionalized exclusion from civil society and political spheres. Decision-making power within the household and the polity is limited, reducing women's capacities to engage in the public sphere and gear development opportunities to safeguard their interests. In recent years, however, women have been capitalizing on opportunities presented by pluralistic interpretations of traditional gender norms, and entering both the work force and the public space. That being said, the gains achieved through social change in this region may not keep pace with the risks and threats arising from the lack of: collective management of transboundary waters; proper chemicals and waste disposal systems and implementation of prohibitive laws; containment of land-based pollutants in the backdrop of climate change and environmental degradation in the region. As with the northern Mediterranean countries, burdens of emerging health risks and shocks may fall on the vulnerable groups.

Despite mounting evidence of severe and irreversible health effects of specific hazardous chemicals on different population subgroups, there is a lack of recognition both by policymakers and governments.[6] Further, where legislation and regulation measures do exist, these are often weak and not updated in accordance to latest health research and exposure data, and with specific policy focus.[7] The Child Project 1.1, thus, is timely. Through its CW component, the project will enhance work towards preserving the rich yet fragile biodiversity, hosted by many diverse ecosystems, of the Mediterranean basin forming invaluable natural capital and provide ecosystem goods and services on which populations and economies depend. Managing anthropogenic pollution sources (land-based, such as: discharges of excess nutrients and hazardous substances, marine litter, and degradation of critical habitats) are being given priority to enhance the health of the Mediterranean LME, while managing threats to the regional biodiversity and human population arising from these pollutants. The project addresses the current need to reinforce the institutional and technical capacity of stakeholders for the development and application of chemical disposal and waste management policies; to accelerate priority actions towards implementing prohibitive and regulatory laws; and, manage biodiversity and coastal populace health risks generated from hazardous chemicals and heavy metals (POPs and mercury) as well as their concomitant socioeconomic repercussions. It also provides the means for the Mediterranean countries to sustainably address a regional chemical disposal issue, and to fill important knowledge gaps on the gendered use and effects of these chemicals by different demographics of the Basin.

Additionally, given the project's focus, a gender lens is both necessary and relevant for the project to achieve its primary objective of reducing hazardous chemicals in the Mediterranean, improving human and ecosystem health, and managing land-based pollutants. Efforts will be made to incorporate the dimension of gender in a holistic manner in the project's activities: by capacity-building on how to

[6] "Why Focus on Women and Chemicals" in *Women and Chemicals: The Impact of Hazardous Chemicals on Women*. Women in Europe for a Common Future & UN Environment. (2015)
[7] *Ibid.*

mainstream gender-responsive actions (and, simultaneously awareness-raising) for personnel involved in the development of regulatory protocols and disposal plans; by creating the impetus towards collection of gender-relevant data and information as pioneering effort to understand the crosscutting nature of gender and chemicals in the region; and, by engaging stakeholders on gender and socioeconomic aspects within policy solutions. In this manner, the project can ensure both environmental and social co-benefits through its results framework, as well as proactive compliance with GEF and UN Environment gender mainstreaming mandates, described in detail in the next section.

3. Gender Mainstreaming at the GEF and UN Environment

Employing a strong mandate of gender mainstreaming and promoting women's empowerment as well as contributing to the international conversation on gender mainstreaming, both the GEF and UN Environment have prioritized delivering inclusive and gender-responsive environmental results, and mitigation solutions towards pollution risks, chemical hazards, and ecosystems degradation.

Having launched its initial gender policy in 2011, the GEF approved a reinforced policy in November 2017[8] at the 53rd Council Meeting, shifting the focus from a *'gender-aware, do no harm'* approach to a *'gender-responsive, do good'* approach. This requires robust standards in the design, implementation and evaluation of GEF activities, and introducing measures that will allow the GEF, over time, to better leverage strategic opportunities to address gender gaps critical to the achievement of global environment benefits.[9] More recently, the *GEF-7 Programming Directions*, prepared by the Secretariat in the April 2018 Stockholm meeting further clarifies the GEF's evolving and progressive gender strategy – by providing action points for each GEF focal point.[10] It lays out clear gender standards for each domain under the GEF, and for CP 1.1 CW – gender directives of the Chemicals and Waste focal area (such as: understanding the socioeconomic dynamics that expose men and women to different chemicals, as well as their biological implications), are particularly relevant and have been incorporated as action points for the operationalization for this Assessment. A case studies report also highlights the experiences from GEF Small Grants Programme in leveraging community-based chemicals and waste management – particularly how empowerment of youth and women could be facilitated through sustainable development projects undertaken in partnership with local civil society organizations and devolved governance structures.[11]

UN Environment recognizes the role of gender equality as a 'driver of sustainable environment development'[12], particularly to enhance environmental security and climate resilience; to assuage the stresses on natural resources and dependent communities, including unsustainable management of coastal resources; and to preserve the health of large marine ecosystems (like the Mediterranean Basin) which provide vital environmental and economic services to coastal populaces. Overall, the organization focuses on the increased visibility and capacity of vulnerable groups in sustainable development policy- and decision-making. To that end, the agency has:

A. Published a lessons-learnt report[13], through gender case study compilation, on issues homologous with the overall MedProgramme agenda: gender integration in marine and coastal pollution, coastal disaster risk reduction and climate change adaptation, coastal developmental planning, and advocacy for gender-inclusive marine ecosystem management and research.
B. Recently submitted a project for the GEF Trust Fund[14], titled 'Global Best Practices on Emerging Chemical Policy Issues of Concern under the Strategic Approach to International Chemicals

[8] See here for the latest GEF Gender Mainstreaming guide (EN). GEF. (2017) (publication)
[9] "A new Policy on Gender Equality for the GEF". GEF official website. (2017) (news update)
[10] GEF-7 Replenishment – Programming Directions. Meeting Report from the 4th meeting held at Stockholm, Sweden for the Seventh Replenishment of the GEF Trust Fund, in April 2018.
[11] See the full case study report, *Community-based Chemicals and Waste Management: Experiences from GEF Small Grants Programme* for more. UNDP. (2017)
[12] *Gender Equality and the Environment: Policy and Strategy.* UN Environment. (2015)
[13] *Regional Seas Reports and Studies No. 207* (forthcoming). Marine and Coastal Ecosystems Unit. UN Environment. (2018)
[14] Project ID: 9771, submitted on 30 May 2018.

Management (SAICM)', which has identified gender and chemicals as cross-cutting topics and the need to conduct a gender review to map emerging policy issues to be able to better target subgroups and understand user behavior.

C. Collaborated with the Food and Agricultural Organization of the United Nations (FAO), and the Basel, Rotterdam and Stockholm Conventions to produce a grassroots case study report[15] on gender perspectives on the management of hazardous chemicals and wastes.

D. Supported Women in Europe for a Common Future (WECF) and Women International for a Common Future (WICF) in producing an in-depth knowledge product[16] to collate information available and research perspectives on the issue of women and chemicals.

Thus, in keeping with the policies and prerogatives of both the GEF and UN Environment, the imperative of this Gender Assessment is the inclusion of more gender-responsive elements throughout this propitious project. Alongside, the development of a dedicated Gender Action Plan in the preparation stage (with clear timelines, responsible parties, indicators and budgetary allocations to be refined in the implementation phase) based on the Assessment, will ensure that the project generates gender-equitable and accessible benefits, promotes greater gender equality, and the empowerment of vulnerable gender demographics in context-specific locales.

4. Methodology

The Gender Assessment has *four* methodological building blocks:

A. A comprehensive desk-review of existing literature was conducted on gender, chemicals and waste management and land-based pollution in Albania, Algeria, Bosnia and Herzegovina (BiH), Egypt, Lebanon, Montenegro, Morocco and Tunisia (and, more generally, in the Mediterranean, Western Balkans, and Middle East and North Africa - MENA region). The literature review revealed useful data and research on chemicals and gender, health hazards and biological differences arising out of exposure, and guidelines on management and regulatory approaches. However, these thematic areas are not triangulated in mainstream research, and there exists lacunae of data and information sources on Mediterranean-specific gendered use (as well as socioeconomic aspects determining extents of exposure risk) and effects of POPs and mercury on different population subgroups. Thus, a *socioeconomic and gender indicators and baseline* (Section 5) was derived from national aggregate statistics (from United Nations Development Programme – UNDP, World Economic Forum – WEF, Oxford Poverty and Human Development Institute – OPHI, International Labour Organization – ILO, and, the World Bank) to identify the potential impacts on different vulnerable groups and demographics, in view of the Mediterranean's designation as a global pollution hotspot, with threats to natural and managed resources, degradation of coastal systems and low-lying areas and marine pollution.

B. Gender-responsive entry points towards chemical and waste management, as well as land-based pollution reduction have been expounded upon in Section 6. This section locates specific gender considerations and actions for the project outcomes, and presents normative information to gear the same towards better socioeconomic and environmental co-benefits.

C. Section 7 explores the policy environment in the countries participating in Child Project 1.1, and presents a potential list of gender stakeholders, relevant for the project activities and collaborations during the project cycle.

[15] See *Gender Heroes: From Grassroots to Global Action* developed by the Gender Task Team of the Secretariat of the Basel, Rotterdam and Stockholm Conventions. (2015)

[16] See *Women and Chemicals: The Impact of Hazardous Chemicals on Women*. WECF WICF & UN Environment. (2015)

D. Section 8 presents the Gender Action Plan, laying out specific action points mainstreamed within this GEF proposal's results framework, corresponding actions, indicators, timelines, responsible parties, and budget allocations, to address the gender issues identified by the preceding Assessment.

5. Gender Baseline and Socioeconomic Issues in the CP 1.1 CW Beneficiary Countries

The eight Mediterranean countries tentatively participating in the CP 1.1 CW face different developmental challenges and socioeconomic disparities. Adopting the current perspective from development research, this Assessment proceeds from the following entry point: poverty, labour force status and economic stability, marginalization, and gender inequities have conclusive and direct links with increased risk of exposure to toxic chemicals and heavy metals, as well as determining coping capacities and managing health shocks.[17] Table I explores these nuances in detail:

TABLE I: CW & GENDER – CROSS-CUTTING ISSUES

CW ISSUE	GENDER & SOCIOECONOMIC ENTRY POINT	Relevance
Chemicals and wastes – such as land-based pollutants, hazardous substances, POPs and mercury – have a blanket effect on the general populace	• Spatial distribution of human habitat • Poverty • Minority social groups	The current baseline of research and action on chemicals and gender, compared to other cross-cutting issues such as gender and climate change or gender and water, displays scant resource allocation, generic one-size-fits-all approaches, and lack of attention from policymakers, governments and researchers. Recent findings from international organizations (The World Bank, World Health Organization – WHO, UNDP and UN Environment)[18] along with specialist research groups (Global Alliance on Health and Pollution – GAHP)[19] have established strong interrelationship between heightened exposure risks and residential proximity, poverty, and being a minority social group in a particular context. Spatial distribution of human habitat mimics social class and poverty levels more often than not – lower-income groups (who could often overlap with minority groups)[20] often settle near industrial plants, ports or airport facilities, and chemical usage sites, where land and infrastructure may be cheaper. This residential proximity is exacerbated by added exposure from occupational hazards, specific susceptibility windows (urban poor women in pregnant or lactating stages), concurrent diseases or health indicator performance (usually, these population subgroups tend to be malnourished or have 'hidden hunger' or lack of micronutrients in diet).

[17] "Chemicals and Gender" in *Gender Mainstreaming Guidance Series*. UNDP. (publication year unknown)
[18] "Linkages between toxics and poverty" in *Toxics and Poverty*. World Bank. (2002)
See here for a WHO bulletin on different metals and chemicals, and specific vulnerabilities.
"Chemicals and Gender" in *Gender Mainstreaming Guidance Series*. UNDP. (publication year unknown)
Women and Chemicals: The Impact of Hazardous Chemicals on Women. WECF WICF & UN Environment. (2015)
[19] *The Poisoned Poor*. GAHP.
[20] Although not relevant to the geographical context of the CP 1.1 CW, research into American demographics have shown that poorer neighbourhoods in USA (with Afro-American, Hispanic, and South Asian populations) show greater exposure to toxic chemicals and heavy metals than affluent white neighbourhoods. Quoted from the *Scientific American*. (2012)

CW ISSUE	GENDER & SOCIOECONOMIC ENTRY POINT	Relevance
		Epidemiological evidence, culled from WHO data, also point towards this trend – developing countries with higher emissions are expected to see chronic disease (caused in part by exposure to toxic substances such as POPs and mercury) burden outweigh infectious disease burden by 2020.[21]
Proactive investment in developing regulatory protocols, disposal and prevention plans, and strengthening coping capacities against pollution-risks and health hazards of toxic substances are immediate measures	• Financial resources – labour force participation and wage levels • Health equity and access • Time poverty	Building on the previous point, assessing how different social groups are able to cope when chemical hazards and pollution-risks do occur, also reveal why sociological factors are of import in the conversation on gender and chemicals. Health outcomes resulting out of heavy metal exposure, land-based pollutants, and chemical hazards can have ripple effects by creating income shocks among poorer groups, particularly those that lack health equity and access. Vulnerable groups – particularly women in urban poor demographics and rural communities – often lack stable sources of income (if at all – labour force participation rates among men and women reveal gender gaps and concomitant gender wage gaps in the Mediterranean, particularly the MENA countries), and this lowers access to healthcare, when insurance or free health provisions are unavailable. Further, women from these social groupings. Lack of economic capital also lessens the decision-making and bargaining power of individuals within the household – where men (often engaged in direct economic activities in the breadwinning roles) may prioritize other necessities. Additionally, there remains the issue of time poverty. Women, and adolescent girls, particularly in the MENA region, disproportionately shoulder the burden of unpaid care and domestic work.[22] This leads to a phenomenon called 'time poverty', defined as a situation where a certain person's time is inflexible, consumed by non-remunerative and non-productive tasks, perpetuating their absence from decision-making and raising the opportunity costs for other profitable pursuits. This time poverty could be exacerbated by additional care work necessary when family members develop health effects of toxic chemicals and heavy metals exposure from POPs and mercury.

These data profiles, covering the gamut of issues outlined in Table I, thus borrow from UNDP's Human Development Index, Gender Inequality Index, and Gender Development Index. Additionally, they refer to the Global Gender Gap Index (WEF) and compiles national-level poverty statistics (conducted by national authorities of the nine countries, as well as the World Bank, in some cases), labour force participation rates and status (primarily from ILO data), and traces the rural-urban dichotomy. These indices have differing methodologies, and are being employed, at the outset, as indicative (and *not*

[21] "Poverty and the burden of chronic disease" in *Toxics and Poverty*. World Bank. (2002)
[22] *Beyond Scarcity: Water Security in the Middle East and North Africa*. World Bank. (2018)

conclusive) measures of current levels of development, gender equality, and poverty and labor force participation.

As Booysen's research[23] shows, composite indices present both challenges and advantages. It should be noted that numerous fallacies have been identified in the methodologies employed in composite indexing. These indices are mainly quantitative, and present empirical and aggregate measures of complex development phenomena, making values apparently objective, at the cost of subjective nuances. Yet, these also remain invaluable as useful supplements to income-based development indicators, understanding relative degrees of development, simplifying complex measurement constructs as well as providing access to non-technical audiences. To balance this dichotomy, ranks have been given less precedence in certain indices and relevance notes have been included to contextualize the results.

TABLE II: HUMAN DEVELOPMENT INDEX (HDI)[24]
(out of 188 countries – United Nations Development Program – UNDP, 2018)

Defining the HDI: This index measures and combines three basic dimensions of human development (long and healthy life, knowledge and decent standard of living) and provides an overall socioeconomic landscape of a country.
Relevance of the HDI: Since socioeconomic capital and security are crucial determinants of the capacities to adapt towards chemical contamination, pollution risks, health hazards, loss of coastal livelihoods due to ecosystem goods and service depletion, marine and environmental degradation, this index indicates how poised each country may be to consider different alternative (usually more expensive) chemicals, resource management, resilience, adaptation and mitigation options.
Indicative, not conclusive: In line with Booysen's argument, the HDI should be treated as indicative, not conclusive. It provides an overview of relative degree of development in a particular country but remains a 'synthetic indicator'. Recent research has shown the need to supplement the HDI with other indicators associated with economic and social cohesion, sound development strategies, and sustainability in growth models.[25]

Country	Rank	Relevance
Albania	68th	With 'high human development', Albania's capacity to reduce land-based pollutants and manage chemical and waste pollution is pegged well. However, due to regional variation in poverty rates (for example, high in the Kukës prefecture – 22% v. Gjirokastër prefecture (qarks) – 8%, in particular[26]) in the country, environmental services and social co-benefits may not be equitably shared.
Algeria	85th	With 'high human development', Algeria wields capital, largely derived from its oil economy, in readiness against hazards. However, due to high inequality in consumption, high unemployment rates (particularly, women and youth) and largely informal workforce[27], environmental services and social co-benefits may not be equitably shared.

[23] Booysen, F. "An Overview and Evaluation of Composite Indices of Development" in *Social Indicators Research,* (Vol. 59 No. 2). (2002)
[24] UNDP. (2018)
[25] Bilbao-Ubillos, J. "The Limits of *Human Development Index"* in *Sustainable Development,* (Vol. 21 No. 6). (2011)
[26] *Portraits of Poverty and Inequality in Albania.* INSTAT (Albanian Institute of Statistics) & World Bank. (2015)
[27] "Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)

Country	Rank	Relevance
Bosnia and Herzegovina (BiH)	77th	With 'high human development', BiH's capacity to reduce land-based pollutants and manage chemical and waste pollution is pegged well and similar to Algeria. As a post-conflict nation, however, educational attainment and labor market access continue to be determined by poverty status[28] in the country, thus, environmental services and social co-benefits may not be shared.
Egypt	115th	With 'medium human development', Egypt's readiness towards adopting safer (more expensive chemicals) and health hazards arising from current pollutants might be limited, wherein the government may prioritize other pressing developmental pursuits.[29] With a volatile political climate, and entrenched gender inequality, environmental services and social co-benefits may not be equitably shared.
Lebanon	80th	With 'high human development', Lebanon's capacity to to reduce land-based pollutants and manage chemical and waste pollution is pegged well. However, due to high concentration of income and wealth in the country[30] and the spill-over effects of the Syrian civil war, environmental services and social co-benefits may not be equitably shared.
Montenegro	50th	With 'very high human development', Montenegro is poised to adapt well to the changes suggested in this project's alternative scenario. However, due to historic ethnic exclusionism (the Roma population, in particular[31]) in the country, environmental services and social co-benefits may not be equitably shared.
Morocco	123rd	With 'medium human development', Morocco's readiness towards adopting more expensive chemicals and strict regulatory approach towards polluting industries might be limited, wherein the government may prioritize other seemingly pressing developmental pursuits. Pronounced gender inequality in the country slows economic growth[32], environmental services and social co-benefits may not be equitably shared.
Tunisia	95th	With 'high human development', Tunisia's capacity to reduce land-based pollutants and manage chemical and waste pollution is pegged well. However, due to concentration of income and wealth in the country[33], high unemployment rates (particularly, youth) and economic unrest challenging political stability, environmental services and social co-benefits may not be equitably shared.

[28] *Poverty and Inequality in BiH.* World Bank. (2011)
[29] *Inequalities, Uprisings and Conflicts in the Arab World. MENA Monitor.* World Bank. (2015)
[30] Assouad, L. "Rethinking the Lebanese Economic Miracle". WID. (2017)
[31] *Gender at a Glance: Montenegro.* World Bank. (2015)
[32] "Reducing gender inequality in Morocco can boost growth". IMF. (2017)
[33] *Tunisia: Economic Outlook.*World Bank. (2018)

TABLE III: GENDER INEQUALITY INDEX (GII)[34]
(out of 159 countries – UNDP, 2018)

Defining the GII: This index, showing inequality in achievement between men and women in three aspects (reproductive health, empowerment and labor market), provides a useful gender baseline in terms of health equity, economic capital and financial access, speaking to the gender opportunities of men and women in the countries. This baseline has been elaborated upon using existing gender studies literature on each country.
Relevance of the GII: This index provides a primary understanding of the different levels of achievements on basic development indicators between men and women. This displays useful features towards the gender status quo hypotheses, which could then be derived in the context of this project.
Indicative, not conclusive: In line with Booysen's argument, the GII should be treated as indicative, not conclusive. Pernmayer finds that the functional form of the index could be unclear, particularly the inclusion of indicators of relative performance of women vis-à-vis men, along with absolute women-specific indicators.[35]

Country	Rank	Relevance
Albania	52nd	In Albania, traditional beliefs continue to influence gender roles, particularly in the household setting. During socialist rule, although policies promoted women's presence in the public sphere (through education and work), the continued responsibility for unpaid domestic work remained with women (leading to time poverty or 'double shifts'). During the transition to a capitalist economy, gender equality laws were not put in place for private sector jobs, and thus, employment for Albanian women could not be safeguarded.[36]
Algeria	100th	In Algeria, social codes affect women's empowerment. Since labor force participation disparity is pronounced, women lag behind on economic capital needed to combat risks arising from coastal chemical pollution, loss of ecosystem goods and services, and POPs and mercury hazards. According to the Arab Barometer, in 2017, compared to 2013, a greater number of Algerians regarded higher education as more important for men, as well as reinforced the notion that married women should be ideally relegated to household duties.[37] This also makes them dependent on the patri-local structure of Algerian society.
Bosnia and Herzegovina (BiH)	37th	Despite progress in closing the gender gap in endowments - mainly in education among the younger generation - BiH still faces a number of gender issues, particularly in women's access to economic and employment opportunities. Alongside improved educational outcomes, significant gaps remain in labor market participation and employment in favor of men, as women continue to face challenges in accessing economic opportunities.[38] Additional obstacles continue to exist for women in exercising agency (the power to choose and decide options to preserve to act for oneself), particularly managing domestic work, lack of

[34] UNDP. (2018)
[35] Pernmayer, I. "A Critical Assessment of the UNDP's Gender Inequality Index" in *Feminist Economics,* (Vol. 19 No. 2). (2013)
[36] World Bank. (2012)
[37] "Droits des femmes en Algérie: les lois progressent mais pas les mentalités". Middle East Eye. (2017)
[38] *BiH: Economic Mobility, Jobs and Gender*. World Bank. (2016)

Country	Rank	Relevance
		political representation and participation as well as widespread gender-based violence.
Egypt	101st	Political, social and economic capitals are not equitably distributed among Egyptian men and women. Without access to these vital resources, the risks identified by CP 1.1 CW will only burden those at the lower echelons of society. Despite improvement of young women's education levels in recent times (Egypt's rank improved by 34 spots in the latest GII quoted here), the workforce participation and retention rates remain unperturbed, signaling a stagnated job market and scarce employment opportunities.[39] Egypt also faces some particular gender-specific barriers in high numbers, such as FGM and sexual harassment, arising out of sexual inequality between men and women in the country.
Lebanon	85th	Lebanese women face the least gender disparity in the Arab world with their male counterparts. Despite this, discriminatory social codes, particularly the focus on intersectional civil and family laws, continue to impede women's empowerment.[40] Although the gender gaps at higher levels of education are reversing, women continue to face entry barriers to the labor market as well as time poverty due to the predominance of unpaid care work.
Montenegro	32nd	Montenegro is relatively advanced in terms of progress towards gender equality. This enhances the capacities of Montenegrin men and women to face health hazards from chemical pollutants and coastal degradation and capitalize on adaptation opportunities to remove POPs and mercury from supply chains and industries. However, gender-inequitable dynamics remain in important determinants such as access to labor markets, health equity et al, rendering certain demographics vulnerable.
Morocco	119th	Political, social and economic capitals are not equitably distributed among Moroccan men and women. Without access to these vital resources, chemical hazards will only burden those at the lower echelons of society. Gender equity in labor force participation is one of the lowest in the world[41], disadvantaging women further: women lag behind on economic capital needed to combat health hazards and POPs and mercury.
Tunisia	63rd	In Tunisia, traditional social codes affect women's empowerment. Since labor force participation disparity is thoroughly pronounced, women lag behind on economic capital needed to combat pollution hazards and chemical health risks. This also makes them dependent on the patri-local structure of Tunisian society. However, the January 2011 uprisings signaled that women were

[39] *Egypt: Country Gender Assessment.* World Bank. (2010)
[40] *Lebanon: Country Gender Assessment.* European Union. (2015)
[41] *Morocco: Country Gender Assessment*. World Bank. (2015)

Country	Rank	Relevance
		entering the public space, leveraging opportunities for their economic empowerment,[42] although it remains to be seen if the force of this societal shift can keep pace with the loss of environmental degradation, coastal pollution, marine litter and decreasing ecosystems goods and services.

TABLE IV: GENDER DEVELOPMENT INDEX (GDI)[43]
(grouped in 5 categories, 1: high equality to 5: low equality – UNDP, 2018)
& GLOBAL GENDER GAP INDEX (GGI)[44]
(out of 144 countries – World Economic Forum – WEF, 2017)

Defining the GDI & GGI: The GDI (UNDP) index shows the ratio of female to male HDI values. GDI expresses values in deviation, hence, in order to facilitate understanding GDI grouped categories have been used (as grouped by UNDP) to show the absolute deviation from gender parity in HDI values. This further reiterates the results of the HDI and GII (also by UNDP), and shows the real gender gap in human development achievements.
The GGI (WEF) benchmarks 144 countries on their progress towards gender parity on four thematic dimensions – economic participation and opportunity, educational attainment, health and survival, and political empowerment. The Index benchmarks national gender gaps on economic, political, education- and health-based criteria, and provides country rankings that allow for effective comparisons across regions and income groups, over time.
Relevance of the GDI & GII: Since the GDI and GGI use different methodologies, and are conducted by different agencies, this report does not suggest a causality between the two indices. However, a correlation is undeniable, and both indices pick up similar rates of gender disparity in the CP 1.1 CW countries.
Indicative, not conclusive: In line with Booysen's argument, the GDI & GII should be treated as indicative, not conclusive. Geake Dijkstra and Hanmer find that although gender-related development indices have increased attention towards 'feminization of poverty and underdevelopment', more robust data needs and indicators are required to create aggregate indices that are sensitive to contemporary trends in gendered privation, particularly with the categorization of 'women'.[45]

Country	GDI – Group	GGI – Rank	Relevance
Albania	Medium-high equality	38th	Despite being categorized as a country with high HDI, a pronounced gender gap in Albania is evinced from the grouping and ranking.
Algeria	Low equality	127th	Algeria, with Tunisia, shows the greatest disparity in development and gender equity rankings. Despite being categorized as a country with high HDI, an entrenched gender gap

[42] *Gender in MENA Projects: Tunisia*. World Bank. (2011)
[43] UNDP. (2018)
[44] WEF. (2017)
[45] Geske Dijkstra, A. & Hanmer, L. C. "Measuring Socio-Economic Gender Inequality: Towards an Alternative to the UNDP Gender Index" in *Feminist Economics,* (Vol. 6, No. 2). (2000)

Country	GDI – Group	GGI – Rank	Relevance
			is revealed.
Bosnia and Herzegovina (BiH)	Medium-low equality	66th	Despite being categorized as a country with high HDI, a pronounced gender gap in BiH is evinced from the grouping and ranking.
Egypt	Low equality	134th	The gender gap in Egypt is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Lebanon	Low equality	137th	The gender gap in Lebanon is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Montenegro	Medium-high equality	77th	Although Montenegro features among the upper categories of the previous indices, this reveals a more entrenched gender gap. Women lag behind their male counterparts, in a greater amount than expected, despite very high human development achievements in the country.
Morocco	Low equality	136th	The gender gap in Morocco is entrenched, requiring tangible efforts to address and lessen gendered disparities in the country.
Tunisia	Medium-low equality	117th	Tunisia, with Algeria, shows the greatest disparity in development and gender equity rankings. Despite being categorized as a country with high HDI, an entrenched gender gap is revealed.

TABLE V: SOCIOECONOMIC FACTORS

Note: This table is compiled from various sources, and determines poverty levels (according to USAID income grouping), rural-urban divide and labor force participation parity in the CP 1.1 CW countries.

***Poverty Level:** Pollution and concomitant health hazards are threat multipliers, and often their impacts combine with poverty– hence this is an important indicator, corroborating HDI ranking. To illustrate this, the Multidimensional Poverty Index has been used. OPHI and UNDP calculate the MPI, for measuring acute poverty in developing countries. It complements traditional income-based poverty measures by capturing the severe deprivations with regard to different indicators: education, health, and living standards. The index not only identifies those living in multidimensional poverty, but the extent (or intensity) of their poverty. The MPI can help the effective allocation of resources by

making possible the targeting of those with the greatest intensity of poverty; it can help address some SDGs strategically and monitor impacts of policy intervention.[46]

***Rural-Urban Divide:** Health hazards, arising out of POPs and mercury, may or may not take different forms in rural and urban areas, but lack of development and investment in rural areas often impedes adaptive capacities of vulnerable demographics, who also derive their livelihoods (in this case, coastal livelihoods) from managed and natural resources (that may become contaminated). Additionally, health equity, as a general trend, is harder to achieve for rural populaces, who may not be insured or may be unable to access proper health facilities to address hazards arising out of POPs and mercury. Additionally, the urban poor and the urban unemployed are vulnerable groups – the former may suffer from prolonged exposure as occupational hazards, and the latter may lack the economic capital to combat health shocks.

***Labor force participation parity (% of working age population active)[47]:** In the Mediterranean, one of the prime arenas of gender disparity is labor force participation parity. The region is plagued with high unemployment rates[48] (12.5% average), and this phenomenon remains a gendered one: women and youth are less likely to be employed than men, as a general trend. Additionally, the existing gap in labor force participation indicates that women possess less economic capital, and are limited to gendered (mostly unpaid care work) roles. This directly correlates to lessened participation in coastal economies and scarce or unstable livelihoods; lack of decision-making power both within the household (especially health decisions) and larger policy frameworks such as coastal resource use and chemical management; and, greater exposure to repercussions of marine environmental degradation, water stress and potential health hazards arising out of POPs and mercury (which often acts as a threat multiplier, in this context).

See Table V from next page (adjusted for footnoting).

[46] See UNDP's Technical Notes (2016) for more.
[47] *World Employment and Social Outlook: Trends for Women.*ILO. (2017)
[48] "Unemployment: The Mediterranean Effect", World Bank. (2012)

Country	Poverty Indices	Rural-Urban	Labor Force Participation *(The gender gap is calculated as the difference between women's and men's labor force participation rates – simply, the number of working age men and women employed in a country, ILO 2016)*
Albania	**1.2%** below the **National Poverty Line.**[49] The Multidimensional Poverty Index reveals that 7.2% of Albanians are precariously 'near' poverty.	Diber and Kukes *qarks* (prefectures) show lowest rates of urbanization, and related issues: fragmentation, population decline, *et al*. Tirana and Durres, on the other hand, have the highest level of urbanization and best performance on demographic and geographic indicators.[50] Rural to urban migration is common, and often unbridled, leading to environmental complications as well as socioeconomic tussles.	**39.3% female** **60.7% male** During the socialist rule, the government policy of full employment boosted female participation and, as a consequence employment rates were higher than the average figures of the OECD countries. Policies such as investment in childcare facilities and female education stimulated women to enter and remain in the labor market. The market economy disadvantaged women by providing unstable employment opportunities, although education outcomes and employment sectoral options have improved in recent decades, leading to the widening of the gender gap in labor force participation.[51]

[49] *Regional disparities in Albania.* UNDP. (2010)
[50] *Regional disparities in Albania.* UNDP. (2010)
[51] Garcia-Pereiro, T. "The Determinants of Female Employment in Albania". Open access on *ResearchGate*. (2016)

Algeria	**11.8%** below the **National Poverty Line.**[52] The MPI is unavailable for the country. However, the *Ligue Algérienne pour la Défense des Droits de l'Homme (LADDH)* reports that about 35% (14 million) of Algerians are in poverty.[53]	Poverty in Algeria has a distinctly urban face: 75% of the country's poor live in cities, undertaking informal jobs without access to social safety nets. Additionally, the disproportionate rates of urban poor show that the incidences of poverty in the Algerian Sahara are twice as much than among people living in the Steppe.[54]	**19.0% female** **70.4% male** Female labor force participation is low in Algeria, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.[55] However, according to ILO, the status quo is slowly altering (although not quite at an ideal pace), as there are marked difference between participation rates from 2011 to 2018.[56]
Bosnia and Herzegovina (BiH)	**15%** below the **National Poverty Line.**[57] The MPI reveals that 3.2% of the populace are precariously 'near' poverty.	BiH remains one of the most rural countries in Europe – with over 60% of its populace residing in rural areas.[58] The rural poverty rate is higher than urban areas, although income dynamics are similar.[59]	**34.4% female** **58% male** Between the years 1992-1995, Bosnia and Herzegovina went through a destructive war that resulted in mass emigration of around 50% of the total population. In the period after the war, although considerable number of refugees returned, it remains unclear how the jobs market was affected around the time. With the failing of the state's strong social protection services such as long-term care, child care and elderly care, and new categories of 'returnee refugees' and 'internally-displaced people', women bear the brunt of

[52] Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)
[53] See *Ligue Algérienne pour la Défense des Droits de l'Homme*(LADDH)for more.
[54] "Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)
[55] Women face the highest proportion of legal restrictions (*de jure* discrimination) in the MENA region, as well as sociocultural norms (*de facto* discrimination) that stipulate limits to women's entry in the public, and working sphere. Young females are particularly discouraged from seeking employment.
[56] This ILO report (2014) expounds on the factors affecting employment and labor force participation in Algeria.
[57] *Poverty and Inequality in BiH.* World Bank. (2011)
[58] *Rural Development in BiH: Myth and Reality.* UNDP. (2013)
[59] *Poverty and Inequality in BiH.* World Bank. (2011)

			unpaid care work. Although more women attend university than men, they continue to face sociocultural barriers in entering the labor force.[60]
Egypt	**27.8%** below the **National Poverty Line.**[61] Although extreme poverty has been virtually eradicated, Egypt is yet to turnaround the effects of the 2011 Arab Springs on its economy, leaving a third of Egyptians in precarious poverty. Particularly, high inflation over 2015-17 has lowered the purchasing power of households.[62]	Regional disparities continue to be a part of the country's landscape, with upper rural Egypt showing poverty rates three times higher than metropolitan Egypt.[63]	**22.8% female** **76.1% male** Female labor force participation is low in Egypt, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.[64] This is a significant loss as including women and enabling conditions to retain them in the workforce can boost the growth rate of the Egyptian economy.[65] In recent times, Egypt's performance on health and education indicators is improving, and this could change labor dynamics.
Lebanon	**30%** below the **Middle-Income-Country Poverty Line.**[66] Although GDP increase in Lebanon remains steady, the country faces the economic and social impact of the Syrian crisis. With the influx of 1.5 million refugees, Lebanon's public finances,	Lebanon's population is 87% urban, concentrated particularly in Beirut. The dynamics of urban poor show a pan-Mediterranean attribute: job creation is low, youth unemployment is high, and the vulnerable groups are trapped within the informal sector. In the rural areas,	**23.5% female** **70.3% male** Female labor force participation is low in Lebanon, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world. This is a significant loss as including women and enabling conditions to retain them in the

[60] This ILO report (2011) expounds on the factors affecting employment and gender in BiH.
[61] *Egypt: Economic Outlook.* World Bank. (2018)
[62] *Ibid.*
[63] *Ibid.*
[64] ILO. *Women in Business and Law.* (2014)
[65] The Economic Research Forum (ERF), a regional forum on economic research in Arab countries, Turkey and Iran finds that encouraging the participation of women in the labor force, particularly the 'married women' demographic could usher in rapid growth for the Egyptian economy. See here.
[66] *Lebanon: Rapid Poverty Assessment.* UNDP. (2016)

	service delivery, and the environment have been strained, increasing poverty headcount and unemployment.[67]	different causes entrench poverty: social protection and government service delivery are limited in these remote and mountainous regions.	workforce can potentially boost the growth rate of the Lebanese economy.[68]Recent studies, however, show that Lebanon is leading the growth rate of female participation in labor force in the MENA region.[69]
Montenegro	**8.6%** below the **Middle-Income-Country Poverty Line.**[70] In Montenegro, there has been sustainable reduction in poverty in the last five years.	60.5% of the rural populace is classified poor.[71] In 2010, MONSTAT finds that not only are the rural populace are at a higher poverty risk, they also face more entrenched forms of poverty.[72]	**42.5% female** **55% male** As the country emerged from dirigisme, social property was privatized, and the economy sprouted 'grey areas' of undeclared or unregulated work. Post-conflict Montenegro is still reeling from the economic effects of war, which increased unemployment (17.8% in 2016)[73] and bolstered GDP loss. The Roma populace face entry barriers to the workforce, and employment rates are far below national averages: 47% Roma male and 8% Roma female are employed.
Morocco	**15.5%** below the **Lower-Middle-Income-Country Poverty Line.**[74] In Morocco, there has been steady decline in poverty, though the underlying factors	3 million out of the 4 million poor live in rural areas[75] The subjective poverty rate has increased by 15% from 2004 figures in rural Morocco. Meanwhile, the	**25% female** **74.1% male** Female labor force participation is low in Morocco, relating to the phenomenon that the gender difference in

[67] *Lebanon: Economic Outlook.* World Bank. (2017)
[68] Find more on Lebanon on the ERF website.
[69] See this AN-NAHAR coverage.
[70] The middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of $5.50/day. World Bank. (2017)
[71] MONSTAT. (2010)
[72] MIDAS Project, World Bank. (2016)
[73] World Bank. (2016)
[74] The lower-middle-income country Poverty Line, as defined by the World Bank, stands at consumption below the standardized poverty line of $3.10/day. World Bank. (2017)
[75] Fair Observer. (2017)

	may be remittances, deceleration of population growth and macroeconomic stability. Inequalities between rich and poor are still abounding, and poverty essentially has a rural face in the country. The MPI also reveals that an additional 12.6% of Moroccans are dangerously 'near' poverty. Among the 15.5% poor, 5% are in 'severe' multidimensional poverty.	urban poverty rate is half of the national average in 2001, and in 2014, stands at one-third.[76]	the labor force participation of the MENA region is the widest in the world.[77] However, Morocco is entering a period potential demographic dividend, with the number of working-age population, relative to below 15 and above 64 years, increasing. This could either signal a potential economic boom or an unemployment crisis, if economic activity is not encouraged and made inclusive for the marginalized.[78]
Tunisia	**24.7%** below the **National Poverty Line.**[79] Poverty rates in Tunisia have seen a significant increase, from 15.5% (2010) to 24.7% (2018). Income disparities are high: the top 20% of Tunisians earn 46% of the national income, while the bottom 20% earn only 5.9%.[80] Civil unrest since the 2011 has increased poverty	Rural areas in Tunisia remain marginalized and underprivileged, leading to high rates of rural to urban migration, particularly towards Greater Tunis and its agglomeration economies.[81]	**25.1% female** **71.3% male** Female labor force participation is low in Morocco, relating to the phenomenon that the gender difference in the labor force participation of the MENA region is the widest in the world.[82] Like Morocco, Tunisia faces crucial demographic transition in the coming years, yet barriers to the job market remain high. Young women are particularly vulnerable and face exclusion from economic activities.[83]

[76] World Bank. (2018)
[77] ILO. *Women in Business and Law.* (2014)
[78] This IFAD report expounds on the factors affecting employment and gender in Morocco.
[79] "Poverty has fallen in the Maghreb, but inequality persists". World Bank. (2016)
[80] *Tunisia: Economic Outlook.* World Bank. (2018)
[81] Amara, M., Jemmali, H. & Ayadi, M. "Rural-Urban Migration and Income Disparity in Tunisia". *Economic Research Forum.* (2017)
[82] ILO. *Women in Business and Law.* (2014)
[83] This ILO report expounds on the factors affecting employment and gender in Tunisia.

	and unemployment and discouraged entrepreneurs and private sector actors.		

6. Gender Entry Points for CP 1.1 CW Component

A commonsensical assumption of chemicals and heavy metal exposure is through food and supply value chains – indeed, in a study[84] conducted among a coastal community of the Moroccan Mediterranean coast, high seafood consumption and directly proportional dietary methymercury exposure was confirmed. Total mercury, determined through analyzing human hair (a biomarker of mercury exposure) using multiple regression analysis, revealed that a high proportion of women childbearing age (50% of the females in the study group) had relatively higher levels. Additionally, fishermen and their families, groups that consume fish more frequently were far more exposed among the different population subgroup. This generic entry point can be further refined to view chemicals and gender (and socioeconomic status) as crosscutting issues, for the CP 1.1 CW portfolio – see Table V below.

TABLE V: GENDER MAINSTREAMING ENTRY POINTS

ENTRY POINT	GENDER MAINSTREAMING CONSIDERATIONS
1. The knowledge and data gaps in understanding the social factors affecting the use of chemicals and heavy metals in the Mediterranean beneficiary countries are substantial	BASELINE: Compared to gender and climate change or gender and water management, the cross-cutting nature of gender and chemicals has received scarce academic and policy attention in the Mediterranean Basin. This lack of recognition has resulted in the paucity of concerted and coordinated effort to collate Mediterranean-specific, gender-responsive information[85] and data, specifically from a sociological perspective. The World Health Organization (WHO) in its *Gender, Health and the 2030 Agenda for Sustainable Development*, reiterates the costs of these gaps in understanding the social factors: "…biological explanations for differences between men and women have limited powers to explain the worldwide differences in health outcomes throughout human history, including in times of rapid demographic and epidemiological transition. These differences are largely due to the social phenomenon of gender".[86] ALTERNATIVE SCENARIO: CP 1.1 CW can provide an in-depth and pioneering understanding of how men and women are differently exposed to POPs and mercury in site-specific contexts, where subgroups (such as the urban poor) lie on the capacity spectrum, and which gender constraints and priorities could to be addressed. Tentatively, it will seek to address these issues through the entry point: a. Vulnerable and marginalized demographics are often limited by the exclusion of their needs and perspectives from chemicals and hazardous waste management strategies, the lack of

[84] "Hair mercury levels in relation to fish consumption in a community of the Moroccan Mediterranean coast" in *Food Additives and Contaminants*. (Vol. 24, No. 11). (2007)
[85] *Ibid.* This study is an illustrative example of why it is important to generate spatially tuned, context-specific information.
[86] See this WHO bulletin. (Published 12 June 2018)

	decision-making power regarding industrial complexes near their habitats, and socioeconomic and political influence in the public sphere. *b.* Addressing the lacuna in the literature can also bolster updating of current mechanisms as well as future efforts in the region, by providing data-driven and normative information, and priming regional and national agencies to consider these parameters in the chemicals and wastes policy and action. Gender-responsive information and gender-disaggregated data, deriving from primary field sources (from small-scale surveys in selected target sites) and secondary sources, can help in fine-tuning existent policies, establish exposure scenarios for different genders and age-groups, formulate new regulations, streamline national and local action, and create a regional effort to address common issues to support vulnerable demographics. Involving vulnerable and marginalized groups, after identification through field surveys and consultations, in relevant hazardous chemicals and waste management policies as stakeholders can increase the shelf-life and ownership of the project outcomes.
PROJECT ACTIVITIES[87] (DISPOSAL RISK ASSESSMENTS)	Outcome 1: *Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas* ✓ Output 1.1: Management and disposal of POPs ✓ Output 1.2: Management and safe storage of mercury Potential Activities: ✓ Environmentally Sound Management of both POPs and mercury is based on inventory of wastes; risk assessment and if necessary, prioritization for selection of wastes to be addressed by the project; treatment (centralization, repackaging and destruction). The key risk assessment tool will be the Environmental Management Plan (EMP – see Annex xx), which currently includes a section on consultation which includes gender/women's organizations. Risk of different chemicals considers the toxicity of each chemical based on WHO Hazard Classes. However, there is currently no quantitative or gender-disaggregated data reflected. The project will adapt the EMP outline and guidelines to better quantify potential exposure routes and risks for women and vulnerable groups. This may include site-specific surveying and consultation activities by local women's or community-based organizations. ✓ A second tool for risk assessment and prioritization will be the 'MapX GIS' interface. The prototype already includes a semi-automated function to map waste sites in relation to sensitive receptors (e.g. surface water, population centers) but there is no currently gender-disaggregated data. Gender-based datasets will be reviewed and integrated if available.

[87] Refer to Appendix A: Project Results Framework, p.x – x for detailed activity description. For the purposes of this Assessment, these activities are suggestive and will be fleshed out in alignment with project progression in later phases of the cycle.

2.

Once identified, linkages between social factors and exposure risks of different population subgroups have to be addressed

BASELINE:

Building on the previous entry point, in-depth research into gender and age-disaggregated pollutant exposure and chemical hazards will increase the comprehension of differentiated social factors in demarcating exposure risks (and concomitant consequences) and also reveal the shortcomings of present regulatory approaches and service delivery of chemical management regimes. Specific examples of differential exposure and risks among occupational / demographic groups could be pregnant and lactating mothers (among women) and firefighters (particularly among men).

ALTERNATIVE SCENARIO:

A plethora of epidemiological studies have revealed the health effects of hazardous chemicals and heavy metals on maternal and intergenerational child health have received attention. For example, exposure studies have revealed that women in the informal sector in developing countries, where chemical and health risks are often unregulated and exposure to solvents, mercury and POPs, are more likely to give birth to 'pre-polluted children', or with disabilities. To complement this existing literature, *CP 1.1 CW will particularly look into social factors* behind increased exposure risk, and resulting health effects.

a. For example, poor women often carry multiple burdens of exposure[88] – in addition to informal employment and hazardous occupational risks, they may also be exposed through bad living conditions (spurious building materials).

b. A specific occupational hazard that probably exists is for fire service personnel in the context of POPs (through flame retardants) and mercury. Firefighters are, as a global trend, predominantly men and are exposed to increased risk through their occupation.[89] Studies have shown increased rates of several types of cancer, as well as coronary heart disease, hearing loss and respiratory health problems than comparison groups among firefighters – despite the fact that, due to selection procedures, firefighters are often considered to be an inherently healthier group than the general population.

c. Men also face the risk of non-communicable diseases as well as reproductive problems (most commonly infertility due to chemical exposure), which require probing in order to delineate the health effects of particular chemicals.

[88] In addition to reproductive health risks, women also face a plethora of other disease risks – non-communicable diseases such as breast cancer, pulmonary and respiratory problems as well as impediments to motor skills through bioaccumulation and biomagnification. Quoted in Walsh, P. (et al.) *Oceans and Human Health: Risks and Remedies from the Seas*. p. 96. (2011)

[89] Specifically in the Mediterranean region, increased risks of forest fires are exposing fire service personnel to greater risks. MEFISTO – Mediterranean Forest FireFighting Training Standardization program through the EU Civil Protection and Humanitarian Aid brings together the EU-Mediterranean countries on a singular platform to address the issue, and presents current statistics on this emerging problem.

PROJECT ACTIVITIES (MULTI-FOCAL)	Outcome 1: *Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas* ➢ Output 1.1: Management and disposal of POPs ➢ Output 1.2: Management and safe storage of mercury ➢ Output 1.3: Long term POPs reduction through pilot activities on new POPs alternatives ➢ Output 1.4: Hg reduction through pilot activities on new Hg alternatives Potential Activities: ✓ Awareness-raising: As mentioned previously, the dearth of knowledge and information on gender and social factors in the chemicals and waste domain has prevent effective policymaking and concerted efforts from governments. Thus, awareness-raising though workshops, can specifically address this. Additionally, the awareness-raising activity could contribute better information access for vulnerable and susceptible groups. Women's information networks are often smaller than men's, presenting fewer opportunities for learning about health hazards, pollution-risks, and mitigating actions. Spreading the information and data collected through accessible and effective delivery channels could aid in the uptake of preventive care – women are likely to address the needs of their families, particularly children, and bring changes in consumption patterns, once informed about the health effects of POPs and mercury.[90] ✓ Capacity-building: Complementing the awareness-raising efforts, capacity-building can also be a strong gender-mainstreaming action point. CSOs, NGOs, labour rights groups, women's organizations and grassroots groups could be trained on the finer nuances of the socioeconomic factors determining the extent of pollution-risks and chemical hazards. They can, then, be involved to employ a bottom-up approach to include the identified stakeholders, as well as to generate inclusive policies. ✓ Technical assistance: Gender-balanced technical groups have to be established for the project activities. This is because vulnerable groups are often excluded from, and limited by their lack of representation and agency in such decision-making bodies. ✓ Legal framework: Regulatory tools, disposal plans, and POPs and mercury management policies could be made gender-responsive through A and B – wherein a participatory and informed approach dedicated to bring the marginalized and vulnerable to the table can lead to effective and inclusive policies. ✓ Governance tools: Using the above steps, CP 1.1 CW can

[90] *Women and Chemicals: The Impact of Hazardous Chemicals on Women*. p. 25. Women in Europe for a Common Future & UN Environment. (2015)

	pioneer gender-responsive project steering and coordination, particularly ensuring that women are not only represented, but can also undertake meaningful and responsible roles in pollutants, chemicals and waste management in the beneficiary countries.

7. Policy Environment, Legal Tools and Institutions

This section takes stock of the policy environment and legal frameworks available for gender-responsive actions related to chemical pollution, regulatory approaches to POPs and mercury (international conventions, national laws and policies, strategy documents on gender and pollution management) in the beneficiary countries, as well as a list of potential institutions towards collaboration on gender mainstreaming during the project cycle. Legal tools and enabling policies are crucial in ensuring gender inequality can be addressed through tangible and formal procedures. Additionally, the inclusion of local and national gender partners engenders capacity and technical knowledge towards future gender efforts while establishing ownership of the project and the change narrative being implemented.

TABLE VI: POLICY ENVIRONMENT,
LEGAL TOOLS & INSTITUTIONS

This table, compiled from various sources, particularly UN Women and the Equal Futures Partnership, takes stock of international conventions, national laws and policies, and country-level stakeholders that can aid CP 1.1 CW in gender mainstreaming and narrowing socioeconomic gaps.

Country	Policy Tools, Legal Instruments, Institutions	Provisions
Albania	1994 – CEDAW	Albania signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1994.
	1998 (amended 2012) – Constitution of the Government of Albania	Article 18 establishes that all are equal before the law. No one may be unjustly discriminated against for reasons such as gender, race, religion, ethnicity, language, political, religious and philosophical beliefs.
	2016 - 2020 – National Strategy and Action Plan on Gender Equality	The Strategy and the Action Plan represent a commitment for 2016 – 2020, with concrete interventions towards economic empowerment of women and men, ensuring actual participation and engagement in political and public decision-making processes; reducing gender-based violence and domestic violence and strengthening the coordination and monitoring role of the national mechanism of gender equality.

	Institutions	Ministry of Social Welfare and Youth (with contribution of the Inter-Agency Working Group) Ministry of Justice National Referral Mechanisms
Algeria	1996 – CEDAW	Algeria signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1996.
	2008 – Constitution of the Government of Algeria	Under the Algerian Constitution, women enjoy the same civil and political rights as men and have the status of full citizens (Articles 29 and 31).
	Institutions	Ministry of National Solidarity, Family Affairs and Status of Women
Bosnia and Herzegovina (BiH)	1993 – CEDAW	BiH signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993.
	2006 – Law on Gender Equality	Bosnia's Gender Equality Law provides definitions for direct and indirect discrimination, as well as gender-based violence and sexual harassment. It mandates the creation of gender equality of gender equality strategies and programs in education, employment, access to resources, social protection, etc.
	2014 - 2017 – National Action Plan on Gender	The NAP addresses the gender rights principles laid out in the national law, and works towards improving women's participation in public life and decision-making, and particularly targets the legacy of human trafficking and sexual slavery in the country's post-conflict context.
	Institutions	Agency for Gender Equality of Bosnia and Herzegovina Ministry of Human Rights and Refugees
Egypt	1981 – CEDAW	Egypt signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1981.
	2014 – Constitution of the Government of Egypt 1937 – Criminal Code of the Government of Egypt	The two main legislations protecting and supporting women are the Egyptian Constitution of 2014 (Articles 11, 53 and 214) and the Criminal Code of 1937. Crimes against women in Egypt are divided in two groups: misdemeanors and felonies. Misdemeanors, such as catcalling, are usually punished by fines with shortened trials.

	Integrated Gender Program (UNDP, UN Women and UNFPA)	Felonies, like FGM and rape, are permanent criminal offences, punished by longer jail time. The integrated program is helping to address multi-faceted challenges faced by women and young girl through three pillars of social, legal and economic empowerment. A similar EBRD project for the MENA region is active in Egypt as well.
	Institutions	National Council for Women
Lebanon	1997 – CEDAW	Lebanon signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in1997.
	1936 – Constitution of the Government of Lebanon	The Lebanese legal system is primarily based on French Civil Code and Egyptian legal systems. Whilst there is no unified civil law in Lebanon, the Lebanese Constitution promulgated in 1926 articulates the principle of equality among all citizens (Articles 7 and 12).
	Women's International League for Peace and Feminism (WILPF) – ABAAD Resource Centre of Gender Equality	WILPF and ABAAD are leading national consultations to develop the first National Action Plan towards gender equality currently. The EU wrapped up its 'Gender Equity and Empowerment of Women in Lebanon' in early 2017, which has laid groundwork towards the adoption of a quota system for women in the country.
	Institutions	National Commission for Lebanese Women
Montenegro	2006 – CEDAW	Montenegro signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 2006.
	2007 – Law on Gender Equality	The first Law on Gender Equality was adopted in July 2007. The Law on Amendments to the Law on Gender Equality was adopted in June 2015, in line with international specifications of the UN, the EU, and the Council of Europe.
	2008 – Action Plan to Achieve Gender Equality in Montenegro – PAPRR	This document was drafted in the context of the accession of Montenegro to the EU, based on CEDAW. Action Plan is updated every 4 years, and out of the critical areas covered in Beijing

		Declaration, Montenegro has opted for 9.
	Institutions	The Ministry of Human and Minority Rights The Department of Gender Equality Affairs
Morocco	1993 – CEDAW	Morocco signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1993.
	2011 – Constitution of the Government of Morocco	Article 19 establishes that men and women should enjoy equal rights and freedoms in all civil, political, economic, social, cultural and environmental matters.
	2013 – IKRAM	The Government Plan for Equality was developed by the Government of Morocco along with key stakeholders. .
	Institutions	The Ministry of Human Rights The Ministry of Family, Solidarity, Equality and Social Development
Tunisia	1985 – CEDAW	Tunisia signed the International Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1985. However, in April 2014, Tunisia officially lifted key reservations on the CEDAW.
	2014 – Constitution of the Government of Tunisia	The new constitution adopted in January 2014 includes strong protection for women's rights: Article 21 confirms equality of rights and duties; Article 34 guarantees women's representation in all elected bodies; and, Article 46 ensures protection of human rights.
	2015 - 2018 – Gender Equality Promotion Program in Tunisia (EU-Tunisia)	The financing agreement of the EU-Tunisia program was signed in April 2015. It aims to contribute to achieving gender equality in Tunisia by reducing inequalities at national, regional and local levels.
	Institutions	The National Council of Peers for Equality and Equal Opportunities between Women and Men Ministry of Women, Family and Children

8. Conclusion

This Gender Assessment has identified and expounded upon both explicit and implicit gender and socioeconomic issues that could be addressed through the project outcomes. The findings from the Assessment also form the basis for the Gender Action Plan (Section 9), which will specifically address these by mainstreaming actionable points in the CP 1.1 CW's results framework, corresponding activities, indicators, timelines, responsible parties, and budget allocations. As gender equality gains priority in the GEF's, UN Environment's and other agencies' portfolio, this project partakes in the international conversation on gender mainstreaming and gender-responsive planning in chemical and wastes domain, international waters, environmental stress and security, and pollution hazards. If implemented effectively, this project has the potential to become a good practice gender mainstreaming guide to future interventions on the gender and chemical domain, and on pollution risk reduction and health hazards with socioeconomic considerations, in the beneficiary countries (Albania, Algeria, BiH, Egypt, Lebanon, Libya, Montenegro, Morocco, and Tunisia), regionally (the Mediterranean, Western Balkans, and the MENA region), as well as globally.

9. Gender Action Plan

CHILD PROJECT 1.1 CW OF THE MEDITERRANEAN SEA PROGRAMME: ENHANCING ENVIRONMENTAL SECURITY				
Programme Objective	To accelerate the implementation of agreed upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas, while strengthening climate resilience and water security, and improving the health and livelihoods of the coastal population			
Programme Component 1:	Reduction of land-based pollution in priority coastal hotspots, and measuring progress to impacts			
COMPONENT 1: CHEMICALS AND WASTE				
PROJECT OUTCOME: In coastal hotspots, measurable reduction of wastes and hazardous chemicals (POPs, Mercury) impacting human health and coastal habitats, through innovative practices, techniques, and regulatory approaches				
Outputs		**Gender Baseline**	**Alternative Scenario**	**Gender Action Points**	**Means of Verification (Evaluation of Gender Mainstreaming Progress)**
1.1	Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment area	• Knowledge and data gaps in understanding socioeconomic and gender dynamics, in the context of hazardous pollutant, chemicals and waste exposure pathways and risks	○ Generate relevant and reliable information and data regarding gender-specific and social factor-specific exposure risks in site-specific contexts	➢ Engage short-term **Gender / Social Development Consultant** to **design social factors and gender-focused survey questionnaire** for selected sites, with a strong participatory and inclusive focus **($10,000 – 15,000 inclusive for potential field visit)**	✓ **Key Informant Interviews** with local target groups on gender sensitivity, chemical use patterns, exposure pathways ✓ **Focus Group Discussions** with NGOs working on gender rights, local gender equality lobbying groups, trade unions, workers' associations, decentralised government bodies to identify needs and interests of each demographic, as well as to map gender relations in site-specific contexts
1.2	Management and safe storage of mercury			➢ **Adapt EMPs** to better quantify exposure pathways and risks for women and vulnerable groups	✓ **EMPs** are adapted – story can potentially be published on the UN Environment news bulletin online to showcase this unique gender focus
		• Time poverty scenarios and socioeconomic dynamics	○ Understand time poverty scenario in site-specific	➢ **Use MAPX GIS** interface potentially to also portray gender-sensitive datasets, if relevant and reliable data can	✓ **MAPX GIS** gender-relevant datasets are shared through UN Environment news bulletin online to highlight the importance of data in the domain of gender and chemicals

		among population subgroups of target sites	contexts, and whether these affect awareness and activities relating to exposure	be collated	
1.3 1.4	Long term POPs reduction through pilot activities on new POPs alternatives Hg reduction through pilot activities on new Hg alternatives	• 1.1 & 1.2 baseline points apply • Gender-exclusion at different stages of the policy/project cycle and lack of capacity to address gender mainstreaming	○ 1.1 & 1.2 Targets and Milestones apply ○ Ensure gender-balance in technical participation, and governance frameworks, as well as visibility and dissemination of information (and data) regarding social factors and gender aspects to influence policy and regulatory approaches (awareness-raising and capacity-building)	➢ Output 1.1 & 1.2 Action Points apply ➢ **Involve 50% women** in technical groups and decision-making bodies ➢ Host **Gender Workshop** to be conducted with technical support from the MedPCU Gender Specialist, for awareness-raising and capacity-building ➢ Train technical members how to highlight gender and socioeconomic factors where relevant in management and negotiation spaces (**through the Workshop**) ➢ Provision for regulatory frameworks, disposal plans and prevention policies to have **gender-responsive focus and inclusive** approach	✓ Output 1.1 & 1.2 Means of Verification apply ✓ **Number of men and women trained to on gender mainstreaming in chemicals and waste sector** ✓ Number of **male and female participants disaggregated by age** and **household head** ✓ **Outcome report** from **Gender Workshop**, possibly to include exit surveys to estimate levels of comprehension, agreement and acceptance of ideas discussed and presented ✓ **Number of men and women in technical groups** ✓ **Meeting minutes** ✓ **Randomised interviews** with different members of technical groups to gauge whether they see any positive effects of gender-responsive legal tools ✓ Knowledge products on POPs, Hg and gender (best practice guides, governance recommendations) – context and site specific information and data (if possible) ✓ Resource lists and annotated bibliography compilation

Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security

GEF ID 9684, Child Project 1.1: Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts

Environmental Assessment and Management Plan – Lebanon

Draft

November 2018

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Abbreviations

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BOQ	Bill of Quantities
DDT	Dichlorodiphenyltrichloroethane
EDL	Electricite du Liban
EA	Executing Agency
EAMP	Environmental Assessment and Management Plan
EIA	Environmental Impact Assessment
ELV	Emission Limit Value
ESERN	UN Environment Environmental, Social and Economic Review Note
ESM	Environmentally sound management
GDP	Gross Domestic Product
GEF	Global Environment Fund
HCH	Hexchlorcyclohexane
HCW	Healthcare waste
HSE	Health, Safety and Environment
IA	Implementing Agency
IEE	Initial Environmental Examination
IMAP	Integrated Monitoring and Assessment Programme
IMDG	International Maritime and Dangerous Goods Code
LCA	Ministry of Finance / Lebanese Customs Authority
LM	Large Marine Ecosystem
MAP	Mediterranean Action Plan
MedPCU	MedProgramme Coordinating Unit
MED POL	Mediterranean Pollution Assessment and Control Programme
MIA	Mercury Initial Assessment (Minamata Convention)
MoA	Ministry of Agriculture
MoE	Ministry of Environment
MoEW	Ministry of Energy and Water
MoI	Ministry of Industry
MoL	Ministry of Labour
MoPH	Ministry of Public Health
NAP	National Action Plan (Barcelona Convention)
NIP	National Implementation Plan (Stockholm Convention)

PCB	Polychlorobiphenyl
PPE	Personal protection equipment
PPP	Purchasing Power Parity
PSC	Project Steering Committee
SAP MED	Strategic Action Programme to Address Pollution from Land-based Activities in the Mediterranean
RID	Regulations Concerning the International Transport of Dangerous Goods by Rail
TDA	Transboundary Diagnostics Analysis
WB	World Bank

Executive Summary

Child Project 1.1 (GEF ID 9684) is one of the seven projects developed in the framework of the GEF funded Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security. MedProgramme's objective is to accelerate the implementation of agreed upon priority actions to reduce major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security and improving the health and livelihoods of coastal populations.

The main expected outcomes of the Child Project 1.1 are:

- Measurable reduction of wastes and hazardous chemicals (POPs, mercury) impacting human health and coastal habitats is achieved;
- Update of the baseline situation/ TDA, harmonization of monitoring protocols, methodologies and procedures in compliance with IMAP, including design of offshore reference network and gender assessment.

The Environmental Assessment and Management Plan (EAMP) for Child Project 1.1 – PCBs disposal activities in Lebanon – describes the planned project interventions, country's legal and institutional framework pertinent to POPs management and the main characteristics (including population, infrastructure and key environmental characteristics) of the eight sites selected for Phase I disposal. At the same time, the EAMP identifies where potential negative environmental impacts could occur in case of no action or failure to ensure environmentally sound management (ESM) of PCB stocks. Based on such an assessment, potential safeguarding and disposal options are evaluated and an appropriate strategy proposed to manage, prevent and/ or mitigate negative environmental impacts. Environmental monitoring and evaluation plan is also proposed within the framework of this assessment.

Based on the detailed inventory completed in June 2018 under the GEF/ WB project PCB Management in the Power Sector (GEF ID 4108), a total of 257 transformers (with a weight of around 211 tonnes and containing over 61 tonnes of oil) were identified for risk management under Child Project 1.1 Phase I. This equipment will be collected and placed at eight sites, as presented in the table below, ready for safeguarding, transport and disposal.

Table 0-1: Distribution and quantities for Phase I equipment

Town/ district	Site	Owner	Total weight (kg)	Oil (kg)	Metal (kg)	Number of transf.	Status*
Tripoli	Hraiche	Qadisha concession	165,205	36,442	128,763	151	Stock
Beirut	Bauchrieh	EDL	54,531	12,737	41,794	54	Stock
		Aley concession	3,495	698	2,797	4	Stock
			2,050	680	1,370	1	In use
Jbeil/ Byblos	Jbeil concession storage	Jbeil concession	2,113	415	1,698	2	Stock
			26,865	5,777	21,088	23	In use
Beirut	Army barrack Kfarchima	Lebanese Army	7,830	2,283	5,547	5	Stock
	Zahrani oil refinery	Zahrani authority	230	85	145	1	Stock

Saida district			1,387	425	962	5	In use
Zahleh district	Midane	Zahleh concession	7,258	1,599	5,659	7	Stock
Jezzine district	Awali river hydro power plant	Litani authority	1,315	340	975	2	Stock
Jbeil district	Nahr Ibrahim hydro power plant	Nahr Ibrahim concession	180	80	100	2	In use
TOTAL			**272,459**	**61,561**	**210,898**	**257**	

A total of 31 transformers that were still in use at the time of inventorying will be removed from the network and be ready for disposal at the time of Phase I implementation. This is in line with the action plan prepared under the GEF/ WB project and endorsed by the equipment owners.

More than 90% of the Phase I equipment will be collected from the 3 sites: Hraiche, Tripoli (cca 165 t), Bauchrieh in Beirut (cca 60 t) and the central storage site for the Jbeil concession in Jbeil/ Byblos (cca 29 t). They are located in the densely populated areas in major cities (Beirut, Tripoli) and tourist centres (Jbeil). The shortest distance from Hraiche site to the Mediterranean Sea is some 50 m. Several Phase I sites are located in the areas assessed as hot spots under the 2016 Barcelona Convention National Action Plan (NAP) addressing pollution from land-based sources, including Bauchrieh and the towns of Tripoli and Saida.

A risk assessment conducted for the sites shows that the risk is largely commensurate with the quantity of PCB oil and equipment being stored at the sites (Hraiche > Bauchrieh > Jbeil). However, the Bauchrieh site has the highest potential for negative environmental and human health effects, despite having only just over half the quantity of stock of the Hraiche site. The Bauchrieh site is in an urban area, has an unprotected well at the site (that can potentially contaminate groundwater sources used for drinking water supplies) and already has contaminated soil reported.

The three main sites are located in the vicinity (within a 40 km radius) of the two major Lebanese ports – Beirut and Tripoli, which are likely to be used for export.

An assessment of the alternatives for the components of safeguarding, transport and disposal was conducted. The following strategy was proposed:

An international tender will be placed for the safeguarding, transport and environmentally sound disposal of the contaminated PCB oil and associated equipment. Selection criteria required as part of the evaluation process will mean that it is highly likely that an international contractor will be responsible for the majority of implementation of the works. It is proposed that national contractors should provide as much resources as possible for the safeguarding and transport components. Training/ stakeholders' capacity building programme comprising theoretical and practical elements will be delivered by the UN Environment MAP in its capacity of the executing agency (EA), in cooperation with the MoE, international and national experts. International contractor will facilitate the training by allowing for practical demonstration of methods required to undertake the work safely. Supervision of the work will be provided by the Ministry of Environment with support of UN Environment (implementing and executing

agencies). Absence of national facilities means that all wastes will be exported for treatment and disposal at a facility abroad.

Risk identification and mitigation planning conducted set out the risks and mitigation measures required for safeguarding, transport and disposal components of the work. The Environmental Monitoring Plan describes in detail both risks and mitigation measures, how the mitigation measures should be monitored, and which individual or organization has the responsibility for doing so. It is recommended that stakeholders responsible for collecting PCB oil and equipment from throughout Lebanon to the 8 sites above also follow the risk mitigation planning as well as the environmental monitoring plan.

A. Background and country setting

Lebanon is Eastern Mediterranean country with a total surface of 10,400 square km, 225 km long Mediterranean coastline, and a population of 6.3 million. The economy is predominantly based on services and oriented towards the region. During the past couple of years, GDP growth rates remained below 2 percent. The prolonged Syrian crisis and the slow pace of structural reforms are seen as critical impediments to achieving potential growth. Estimated per capita GDP (PPP – Purchasing Power Parity) in 2017 was USD 19,500.

The economic and social impact of the Syrian crisis is significantly exacerbating country's development and environmental problems. According to government and independent sources, up to 1.5 million Syrians, about a quarter of the Lebanese population, have taken refuge in Lebanon since 2011. This has strained Lebanon's public finances, service delivery, and the environment.

The main environmental issues include deforestation, soil deterioration (due to erosions, pollution and urbanisation), species loss, air pollution (especially in Beirut area where more than one third of the total population is concentrated), and pollution of coastal waters from wastewater, solid waste and oil spills. National environmental priorities include solid waste and wastewater management, and industrial pollution control, whereas the key environmental management challenges include e.g. completion of the regulatory and institutional frameworks, monitoring, licensing and enforcement of environmental legislation.

A.1 Description of the project

Child Project 1.1 (GEF ID 9684) is one of the seven projects developed in the framework of the GEF funded Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security. MedProgramme's objective is to accelerate the implementation of agreed upon priority actions to reduce major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security and improving the health and livelihoods of coastal populations. The programme comprises four components:

Component 1 - Reduction of land-based pollution and measuring progress to impact;
Component 2 - Enhancing sustainability and climate resilience;
Component 3 - Protection of marine biodiversity (component 3); and
Component 4 - Knowledge management/ programme coordination.

Child 1.1 is developed under the first MedProgramme component together with Child 1.2 (addressing depollution and water resources management) and Child 1.3 (focusing on the design and implementation of innovative investment programmes) projects.

The main expected outcomes of the project are:

- Measurable reduction of wastes and hazardous chemicals (POPs, mercury) impacting human health and coastal habitats is achieved;
- Update of the baseline situation/ TDA, harmonization of monitoring protocols, methodologies and procedures in compliance with IMAP, including design of offshore reference network and gender assessment.

Child Project 1.1 is fully consistent with and supportive of implementation of the regional policy framework of the Barcelona Convention, in particular as regards Strategic Action Programme to Address Pollution from Land-based Activities (SAP MED), Regional Plans on POPs and mercury, Regional Action Plan on Sustainable Consumption and Production in the Mediterranean, Guidelines on Best Environmental Practices for the Environmentally Sound Management of Mercury Contaminated Sites, PCBs, Lube Oils and Lead Batteries, and the Integrated Monitoring and Assessment Programme for the Mediterranean. Moreover, implementation of the Child Project 1.1 is expected to contribute significantly to the implementation of national commitments under relevant conventions – primarily Stockholm and Minamata Conventions.

The project has two components: Component 1 – Chemicals and Wastes – with a budget of USD 11.25 million (6.25 million for POPs and 5 million for mercury), and Component 2 – International Waters – with a budget of USD 3 million.

Project Component 1 - Chemicals and Waste - aims to improve human health and coastal habitats, through reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas. Activities planned under this component include engaging with participating country governments on the provision of disposal options (for POPs) and long-term containment (for mercury); and raising awareness on new POPs in products and mercury in measuring devices, through targeted pilot activities to introduce alternatives. Ultimately project activities should lead to a tangible reduction of land-based pollutants in Mediterranean countries, through the disposal of 2,000 t of POPs and over 50 t of Mercury waste.

The activities to be implemented under Component 2 focus on improving Mediterranean countries' capacity to identify trends and monitor progress to impacts, including through an update of the Transboundary Diagnostics Analysis (TDA) for the Mediterranean large marine ecosystem (LME), gender assessment, strengthening and harmonisation of monitoring protocols, enhanced data sharing, and similar.

In the framework of project preparation activities (PPG phase), the Lebanon country mission was organised in December 2017 to confirm national priorities, collect data and assess PCBs stocks to be potentially addressed through Child Project 1.1. Stocks of mercury wastes were not reported as an issue requiring Child 1.1 assistance, but development/ consideration of mercury prevention activities was requested, together with the assistance to improve management of mercury wastes in health sector. Preparation of Mercury Initial Assessment (MIA) is expected to start in 2018.

Lebanon has been prioritised for POPs disposal activities of the Child Project 1.1 due to the following:

- the country did not benefit from the previous GEF supported UN Environment/ MAP project (MedPartnership) on POPs disposal;
- improvements in PCBs management are prioritised in the Stockholm Convention National Implementation Plan (NIP) 2017;
- The GEF/ World Bank project PCB Management in the Power Sector (GEF ID 4108) supported preparation of a detailed PCBs inventory (completed in June 2018) confirming a significant quantity (over 1,000 t) of PCBs/ PCBs contaminated equipment would remain in the power sector following project's completion in 2019;
- building up on the previous GEF-funded interventions/ sustainability;

- PCBs contaminated sites have been identified in the areas assessed as hot spots under the 2016 Barcelona Convention National Action Plan (NAP) addressing pollution from land-based sources NAP (such as Bauchrieh/ Beirut; Tripoli; Saida).

Child Project 1.1 Component 1 activities are structured under the following four outputs:
Output 1.1: Management and disposal of POPs
Output 1.2: Management and safe storage of mercury
Output 1.3: Long term POPs reduction through pilot activities on new POPs alternatives
Output 1.4: Hg reduction through pilot activities on new Hg alternatives

For the output 1.1 on management and disposal of POPs, a two-phase approach has been adopted, with a first phase of collection to secure, export, and dispose quantities verified during the PPG phase as being ready for disposal. Quantities identified in the PPG phase but requiring further work on verification and prioritisation are planned for Phase II. The criteria for determining quantities of POPs to be included in Phase I and Phase II are detailed in the subsequent paragraphs.

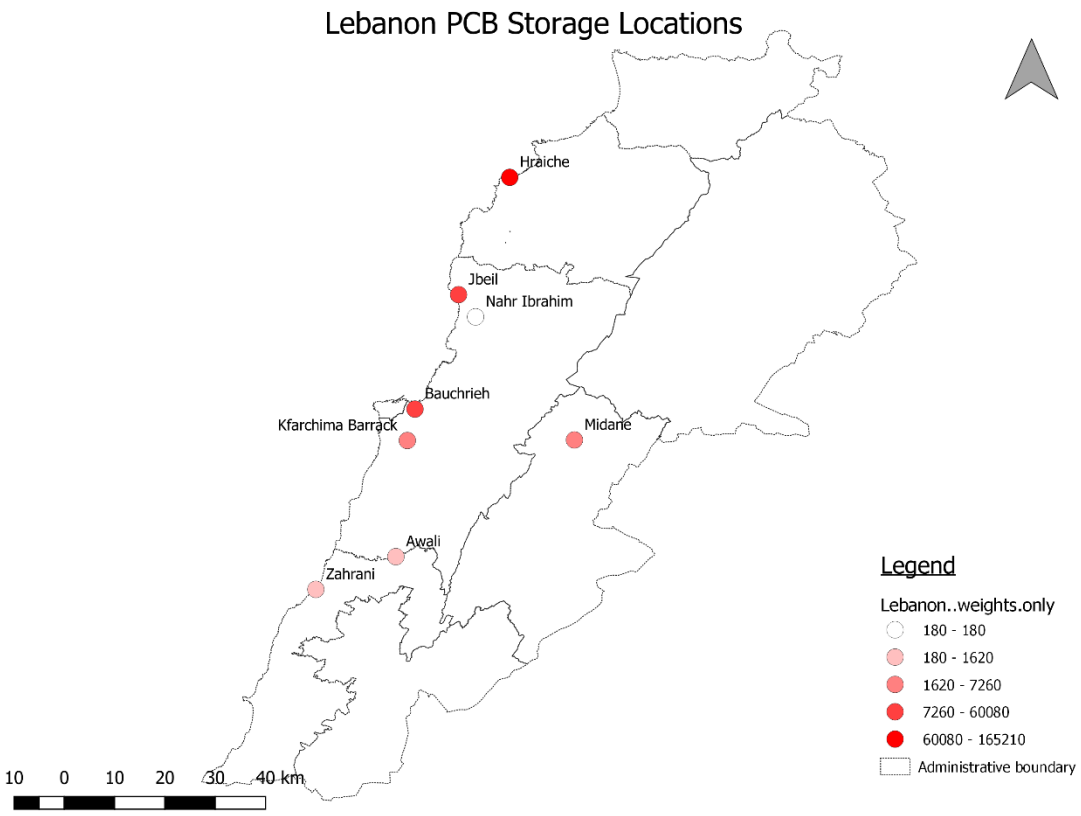
For inclusion in **Phase I**, stocks were required to be:

- fully inventoried on a per piece basis (i.e. individual transformers and other equipment are indicated in detail);
- confirmed as contaminated and, in the case of PCB contaminated oil, oil has been tested and PCB concentrations verified, or presence of pure PCBs established;
- declared by their owners to be available and ready for immediate disposal by the project, with adequate security measures in place to prevent stocks from being accessed and/or removed prior to project initiation.

The project preparation process confirmed more than 272 tonnes of Phase I stocks at eight sites in Lebanon (shown in the A-1 below). Results of the detailed inventory and consultations with the Lebanese Ministry of Environment were used to confirm Phase I stocks comprising 257 transformers with the total weight (oil and metal parts) of 272,459 kg. The predominant share of these are out of use transformers, while 31 transformers (with the total weight of cca 30 t) were still in use at the moment of survey. These will be removed from the network and ready for disposal by the time Phase I activities take off. Contamination levels in the equipment identified for Phase I range from 50 ppm to pure PCBs.

Four out of eight Phase I sites (storing some 75% of the total stocks) are located in major cities (Beirut, Tripoli) and tourism centres (Jbeil) in Lebanon's densely populated coastal belt. Population exposure risk factor in these areas is very high, and in the case of Bauchrieh (Beirut) it is exacerbated due to potential groundwater contamination through the site's well (more details in section C.1.2). Two of the Phase I sites – Hraiche and Zahrani oil refinery – are located in the immediate vicinity of the Mediterranean Sea.

Figure A-1: Lebanon PCB storage locations



For inclusion in **Phase II,** once the different priority wastes are characterized, a transparent and objective analysis will be made of the stocks based on the following criteria:

- Immediate risk to human health and environment; this will be assessed following an approach developed by FAO based on a chemical risk factor and an environment/ exposure risk factor;
- Cost effectiveness and feasibility within the timescale of the project, including the priority expressed by governments and existence of political will and co-finance to address wastes;
- Balance between disposal of legacy accumulations of wastes, and contemporary accumulations, in support of prevention pilots;
- Equitable regional distribution of project activities across project countries.

In line with the 2017 NIP priorities and inventory results, the following potential project interventions are identified for Phase II in Lebanon:

1. Disposal of up to 780 t of PCBs and in-use PCBs contaminated;
2. Mobile dechlorination for 126 t of PCBs contaminated oil from large transmission (in-use) transformers to enable full elimination of PCBs and cut potential cross-contamination routes;
3. Priority remediation measures for Bauchrieh – PCBs contaminated transformer maintenance and storage site located in a residential area of Beirut; priority measures include improvement of the drainage system at the site, pumping out the content of the site's well and disposing of the extracted oil and sludge.

Under the GEF/ WB project, an action plan on decommissioning contaminated in-use equipment was prepared following completion of the detailed inventory in June 2018 and is undergoing a consultation process with the equipment owners, starting from August 2018. The consultation process is expected to lead to an agreed upon course of action and a commitment by the equipment owners to phase out transformers contaminated above 50 ppm in line with country's Stockholm Convention obligations to eliminate PCBs by 2025. The action plan endorsed by the equipment owners – the main ones being Electricite du Liban (EDL), Qadisha and Zahleh Concessions – will be shared with the Child Project 1.1 and taken *in lieu* of declaration of ownership to confirm the quantities will be available for disposal (this is primarily relevant for Phase II equipment but also for 31 in-use transformers identified for Phase I disposal).

A.2 Scope, objectives and format of the Environmental Assessment and Management Plan

Scope

The Environmental Assessment and Management Plan (EAMP) for Child Project 1.1 – PCBs disposal activities in Lebanon planned under component 2 – describes the planned project interventions, country's legal and institutional framework pertinent to POPs management and the main characteristics (including population, infrastructure and key environmental characteristics) of the eight sites selected for Phase I disposal. At the same time, the EAMP identifies where potential negative environmental impacts could occur in case of no action or failure to ensure environmentally sound management (ESM) of PCB stocks. Based on such an assessment, potential safeguarding and disposal options are evaluated and an appropriate strategy proposed to manage, prevent and/ or mitigate negative environmental impacts. Environmental monitoring and evaluation plan is also proposed within the framework of this assessment.

Objectives

The main objectives of the EAMP are to:

- comply with UN Environment safeguard policies for projects, namely the UN Environment Environmental, Social and Economic Review Note (ESERN);
- describe the sites for Phase I activities and set the basis for preparation of Environmental Management Plans to be implemented by contractors at disposal stage;
- to identify risks associated with the work and appropriate mitigation measures to manage identified/ potential negative environmental impacts;
- assess national capacities and to recommend adequate safeguarding and disposal strategies.

The UN Environment ESERN approach categorizes projects into Low, Moderate and High risk, based on the potential for negative impacts. This project, involving handling and movement of highly hazardous substances, does have the potential for significant negative impacts, possibly irreversible, in the event of an accident or leakage. Thus, the project is likely to be classified as 'High Risk' and as such, requires a full impact assessment and effective safeguard management plan. This document sets out these requirements.

Format of the EAMP

In general, international hazardous waste safeguarding projects, including those dealing with PCB wastes, involve several components, namely, collection and centralization of wastes, repackaging, stowage into

ISO shipping containers, domestic and international transport and finally disposal. A principal step in the EAMP process is the environmental assessment (EA) which for this type of project is intended to give information about the type and level of risk at each site being dealt with. The format for the EAMP allows for the objective evaluation of available options for each of these components, taking into consideration the existing national capacity and the results of the EA. The assessment of available options includes deciding which organization will take responsibility for the management, supervision and implementation of each element. Additionally, the EAMP allows for a technical assessment of disposal technologies appropriate to the wastes being dealt with. A key output of the document in this regard is the safeguarding and disposal strategy.

Once the strategy has been decided upon, what follows is an assessment of key factors that will allow all aspects to be undertaken with minimal risks to human health and the environment. This is set out in the Environmental Management Plan which requires the detailed identification of risks at all stages of the project and proposal of appropriate risk mitigation measures for each one. This is followed by specification of the required monitoring (Environmental Monitoring Plan) to ensure that the mitigation measures have been put in place and the risks have been lowered. The EMP also requires that responsibility for monitoring is clearly assigned to individuals or institutions.

A.3 Country institutional and legal framework

The **key institutions** with competences for POPs/ PCBs management are briefly described below.

Ministry of Environment (MoE): The key governmental body with competences for environmental management in Lebanon, responsible for implementing the Stockholm Convention (SC) and in charge of coordinating all POPs related activities with relevant stakeholders. The Service of Environmental Technology – Department of Chemical Safety is specifically responsible for the management of chemicals including POPs. Following the amendments of the SC which resulted in addition new industrial chemicals (new POPs), this department coordinates with the Department of Protection of Urban Environment and the Service for Urban Environment, which are responsible (among other duties) for reviewing environmental conditions for industrial establishments in the permitting processes. MoE is also a competent authority for the environmental impact assessment (EIA) procedures.

Ministry of Agriculture (MoA): The Service of Plant Protection within the MoA is responsible for management of pesticides in the country including permitting, registration and distribution, as well as disposal and handling of empty containers.

Ministry of Public Health (MoPH): The Service of Sanitary Engineering within the MoPH is responsible for reviewing, updating, and enforcing the registration and use of public health pesticides, biocides, and home-owner pesticide products.

Ministry of Finance / Lebanese Customs Authority (LCA): Responsible for controlling goods imported/ exported to/ from Lebanon in accordance to the Customs Law or any other law or agreement which Lebanon is party to. Import of POPs materials into Lebanon is controlled by the LCA.

Ministry of Energy and Water (MoEW) - Electricite du Liban (EDL): Under the jurisdiction of the MoEW, the EDL is an autonomous state owned national electrical utility that largely owns and manages the power sector in Lebanon. The MoEW/ EDL owns a large number of PCBs containing transformers and capacitors. The EDL has cooperated with MoE on the environmentally sound management of the PCBs in the power sector under the ongoing GEF/ WB project.

EDL produces some 90% of electricity in Lebanon and provides transmission and distribution services. In performing its functions, EDL also relies on service providers/ private companies to whom certain tasks are outsourced based on concession agreements (made between service providers and the Ministry of Energy and Water). Out of the currently active seven concessions, some are exclusively distribution, some are mixed transmission/ distribution, and there is one production concession (Qadisha). At the end of concession agreements, facilities operated by service providers will become state ownership. Most of the current concession will end over the course of the next five years (with possibilities for extension).

Ministry of Industry (MoI): Issues licences for industrial firms and is directly involved in managing industrial chemical wastes.

Ministry of Labour (MoL): Issues health and safety measures that industries need to abide by including management of chemicals as they relate to workers safety.

Regulations pertinent to hazardous wastes and pesticides date to as early as 1960's, including, for example, laws number 6 of 08/01/1968 on Organization of the trade of fertilizers, agricultural medicines and feeds, and number 11 of 24/04/1978 on Organization of the import and the occupations of selling, filling, packaging, preparing, manufacturing and spraying pesticides and rodenticides for domestic use. Other relevant pieces of legislation include the law number 64 of 12/08/1988 on Environmental preservation against pollution from harmful wastes and hazardous materials, the decree number 13528 of 19/11/1998 on trading of pesticides, ministerial decisions banning the import of certain pesticides, and others. Moreover, general environmental legislation such as the law number 444 of 29/07/2002 on Protection of the environment and the decree number 8471 of 04/07/2012 on Environmental compliance of establishments are also relevant for POPs management. A list of pertinent legislation is provided in Annex 1. Provisions of the relevant international conventions transposed into the national legislation (see section A.4) complete the legal framework for POPs management in Lebanon.

Ministry of Environment has the key responsibilities related to EIA procedures, as regulated under **Decree 8633 Fundamentals of environmental impact assessment** of 07/08/2012. The Decree and its annexes describe the requirements and the stages of the environmental assessment procedure including:

- The initial filing and screening process whereby a request to carry out a project is submitted to the MoE for screening to classify the project and indicate the type of study that is required – if it falls under Annex 1 projects then a full EIA study is required and if it falls under Annex 2 listed projects, an Initial Environmental Examination (IEE) is required;
- Baseline data collection;
- Scoping of environmental impacts;
- Carrying public participation to disclose potential impacts to the public (only required for EIAs);
- Assessment of environmental and social impacts;
- Design of adequate impact mitigation measures to avoid, reduce, or compensate and impact;

- Development of an Environmental Management Plan;
- Development of a Monitoring Plan;
- Disclosure of findings to the public (in the case of EIA).

In the course of preparation of the GEF/ WB project (GEF ID 4108), an assessment of environmental and social impacts (ESIA)[1] was carried out by the Ministry of Environment (in cooperation with EDL) with the technical assistance of the WB environmental safeguards staff. ESIA was prepared in line with the WB Operational Policies and Procedures[2] and it includes a generic environmental and social management plan (ESMP). The generic ESPM proposes different protocols to be adopted during project implementation to avoid and mitigate identified impacts; it also includes monitoring plans necessary to evaluate environmental quality throughout the process. Based on this ESMPs, site specific plans are prepared (by contractors) and implemented in parallel to the implementation of project activities.

In line with provisions of the **Decree 8633 Fundamentals of environmental impact assessment** and based on preliminary consultations with the Ministry of Environment, activities considered under the Child Project 1.1 Phase I will not require a full EIA study. The current EAMP and measures it identifies will be carried out during project implementation to ensure potential negative impacts linked to project interventions are avoided and/ or mitigated.

A.4 Applicable international legal framework

Lebanon is party to Barcelona, Basel, Minamata, Rotterdam and Stockholm Conventions. Overview of the status of ratification for the main international conventions relevant for chemicals and waste management for the Child Project 1.1 Phase I is provided in Table A-1.

Table A-1: Legislative framework relevant for POPs management

Country	Status of ratification (a – accession) and year				
	Barcelona	Basel	Minamata	Rotterdam	Stockholm
Lebanon	1977 (a); 2009	1994	2017 (a)	2006 (a)	2003

Key provisions of the ratification laws for Basel, Stockholm and Rotterdam Conventions are provided below (Table A-2).

[1] Ministry of Environment of the Lebanese Republic, Environmental and Social Impact Assessment Report: PCB Management in the Power Sector Project, 2015

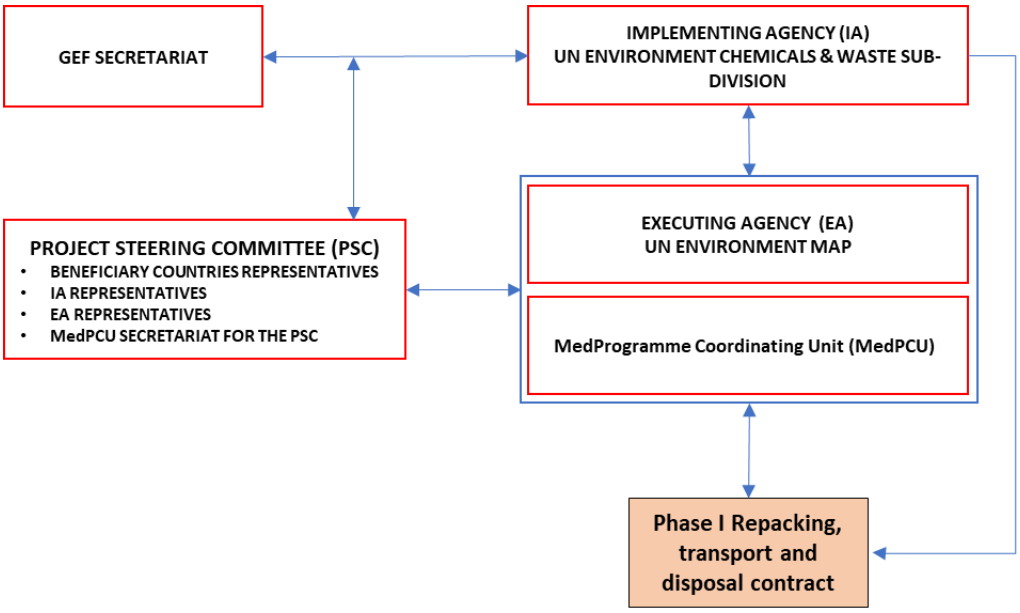
[2] The project concept (Project Identification Form) and project preparation grant were approved by GEF in 2011. Classified as Category "A" under the WB Operational Policy (OP) 4.01 on Environmental Assessment, the project triggered preparation of a full scale ESIA study. The study was developed in the period 2012 – 2015, with public consultations taking place in 2012 and 2013.

Table A-2: Laws on ratification of the Basel, Stockholm and Rotterdam Conventions

Legal text no.	*Date*	*Title and relevance to POPs*
Laws		
3878	04/11/1994	**Ratification of the Basel Convention on the control of trans-boundary movements of hazardous wastes and their disposal** The Law transposes the Basel Convention's text as it is, regulating *inter alia*: - Definition of hazardous wastes; - Restriction of trans-boundary movements of hazardous wastes except where it is perceived to be in accordance with the principles of environmentally sound management and with a proof of acceptance of the importing country; - Restriction of the allowance of export of hazardous waste from countries without facilities, or expertise to dispose safely of certain wastes, to countries which have both facilities and expertise.
432	29/07/2002	**Ratification of Stockholm Convention on Persistent Organic Pollutants** The Law transposes the Stockholm Convention's text and annexes as they are, regulating *inter alia:* - Elimination of listed POPs; - Support the transition to safer alternatives; - Targeting of additional POPs for action; - Clean-up of old stockpiles and equipment containing POPs; - Solidarity for a POPs-free future.
728	15/05/2006	**Ratification of Rotterdam Convention on the prior informed consent Procedure for certain hazardous chemicals and pesticides in international trade** The Law transposes the Rotterdam Convention's text and annexes as they are, regulating *inter alia:* - Prevention of the entry of hazardous chemicals into the country; - Imports of pesticides and chemicals listed in Annex III of the Convention; - Information exchange.

A.5 Project Institutional Framework for Phase I

Figure A-2: Institutional Arrangements and Coordination for Phase I



As per the above diagram, the Implementing Agency (IA) for the overall project, including Phase I, is the UN Environment Chemicals and Waste Sub-Division. The Executing Agency (EA) is UN Environment MAP; MED POL will act as an executing partner for disposal activities. The EA will report on the project implementation progress to the IA, including on the activities performed by executing partners. The IA and EA Rrepresentatives ~~from these organizations~~ as well as representatives from the Ministry of Environment, the lead agency for project implementation ~~with~~in Lebanon, alongside with representatives of other beneficiary countries, will form the Project Steering Committee (PSC). The PSC will provide overall guidance for project implementation and ensure coordination among all parties. ~~It is intended that a coordinating unit lead by MoE and UN MAP will be attended by national stakeholders involved with the project. The IA will be the body responsible for issuing an international tender for implementation of the work.~~

The EA will be responsible for establishing, hosting and supervising the MedProgramme Coordinating Unit (MedPCU) and through the PCU for the overall project management, including disposal of Phase I equipment. The EA/ MedPCU will ensure that all the activities, including procurement of goods and services, are carried out in strict compliance with the rules and procedures of UN Environment and GEF, in line with the agreed work plan and budget. For the technical aspects in managing the disposal activities, MedPCU will be assisted by the MAP – MED POL project officers and/ or consultants. To support execution of disposal activities in Lebanon, a national consultant/ project manager will be selected in close cooperation with the lead national agency (the same approach will be followed in other beneficiary countries).

B. Baseline

B.1 Polychlorinated biphenyls

Polychlorinated biphenyls (PCBs) are persistent (they remain intact in the environment for a long period of time) and bio-accumulating synthetic organic chemicals that have a potential to cause adverse effects to the human health[3] and environment. One of the main commercial uses of PCBs is as cooling and insulating liquids in electricity transmission and distribution equipment such as transformers and capacitors. Due to their environmental toxicity and subsequent classification as POPs, the production and uses of PCBs were restricted and they are slated for elimination under the Stockholm Convention on Persistent Organic Pollutants, adopted in 2001 and entering into force in 2004.

In **Lebanon**, PCBs are mainly found in the electric power sector. Until mid-1990s, they were widely used in power transformers and capacitors in the power plants, substations and the distribution network. As the awareness on negative impacts linked to releases of PCBs into the environment grew, gradual withdrawal of the equipment containing and/ or contaminated with PCBs took place over the course of the past two decades and the efforts to ensure its environmentally sound management were stepped up.

Despite the so far efforts, significant quantity of PCBs still remains in Lebanese power sector in 2018, including stocked and in-use equipment. A detailed inventory for power sector and military completed in June 2018 indicates a total of 1,052 t of mainly distribution transformers (including oil and metal parts) is contaminated with PCBs. Moreover, 126 t of oil in large transmission transformers needs to be treated to ensure PCBs elimination. Most of this equipment is owned by EDL, the state-owned power utility. Other companies that hold concession contracts for provision of electricity transmission and distribution services, including Qadisha, Zahleh, Jbeil and others, also operate/ own significant quantities of equipment contaminated with PCBs. Presence of PCBs in industries, public institutions and other potential owners has not been surveyed in detail.

B.2 Previous PCB safeguarding initiatives

An update of the preliminary PCBs inventory was carried out in 2011 (by the consulting company COWI[4]) under the PCBs Inventory Update and Project Preparation Study funded by the WB. The main findings of the inventory included:

- Identification of Askarel transformers in Jieh and Zouk power plants as well as PCBs capacitors in 9 of the 58 substations. 49 tonnes of PCBs from out-of-service equipment and 147 tonnes of PCB oil from in-service equipment were found.

[3] Exposure to PCBs/ other persistent organic pollutants can lead to development of serious health problems including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease and damages to the central and peripheral nervous systems and others.

[4] COWI A/S is an international consulting group, specialising in engineering, environmental science and economics, based Denmark.

- Identification of widespread PCBs contamination of transformers in all parts of the network with 20-30% of all the transformers suspected of contamination. The total number of potentially contaminated transformers (to be surveyed) was 22,100, of which 19,000 were in the distribution network.
- The Bauchrieh transformers facility was identified as a contaminated site based on sampling of oil, sludge, and water from the on-site well in addition to samples of drinking water in nearby wells.

In response to the findings of the 2011 COWI inventory, Lebanese Government and the WB developed PCB Management in the Power Sector Project. Total project budget is around USD 7.5 million (2.5 million GEF contribution, 2.5 million MoE co-financing, and 2.5 million EDL co-financing). The implementation started in 2015 with the following main objectives:

- Dispose of high content PCBs equipment and waste from the power sector in an environmentally sound manner;
- Carry out a full scale national inventory of potentially contaminated equipment in the power sector (around 26,702 transformers);
- Establish an interim storage facility for PCB contaminated equipment;
- Investigation and site assessment of the Bauchrieh site;
- Strengthening the legal framework for improved PCB management;
- Training and capacity building of related stakeholders on sustainable management of PCBs equipment and storage sites;
- Information dissemination and outreach awareness programs; and
- Technical assistance of national laboratories for the analysis of PCBs dielectric oil, waste products, oil or other media.

In 2016 the project executed contractual works for the draining, packaging, and disposal of high content out of service PCBs equipment and waste. This included disposal of a total of 91 t including 17 transformers, 606 capacitors, and about 10 t of PCBs contaminated soil and debris, mainly from Zouk, Jieh and Bauchrieh sites. All activities were successfully carried out in full accordance with the Basel Convention, the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), and the International Maritime Dangerous Goods (IMDG) Code as well as other international best practices for the safe handling, management and disposal of high content PCBs waste. On 31 July 2017, the Certificate of Elimination and Destruction Report was issued by the disposal facility (Tredi) in France.

The second phase of the GEF/ WB project for the disposal of high content PCBs equipment from the power sector is due to be executed following the completion of the national inventory. Based on the inventory results, a total of 281 transformers, weighing about 233 tonnes, have been selected for disposal from the Bauchrieh and Hraiche storage sites from EDL and Qadisha Concession respectively (Table B-1).

Table B-1: Contaminated equipment to be disposed under the GEF/ WB project in 2018

Owner/ locations	*Number of transformers (>50 ppm)*	*Total weight (kg) - oil and metal*
EDL		
EDL – Bauchrieh	212	171,663
Drums (2)	-	-
Qadisha concession		
Hraiche Storage	69	61,696
TOTAL	**281**	**233,359**

B.3 National capacities

Capacity of national stakeholders was significantly improved, and awareness raised through the GEF/ WB project. The project supported a range of training and capacity building activities on sustainable management of PCBs, primarily for the MoE and EDL (including management and on-site workers/ technicians), but also including other stakeholders, such as customs administration. Good cooperation and coordination mechanism were developed with the owners of the equipment – principally with EDL, but also with the key concession holders. A detailed inventory was produced, and an action plan prepared for gradual removal of PCBs contaminated equipment from the grid, consulted and agreed upon with all the owners. Consultation records and endorsement of the inventory/ action plan are to be taken in lieu of declaration of ownership for the Child Project 1.1, whereas the owners of the equipment and the MoE will vouch to keep the identified equipment secured until disposal.

Capacities and cooperation/ coordination mechanisms developed through the previous initiative to manage PCBs in an environmentally sound manner represent a good starting point for the follow up work planned under Child Project 1.1, yet the overall national capacities for safeguarding and disposal of PCBs and PCBs contaminated equipment remain limited and the additional support to be provided under the project is expected to play a key role in ensuring ESM of these wastes.

An overview of the assessment of national capacities for PCBs management is presented in Table B-2, below:

	Repackaging	Transport	Storage	Disposal
Management:	The Government/ Ministry of Environment does not normally play an active role in the management of projects. Expertise and remit are focussed on supervision and monitoring of activities. While private industry in Lebanon has had some involvement with national hazardous waste management and was involved in the previous WB project it does not have the capacity or experience with requirements of the current project.	If necessary, the Government/ MoE can procure and monitor transport contractors. Private industry within the Lebanon has the management capability to deal with the transportation element.	Ownership and management of the storage locations in the current project rests with the utilities and/or Govt. departments involved. Government/ MoE storage is not available and MoE cannot manage storage operations.	There are no adequate facilities in the country to treat/ dispose of PCBs and PCBs contaminated equipment.
Supervision:	MoE/ environmental inspectorate have the necessary skills and understanding of technical issues to do with PCB management to enable them to supervise the repackaging element. As with other areas (e.g. for customs administration), further capacity building is needed. The MoE is responsible for the control of many other activities and therefore availability of staff members to supervise the project to the necessary extent is limited. Consultant staff will be necessary to ensure more lasting presence/ supervision at the sites.	MoE/ environmental inspectorate have the necessary skills and understanding of technical issues to do with PCB management to enable them to supervise transport element of the project. The MoE is responsible for the control of many other activities and therefore availability of staff members to supervise the project to the necessary extent is limited. Consultant staff will be necessary to ensure more lasting presence/ supervision at the sites.	MoE/ environmental inspectorate have the necessary skills and understanding of technical issues to do with PCB management to enable them to supervise the storage element. The MoE is responsible for the control of many other activities and therefore availability of staff members to supervise the project to the necessary extent is limited. Consultant staff will be necessary to ensure more lasting presence/ supervision at the sites.	
Implementation:	During the WB project a number of national private waste management firms were identified with experience in the handling of hazardous wastes. Whilst these firms would not be able to assume a lead role or take financial responsibility or liability for the implementation of Child Project 1.1 disposal activities (due to limited capacities and experience), they would be able to make a contribution towards implementation of safeguarding.	Government/ MoE is not able to provide transportation. Private companies capable of performing transport operations are available. Owners of the equipment can contribute to transport operations (by e.g. collecting/ centralising the equipment).	Current storage locations are under the responsibility of the respective utilities and or Govt. departments. There are no hazardous waste storage facilities in Lebanon. The existing storage facilities for transformers are not adequate and are often considered as contaminated sites/ hot spots. The facilities to prevent spillage run off are not found at these sites. Emergency provisions are partially available (only fire safety equipment) and the staff managing transformers storage sites is partially capable/ trained for handling emergency situations and accidents.	

Table B-2: Brief assessment of national capacities for PCBs management in Lebanon

B.4 Causes of accumulation of PCB contaminated material

Barriers to addressing PCBs

Two root causes lead to contamination of the Mediterranean by PCBs:

- in-use transformers contain PCB contaminated oil, and this oil contaminates other equipment and oils due to current top-up practices; and
- owners of decommissioned equipment containing PCB contaminated oil (power generation, transmission and distribution companies, industries, public sector institutions) store waste equipment without appropriate safety or environmental management measures, at risk of being disposed of with municipal waste or sold into local markets instead of being disposed of in an environmentally sound manner;

Key barriers to the sound environmental management of PCB contaminated equipment include respectively: the high capital cost and lack of incentives or financial mechanisms to replace in-use transformers; and the high cost and lack of local infrastructure for environmentally sound disposal of the wastes.

B.5 PCBs and contaminated equipment inventory

Based on the detailed inventory completed in June 2018, a total of 257 transformers have been identified for Child Project 1.1 Phase I. A detailed record of Phase I equipment is annexed to the EAMP (Annex 6: List of Phase I equipment). At the time of survey, the Phase I equipment was spread around large number of sites, whereas partial centralisation of the equipment will be carried out for the disposal. Phase I equipment will be concentrated at eight sites, as presented in Table B-3.

Town/ district	Site	Owner	Total weight (kg)	Oil (kg)	Metal (kg)	Number of transf.	[5]Status
Tripoli	Hraiche	Qadisha concession	165,205	36,442	128,763	151	Stock
Beirut	Bauchrieh	EDL	54,531	12,737	41,794	54	Stock
		Aley concession	3,495	698	2,797	4	Stock
			2,050	680	1,370	1	In use
Jbeil/ Byblos	Jbeil concession storage	Jbeil concession	2,113	415	1,698	2	Stock
			26,865	5,777	21,088	23	In use
Beirut	Army barrack Kfarchima	Lebanese Army	7,830	2,283	5,547	5	Stock
Saida district	Zahrani oil rafinery	Zahrani authority	230	85	145	1	Stock
			1,387	425	962	5	In use

[5] Status of the equipment reported based on the inventory results; 'Stock' includes equipment recorded as 'stand by' and 'under maintenance'

Zahleh district	Midane	Zahleh concession	7,258	1,599	5,659	7	Stock
Jezzine district	Awali river hydro power plant	Litani authority	1,315	340	975	2	Stock
Jbeil district	Nahr Ibrahim hydro power plant	Nahr Ibrahim concession	180	80	100	2	In use
TOTAL			**272,459**	**61,561**	**210,898**	**257**	

Table B-3: Distribution and quantities for Phase I equipment

A total of 31 transformers that were still in use at the time of inventorying will be removed from the network and ready for disposal at the time of Phase I implementation, in line with the action plan prepared under the GEF/ WB project and endorsed by the equipment owners.

More than 90% of the Phase I equipment will be collected from the 3 sites: Hraiche, Tripoli (cca 165 t), Bauchrieh in Beirut (cca 60 t) and central storage site for the Jbeil concession in Jbeil/ Byblos (cca 29 t). They are located in the densely populated areas in major cities (Beirut, Tripoli) and tourist centres (Jbeil) and the relative risks of negative environmental and human health impacts arising at these sites are the highest. The shortest distance from Hraiche site to the sea is some 50 m, and the Bauchrieh site's well has a potential to contaminate groundwater sources used for drinking water supplies.

The three main sites are located in the vicinity (within a 40 km radius) of the two major Lebanese ports – Beirut and Tripoli, which are likely to be used for export.

Distribution transformers with the total weight of less than 1,100 kg per piece account for more than a half of identified Phase I equipment, whereas the bulk of the transformers are in the range of 230 to 2,300 kg of total weight. There are only few transformers with the weight outside this range, with only one transformer with the total weight of 3,600 kg. Dismantling or cutting down the equipment prior to transport will not be necessary as the identified units' dimensions are less than 2.5 m high and 2.3 m wide.

The total quantity of oil contained in the 257 Phase I transformers is 61.5 t; adequate number of drums is expected to be provided by the contractors.

C. Environmental impact assessment

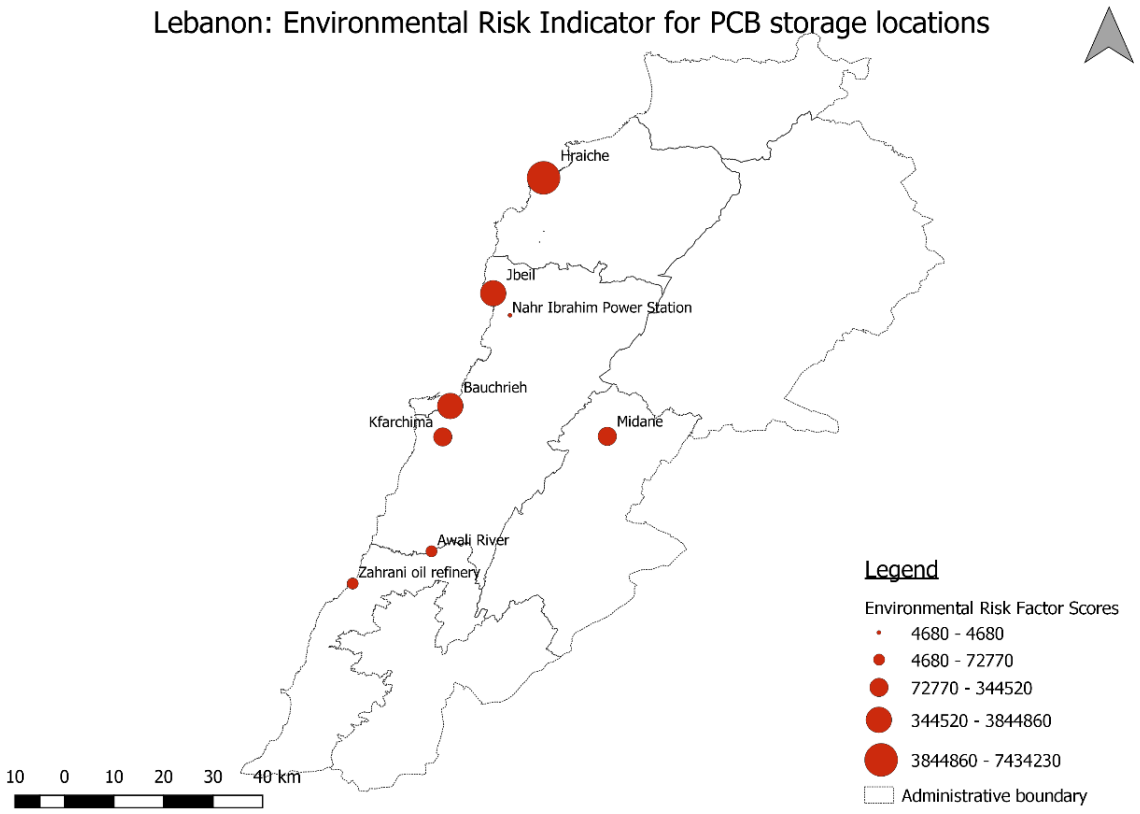


Figure C-1: Environmental risk indicator for PCB storage locations

[6]Risk assessment

An environmental risk assessment was conducted of the storage sites. Questionnaires were completed[7] for each site recording basic information regarding the situation of the site related to environmental and human health risk factors. The answer of each question was given a score relative to its effect. The ranked product of the total score for all the sites gives a relative indication of potential environmental impacts, the F_E score; the sites with the highest score present the greatest potential risk to cause harm to the environment. The results of the risk assessment are shown in the Table C-1.

[6] This method of risk assessment is based on the method set out in the UN Food and Agriculture Organization Environmental Management Tool Kit Volume 1. This is used for the assessment of risks posed by stocks of agrochemicals, including POPs pesticides.

[7] Based on the findings of the country mission, inputs from the national consultants and information provided by MoE.

Table C-1: Table of potential environmental impact scores (FE)

Location	F_E
Bauchrieh	64
Hraiche	45
Zahrani oil refinery	45
Kfarchima	44
Midane	41
Awali River	40
Jbeil	32
Nahr Ibrahim Power Station	26

The Bauchrieh site demonstrates the highest potential risk to the environment. Examination of the underlying data shows that this is because the site is situated in an urban area, there is a well on the site which has not been protected and contaminated soil is present. The Hraiche and Zahrani sites are located very close to the Mediterranean Sea and the locations do not have integral concrete storage areas. Additionally, there is contaminated soil present at the Hraiche site.

Table C-2: Environmental risk indicator scores

Location	Total Quantity PCB	F_E	Environmental Risk Indicator
Hraiche	165,205	45	7,434,225
Bauchrieh	60,076	64	3,844,864
Jbeil	28,978	32	927,296
Kfarchima Barracks	7,830	44	344,520
Midane	7,258	41	297,578
Zahrani oil refinery	1,617	45	72,765
Awali River	1,315	40	52,600
Nahr Ibrahim Power Station	180	26	4,680

Further analysis is possibly by multiplying the F_E with the total quantity (kg) of PCB material stored at each site. In doing this it is possible to see the Environmental Risk Indicator which combines the environmental risk together with the quantity. A graphic representation of the Environmental Risk Indicator can be seen in Figure C-1. The scores returned for the Environmental Risk Indicator largely correspond to the quantity of stock stored at each site. Examination of the Environmental Risk Indicators for each site demonstrates that:

- Due to the large quantity of PCB stock and its poor situation, the Hraiche site presents the most acute risk amongst the storage locations in Lebanon;
- Significant risk is observed from the Bauchrieh site, which has smaller quantity of stock but a much higher FE score;
- The Kfarchima Barracks, notably has a significantly lower quantity of stock than the top three sites, however due to its higher F_E score it demonstrates a relatively high overall risk to the environment;

- Whilst the Jbeil site is relatively well situated and has a low environmental risk associated with it, due to the large quantity of PCB contaminated materials stored there, it also presents a highest risk to the environment and human health.

C.1 Description of sites

More detailed descriptions of the sites and discussion of the risks affecting each are found in the section below.

C.1.1 Hraiche, Tripoli

Phase I equipment to be collected from Hraiche site includes 151 transformers with various levels of contamination, totalling 165,205 kg, including 36,442 kg of oil. The site is located in northern part of Lebanon near Tripoli, within the complex of Hraiche power plant (see Figure C-3). The complex is used/ managed by Qadisha concession. The power plant has been decommissioned and a contract (with a French company) is in place to demolish the old structures and build a new power plant. The site is accessible from the main north highway; distance to Beirut Port is 67 km. Tripoli is one of the eight locations in Lebanon that have been classified as priority hot spots (category A) in the 2016 NAP. Population of the city is around 230,000.

To the east from the power plant, a fenced surface of around 1,500 m^2 (including buildings and open spaces) is used to store out of service transformers.



Figure C-2: Aerial view of Hraiche power plant with marked position of the transformers storage site

In December 2017, some 200 transformers were stored at the site (see Figure C-4).





Transformers screened and labelled in the course of the GEF/ WB project



View of transformers stored at the site



Proximity to the sea

Figure C-3: Conditions at Hraiche storage site, December 2017

The storage site is connected to electricity and water networks. As regards the emergency kits, only fire protection equipment is found on the site; emergency operational procedures are in place. The storage site is very close to the sea shore (the distance to the closest point is around 50 m) and is operated without any precautionary measures to prevent contaminants reaching the sea. The sea in the nearby areas is used for recreational purposes/ bathing. There are no other water bodies in the proximity. The area used to store contaminated transformers shows clear signs of oil leakages beneath the units into surface layers of soil and concrete (Figure C-5). Many transformers stored at the site in December 2017 were corroded, most likely because of exposure to rainwater.



Figure C-4: Storage area for contaminated transformers

The site is located in an industrial area with no housing units in the immediate surroundings. The wider area is residential suburban part of Tripoli called Anfeh, situated about 16 km from Tripoli Port.

Hraiche is located 4 km to the north from the Anfeh Hima protected area important for migratory birds.

C.1.2 Bauchrieh, Beirut

Phase I equipment that will be centralised at Bauchrieh for project implementation includes 59 transformers (owned by EDL and Aley concession) with the total weight of 60,076 kg and oil weight of 14,115 kg. The site covers a surface of 4,600 m^2 in a residential area in northern Beirut (see Figure C-6). It is located about 1.5 km away from main Beirut - Jounieh highway and 4.5 km from Beirut Port. Population of the neighbouring area is estimated at around 25,000; population of Beirut is 1.9 million.

Out of the total site area, approximately 4,000 m^2 is used for outdoors storage of transformers while the remaining 600 m^2 are occupied with repair workshops and closed storage facilities. Bauchrieh is the biggest transformers repair site in Lebanon, where EDL maintains and when possible, repairs its equipment. Transformers declared as scrap are stored here in open space, together with new and repaired ones. Most of the site is paved with concrete or asphalt. The site is connected to electricity and water supply networks. Basic emergency equipment is found at the site and emergency operational procedures are in place.



Figure C-5: Aerial view of Bauchrieh site

The site has an underground network to collect oil from the buildings where transformers are tested, drained and refilled. Collected effluents are channelled without any treatment to a 30 m deep well that has been in use for more than 40 years. The diameter of the well is 2.5 meters. Water effluents from the site are also pumped/ discharged into the public sewage system without any treatment.



Figure C-6: Sampled locations at Bauchrieh

A preliminary investigation of the site's contamination was carried out by COWI in 2011[8]. Eleven samples were taken from the soil and have shown an average PCBs concentration of 105 ppm. Seven samples were taken from the well – both from the liquid phase and from sediments. The results of the analysis for oil-water mix showed PCBs concentration of 2,224 µg/l and for water from the well of 7,370 µg/l. Results for the samples taken from well's sediments showed contamination level of 1,741 mg/kg. The study estimated 55 t of PCBs contaminated oil and an unknown quantity of contaminated sludge had accumulated in the well over time, posing high risks for groundwater and contamination of surrounding wells.

The study also provided an estimation of the potential total PCBs quantities on the site. It assumed the site may be contaminated at an average level of 105 mg/kg. Based on the assumption that 20 cm of surface soil (over the 4,000 m^2 area of the site) is contaminated, the content of pure PCBs was estimated at 200 kg. Sampled locations are presented in Figure C-7.

The 2011 COWI study outlined potential remediation activities in two phases, as presented below.

Phase 1:

- Prepare a detailed plan for the mapping and characterization of the site;
- Establish an interim storage for sludge and solid waste that would result from the cleaning of surfacing and that would be removed during this phase;
- Cleaning all surfacing of contaminated sludge and waste to minimize immediate risk from fire, contact/ inhalation and on-going contamination of surfacing, soil and groundwater;
- Systematically map the contaminations of the surfacing including the upper 50 cm of the soil underlying the surfacing;
- Perform a risk assessment of contamination in the soil and concrete and assess the need for removal of the contamination.

Phase 2 (assumed activities - to be re-assessed on the basis of the results of Phase 1):

- Expand the interim storage for soil/ concrete or establish another storage of-site;
- Abrade/demolish surfacing with high PCB content (presumably >100 mg/kg), package it and dispose it abroad (assumed 10 tonnes) – the limit quantity to be disposed of abroad to be determined on the basis of an assessment considering the risk and the available resources for disposal. If more of the concrete is highly contaminated, it may be necessary in order to keep the costs within the budget to increase the applied limit value (that is above 100 mg/kg) and dispose of more of contaminated soil locally in the interim storage for soil/ concrete until further treatment;
- Demolish surfacing with low PCBs content (10-100 mg/kg) and securely store either on-site or dispose off-site in an interim storage for soil/concrete. Concentrations < 10 mg/kg are considered uncontaminated and left on the site.

Full investigation and assessment of the site is planned to be undertaken under the GEF/ WB project.

[8] COWI A/S, Enviro-consultant and ECODIT Liban Sarl, Sustainable POPs Management Project – Lebanon: PCB Inventory Update and Project Preparation Study, final report, September 2011

Conditions at the site and equipment stored in December 2017 are shown in figure C-8.





Transformers stored in the open, exposed to weather conditions



Water pumped out of the site into public sewage system



The oil dumping well



Soil contamination



Surrounding residential area

Figure C-7: Conditions at Bauchrieh site, December 2017

Bauchrieh storage and maintenance workshop are located in a densely populated quarter of Beirut. A significant share of the surrounding residential buildings extract water from private wells[9], and the risk of contamination of these drinking water sources has been assessed as high (COWI, 2011). Distances to other water bodies/ sources are shown in Table C-3.

Table C-3: Water resources near the Bouchrieh site

Spring/ river	Direction from the site	Distance from the site (m)
Beirut river	W	1,500
Ain el Jdaide	NE	1,500
Ain Fraigi	E	2,400
Ain Maqsbi	E	2,300
Captured source	S	1,800
Ain er Rohbaine	SE	2,500

Source: ESIA, GEF/ WB project

There are no nature protected areas in the vicinity of the site. Data on biodiversity in Lebanon is limited in general, due to a lack of biodiversity monitoring programmes.

C.1.3 Jbeil concession storage, Jbeil/ Byblos

The central storage site of Jbeil Concession is located on the outskirts of the touristic coastal city of Jbeil/ Byblos, which is UNESCO's World Heritage Site. Location of the site is shown in Figure C-9. The site is accessed by the main coastal highway; distance to Beirut Port is around 35 km. Population of the town's is around 70,000.

A total of 25 transformers contaminated with PCBs will be brought to the site (from various facilities/ locations managed by Jbeil concession) for Phase I disposal, with a weight of 28,978 kg (including 6,192 kg of oil). The equipment on the site is stored both in closed facilities as well as in open spaces on the site.

Storage facilities and the site itself are connected to water and electricity supplies and partially equipped with emergency appliances (fire safety equipment is available at the site). Emergency operational procedures are in place. Covered part of the storage has an integral concrete floor and the roof is in a good shape. A drainage system with an oil interceptor is not found at the site.

[9] According to the ESIA (GEF/ WB project), there are 13 wells around the site in cadastral areas of Ain Check, Anwar, Dekweneh, Fanar (Bonjus), Jdeideh, Karmid, Mar Antonios, Nacouzi, Nahr el Mawt, Rawda, Saloumeh, Zaatrieh, and Zoghzhogi.



Figure C-8: Location of the Jbeil concession storage site

The ground on the site does not appear to be contaminated. There are no water bodies or wells in the vicinity (within 500 m radius), and no protected areas. Wadi Baachta stream is located 1 km to the north of the site, and Wadi Mouhnane stream 1.5 km to the south. The site is however located in a proximity of residential areas with schools and hospitals. The closest housing units are located immediately next to the site. There are no agricultural activities in the vicinity.

C.1.4 Army barrack Kfarchima, Beirut

The army barrack Kfarchima is located in a wider area of the city of Beirut. Population living within 1 km from the site is estimated at around 10,000. The site stores 5 decommissioned Askarel transforms ready for Phase I disposal. Total weight of transformers is 7,830 kg (of which 2,283 kg oil). Position of the site is shown in Figure C-10.



Figure C-9: Location of Kfarchima army barrack

Transformers are kept in the open area on a fenced site (part of the army complex in Kfarchima). Emergency equipment is partially available (only fire safety) and the emergency procedures are in place. Transformers are kept on a concrete surface without a drainage system. The ground on the site does not appear to be contaminated.

There are no water bodies, wells or protected areas in the vicinity of the site. The principal land uses in the area surrounding the site are industrial and residential. There are also some agricultural activities nearby, with crop production taking place in the belt spreading from 100 m to 1 km distance from the site. Animals do not have access to the site/ do not graze in the vicinity.

C.1.5 Zahrani oil refinery, Saida district

Disused Zahrani oil refinery and related Zahrani power plant are located on the very shore of the Mediterranean Sea in Saida district, South Lebanon (location shown in Figure C-11). There are no settlements/ residential areas nearby the site. The closest town – Saida – has been identified as one of the NAP hot spot areas. Six transformers with the total weight of 1,617 kg (including 510 kg of oil) are located on the site and will be available for Phase I disposal. The equipment is owned by Zahrani authority – operator of Zahrani power plant.



Figure C-10: Zahrani oil refinery site

The equipment is kept in the open space on a fenced site that is connected to water and electricity networks. Fire protection equipment and emergency operational procedures are in place. There is no concrete floor in the area where transformers are kept (and no drainage system). There are however no visible signs of soil contamination on the site.

The distance from the storage site to the shore is less than 100 m, and nearby sea waters are used for recreational purposes/ bathing. There is also a well within 500 m radius from the site. Zahrani river outfall is on the southern edge of the Zahrani power plant.

The main land uses in the surrounding areas are industrial and agricultural (but crop production does not take place within 100 m radius).

C.1.6 Midane, Zahleh district

Midane is town with a population of around 150,000 in Zahleh district, Bekaa. The site indicated on Figure C-12 is managed by Zahleh concession and is used as a storage place for 7 transformers (total weight of 7,258 kg, of which 1,599 kg oil) to be collected in Phase I. The storage is located in Midane's suburban village on the Chtoura-Zahle highway, some 48 km from Beirut.

Transformers are kept in the open space and the access to the site is not restricted (no fence). Connections to water and electricity supplies are in place. The site is partially equipped with emergency tools (fire safety equipment) and the procedures for operation in emergency cases are in place. Transformers are kept on a concrete surface (without a drainage system with oil interceptor) and there are no visible signs of soil contamination.



Figure C-11: Midane storage site, Zahleh concession

The closest water course is Litani river which flows about 1.5 km south of the site. There are no wells in the vicinity, and no protected areas.

The main land uses in the surrounding areas are residential and agricultural. Crops are produced in the immediate vicinity of the site – within 100 m belt. Animals do not have access to and do not graze around the site.

C.1.7 Awali river hydro power plant, Jezzine district

Two transformers (1,315 kg total weight, 340 kg of oil) are stored at Awali hydro power plant in Jezinne district, are ready for collection in Phase I. The plant is located at the Bisri Dam on Awali river, 56 km south of Beirut and is accessed by Saida – Jezzine road. There are no major settlements near the site; location is shown in Figure C-13.

The equipment is owned by Litani authority and is kept in the open space on a fenced site (within the hydro power plant complex) connected to water and electricity supplies. Fire protection equipment is found on the site and emergency operational procedures are in place. Transforms are kept on an integral concrete surface without a drainage system/ oil interceptor. There are no signs of soil contamination around the area where transformers are kept.



Figure C-12: Awali hydro power plant

Anane lake and Awali accumulation are located in the proximity, designated as water sensitive areas. These water bodies are not used for recreational purposes. The closest well is found at a distance of 500 m. The main land uses around the site are green/ natural areas, with some housing units and agricultural activities. Crops are produced in the belt 100 m – 1 km from the site, and animals graze in its immediate vicinity (within 100 m belt).

C.1.8 Nahr Ibrahim hydro power plan, Jbeil district

PCBs inventory completed in June 2018 identified two contaminated in-use transformers at Nahr Ibrahim hydro power plant that will be available for Phase I disposal (with the total weight of 180 kg). The plant is

operated by Nahr Ibrahim concession. It is located in Jbeil district, around 47 km from Beirut on the Nahr Ibrahim river. Location of the site is shown in Figure C-14. There are no major settlements in the vicinity.

Transformers are currently kept in a closed room with good conditions. The site is connected to water and electricity supply networks, it is equipped with fire protection gear and has emergency operational procedures. The site is surrounded by forests and Nahr Ibrahim river, which is used for recreational purposes and is designated as water sensitive area. The closest well is found at a distance of 500 m.

Small-scale agricultural activities are performed in the proximity of the site: crops are produced within 100 m radius, and animals grazing next to the site has been evidenced.



Figure C-13: Nahr Ibrahim hydro power plant

D. Assessment of alternatives

D.1 Available options for safeguarding

Hazardous waste clean-up projects, in general, have several options available for safeguarding, transport and disposal. These are set out in the Table D-1. Whilst the optimum situation would be that Government would able to rely on 100% national capacity, either within Government or from private industry, to carry out project work, the technological ability and experience necessary for high risk projects is very often not adequate nationally. The default option has historically been for projects to select international contractors to carry out the bulk of works and have responsibility for the elements involved. Additionally, underwriters insuring projects frequently will deal only with established international contractors that are financially stable and have a track record of experience. Contrarily, employment of an International Contractor to undertake all the work involved leaves no room for the country to gain the experience necessary to undertake similar work in the future. Therefore, it is important to use any opportunity available to allow national capacity to develop.

The situation in Lebanon, as highlighted in the assessment of national capacity, is that stakeholders have had experience of PCB management in a current project (to be completed in May 2019) with the assistance of the WB. In this case work was principally implemented by an international contractor utilising sub-contractors to undertake lower risk aspects of the work. Supervision of the work was the responsibility of Government supported by expertise from the WB and the Project Implementation Unit. Crucially, by employing International Contractor, the project was able to transfer liability for the work to the contractor. As stressed in the assessment of national capacity the Lebanese Government does not see a lead role for itself in the management or implementation of work.

In the Child Project 1.1, which is also planned to have 2 phases, it is expected that a similar model will be used. It is hoped that sub-contractors will play a much larger role in the second phase of the project to allow the experience necessary for capacity development.

D.2 Assessment of options for safeguarding, transport and disposal

The principal method of assessment of available strategy options is by SWOT (Strengths, Weaknesses, Opportunities and Threats). Through SWOT, assessors can set out the key considerations involved and make a justification for selection of the final strategy. A SWOT analysis was carried out of the available safeguarding, transport and disposal options for the scenario in Lebanon, in addition to the assessment of national capacity. The following are key factors for consideration in the strategy:

- Government does not have the immediate ambition to directly manage or implement hazardous waste clean-up and is more motivated towards project management and supervision over the long-term;
- UN projects have a relatively short -term life span and agencies are keen that as much capacity is built during the project to allow hazardous waste management to be dealt with on a national basis following project closure. The opportunity for follow on projects dealing with the same waste would be limited;
- There is opportunity under the current project to follow on from capacity building that was started under the WB project;
- There is difficulty for national contractors to be underwritten by insurance companies for high risk projects;
- There would be significant reputational damage for all stakeholders in the event of an accident occurring. Accidents are far less likely to occur using an international as opposed to a national contractor;
- Budgetary requirements of using an international contractor are greater than using a local contractor. As stated in the assessment of national capacity, there are no facilities in Lebanon with the ability to treat or dispose of PCB equipment and associated PCB contaminated wastes. All waste classified as contaminated with PCB (>50ppm) must therefore be exported for treatment or disposal. Annex 3 outlines a SWOT assessment of potential disposal options as a mechanism of evaluation. The detailed assessment tables setting out points of evaluation of alternatives for elements of repackaging, temporary storage and transport are set out in Annex 2.

E. Safeguarding, transport and disposal strategies

The existing institutional capacities (of the Ministry of Environment) can be utilised to support management and supervisory functions in the repackaging – transport – storage steps of the process, whereas the need for project's assistance towards execution of these functions has been established (possibly through engagement of a national consultant or establishment of PMU). Options to dispose of hazardous wastes in the country are not available hence their export is needed. For the implementation of safeguarding and shipping activities, Ministry of Environment stated preference for engagement of an international contractor (qualified hazardous waste management company) to perform integrated services – draining, packaging, labelling, collection, notification, shipment and final disposal of PCB wastes – while utilising (and developing) available national capacities to the greatest possible extent. Capacity building needs (covering topics such as notification process; draining - packaging- loading on fright containers; transport ADR/IMDG/RID; etc.) for national stakeholders has been established. Technical capacities of the equipment owners (EDL and concession holders) can be utilised, in particular for transport and storage of the equipment. Notification process for transboundary movements/ shipments of hazardous waste needs to be handled in line with Basel Convention and Regulation 1013/06/EC (using common notification documents). The process is initiated by export authority – Ministry of Environment/ competent environmental authority – and is led in close cooperation with the import authority in order to secure necessary permits. The export authority appoints export/ notifying company (it can be a local company authorized for hazardous waste management or international contractor).

E.1 Repackaging, storage and transport strategies

At the commencement of works the PCB stock will be present at 8 sites across Lebanon ready for safeguarding. The contracted team will visit each site in series to carry out the necessary safeguarding. Once safeguarding has been completed shipping containers will be delivered to the sites for loading and transport.

E.1.1 Safeguarding

Safeguarding will consist of draining equipment of all oil into UN approved containers under controlled conditions and preparing the empty electrical equipment for transport. Importantly, integral equipment which contain PCB oil such as capacitors, will be made safe and ready for loading and transport but will not be drained of oil unless it is necessary. To improve capacity, it is recommended that the safeguarding team is lead by the International Contractor and that team members are comprised of representatives of both the equipment owners and also waste management companies.

E.1.2 Transport

The transportation element of the work will comprise of the safe loading and loading of the waste into ISO shipping containers followed by transport to the disposal points. The waste will be subject to road haulage from each of the 8 storage locations to the port of export, transportation by sea followed by road haulage on the European mainland to the disposal points. The international contractor will be responsible for implementation of the transport element. Again, it is proposed that local sub-

contractors are employed to provide as much resources and support to the principal contractor as possible. The international contractor will supervise packing of the shipping container according to Basel Convention guidelines and the IMDG code.

Ideally the International Contractor will initiate Basel Convention Notification procedures soon after award of the contract to allow transport to follow on from repackaging as soon as it has been completed. If necessary, the PCB oil and drained electrical equipment will remain at the storage locations until approval for movement is received.

E.2 Disposal strategy

The final choice of disposal methodologies will be left for the principal contractor to propose in bidding documentation. All proposed methods of disposal will be evaluated at tender stage to ensure compliance with the Basel and Stockholm Conventions.

E.2.1 Disposal of PCB oil

Disposal options analysis in section of available disposal methods shows that High Temperature Incineration (HTI) will be necessary for equipment and oil containing high concentrations of PCB (>10,000-15,000ppm). Equipment containing lower levels of PCB will be treated by either base catalysed reduction or sodium dispersion.

Material	Method
Oil	Dechlorination by base catalysed reduction
	Dechlorination by sodium dispersion
	High Temperature Incineration (HTI)

E.2.2 Disposal of drained equipment

Material	Method
Metal	Autoclaving
	Thermal desorption
Ceramic	Thermal desorption
Cardboard / wood	High temperature incineration

E.2.3 Management

~~Higher level m~~Management and facilitation of repackaging work will be conducted through ~~a MedProgramme Coordinating Unit (~~the MedPCU~~)~~, in cooperation with the EA technical project

officers/ consultants and national consultant/ project manager for Lebanon. Repackaging activities will be coordinated through regular meetings with necessary stakeholders. Direct management of repackaging works will be the responsibility of the principle contractor.

E.2.4 Supervision

Supervision of project work will be conducted by the Ministry of Environment with support from the Executing Agency UNE MAP and its representatives or consultants, additional technical support will be provided by UNE Chemicals and Waste Division.

F. Strategy implementation risk analysis

After evaluation and selection of the safeguarding, transport and disposal strategies the next stage of risk management is to identify principle risks affecting the project so that appropriate mitigation measures can be taken. The risks are categorized in 7 key areas of the project which include risks to health, safety and the environment also risks that affect the success of the project through project management, sustainability and consultation. The risks are set out in a tabular format – the risk identification tables. Once the risks have been identified, appropriate mitigation measures are then set out against each risk in corresponding risk mitigation planning tables. The identification of risk and specification of mitigation measures then allows for the development of the environmental monitoring plan. This plan describes in detail both risks and mitigation measures, how the mitigation measures should be monitored, and which individual or organization has the responsibility for doing so. The risk identification and mitigation plans are set in Annex 4 tables.

G. Environmental monitoring and evaluation plan

The identification of risk and specification of mitigation measures in section F. allows for the development of the environmental monitoring plan. This plan describes in detail both risks and mitigation measures, how the mitigation measures should be monitored, and which individual or organization has the responsibility for doing so. The Environmental monitoring and evaluation plan is set out in Annex 5.

H. Public information and stakeholder involvement

Through conducting the risk identification and mitigation planning, the following measures are emphasised:

Prior and during safeguarding works

- Set up of stakeholder meeting with local community to inform of:
    - Safeguarding works and general methods, risks and risk mitigation
    - Intended length of time of works
    - Risk level and impact on local community

Inform local hospital and nearby facilities of works due to take place.

Prior and during transportation

- Meetings held with community leaders and civil society to inform of works, particularly:
    - When transport is to take place
    - What routes (proposed routes to avoid sensitive areas (schools / hospitals / residential areas)
    - Emergency procedures
    - Contact with police and local authorities prior to transport

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Annex 1: Legislative framework relevant for POPs management

Legal text no.	*Date*	*Title and relevance to POPs*
Laws		
64	12/08/1988	**Environmental preservation against pollution from harmful wastes and hazardous materials** Defines the harmful wastes as being the residues and by-products resulting or released from every transformation or usage of materials containing any hazardous materials listed in its Annex 1. It also regulates the following: - Control and minimization of POPs from HCW; - Control of all types of hazardous wastes including POPs wastes; - Control of production, transport, trade of harmful and hazardous wastes; - Rules of disposal of hazardous wastes; - Penalties of violations leading to environmental pollution
444	29/07/2002	**Protection of the environment** This is the national framework law on the environment. The key regulated areas include: - Definition of environmental principles; - Procedures of environmental planning; - Resource mobilization for environmental protection; - Procedures to monitor environmental pollution; - Environmental Impact Assessments; - Protection of all environmental media from all types of pollution, including harmful and hazardous chemicals.
Decrees		
5100	12/04/1982	**Identification of technical requirements for the importers and sellers of pesticides and rodenticides for domestic use** Sets up the rules, regulations and technical requirements for occupations related to the use of pesticides and rodenticides for domestic purposes - importing, selling, filling, packaging, preparing, manufacturing and spraying.
4917	24/03/1994	**Amendment of classification of dangerous, harmful and disturbing establishments** Classifying dangerous, harmful and disturbing industrial establishment, including those that may use or release POPs.
13528	19/11/1998	**Regulatory texts for trade of pesticides** Sets the general legal rules applied for occupations related to import, selling, packaging, preparation, production and use of pesticides, as well as fines in cases of violations.
8018	12/06/2002	**Definition of principles, procedures and conditions for construction and operation permits in industrial establishments**
9765	11/03/2003	**Monitoring, measures and penalties related to industrial establishments** - Fundamentals of monitoring the industrial establishments; - Measures and penalties for violations taking into consideration provisions of Decree 8018/2002.
11802	03/01/2004	**Regulating the occupational prevention, safety and health in all enterprises subject to the Code of Labour** - Prevention and safety at work; - Health conditions at work; - Safety measures for chemical usage at work; - Prevention measures for gasoline usage.

8471	04/07/2012	**Environmental compliance for establishments** - Definition of establishments, environmental audits; - Explanation of environmental compliance; - Procedures and requirements for the application of environmental compliance certificate; - Violations and penalties.
Ministerial Decisions		
52/1	29/07/1996	**Definition of standards and maximum allowable limits for the reduction of air, water and soil pollution** - Standards for drinking water; - Standards of wastewater; - ELVs for air pollution at work; ELVs for noise pollution; ELVs for air pollution resulting from waste burning; ELVs for air pollution in cement industries.
92/1	20/05/1998	**Standards of pesticides labels and the information required on them** Banning the import, retail and trade of pesticide unless its label includes the standards and information in accordance to the Decision's annex.
94/1	20/05/1998	**Banning the import of some pesticides** Banning the import of Aldrin, Chlordane, Chlordecone, DDT, Dieldrin, Endrin, HCH containing less than 99% of gamma isomer, Heptachlor, Mirex.
8/1	30/01/2001	**Specifications and standards for air emissions and liquid effluents generated from classified institutions and for wastewater treatment plants** Amendments of the ELVs adopted under Decision 52/1.
262/1	26/09/2001	**Banning the registration of some pesticides** (Lindane)
554/1	19/12/2008	**Internal regulation for pesticides committee** Organization and mandate of the pesticides committee to deal with all pesticides (including POPs)
570/1	24/12/2008	**Banning the import of some pesticides** (Hexachlorobenzene and Pentachlorophenol and its salts and esters)
79/1	13/02/2010	**Registration cancellation and banning the import of some pesticides** (Endosulfan)
310/1	24/06/2010	**Organization of registration of imported and nationally produced pesticides and its usages**
868/1	14/12/2010	**Allowing the selling and using some pesticides** Allowing selling and using existing Endosulfan in the country till its expiry date.
311/1	26/01/2011	**Organization of import of pesticides**
539/1	17/11/2015	**Determination of the deadlines of applications for the environmental compliance certificates from the industrial establishments subject to Decree 8471/2012**
590/1	21/12/2015	**Mechanism of action, from an environmental perspective, with license applications of industrial establishments** - Procedures for taking the decision from an environmental perspective with regard to license applications of industrial establishments within the MoE; - Mechanism to be followed by the MoE representative at the industrial permitting committee; - Mechanism of coordination between the MoE representative at the industrial permitting committee and the department of urban protection at the service of urban environment at the MoE.

Annex 2: Safeguarding strategy alternatives assessment

H.1.1 Safeguarding strategy alternatives assessment

	Option	Strengths	Weaknesses	Opportunities	Threats
Available safeguarding options	**Management**				
	100% International Contractor	High Competence, very quick and according to programme. No cost overruns outside agreed contract. Relatively simple to gain insurance for liability required and sufficient capital to cover bond required under Basel Convention notification process.	Very costly	Total responsibility and liability transferred	No skills transfer or capacity building.
	100% Local contractor	Flexibility on the ground, good local knowledge & cost reduction of operations	Lower technical competence difficulty in getting required insurance, insurance costs much higher	In-country completion / self-implementation, national retention of GEF funds	Pre-conceptions that national contractors are not able to carry out works effectively.
	International Contractor / Local Contractor partnership	Flexibility on the ground, good local knowledge & cost reduction of operations	Higher insurance cost. Reputational risk to project if accident were to happen	Skills & Knowledge transfer	Counterproductive for International Contractor to involve local contractor to high degree – over the long term skills transfer not in interests of International Contractor.
	Govt. / international contractor partnership	International contractor to take lead.	Govt. restricted to supervision only. Govt. not willing to undertake operations. This would be as if option 1.Govt. had limited personnel and skill dedicated to PCB management.	Ability to demonstrate cooperation. Skills transfer to build national capacity.	Skills transfer or capacity building Long term view would be for Govt. to contract out hazardous waste management either to local or international contractor. Any effort spent building capacity would be lost.

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	100% Government	Cost effective	Lack of technical and practical knowledge. Difficulty in underwriting liability	Self -implementation	Environmental and Health and Safety concerns
	Supervision				
	90% Government (Environment Agency) 10% NGO /IGO	Flexibility on the ground, good local knowledge & cost reduction	Miss communication possible.	Skills & Knowledge transfer	Lack of cooperation by agencies
	100% International Contractor	High Competence	Very costly. Third party / impartial monitoring required	Total responsibility and liability contracted	No skills transfer
	100% Government	Cost effective	Lack of technical and practical knowledge	Self-implementation	Environmental and Health and Safety concerns
	Implementation				
	100% International Contractor	High Competence	Very costly	Total responsibility and liability contracted	No skills transfer – opportunity to build capacity during GEF project is lost
	International Contractor / national sub-contractor partnership	Flexibility on the ground, good local knowledge &cost reduction	Not total control for the principle contractor – non acceptance of liability in the event of an incident.	Skills & Knowledge transfer.	Non-participation or integration by agencies. Opportunity to build capacity whilst liability coverage by principle international contractor.
	100% Government	Cost effective	Lack of technical and practical knowledge	Self implementation	Environmental and Health and Safety concerns

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H.1.2 Transport strategy alternatives assessment

	Option	Strengths	Weaknesses	Opportunities	Threats
Available transport options	**Personnel**				
	International Contractor supplied (hire vehicle)	Good reliability	High cost	Income for local business	
	Sub-contractor supplied	Cost effective	Standard of vehicles possibly poor	Income for local business	International Contractor unwilling to use sub-contractor supplied vehicles
	Public transport	Very cost effective	Time table difficult to fit in with work time. Often subject to cancellation / can be very unreliable.		Project workers unwilling to use public transport.
	Government supplied	Cost effective	Govt. not willing to use its own resources for project work. Pressure on local resources. Transport usually pre-assigned to other Govt. tasks.	Income for local business	
	Equipment				
	National Contractor supplied	Increased Reliability	Weak management. Drivers may not have required qualifications.	Income for local business	Close supervision required
	International Contractor Supplied	Good Reliability	Higher cost	Risk Transfer	
	Government Supplied	Cost effective	May not be able to supply	Self-implementation	Budget and equipment may not be available
	Waste to Interim collection – waste already placed at Interim collection points prior to work starting				
	Waste to main collection point/point of export:				
	International Contractor using freight forwarder	Reliable. Use of internationally recognised operating systems ADR / IMDG	Very high cost	No management concerns/Risk Transfer	International Contractor has to rely on local services i.e. national haulage contractor in any event.
	Regional / National Haulage Contractor	Increased Reliability	Weak operational systems higher risk of problems occurring. Drivers and vehicles not	Income for local business, Contribution to nationally implemented solution	International Contractor has limited control over sub-contractors operations

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			operating at standard required		
	Government Supplied	Cost effective	Govt. not willing or unable to provide resources. Weak operational systems higher risk of problems occurring. Drivers and vehicles not operating at standard required	Self-implementation	Risk for Health Safety and Environmental damage

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Annex 3: Disposal options assessment

Waste	Alternatives considered	Strengths	Weaknesses	Opportunities	Threats
Available disposal options	High Temperature Incineration (HTI), Rotary and Static at a Western European facility	100% destruction under certified management systems. Process regulated under national and EU legislation. Long term monitoring conducted. Able to deal with all concentrations of PCB oil	Potential for environmental damage during transportation via road and sea. Capital intensive. Export under Basel Convention time consuming.	Transfer of risk to international contractor.	Public opposition to disposal of toxic waste by thermal method; both in-country and in the country of disposal.
	Local or regional Cement Kiln	Regional or local disposal of material	Inadequate scrubbing system if operated without installation giving rise to toxic off gas (containing Dioxin). Physical and systematic controls – required. High potential for environmental damage. Local regulatory and monitoring systems not robust enough. Project overtime and budget due to the required installation of control measures. Significant investment required to bring plants up to local and international standards. Not	Use of pre-existing local infrastructure and support of sustainable industry. Allows development of waste management infrastructure for other hazardous wastes over the long term.	Opposition to use of thermal technique by national stakeholders and civil society Reputational risk to stakeholders.

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Waste	Alternatives considered	Strengths	Weaknesses	Opportunities	Threats
			suitable for all pesticide wastes. Can treat oils but infrastructure not set up to deal with transformer carcasses.		
	Dechlorination using base catalysed decomposition or Sodium dispersion	Cheaper treatment possible using established method at certified facility	Upper limit or 10000 ppm oil – Askarel not possible to be dealt with.	Could be used as part of integrated disposal strategy.	

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Waste	Alternatives considered	Strengths	Weaknesses	Opportunities	Threats
	Dechlorination using base catalysed decomposition	In-country construction of imported of technology and plant. Local disposal of treated material.	Restriction on import by local govt. Technology not ready for use in project time frame. Regulatory and monitoring systems not strong enough. Production of unintended dioxin due to uncontrolled and incomplete reaction. Project overtime and budget. Environmental pollution. Very high set-up costs for a relatively small amount of material. Significant local legislative obstacles to overcome before importation and operation possible. Use of non-thermal technology strong benefit.	Development of waste industry using novel / newer technology in Lebanon.	Not enough PCB waste over the long term to make investment case for installation.

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Waste	Alternatives considered	Strengths	Weaknesses	Opportunities	Threats
	Dechlorination using sodium catalysed decomposition	On-site use of imported of technology and plant. Local disposal of treated material.	Restriction on import by local govt. Technology not ready for use in project time frame. Regulatory and monitoring systems not strong enough. Production of unintended dioxin due to uncontrolled and incomplete reaction. Project overtime and budget. Environmental pollution. Very high set-up costs for a relatively small amount of material. Significant local legislative obstacles to overcome before importation and operation possible. Use of non-thermal technology strong benefit.	Development of waste industry using novel / newer technology in Lebanon	Not enough waste over the long term to make investment case for installation.
	Thermal Desorption - Mobile Pyrolysis	Local disposal of material.	Restriction on import of equipment by govt. Technology not ready for use in project time frame. Regulatory and monitoring systems not strong enough. Project overtime and budget. Environmental pollution. Very high set-up costs for a	On-site use of imported equipment.	Opposition to use of thermal technique by national stakeholders and civil society Reputational risk to stakeholders.

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Waste	Alternatives considered	Strengths	Weaknesses	Opportunities	Threats
			relatively small amount of material. Significant local legislative obstacles to overcome before importation and operation possible. Illegal disposal of wastes. Mobile systems technologically deficient in comparison to more robust static systems.		

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Annex 4: Risk identification and risk mitigation planning

H.2 Risk identification table for repackaging and temporary storage activities

High Risk Stores–	**Repackaging and temporary storage**	
Initial Safeguarding Option Repackaging and temporary storage of pre-centralised PCB equipment	**At the site:**	200T of miscellaneous electrical equipment contaminated with PCB
Scope of Work	Repackaging and temporary storage of contaminated electrical equipment and PCB oil	
Risk category		

Health and Safety
Chemical hazard
	• Direct exposure to workers
	  ○ Dermal contact with contaminated oil PCB
	  ○ Oral contact with contaminated oil PCB
	  ○ Inhalation of PCB vapour / contaminated dusts
	• Secondary exposure
	  ○ Tracking of PCB residues by workers from workplace to home and offices	

Health and Safety **Other hazards**	• Fire resulting from sparking electrical equipment during cutting of electrical equipment (hotworks) • Electric shock whilst using electrical equipment	
Environmental hazard	• Spillage of PCB contaminated oil and leakage into outside environment over facility floor • Leaching of PCB contaminated oils through facility floor • Escape of PCB residues into environment – inadequate disposal of contaminated equipment including PPE • Tracking of PCB residue from storage facility into local environment via contaminated vehicles • Tracking of PCB residue from storage facility into local environment via contaminated footwear • Infiltration of rain into storage area to wash out PCB contaminated oil into local environment • Spread of dusts / particles during cutting of electrical equipment • Failure of packaging equipment leading to leakage • Pollution resulting from theft of electrical equipment	
Equipment	• Poor quality equipment resulting in failure ○ Failure of lifting equipment	

	• Non-availability of required equipment, for example forklift truck • Equipment breakdown, for example forklift
Project Management	• Project not running according to time • Lack of access to stores • Activities not conducted according to international standards • Lack of communication between principle contractor and sub-contractors leading to miss-management
Consultation	• Inadequate consultation with local people prior to works
Sustainability	• Residual contamination discovered at site • No transfer of knowledge
Budget	• Project over spend • Budget spent on activities / items not aligned with project activities • Government / project not honouring commitments set out in project document

H.2.1 Risk identification table for transport activities

High Risk Store–	**Transport**	
Initial Safeguarding Option Repackaging of pre-centralised PCB equipment and oil	**At the site:**	Approximately 200T of miscellaneous electrical equipment contaminated with PCB
Scope of Work	Repackaging and temporary storage of contaminated electrical equipment and PCB oil	
Risk category		
Health and Safety **Chemical hazard**	• PCB residue on exterior of packaging leading to exposure during loading and transport	

Health and Safety
Other hazards
	• Road traffic accident due to:
	  ○ Improper loading of cargo
	  ○ Poor vehicle condition
	  ▪ Tyres, trailer, lights etc.
	  ○ Poor driving
	  ○ Driving at busy times of day
	• Road traffic accident in residential area	

Environmental hazard	• Road traffic accident in environmentally sensitive area • Spillage incident
Equipment	• Poor quality vehicle quality and / or trailer unit • Vehicles not equipped according to ADR regs
Project Management	• Lack of vehicles • Notifications not completed
Consultation	• Inadequate consultation with local people prior to works
Sustainability	• No transfer of knowledge
Budget	• Project over spend • Budget spent on activities / items not aligned with project activities • Government / project not honoring commitments set out in project document

H.2.2 Risk identification table for disposal activities

High Risk Store–	**Disposal**	
Initial Safeguarding Option Repackaging of pre-centralised PCB equipment and oil	**At the site:**	Approximately 200T of miscellaneous electrical equipment contaminated with PCB
Scope of Work		
Risk category		
Health and Safety **Chemical hazard**	• Exposure to PCB through direct and indirect exposure • Plant not operated according to design • Inadequate storage of waste materials pre and post treatment • Inadequate handling of raw materials • Mixing of wastes including PCB leading to uncontrolled reactions • Inadequate operating systems leading to indirect exposure of persons outside plant and in surrounding area (for example workers wearing dirty footwear to home and offices)	
Health and Safety **Other hazards**	• Operating systems inadequate leading to high risk situations with machinery and plant structure	
Environmental hazard	• Inadequate design of plant leading to uncontrolled emissions • Incomplete destruction of waste materials • Production of dioxin and furan in destruction process • Effluent treatment system poor or non-existent leading to leaching of contaminated rainwater outside plant	

Equipment	• Plant structurally deficient • Materials handling and lifting equipment not adequate
Project Management	• Plant not operated by skilled personnel • Plant not large enough or has enough disposal capacity to treat wastes • Operating systems not sufficient to deal with toxic waste • Failure of monitoring systems leading to lack of knowledge about extent of emission releases to air, water and soil
Consultation	• Inadequate consultation with local people prior to works
Sustainability	• No transfer of knowledge
Budget	• Project over spend • Budget spent on activities / items not aligned with project activities • Government / project not honouring commitments set out in project document • Disposal company has cash flow issues leading to non destruction of wastes

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H.2.3 Mitigation planning for safeguarding and temporary storage

Risk Analysis	Identified risks	Mitigation measures

Health and Safety
Chemical hazard
	• Dermal contact with contaminated oil PCB
	• Eye contact
	• Oral contact with contaminated oil PCB
	• Inhalation of PCB vapour / contaminated dusts, particularly during cutting operations
	• Tracking of PCB residues from workplace to home and offices
		• Health monitoring of workers
		• Use of correct PPE, introduction of Risk Assessment and Standard Operating Procedures during Storage / Repackaging Operations
		  ○ Chemical resistant boots / non-lace with steel midsole toe caps
		  ○ PVC or nitrile gloves
		  ○ Organic vapour protective respiratory wear
		  ▪ Full face during pumping operations
		  ▪ ¾ face during handling of solids or newly packaged liquids
		  ○ Disposable type 5/6 coveralls during movement of contaminated equipment or drums
		  ○ Semi disposable type 4 coveralls during pumping of contaminated oils
		• Use of non-rotary / reciprocating blades during cutting of electrical equipment
		• Use of site zoning (clean / intermediate / dirty areas / change of clothes and footwear before entry or leaving site)
		  ○ Installation and use of three stage changing area
		• Collection of contaminated refuse
		• Incorporation of designated break / eating area away from operational area
		• Introduction of no smoking at work policy in operating procedures
		• Ensure adequate ventilation
		• Installation of emergency shower / ensure access to water for emergency
		• Development of Emergency Plan
		• Writing of Health, Safety and Environment Plan for storage operations
		• Writing of Health, Safety and Environment Plan for repackaging operations
		• Submission of HSE Plan for technical approval to PCU
		• Training of all operatives in the working methodology
		• Briefing and training in operatives of Emergency Plan

Health and Safety **Physical / mechanical hazards**	• slips, trips and falls • crush injuries from poorly stacked falling equipment • crush injuries / impact injury from building collapse	• Introduction of Risk Assessment and Standard Operating Procedures during Storage / Repackaging Operations Introduction of clean working methods • Tidy placement of electrical equipment • Introduction of maximum stacking height for drums of two pallets high, • No stacking of electrical equipment • Workers to wear safety helmets

	• head injury resulting from mechanical impact with electrical equipment • impact / crush injuries during handling of heavy equipment • manual lifting of heavy equipment resulting in bodily injury • injury / mechanical damage during vehicle collision • vibration injury during cutting of electrical equipment (white finger) • Fall from heights / fall from large electrical item • Hearing damage due to very loud noise	• No manual handling of >25kg per person • Use of certified lifting equipment • Use of impact resistant gloves during cutting • Use of low vibration cutting equipment during cutting • Use of ladders for working at height • Ensure adequate lighting in design • Use of ear defence equipment when necessary – ear defenders and ear plugs • Use of trained drivers to drive forklift or other lifting equipment
Health and Safety **Other hazards**	• Fire resulting from sparking electrical equipment during cutting of electrical equipment (hotworks) • Electric shock during use of electrically powered equipment	• Use of non-sparking tools • Non-sparking ATEX rated 110v electrical generation equipment • 110v electrical supply either through generator / transformer or static supply • Prohibition of use of flame cutting torch (oxyacetylene or otherwise) • Prohibition of electric arc welding during storage or maintenance • Designated storage area for fuels and solvents, (away from PCBs) • All equipment used by International Contractor to show evidence of maintenance and monitoring programme
Environmental	• Spillage of PCB contaminated oil and leakage into outside environment over facility floor • Leaching of PCB contaminated oils through facility floor • Escape of PCB residues into environment – inadequate disposal of contaminated equipment including PPE • Tracking of PCB residue from storage facility into local	• Collection of all contaminated materials and equipment for proper disposal during repackaging operations ○ Installation of designated refuse storage area • Use of steel bund / drip trays under PCB contaminated electrical equipment during repackaging • Use of designated forklift truck / lifting equipment inside working area • Guarantee that forklift to be used not to be used in food production or agriculture (i.e. not to come from general hire company) • Use of security measures to eliminate theft • Use of non-rotary cutting methods • Introduction of site zoning / clean / intermediate / dirty areas • Contractor to have ISO 14001 certification

	environment via contaminated vehicles • Tracking of PCB residue from storage facility into local environment via contaminated footwear • Infiltration of rain into storage area to wash out PCB contaminated oil into local environment • Spread of dusts / particles during cutting of electrical equipment • Pollution resulting from theft of electrical equipment	

Equipment	• Poor quality storage / repackaging / lifting equipment resulting in failure	• International contractor to specify design and quality of safeguarding equipment
		  ○ PPE
		  ○ UN packaging materials
		  ○ Steel drip tray construction
		  ○ Electrical equipment required for repackaging
		• Inspection of all equipment prior to use
		• Use of trained drivers to drive forklift

Project Management	• Project not running according to time
	• Activities not conducted according to international standards
	• Lack of communication leading to breakdown
		• Project management oversight
		• Technical oversight of project activities
		• Regular project management meetings
		  ○ Steering committee meetings
		  ○ MedPCU meetings
		  ○ Oversight by IA
		• Contactor to have ISO 9001 certification

Consultation	• Inadequate consultation with local people prior to works	• Set up of stakeholder meeting with local community to inform of:
		  ○ Safeguarding works and general risks
		  ○ length of time of works
		  ○ risk level and impact on local community
		  ○ Inform stakeholders of risk reduction measures
		• Inform local hospital and nearby facilities of works due to take place

Sustainability	• Residual contamination discovered at site following	• Adherence to EAMP and HSE plan • Project to ensure training

	demolition rendering site not able to be used for original use • Non transfer of skills	• Project to try to ensure responsibility of tasks given to sub-contractor
Budget	• Project over spend • Budget spent on activities / items not aligned with project activities • Government / project not honouring commitments set out in project document	• Project budgeting • Financial oversight by IA and EA • Procurement planning • Regular communication / reporting regarding budgetary issues

H.2.4 Mitigation planning table for transport activities

Risk category	Identified risks	Mitigation measures
Health and Safety **Chemical hazard**	• PCB residue on exterior of packaging leading to exposure during loading and transport	• Careful repackaging • Inspection of packages during / after repackaging and during loading onto ISO container

Health and Safety
Other hazards
	• Road traffic accident due to:
	  ○ Improper loading of cargo
	  ○ Poor vehicle condition
	  ▪ Tyres, trailer, lights etc.
	  ○ Poor driving
	  ○ Driving at busy times of day
	• Road traffic accident in residential area
		• Inspection of vehicle prior to departure
		• Use of trained drivers only
		• Adherence to ADR during road transport
		• Loading of containers according to IMDG
		• Use of steel drip tray under equipment
		• Generation of transport plan to avoid driving during busy times and through residential areas
		• Submission of transport plan for technical approval to PCU prior to transport

Environmental hazard	• Road traffic accident in environmentally sensitive area	• Generation of transport plan to avoid driving through protected / environmentally sensitive areas
Equipment	• Poor quality vehicle quality and / or trailer unit • Vehicles not equipped according to ADR regulations	• Inspection of tractor unit and trailer prior to departure (use of inspection check list) • Training of driver in ADR

Project Management	• Lack of vehicles • Notifications not completed	• Supervision of contractor project management

Consultation	• Inadequate consultation with local people prior to works	• Meetings held with community leaders and civil society to inform of works, particularly:
		  ○ When transport is to take place
		  ○ What routes (proposed routes to avoid sensitive areas (schools / hospitals / residential areas)
		  ○ Emergency procedures
		  ○ Contact with police and local authorities prior to transport

Sustainability	• No transfer of knowledge	• Use of sub-contractor where possible
Budget	• Project over spend	• Designation of responsibilities between contractor and sub-contractor in contractual agreement • Supervision of contractor project management • Clear contract and BOQ

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Annex 5: Environmental monitoring and evaluation plan

	Mitigation measures	Parameters to be monitored	Location	Data and/or measurements (incl. methods and equipment)	Frequency of monitoring	Responsibility for M&E (incl. review and reporting)
Safeguarding and temporary storage	Health monitor of workers	Fitness for work prior to starting	Clinic	General medical test	Once	Contractor to implement, MedPCU
	International Contractor to have personnel with sufficient experience	• No. years' experience • Qualifications • Experience of working in foreign country	Bid documents	• No. years' experience • Qualifications • Experience of working in foreign country	Once	Project officers

	Principle contractor to write HSE plan for high risk sites,
	Generic plan to be included for low risk sites.
		• Overview
		• Contacts
		• Detailed risk assessment for each working method
		• Standard operating procedures
		• Packaging materials
		• General equipment
		  ○ Type
		  ○ Certification
		  ○ Maintenance
		• Lifting equipment
		• PPE
		• Site map
		• Emergency plan
		• Transport planning
		• Training
		• Gant chart and project planning
		• Package list
			HSE Plan	Presence or absence	Continual	Review by project technical officers/ MedPCU designated supervisor

	• Training of personnel	Check training agenda Check training has been conducted	Class room / site	Length of training Training agenda Pass mark	Once prior to work starting / use of tool box talk system and briefing of workers during work	MedPCU designated supervisor
	• Set-up and use of site zoning	Dirty / intermediate / clean section	Site	Ensure site zoning in place and is used correctly	Check tender for design of area Continual monitoring to ensure in place	MedPCU designated supervisor

	• Check working area for safety equipment	• Eyewash • Fire extinguishers • Spill kit • Drip trays and bunding • Safety signs • Emergency water • Emergency shower • Earthing cable during pumping	Site	Presence or absence	Check tender for design of area and supply of appropriate equipment Continual	MedPCU designated supervisor
	• Installation of sign system	• Hazard warning • Chemical hazards • Physical hazards • Prohibition signs • No entry • No smoking • No eating / drinking • Working area signs • PPE required • Non-working area signs • Emergency exit signs	Tender documentation / HSE Plan / Site	Check tender for design of area Continual	MedPCU designated supervisor	site
	• Use of designated break / eating area away from operational area	Designated break eating area	Site	Presence or absence	Continually during works	MedPCU designated supervisor

	• Ensure adequate ventilation	Adequate ventilation	Site	Presence or absence	Continually during works	MedPCU designated supervisor
	• Electrical supply either through generator / transformer or static supply considering installation and operational safety	Design	HSE plan and Site	Presence or absence	Inspection of HSE plan and equipment list – check on-site	MedPCU designated supervisor
	• Storage of fuels and solvents away from PCB	Location	Site	Presence or absence	Once during design Construction Quality check during supervisory checks of construction	MedPCU designated supervisor

	• Designated refuse storage and collection of all contaminated wastes	Presence absence	Site	Presence absence	Continual	MedPCU designated supervisor
	• Inspection of equipment	• Lifting equipment • Electrical equipment • Mechanical equipment • PPE	HSE plan / site	Certification and condition	Check certification and conduct physical inspection during works	MedPCU designated supervisor
	• Use of forklift and other equipment	• Ensure contaminated wheels only to be used on industrial areas – not to be used in food or farming	Site		Physical inspection during works	MedPCU designated supervisor

	Mitigation measures	Parameters to be monitored	Location	Data and/or measurements (incl. methods and equipment)	Frequency of monitoring	Responsibility for M&E (incl. review and reporting)
Transport	Qualification of International Contractor representative in ADR & IMDG	Certificate	Bid documents	Presence / absence	Once at tender stage	Project technical officers
	Development of transport plan	Route, times of travel, emergency procedures, proposed manifest	Office	Check plan	2 weeks before departure	MedPCU designated supervisor
	Drip trays in containers under packages containing liquids	Drip tray presence and condition	All shipping containers transporting liquid	Drip tray presence and condition	Prior to transport	MedPCU designated supervisor
	Use of suitable and road worthy vehicle under supervision of international contractor	Tender questionnaire / Inspection of vehicles prior to departure: - vehicle registration documents and all service/maintenance records; - driver licence and training certificates along with a record of performance; - vehicle inspection checklists; - Vehicle equipment checklists - Waste manifest and transport documentation	Site	Visual	Inspection of tender questionnaire / Continual assessment during works	MedPCU designated supervisor

	Supervised loading	Performance	Site	Visual oral	Continual assessment during works	MedPCU designated supervisor
	Escort of loaded vehicles to port of export	Escort	During transport	Presence / absence	During transport	MedPCU designated supervisor
	Prenotification of emergency services by International Contractor prior to departure		Site	Completed or not	Prior to transport	MedPCU designated supervisor
Disposal	Approval of proposed disposal facility by specialised technical unit	Bid documents	Tender	Tender process	Once	Project officers
	Disposal company to have environmental and project management systems • ISO 9000 • ISO 14000	Bid documents	Tender	Tender process	Once	Project officers
	Disposal company to have proven track record of operations	Bid documents	Tender	Tender process	Once	Project officers

	Disposal company to have proven value and cash flow to ensure ability to deal with all wastes	Bid documents	Tender	Tender process	Once	Project officers
	Use of Regional / International contractor to take on liability	Bid documents		Inspection of bid documents	Once	Project officers
	Operation of disposal facility according to international and national legislation and guidelines	Incinerator performance monitored with respect to environmental legislation and monitoring standards • EU waste incineration directive or equivalent	Facility	Audit	Continual	Contractor / Environment agency of country where facility is located
Communications	Development & Implementation of communications strategy	Audit	Facility	Audit	Once	MedPCU
Budget	Obtain firm bid from Regional or International Contractor detailing pricing structure	Pricing structure		Examination of bid document	Once	MedPCU
	Health Monitoring	Blood criteria – examination of medical certificates and health monitoring plan of plant workforce	Facility	Audit	Once	MedPCU
	Monitoring and tracking of waste disposal at final disposal facility	Verification of handover of waste to facility. Cert. of destruction	Facility	Audit	Once	MedPCU

Annex 6: List of Phase I equipment

MEANING OF THE COLORS/ SHADINGS

	SDGs and related indicators of particular relevance for TDA
Grey ink	**Indicators repeat in several rows/ columns**

SDG Indicators	CORRESPONDING BARCELONA CONVENTION SYSTEM INDICATORS						ADDITIONAL DRIVERS INDICATORS (PB)
	MSSD	MAP Reporting System	IMAP	NAP/ H2020	SCP	Offshore, pollution from ships	
1.4.1 Proportion of population living in households with access to basic services	Indicator 13: Share of population with access to an improved water source (total, urban, rural) (Mediterranean SD Dashboard) Indicator 14: Share of population with access to an improved sanitation system (total, urban, rural) (Mediterranean SD Dashboard) Indicator 17: Proportion of urban population with access to a decent dwelling (Mediterranean SD Dashboard)						
1.4.2 Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure	Number of rural development programs that include sustainability considerations, including in relation to women and youth (indicator recommended by the MSSD) Number of rural development programs that include support for traditional agricultural practices and landrace (indicator recommended by the MSSD)						
2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size 2.3.2 Average income of small-scale food producers, by sex and indigenous status	Number of rural development programs that include sustainability considerations, including in relation to women and youth (indicator recommended by the MSSD) Number of rural development programs that include support for traditional agricultural practices and landrace (indicator recommended by the MSSD)						
2.4.1 Proportion of agricultural area under productive and sustainable agriculture	Indicator 11: Global Food Security Index (Mediterranean SD Dashboard) Indicator 15: Proportion of agriculture quality products and Share of the agricultural land area used by organic farming (Mediterranean SD Dashboard)				Proportion of agricultural area under productive and sustainable agriculture (SCP AP) Agricultural area organic, total (SCP AP) Global food loss index (SCP AP, link to SDG 12.3.1)		
2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities 2.5.2 Proportion of local breeds	Number of seed banks operating in the region (Indicator recommended by the						

2.5.2 Proportion of local breeds classified as being at risk, not at risk or at unknown level of risk of extinction	MSSD)						
3.9.1 Mortality rate attributed to household and ambient air pollution 3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services) 3.9.3 Mortality rate attributed to unintentional poisoning	Indicator 13: Share of population with access to an improved water source (total, urban, rural) (Mediterranean SD Dashboard) Indicator 14: Share of population with access to an improved sanitation system (total, urban, rural) (Mediterranean SD Dashboard)			3.1: Share of total, urban and rural population with access to an improved sanitation system (ISS) 3.2: Proportion of population using safely managed sanitation services (SMSS) 5.2 Bathing water quality 6.2.1. Total heavy metals load released from industrial installations to the Mediterranean marine environment 6.2.2. Furans and dioxins load released from industrial installations to the Mediterranean marine environment 6.2.3. Polycyclic aromatic hydrocarbons (PAH) load released from industrial installations to the Mediterranean marine environment 6.2.4. Volatile organic compounds (VOC) load released from industrial installations to the Mediterranean marine environment	Annual mean level of fine particulate matter (e.g. PM2,5 and PM10) in cities (SCP indicator)	Sulphur oxides (SOx) emission control area technical and feasibility study carried out, and roadmap put in place Number of ratifications of MARPOL Annex VI	
4.1.1 Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	Indicator 4: Youth literacy rate (Mediterranean SD Dashboard) Indicator 5: Girl/ boy primary and secondary school registration ratio (Mediterranean SD Dashboard)						
4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	Indicator 4: Youth literacy rate (Mediterranean SD Dashboard)						
4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	Status of implementation of the Mediterranean Strategy on Education for Sustainable Development (Indicator recommended by the MSSD) Number of countries that have launched national strategies on education for sustainable development (Indicator recommended by the MSSD)						

5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure 5.a.2 Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control	Number of rural development programs that include sustainability considerations, including in relation to women and youth (indicator recommended by the MSSD)						
6.1.1 Proportion of population using safely managed drinking water services	Indicator 13: Share of population with access to an improved water source (total, urban, rural) (Mediterranean SD Dashboard)						
6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water	Indicator 14: Share of population with access to an improved sanitation system (total, urban, rural) (Mediterranean SD Dashboard)			3.1: Share of total, urban and rural population with access to an improved sanitation system (ISS) 3.2: Proportion of population using safely managed sanitation services (SMSS)			
6.3.1 Proportion of wastewater safely treated 6.3.2 Proportion of bodies of water with good ambient water quality	Percentage of wastewater treated by country (target is 90 per cent by 2025) (indicator recommended by the MSSD) Percentage of wastewater reused by country (indicator recommended by the MSSD)		CI 13: Concentration of key nutrients in water column CI 14: Chlorophyll-a concentration in water column (IMAP) CI 17: Concentration of key harmful contaminants measured in the relevant matrix CI 18: Level of pollution effects of key contaminants where a cause and effect relationship has been established CI 20: Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood CI 21: Percentage of intestinal enterococci concentration measurements within established standards	4.1 Municipal wastewater collected and wastewater treated 4.2 Direct use of treated municipal wastewater 4.3 Release of nutrients from municipal wastewater 5.1 Nutrient concentrations in transitional, coastal and marine waters 5.2 Bathing water quality 6.1.1. Total BOD load discharged from industrial installations to the Mediterranean marine environment 6.1.2. Total Nitrogen load discharged from industrial installations to the Mediterranean marine environment 6.1.3. Total Phosphorus load discharged from industrial installations to the Mediterranean marine environment 6.2.1. Total heavy metals load released from industrial installations to the Mediterranean marine environment 6.2.2. Furans and dioxins load released from industrial installations to the Mediterranean marine environment 6.2.3. Polycyclic aromatic hydrocarbons (PAH) load released from industrial installations to the Mediterranean marine environment 6.2.4. Volatile organic compounds (VOC) load released from industrial installations to the Mediterranean marine environment		CI 19: Occurrence, origin (where possible), extent of acute pollution events (e.g. slicks from oil, oil products and hazardous substances), and their impact on biota affected by this pollution Common standards, on the use and discharge of harmful or noxious substances and material, in line with relevant international standards and conventions defining inter alia limits and prohibitions at regional level formulated and adopted Common standards on the disposal of oil and oily mixtures and on the use and disposal of drilling fluids and cutting formulated and adopted All Contracting Parties to have established systems and procedures for national and sub-regional monitoring and surveillance including, where practicable, regular individual or coordinated aerial surveillance in the waters under their jurisdiction, if the Parties so agree All Mediterranean coastal States to have ensured the existence of a national legal framework (regulations) as a basis for prosecuting discharge offenders for infringements of MARPOL or of any national legal framework implementing it	
6.4.1 Change in water-use efficiency over time 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	Indicator 8: Water efficiency index (Mediterranean SD Dashboard) Indicator 12: Water demand, total and by sector, compared to GDP (Mediterranean SD Dashboard)				Freshwater withdrawal as a proportion of available freshwater resources (also known as withdrawal intensity) (SCP AP) Water Productivity (SCP AP) Water footprint (SCP AP)		

6.5.1 Degree of integrated water resources management implementation (0–100) 6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation	Number of river basins with integrated water resources management schemes in place (indicator recommended by the MSSD) Participation of countries in cross border integrated water resources management processes (indicator recommended by the MSSD)				Degree of integrated water resources management (IWRM) implementation (0-100) (SCP AP)		
6.6.1 Change in the extent of water-related ecosystems over time	Percentage of Mediterranean coastal wetlands protected						
7.2.1 Renewable energy share in the total final energy consumption	Indicator 21: Energy consumption (related to GDP) (Mediterranean SD Dashboard) Renewable energy rate (indicator recommended by the MSSD)				Renewable energy share in the total final energy consumption (SCP AP)		Installed capacity of offshore wind energy Electricity produced by offshore wind energy (Maritime) Renewable energy share in the total primary energy consumption (%) Number of renewable marine R&D projects, e.g. in biofuel/ biomass production from algae Installed capacity of onshore wind energy in coastal zones Installed capacity from tidal energy at the coast Installed capacity from wave and tidal energy at the coast
7.3.1 Energy intensity measured in terms of primary energy and GDP	Indicator 21: Energy consumption (related to GDP) (Mediterranean SD Dashboard)						Employment in offshore oil and gas Economic value offshore oil and gas sector (GDP contribution) Offshore oil and gas produced Number of exploration drills for oil and gas Desalination capacity installed Number of energy infrastructures in coastal areas Employment in energy sector Length of pipelines projects crossing the Mediterranean Sea Size/ economic value/ capacity of refineries at MED shores
8.1.1 Annual growth rate of real GDP per capita	Indicator 3: Gross Domestic Product (GDP) (Mediterranean SD Dashboard)						
8.4.1 Material footprint, material footprint per capita, and material footprint per GDP 8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Indicator 1: Ecological footprint (Mediterranean SD Dashboard) Indicator 22: Material intensity of the economy (Mediterranean SD Dashboard)				Ecological footprint (SCP AP) Material footprint, per GDP and per capita (SCP AP) Domestic material consumption, per GDP and per capita (SCP AP) Green patents (Patents of Importance to Green Growth and Development of environment-related technologies, % of all technologies) (SCP AP)		

8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate 8.9.2 Proportion of jobs in sustainable tourism industries out of total tourism jobs				3.C.3 Are there policies to support sustainable tourism?		All Contracting Parties to have reported to the Secretariat on the measures they undertook to implement the Guidelines concerning Pleasure Craft Activities and the Protection of the Marine Environment in the Mediterranean	Employment in tourism sector (FTE, % total) Economic value of tourism sector (USD, GDP contribution) International Tourism Arrivals (per capita) Tourist resident ratio (tourism intensity) Number of overnight stays in tourist accommodation (tourism intensity) Ratio of national tourists Tourism density along the coast Quality of tourism accommodation Value / revenue of tourism taxes Seasonality of tourism in the coastal zones Evolution of tourism accommodation Cost of tourism accommodation
9.4.1 CO_2 emission per unit of value added	Indicator 20: Green House Gas emissions (related to GDP) (Mediterranean SD Dashboard)				Carbon footprint (SCP AP) CO_2 emission per unit of value added (SCP AP)		
9.5.1 Research and development expenditure as a proportion of GDP 9.5.2 Researchers (in full-time equivalent) per million inhabitants	Indicator 25: Public and private expenses for research and development in percentage of GDP (Mediterranean SD Dashboard)						
11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing	Indicator 17: Proportion of urban population with access to a decent dwelling (Mediterranean SD Dashboard)						
11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Percentage of the urban population using public transport (Indicator recommended by the MSSD) Number of private vehicle ownership per urban inhabitant (Indicator recommended by the MSSD)						
11.3.1 Ratio of land consumption rate to population growth rate			CI 16: Length of coastline subject to physical disturbance due to the influence of manmade structures Land use change (candidate indicator)				
11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically	Number of countries with participatory mechanisms enshrined in urban planning legislation (Indicator recommended by the MSSD)						

11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed and World Heritage Centre designation), level of government (national, regional and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector and sponsorship)	Indicator 18: Status of UNESCO world heritage sites (Mediterranean SD Dashboard)						
11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	Indicator 19: Waste generated and treated by type of waste and treatment type (Mediterranean SD Dashboard) Status of the assessment (of high- and low-tech solutions that have been successfully implemented to achieve waste reduction) initiative (Indicator recommended by the MSSD)			2.A.1 Waste collection coverage 2.A.2 Waste captured by the formal waste sector 2.B.1 % of waste to uncontrolled dumpsites 2.B.2 Uncontrolled dumpsites in Coastal Areas 2.B.3 Waste going to dumpsites in Coastal Areas	Generation of waste (SCP AP) Annual mean level of fine particulate matter (e.g. PM2,5 and PM10) in cities (population weighted) (SCP indicator)		
11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	Number of countries and large cities with initiatives to improve public open space (Indicator recommended by the MSSD) Urban public open space per capita (m2 per capita) (Indicator recommended by the MSSD) Istanbul Environment Friendly City Award put in place (Indicator recommended by the MSSD)						
11.a.1 Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city	Population trends in large, medium and small urban settlements by country (Indicator recommended by the MSSD)						
11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030 11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Sustainable urban toolbox put in place Number of harmonised indicators and tools for climate change vulnerability and mitigation assessments (Indicator recommended by the MSSD) Number of collaborative workshops, and capacity building activities on indicators and harmonisation (Indicator recommended by the MSSD)						

12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies				3.C.1 Are there Sustainable Consumption and Production plans or strategies? 3.C.4 Are there policies to support eco-labelling and eco-design?	Number of countries with SCP national action plans or SCP mainstreamed as a priority or a target into national policies (SCP indicator)		
12.2.1 Material footprint, material footprint per capita, and material footprint per GDP 12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Indicator 1: Ecological footprint (Mediterranean SD Dashboard) Indicator 22: Material intensity of the economy (Mediterranean SD Dashboard)			3.B.1 Is there a National Plan or Strategy for Waste Prevention? 3.B.2 Are there mandatory targets for recycling - recovery of packaging waste? 3.B.3 Are there EPR or Deposit- Return schemes for packaging waste? 3.B.4 Are there national policies to eliminate or reduce single-use plastics? 3.B.5 Are there financial incentives for reuse – resource recovery activities?	Ecological footprint (SCP AP) Material footprint, per GDP and per capita (SCP AP) Domestic material consumption, per GDP and per capita (SCP AP)		
12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement 12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment		Compliance with relevant BC Protocols		6.3.1. Total quantity of generated hazardous waste from industrial installations 6.3.2. Quantity of industrial hazardous waste disposed in environmentally sound manner relative to total quantity of generated hazardous waste from industrial installations 6.4.1. Number of industrial installations reporting periodically loads of pollutants discharged to the marine and coastal environments relative to the total number of industrial installations 6.4.2. Number of environmental inspections carried out by enforcement authorities in which industrial installations were found to be in breach of laws and regulations relative to the total number of executed inspections 6.4.3. Number of eliminated hotspots identified in the updated NAPs relative to the 2001 and 2015 baselines	Signatory if 1 to 3 international multilateral environmental agreements (Basel, Rotterdam and Stockholm Conventions) on hazardous waste, and other chemicals (SCP AP)	Number of ports providing adequate reception facilities Measures or initiatives taken for the delivery of ship-generated wastes Measures undertaken to implement the Guidelines and relevant provisions of the MARPOL Convention and of the Barcelona Convention Regional Plan on Marine Litter	
12.5.1 National recycling rate, tons of material recycled	Indicator 19: Waste generated and treated by type of waste and treatment type (MSSD SD Dashboard)			1.A Municipal waste composition 1.B Plastic waste generation per capita 2.C.1 % of plastic waste generated that is recycled 3.B.2 Are there mandatory targets for recycling - recovery of packaging waste? 3.B.3 Are there EPR or Deposit- Return schemes for packaging waste? 3.B.4 Are there national policies to eliminate or reduce single-use plastics?			
12.7.1 Number of countries implementing sustainable public procurement policies and action plans	Share of green or sustainable public procurement (Indicator recommended by the MSSD) National legislation on sustainable/green public procurement (MSSD Flagship initiative – Action 5.6.5)			3.C.2 Are there green procurement rules for the public sector in place?	SPP/ GPP as a percentage of total public procurement (in terms of monetary value) (SCP AP) Green patents (Patents of Importance to Green Growth and Development of environment-related technologies, % of all technologies) (SCP AP)		

12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	Status of implementation of the Mediterranean Strategy on Education for Sustainable Development (Indicator recommended by the MSSD) Number of countries that have launched national strategies on education for sustainable development (Indicator recommended by the MSSD)						
12.c.1 Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels					Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as proportion of total national expenditure on fossil fuels (SCP AP)		
13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)	Status of implementation of the commitments and obligations under the new UNFCCC climate agreement (Indicator recommended by the MSSD) Status of implementation of relevant regional climate change strategies and policies (Indicator recommended by the MSSD)						
13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula 13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions	Science Policy Interface put in place (Indicator recommended by the MSSD) Number of regional climate change adaptation and mitigation knowledge-sharing platforms and support mechanisms aimed at fostering collaborative R&D and innovation programmes set up (Indicator recommended by the MSSD) Status of project disseminating regional climate knowledge (Indicator recommended by the MSSD)						

14.1.1 Index of coastal eutrophication and floating plastic debris density			CI 13: Concentration of key nutrients in water column CI 14: Chlorophyll-a concentration in water column CI 17: Concentration of key harmful contaminants measured in the relevant matrix CI 18: Level of pollution effects of key contaminants where a cause and effect relationship has been established CI 20: Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood CI 21: Percentage of intestinal enterococci concentration measurements within established standards CI 22: Trends in the amount of litter washed ashore and/or deposited on coastlines CI 23: Trends in the amount of litter in the water column including microplastics and on the seafloor CI 24: Trends in the amount of litter ingested by or entangling marine organisms focusing on selected mammals, marine birds, and marine turtles	1.A Municipal waste composition 1.B Plastic waste generation per capita 1.C % of population living in Coastal Areas 1.D % of Tourists in Coastal Areas 3.A.1 Is there a National Assessment for ML and its impacts? 3.A.2 Is there a National Plan or Strategy for ML? 3.A.3 Is there a National Plan or Strategy for Waste Management? 3.A.4 Is there a National Law on Waste? 3.A.5 Is there a national plan or target to close the dumpsites before 2030? 3.A.6 Is there a National Information system for waste management in place?	Index of coastal eutrophication and floating plastic debris density (SCP AP)	CI 19: Occurrence, origin (where possible), extent of acute pollution events (e.g. slicks from oil, oil products and hazaradous substances), and their impact on biota affected by this pollution Number of marine pollution prevention and control regulatory instruments and policies updated or developed Measures undertaken for the establishment of places of refuges (for ships in need of assistance) Number of decision support tools (in case of marine pollution incidents) developed, updated and maintained Number of National oceano-meteorological institutes to have joined the MONGOOS (Mediterranean Operational Network for the Global Ocean Observing System) Number of persons trained (for response to incidents involving oil and other harmful or noxious substances) Number of exercises carried out (to test national response capacity) Number of Guidelines revised, developed and integrated in national procedures (concerning accidental marine pollution preparedness)	Employment in ports and on ships Economic value of the maritime transport sector (GDP contribution) Volume of passenger traffic Volume of port/ freight traffic % of MED maritime freight/ total MED freight
14.2.1 Proportion of national exclusive economic zones managed using ecosystem-based approaches			CI 15: Location and extent of the habitats impacted directly by hydrographic alterations CI 16: Length of coastline subject to physical disturbance due to the influence of man-made structures Proportion of days and geographical distribution where loud, low, and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals (candidate indicator) Levels of continuous low frequency sounds with the use of models as appropriate (candidate indicator)			Number of Contracting Parties that have disseminated the Guidelines for the control and management of ships' biofouling to the shipping industry and other interested parties All Contracting Parties to have applied the 2011 Guidelines to minimise the transfer of invasive aquatic species and report to IMO accordingly	
14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations			CI 13: Concentration of key nutrients in water column				

14.4.1 Proportion of fish stocks within biologically sustainable levels			CI 7: Spawning stock biomass CI 8: Total landings CI 9: Fishing mortality CI 10: Fishing effort CI 11: Catch per unit of effort (CPUE) or Landing per unit of effort (LPUE) as a proxy CI 12: Bycatch of vulnerable and non-target species		Proportion of fish stocks within biologically sustainable levels (SCP AP) Marine Trophic Index (also called Mean Trophic Level (TL) of fisheries landings (SCP AP)		Economic value of fisheries and aquaculture (GDP contribution) Total landed value Employment in fisheries sector Amount of fish caught Percentage of Fish Stock exploited over sustainable levels Farm production Number/production/ratio of certified organic aquaculture farms Number of personnel on semi-static aquaculture farms and related activities Number of jobs in large-scale fisheries Effective management of protected areas: share of coastal and marine habitats and species listed under international agreements (SPA protocol) that are in good condition (favourable, unfavourable etc.) Farm production values (Revenue) Fish farms (number of fish farms) Number of large shipping vessels Number of jobs in processing industry
14.5.1 Coverage of protected areas in relation to marine areas	Indicator 7: Percentage of protected coastal and marine areas [under national jurisdiction] (Mediterranean Sustainability Dashboard)		CI 1: Habitat distributional range CI 2: Condition of the habitat's typical species and communities CI 3: Species distributional range (EO1 related to marine mammals, seabirds, marine reptiles) CI 4: Population abundance of selected species (EO1, related to marine mammals, seabirds, marine reptiles) CI 5: Population demographic characteristics (EO1, e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles)			All Contracting Parties have ascertained whether there are maritime areas within their jurisdiction which need the protection afforded by their designation as Particularly Sensitive Sea Areas (PSSAs) and, if so ascertained, have initiated the process of requesting IMO to enable such designation Offshore common standards and guidelines for special restrictions or conditions for specially protected areas defined and adopted	
14.6.1 Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing	Relevant national legislation adopted (MSSD Strategic direction 1.2)		CI 7: Spawning stock biomass CI 8: Total landings CI 9: Fishing mortality CI 10: Fishing effort CI 11: Catch per unit of effort (CPUE) or Landing per unit of effort (LPUE) as a proxy CI 12: Bycatch of vulnerable and non-target species				
14.a.1 Proportion of total research budget allocated to research in the field of marine technology						Number of R&D projects and activities shared and level of data sharing (related to accidental marine pollution prevention, preparedness and response)	
14.b.1 Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries	Percentage of contribution of maritime-related activities to the gross national product (MSSD Action 1.2.1) Number of countries with actions to improve access of small scale producers to markets (MSSD Action 2.5.1)						Jobs in artisanal fisheries Number of small scale fisheries vessels

14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources	Indicator 6: Number of ratifications and level of compliance as reported by BC Contracting Parties (Mediterranean SD Dashboard)	Number of ratifications (of the Convention and its Protocols) and level of compliance as reported by BC Contracting Parties				Number of ratifications MARPOL Convention and its Annexes Number of ratifications of other IMO relevant international conventions Number of ratifications of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) Number of ratification of the Barcelona Convention Offshore Protocol	
15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	Indicator 9: Number of protected areas participating in the Green list initiative (Mediterranean SD Dashboard)						
15.2.1 Progress towards sustainable forest management	Share of Mediterranean forests under sustainable management (Indicator recommended by the MSSD)				Index of sustainable forest management (SCP AP) Area of certified forest (SCP AP)		
15.3.1 Proportion of land that is degraded over total land area	Status of action plans for the restoration of land from extractive activities (Indicator recommended by the MSSD)						
15.5.1 Red List Index	Indicator 16: Number of Mediterranean threatened species included in legal documents (Mediterranean SD Dashboard) Number of States supporting and/or benefitting from the Mediterranean Trust Fund for MPAs (MSSD)		CI 1: Habitat distributional range CI 2: Condition of the habitat's typical species and communities CI 3: Species distributional range CI 4: Population abundance of selected species CI 5: Population demographic characteristics CI 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species CI 12: Bycatch of vulnerable and non-target species				
15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species		Number of countries with National Action Plans concerning species introductions and non-indigenous species	CI 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species				
15.9.1 Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020		Number of Parties reporting on the implementation of the Barcelona Convention and its Protocols					
15.a.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems	Indicator 10: Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems (Mediterranean SD Dashboard) Number of States supporting and/or benefitting from the Mediterranean Trust Fund for MPAs (MSSD)						

16.10.2 Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information	Indicator 26: Existing mechanisms to ensure public participation and access to environmental publication (Mediterranean SD Dashboard) Number of countries adopting the Aarhus Convention (indicator recommended by the MSSD) Number of countries with legal provisions in place for public participation in decision-making that affects the environment (indicator recommended by the MSSD)						
17.13.1 Macroeconomic Dashboard	Indicator 2: Human Development Index (Mediterranean SD Dashboard) Indicator 3: Gross Domestic Product (Mediterranean SD Dashboard)						
17.14.1 Number of countries with mechanisms in place to enhance policy coherence of sustainable development	Indicator 23: Number of National Strategies for Sustainable Development adopted or updated [and number of updates since first edition] (Mediterranean Sustainability Dashboard) Number of countries where capacity development programmes on issues related to implementation and compliance with environmental obligations and agreements are put in place (Indicator recommended by the MSSD)						
17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals	Number of times Mediterranean Commission on Sustainable Development presented at the United Nations High-Level Political Forum on sustainable development (Indicator recommended by the MSSD)						
17.18.1 Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics	Status of the Mediterranean Sustainability Dashboard (MSSD)						

ADDITIONAL SDGs INDICATORS OF POTENTIAL RELEVANCE FOR TDA (WITHOUT DIRECT LINKAGES TO THE CURRENT SET OF INDICATORS OF THE BARCELONA CONVENTION SYSTEM)

1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex

5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments

5.5.2 Proportion of women in managerial positions

5.6.2 Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education

6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management

8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities

8.5.2 Unemployment rate, by sex, age and persons with disabilities

12.b.1 Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools

SDG Indicators	CORRESPONDING BARCELONA CONVENTION SYSTEM INDICATORS, GROUPED IN THE GEF CATEGORIES		
	Process	Stress reduction	Environmental status
2.4.1 Proportion of agricultural area under productive and sustainable agriculture		Indicator 15: Proportion of agriculture quality products and Share of the agricultural land area used by organic farming (Mediterranean SD Dashboard) Agricultural area organic, total (SCP AP)	
6.1.1 Proportion of population using safely managed drinking water services		Indicator 13: Share of population with access to an improved water source (total, urban, rural) (Mediterranean SD Dashboard)	
6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water		3.1: Share of total, urban and rural population with access to an improved sanitation system (ISS) 3.2: Proportion of population using safely managed sanitation services (SMSS)	
6.3.1 Proportion of wastewater safely treated 6.3.2 Proportion of bodies of water with good ambient water quality	Common standards, on the use and discharge of harmful or noxious substances and material, in line with relevant international standards and conventions defining inter alia limits and prohibitions at regional level formulated and adopted Common standards on the disposal of oil and oily mixtures and on the use and disposal of drilling fluids and cutting formulated and adopted All Contracting Parties to have established systems and procedures for national and sub-regional monitoring and surveillance including, where practicable, regular individual or coordinated aerial surveillance in the waters under their jurisdiction, if the Parties so agree All Mediterranean coastal States to have ensured the existence of a national legal framework (regulations) as a basis for prosecuting discharge offenders for infringements of MARPOL or of any national legal framework implementing it	4.1 Municipal wastewater collected and wastewater treated 4.2 Direct use of treated municipal wastewater 4.3 Release of nutrients from municipal wastewater 5.1 Nutrient concentrations in transitional, coastal and marine waters 5.2 Bathing water quality 6.1.1. Total BOD load discharged from industrial installations to the Mediterranean marine environment 6.1.2. Total Nitrogen load discharged from industrial installations to the Mediterranean marine environment 6.1.3. Total Phosphorus load discharged from industrial installations to the Mediterranean marine environment 6.2.1. Total heavy metals load released from industrial installations to the Mediterranean marine environment 6.2.2. Furans and dioxins load released from industrial installations to the Mediterranean marine environment 6.2.3. Polycyclic aromatic hydrocarbons (PAH) load released from industrial installations to the Mediterranean marine environment 6.2.4. Volatile organic compounds (VOC) load released from industrial installations to the Mediterranean marine environment	
6.4.1 Change in water-use efficiency over time 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources		Indicator 8: Water efficiency index (Mediterranean SD Dashboard) Indicator 12: Water demand, total and by sector, compared to GDP (Mediterranean SD Dashboard) Freshwater withdrawal as a proportion of available freshwater resources (also known as withdrawal intensity) (SCP AP) Water Productivity (SCP AP) Water footprint (SCP AP)	

6.5.1 Degree of integrated water resources management implementation (0–100) 6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation	Degree of integrated water resources management (IWRM) implementation (0-100) (SCP AP) Participation of countries in cross border integrated water resources management processes (indicator recommended by the MSSD)		
6.6.1 Change in the extent of water-related ecosystems over time	Percentage of Mediterranean coastal wetlands protected		
7.2.1 Renewable energy share in the total final energy consumption		Renewable energy share in the total final energy consumption (SCP AP) Installed capacity of offshore wind energy Electricity produced by offshore wind energy (Maritime) Renewable energy share in the total primary energy consumption (%) Number of renewable marine R&D projects, e.g. in biofuel/ biomass production from algae Installed capacity of onshore wind energy in coastal zones Installed capacity from tidal energy at the coast Installed capacity from wave and tidal energy at the coast	
7.3.1 Energy intensity measured in terms of primary energy and GDP		Energy intensity measured in terms of primary energy and GDP (SCP AP) Employment in offshore oil and gas Economic value offshore oil and gas sector (GDP contribution) Offshore oil and gas produced Number of exploration drills for oil and gas Desalination capacity installed Number of energy infrastructures in coastal areas Employment in energy sector Length of pipelines projects crossing the Mediterranean Sea Size/ economic value/ capacity of refineries at MED shores	
8.4.1 Material footprint, material footprint per capita, and material footprint per GDP 8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP		Ecological footprint (SCP AP) Material footprint, per GDP and per capita (SCP AP) Domestic material consumption, per GDP and per capita (SCP AP)	

8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate 8.9.2 Proportion of jobs in sustainable tourism industries out of total tourism jobs	3.C.3 Are there policies to support sustainable tourism? All Contracting Parties to have reported to the Secretariat on the measures they undertook to implement the Guidelines concerning Pleasure Craft Activities and the Protection of the Marine Environment in the Mediterranean	Employment in tourism sector (FTE, % total) Economic value of tourism sector (USD, GDP contribution) International Tourism Arrivals (per capita) Tourist resident ratio (tourism intensity) Number of overnight stays in tourist accommodation (tourism intensity) Ratio of national tourists Tourism density along the coast Quality of tourism accommodation Value / revenue of tourism taxes Seasonality of tourism in the coastal zones Evolution of tourism accommodation Cost of tourism accommodation	
9.4.1 CO_2 emission per unit of value added		Indicator 20: Green House Gas emissions (related to GDP) (Mediterranean SD Dashboard) Carbon footprint (SCP AP) CO2 emission per unit of value added (SCP AP)	
11.3.1 Ratio of land consumption rate to population growth rate			CI 16: Length of coastline subject to physical disturbance due to the influence of manmade structures Land use change (candidate indicator)
11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically	Number of countries with participatory mechanisms enshrined in urban planning legislation (Indicator recommended by the MSSD)		
11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	Status of the assessment (of high- and low-tech solutions that have been successfully implemented to achieve waste reduction) initiative (Indicator recommended by the MSSD)	Indicator 19: Waste generated and treated by type of waste and treatment type (Mediterranean SD Dashboard) 2.A.1 Waste collection coverage 2.A.2 Waste captured by the formal waste sector 2.B.1 % of waste to uncontrolled dumpsites 2.B.2 Uncontrolled dumpsites in Coastal Areas 2.B.3 Waste going to dumpsites in Coastal Areas	Annual mean level of fine particulate matter (e.g. PM2,5 and PM10) in cities (population weighted) (SCP indicator)
11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030 11.b.2 Proportion of local	Sustainable urban toolbox put in place Number of harmonised indicators and tools for climate change vulnerability and mitigation assessments (Indicator recommended by the MSSD) Number of collaborative workshops, and capacity building activities		

11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Number of collaborative workshops, and capacity building activities on indicators and harmonisation (Indicator recommended by the MSSD)		
12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies	Number of countries with SCP national action plans or SCP mainstreamed as a priority or a target into national policies (SCP indicator) 3.C.1 Are there Sustainable Consumption and Production plans or strategies? 3.C.4 Are there policies to support eco-labelling and eco-design?		
12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement 12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment	Compliance with relevant BC Protocols Signatory if 1 to 3 international multilateral environmental agreements (Basel, Rotterdam and Stockholm Conventions) on hazardous waste, and other chemicals (SCP AP) 6.4.1. Number of industrial installations reporting periodically loads of pollutants discharged to the marine and coastal environments relative to the total number of industrial installations 6.4.2. Number of environmental inspections carried out by enforcement authorities in which industrial installations were found to be in breach of laws and regulations relative to the total number of executed inspections 6.4.3. Number of eliminated hotspots identified in the updated NAPs relative to the 2001 and 2015 baselines Number of ports providing adequate reception facilities Measures or initiatives taken for the delivery of ship-generated wastes Measures undertaken to implement the Guidelines and relevant provisions of the MARPOL Convention and of the Barcelona Convention Regional Plan on Marine Litter	6.3.1. Total quantity of generated hazardous waste from industrial installations 6.3.2. Quantity of industrial hazardous waste disposed in environmentally sound manner relative to total quantity of generated hazardous waste from industrial installations	
12.5.1 National recycling rate, tons of material recycled		1.A Municipal waste composition 1.B Plastic waste generation per capita 2.C.1 % of plastic waste generated that is recycled	

12.7.1 Number of countries implementing sustainable public procurement policies and action plans	Share of green or sustainable public procurement (Indicator recommended by the MSSD) National legislation on sustainable/green public procurement (MSSD Flagship initiative – Action 5.6.5) 3.C.2 Are there green procurement rules for the public sector in place? SPP/ GPP as a percentage of total public procurement (in terms of monetary value) (SCP AP) Green patents (Patents of Importance to Green Growth and Development of environment-related technologies, % of all technologies) (SCP AP)		
13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)	Status of implementation of the commitments and obligations under the new UNFCCC climate agreement (Indicator recommended by the MSSD) Status of implementation of relevant regional climate change strategies and policies (Indicator recommended by the MSSD)		
13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula 13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions	Science Policy Interface put in place (Indicator recommended by the MSSD) Number of regional climate change adaptation and mitigation knowledge-sharing platforms and support mechanisms aimed at fostering collaborative R&D and innovation programmes set up (Indicator recommended by the MSSD) Status of project disseminating regional climate knowledge (Indicator recommended by the MSSD)		

14.1.1 Index of coastal eutrophication and floating plastic debris density	3.A.1 Is there a National Assessment for ML and its impacts? 3.A.2 Is there a National Plan or Strategy for ML? 3.A.3 Is there a National Plan or Strategy for Waste Management? 3.A.4 Is there a National Law on Waste? 3.A.5 Is there a national plan or target to close the dumpsites before 2030? 3.A.6 Is there a National Information system for waste management in place? Number of marine pollution prevention and control regulatory instruments and policies updated or developed Measures undertaken for the establishment of places of refuges (for ships in need of assistance) Number of decision support tools (in case of marine pollution incidents) developed, updated and maintained Number of National oceano-meteorological institutes to have joined the MONGOOS (Mediterranean Operational Network for the Global Ocean Observing System) Number of persons trained (for response to incidents involving oil and other harmful or noxious substances) Number of exercises carried out (to test national response capacity) Number of Guidelines revised, developed and integrated in national procedures (concerning accidental marine pollution preparedness)	1.C % of population living in Coastal Areas 1.D % of Tourists in Coastal Areas Employment in ports and on ships Economic value of the maritime transport sector (GDP contribution) Volume of passenger traffic Volume of port/ freight traffic % of MED maritime freight/ total MED freight	CI 13: Concentration of key nutrients in water column CI 14: Chlorophyll-a concentration in water column CI 17: Concentration of key harmful contaminants measured in the relevant matrix CI 18: Level of pollution effects of key contaminants where a cause and effect relationship has been established CI 20: Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood CI 21: Percentage of intestinal enterococci concentration measurements within established standards CI 22: Trends in the amount of litter washed ashore and/or deposited on coastlines CI 23: Trends in the amount of litter in the water column including microplastics and on the seafloor CI 24: Trends in the amount of litter ingested by or entangling marine organisms focusing on selected mammals, marine birds, and marine turtles CI 19: Occurrence, origin (where possible), extent of acute pollution events (e.g. slicks from oil, oil products and hazaradous substances), and their impact on biota affected by this pollution Index of coastal eutrophication and floating plastic debris density (SCP AP)
14.2.1 Proportion of national exclusive economic zones managed using ecosystem-based approaches	Number of Contracting Parties that have disseminated the Guidelines for the control and management of ships' biofouling to the shipping industry and other interested parties All Contracting Parties to have applied the 2011 Guidelines to minimise the transfer of invasive aquatic species and report to IMO accordingly		CI 15: Location and extent of the habitats impacted directly by hydrographic alterations CI 16: Length of coastline subject to physical disturbance due to the influence of man-made structures Proportion of days and geographical distribution where loud, low, and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals (candidate indicator) Levels of continuous low frequency sounds with the use of models as appropriate (candidate indicator)
14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations			CI 13: Concentration of key nutrients in water column

14.4.1 Proportion of fish stocks within biologically sustainable levels		Economic value of fisheries and aquaculture (GDP contribution) Total landed value Employment in fisheries sector Amount of fish caught Percentage of Fish Stock exploited over sustainable levels Farm production Number/production/ratio of certified organic aquaculture farms Number of personnel on semi-static aquaculture farms and related activities Number of jobs in large-scale fisheries Effective management of protected areas: share of coastal and marine habitats and species listed under international agreements (SPA protocol) that are in good condition (favourable, unfavourable etc.) Farm production values (Revenue) Fish farms (number of fish farms) Number of large shipping vessels Number of jobs in processing industry	CI 7: Spawning stock biomass CI 8: Total landings CI 9: Fishing mortality CI 10: Fishing effort CI 11: Catch per unit of effort (CPUE) or Landing per unit of effort (LPUE) as a proxy CI 12: Bycatch of vulnerable and non-target species Proportion of fish stocks within biologically sustainable levels (SCP AP) Marine Trophic Index (also called Mean Trophic Level (TL) of fisheries landings (SCP AP)
14.5.1 Coverage of protected areas in relation to marine areas	All Contracting Parties have ascertained whether there are maritime areas within their jurisdiction which need the protection afforded by their designation as Particularly Sensitive Sea Areas (PSSAs) and, if so ascertained, have initiated the process of requesting IMO to enable such designation Offshore common standards and guidelines for special restrictions or conditions for specially protected areas defined and adopted		Indicator 7: Percentage of protected coastal and marine areas [under national jurisdiction] (Mediterranean Sustainability Dashboard) CI 1: Habitat distributional range CI 2: Condition of the habitat's typical species and communities CI 3: Species distributional range (EO1 related to marine mammals, seabirds, marine reptiles) CI 4: Population abundance of selected species (EO1, related to marine mammals, seabirds, marine reptiles) CI 5: Population demographic characteristics (EO1, e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles)
14.6.1 Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing	Relevant national legislation adopted (MSSD Strategic direction 1.2)		
14.a.1 Proportion of total research budget allocated to research in the field of marine technology	Number of R&D projects and activities shared and level of data sharing (related to accidental marine pollution prevention, preparedness and response)		

14.b.1 Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries	Percentage of contribution of maritime-related activities to the gross national product (MSSD Action 1.2.1) Number of countries with actions to improve access of small scale producers to markets (MSSD Action 2.5.1)	Jobs in artisanal fisheries Number of small scale fisheries vessels	
14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources	Indicator 6: Number of ratifications and level of compliance as reported by BC Contracting Parties (Mediterranean SD Dashboard) Number of ratifications MARPOL Convention and its Annexes Number of ratifications of other IMO relevant international conventions Number of ratifications of the International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) Number of ratification of the Barcelona Convention Offshore Protocol		
15.5.1 Red List Index	Indicator 16: Number of Mediterranean threatened species included in legal documents (Mediterranean SD Dashboard)		CI 1: Habitat distributional range CI 2: Condition of the habitat's typical species and communities CI 3: Species distributional range CI 4: Population abundance of selected species CI 5: Population demographic characteristics CI 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species CI 12: Bycatch of vulnerable and non-target species
15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species	Number of countries with National Action Plans concerning species introductions and non-indigenous species		CI 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species
15.a.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems	Indicator 10: Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems (Mediterranean SD Dashboard) Number of States supporting and/or benefitting from the Mediterranean Trust Fund for MPAs (MSSD)		

17.14.1 Number of countries with mechanisms in place to enhance policy coherence of sustainable development	Indicator 23: Number of National Strategies for Sustainable Development adopted or updated [and number of updates since first edition] (Mediterranean Sustainability Dashboard) Number of countries where capacity development programmes on issues related to implementation and compliance with environmental obligations and agreements are put in place (Indicator recommended by the MSSD)		
17.18.1 Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics	Status of the Mediterranean Sustainability Dashboard (MSSD)		

ADDITIONAL SDGs INDICATORS OF POTENTIAL RELEVANCE FOR TDA (WITHOUT DIRECT LINKAGES TO THE CURRENT SET OF INDICATORS OF THE BARCELONA CONVENTION SYSTEM)

1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex

5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments

5.5.2 Proportion of women in managerial positions

5.6.2 Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education

6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management

8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities

8.5.2 Unemployment rate, by sex, age and persons with disabilities

12.b.1 Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools

SDG Indicators	CORRESPONDING BARCELONA CONVENTION SYSTEM INDICATORS, GROUPED IN THE GEF CATEGORIES		
	Process	Stress reduction	Environmental status
2.4.1 Proportion of agricultural area under productive and sustainable agriculture		**Indicator 15: Proportion of agriculture quality products and Share of the agricultural land area used by organic farming (Mediterranean SD Dashboard)** **Agricultural area organic, total (SCP AP)**	
6.1.1 Proportion of population using safely managed drinking water services		**Indicator 13: Share of population with access to an improved water source (total, urban, rural) (Mediterranean SD Dashboard)**	
6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water		NAP/ H2020 indicator: **3.1: Share of total, urban and rural population with access to an improved sanitation system (ISS)**	
6.3.1 Proportion of wastewater safely treated 6.3.2 Proportion of bodies of water with good ambient water quality	Offshore/ pollution from ships: **All Contracting Parties to have established systems and procedures for national and sub-regional monitoring and surveillance including, where practicable, regular individual or coordinated aerial surveillance in the waters under their jurisdiction, if the Parties so agree**	NAP/H2020 indicators: **4.2 Direct use of treated municipal wastewater** **4.3 Release of nutrients from municipal wastewater** **5.1 Nutrient concentrations in transitional, coastal and marine waters** **5.2 Bathing water quality** **6.1.1. Total BOD load discharged from industrial installations to the Mediterranean marine environment** **6.1.2. Total Nitrogen load discharged from industrial installations to the Mediterranean marine environment** **6.1.3. Total Phosphorus load discharged from industrial installations to the Mediterranean marine environment** **6.2.1. Total heavy metals load released from industrial installations to the Mediterranean marine environment** **6.2.2. Furans and dioxins load released from industrial installations to the Mediterranean marine environment** **6.2.3. Polycyclic aromatic hydrocarbons (PAH) load released from industrial installations to the Mediterranean marine environment** **6.2.4. Volatile organic compounds (VOC) load released from industrial installations to the Mediterranean marine environment**	
6.4.1 Change in water-use efficiency over time 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources		**Indicator 8: Water efficiency index (Mediterranean SD Dashboard)** **Water footprint (SCP AP)**	

6.5.1 Degree of integrated water resources management implementation (0–100) 6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation	**Degree of integrated water resources management (IWRM) implementation (0-100) (SCP AP)**		
6.6.1 Change in the extent of water-related ecosystems over time	**Percentage of Mediterranean coastal wetlands protected**		
7.2.1 Renewable energy share in the total final energy consumption		**Renewable energy share in the total final energy consumption (SCP AP)** Drivers indicators: **Installed capacity of offshore wind energy** **Electricity produced by offshore wind energy**	
7.3.1 Energy intensity measured in terms of primary energy and GDP		Drivers indicators: **Employment in offshore oil and gas** **Economic value offshore oil and gas sector (GDP contribution)** **Offshore oil and gas produced** **Number of exploration drills for oil and gas** **Length of pipelines projects crossing the Mediterranean Sea** **Size/ economic value/ capacity of refineries at MED shores**	
8.4.1 Material footprint, material footprint per capita, and material footprint per GDP 8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP		**Ecological footprint (SCP AP)** **Material footprint, per GDP and per capita (SCP AP)** **Domestic material consumption, per GDP and per capita (SCP AP)**	
8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate 8.9.2 Proportion of jobs in sustainable tourism industries out of total tourism jobs	NAP/ H2020 indicators: **3.C.3 Are there policies to support sustainable tourism?**	Drivers indicators: **Economic value of tourism sector (USD, GDP contribution)** **Tourism density along the coast**	

9.4.1 CO_2 emission per unit of value added		**Carbon footprint (SCP AP)** **CO2 emission per unit of value added (SCP AP)**	
11.3.1 Ratio of land consumption rate to population growth rate			**CI 16: Length of coastline subject to physical disturbance due to the influence of manmade structures**
11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	**Status of the assessment (of high- and low-tech solutions that have been successfully implemented to achieve waste reduction) initiative (Indicator recommended by the MSSD)**	**Indicator 19: Waste generated and treated by type of waste and treatment type (Mediterranean SD Dashboard)** NAP/ H2020 indicators: **2.A.1 Waste collection coverage**	
11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030 11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	**Sustainable urban toolbox put in place (MSSD)** **Number of harmonised indicators and tools for climate change vulnerability and mitigation assessments (Indicator recommended by the MSSD)**		
12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies	**Number of countries with SCP national action plans or SCP mainstreamed as a priority or a target into national policies (SCP indicator)**		
12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement 12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment		NAP/ H2020 indicators: **6.3.1. Total quantity of generated hazardous waste from industrial installations** **6.3.2. Quantity of industrial hazardous waste disposed in environmentally sound manner relative to total quantity of generated hazardous waste from industrial installations**	

12.5.1 National recycling rate, tons of material recycled		NAP/ H2020 indicators: **1.A Municipal waste composition** **1.B Plastic waste generation per capita** **2.C.1 % of plastic waste generated that is recycled**	
12.7.1 Number of countries implementing sustainable public procurement policies and action plans	**Share of green or sustainable public procurement (Indicator recommended by the MSSD)**		
13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)	**Status of implementation of relevant regional climate change strategies and policies (Indicator recommended by the MSSD)**		
13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula 13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions	**Number of regional climate change adaptation and mitigation knowledge-sharing platforms and support mechanisms aimed at fostering collaborative R&D and innovation programmes set up (Indicator recommended by the MSSD)**		

14.1.1 Index of coastal eutrophication and floating plastic debris density	NAP/ H2020 indicators: **3.A.1 Is there a National Assessment for ML and its impacts?** **3.A.3 Is there a National Plan or Strategy for Waste Management?**	NAP/ H2020 indicators: **1.C % of population living in Coastal Areas** **1.D % of Tourists in Coastal Areas**	**CI 13: Concentration of key nutrients in water column** **CI 14: Chlorophyll-a concentration in water column** **CI 17: Concentration of key harmful contaminants measured in the relevant matrix** **CI 18: Level of pollution effects of key contaminants where a cause and effect** **relationship has been established** **CI 20: Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood** **CI 23: Trends in the amount of litter in the water column including microplastics and on the seafloor** **CI 19: Occurrence, origin (where possible), extent of acute pollution events (e.g. slicks from oil, oil products and hazaradous substances), and their impact on biota affected by this pollution** **Index of coastal eutrophication and floating plastic debris density (SCP AP)**
14.2.1 Proportion of national exclusive economic zones managed using ecosystem-based approaches			**CI 15: Location and extent of the habitats impacted directly by hydrographic alterations** **Proportion of days and geographical distribution where loud, low, and mid-frequency impulsive sounds exceed levels that are likely to entail significant impact on marine animals (candidate indicator)** **Levels of continuous low frequency sounds with the use of models as appropriate (candidate indicator)**
14.4.1 Proportion of fish stocks within biologically sustainable levels		Drivers indicators: **Amount of fish caught** **Percentage of Fish Stock exploited over sustainable levels** **Number/production/ratio of certified organic aquaculture farms** **Number of jobs in large-scale fisheries** **Effective management of protected areas: share of coastal and marine habitats and species listed under international agreements (SPA protocol) that are in good condition (favourable, unfavourable etc.)** **Number of large shipping vessels**	**CI 7: Spawning stock biomass** **CI 8: Total landings** **CI 9: Fishing mortality** **CI 10: Fishing effort** **CI 11: Catch per unit of effort (CPUE) or Landing per unit of effort (LPUE) as a proxy** **CI 12: Bycatch of vulnerable and non-target species** **Proportion of fish stocks within biologically sustainable levels (SCP AP)** **Marine Trophic Index (also called Mean Trophic Level (TL) of fisheries landings (SCP AP)**

14.5.1 Coverage of protected areas in relation to marine areas			**Indicator 7: Percentage of protected coastal and marine areas [under national jurisdiction] (Mediterranean Sustainability Dashboard)** **CI 1: Habitat distributional range** **CI 2: Condition of the habitat's typical species and communities** **CI 3: Species distributional range (EO1 related to marine mammals, seabirds, marine reptiles)** **CI 4: Population abundance of selected species (EO1, related to marine mammals, seabirds, marine reptiles)** **CI 5: Population demographic characteristics (EO1, e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates related to marine mammals, seabirds, marine reptiles)**
14.b.1 Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries	**Number of countries with actions to improve access of small scale producers to markets (MSSD Action 2.5.1)**	Drivers indicators: **Number of small scale fisheries vessels**	
14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources	**Indicator 6: Number of ratifications and level of compliance as reported by BC Contracting Parties (Mediterranean SD Dashboard)**		
15.5.1 Red List Index			**CI 12: Bycatch of vulnerable and non-target species**
15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species	**Number of countries with National Action Plans concerning species introductions and non-indigenous species** - MAP reporting system		**CI 6: Trends in abundance, temporal occurrence, and spatial distribution of non-indigenous species**
15.a.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems	**Indicator 10: Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems (Mediterranean SD Dashboard)**		

Annex I: UNEP Environmental Social and Economic Review Note (ESERN)

I. Project Overview

Identification	*GEF ID: 9684*
Project Title	*Reducing pollution from harmful chemicals and wastes in Mediterranean hotspots and measuring progress to impacts*
Managing Division	*UN Environment – Chemicals and Health GEF Unit (Implementing Agency) and Ecoysstems Division (Implementing Agency)*
Type/Location	*Regional*
Region	*Mediterranean*
List Countries	*Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Morocco, Montenegro, Tunisia, Turkey*
Project Description	*The objective of this project is to achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas. This objective will be achieved through a multi-focal area collaboration between the GEF Chemicals and Waste and International Waters focal areas.* *Component 1 links with the other Child Projects of the MedProgramme which focus on reductions of the other main source of Mediterranean pollution, namely excess nutrients. The cross-cutting IW component will support monitoring of all types of pollution in Mediterranean coastal hot spots.* *This Full Size Project is comprised of two substantive components (one for CW and one for IW), and a M&E component, with the following outcomes/ outputs:* *Component 1: Chemicals and Waste (CW)* *Outcome 1. Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas* • *Output 1.1: Management and disposal of POPs* • *Output 1.2: Management and safe storage of mercury* • *Output 1.3: Long term POPs reduction through pilot activities on new POPs alternatives* • *Output 1.4: Hg reduction through pilot activities on new Hg alternatives* *Component 2: International Waters (IW)* *Outcome 2: Littoral countries enabled to identify trends and progress to impacts* • *Output 2.1: Updated TDA including gender assessment* • *Output 2.2: Report on progress to impacts*

	• *Output 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations* • *Output 2.4: Data sharing policy for the Mediterranean*
Estimated duration of project:	*60 months*
Estimated cost of the project	*USD 14,250,000* *(IW = 3,000,000 CW = 11,250,000)*

II. Environmental Social and Economic Screening Determination

A. Summary of the Safeguard Risks Triggered

Safeguard Standard Triggered by the Project	Impact of Risk[1] (1-5)	Probability of Risk (1-5)	Significance of Risk (L, M, H)
SS 1: Biodiversity, natural habitat and Sustainable Management of Living Resources	2	1	L
SS 2: Resource Efficiency, Pollution Prevention and Management of Chemicals and Wastes	3	2	M
SS 3: Safety of Dams	1	1	L
SS 4: Involuntary resettlement	1	1	L
SS 5: Indigenous peoples	1	1	L
SS 6: Labor and working conditions	1	1	L
SS 7: Cultural Heritage	1	1	L
SS 8: Gender equity	1	1	L
SS 9: Economic Sustainability	1	1	L
Additional Safeguard questions for projects seeking GCF-funding (Section IV)			

B. ESE Screening Decision[2] (Refer to the UNEP ESES Framework (Chapter 2) and the UNEP's ESES Guidelines.)

[1] Refer to UNEP Environment, Social and Economic Sustainability (ESES): Implementation Guidance Note to assign values to the Impact of Risk and the Probability of Risk to determine the overall significance of Risk (Low, Moderate or High).

[2] **Low risk**: Negative impacts negligible: no further study or impact management required.

Moderate risk: Potential negative impacts, but less significant; few if any impacts irreversible; impact amenable to management using standard mitigation measures; limited environmental or social analysis

Low risk ☐ Moderate risk [x] High risk ☐ Additional information required ☐	
C. Development of ESE Review Note and Screening Decision:	
Prepared by: Name: _____Eloise Touni_____Date: _____	
Safeguard Advisor: Name: _____ Date: _____	
Project Manager: Name: _____ Date: _____	
The project component on chemicals and waste includes repackaging, transport and environmentally sound destruction of hazardous wastes, namely POPs and mercury. An efficient and successful implementation of these activities will directly improve the environment of the Mediterranean Sea. The environmental and social risks of the project relate to the possibility of an accident or spill during the field operations. In the event of poor site management, an accident or spill or exposure of workers to the chemicals could occur. The environmental and social risk management framework of the project is therefore well established and sets out a relevant risk assessment and initial environmental management plan (EMP) for each site where operations will be conducted. Health and environmental management capacity is a criterion for the selection of the international contractor who will be appointed to manage the operations. Finally, the contractor is required to produce a Health and Safety Plan for each site, detailing the precautionary and emergency measures to be in place before operations begin, including ongoing monitoring of worker exposure, air quality, and other relevant measures depending on the specific wastes being handled. The project design includes a Phase 1 of disposal activities in two countries (Algeria and Lebanon), and the site-specific EMPs for these two countries have been included as an annex to the CEO Endorsement Request. The EMP was shared with the Safeguard Advisor prior to submission for PRC.	

may be required to develop a ESEMP. Straightforward application of good practice may be sufficient without additional study.

High risk: Potential for significant negative impacts, possibly irreversible, ESEA including a full impact assessment may be required, followed by an effective safeguard management plan.

ANNEX M: ABBREVIATIONS AND ACRONYMS

3F	Fluorine Free Foams
CHB	Chemicals and Health Branch
CP	Child Project
CW	Chemicals and Waste
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
EO	Ecological Objective
EPR	Extended Producer Responsibility
EPS/XPS	Expanded Polystyrene/ Extruded Polystyrene
ESM	Environmentally Sound Management
EU	European Union
GEF	Global Environment Facility
HBCD	Hexabromocyclododecane
ICZM	Integrated Coastal Zone Management
IMAP	Integrated Monitoring and Assessment Programme
IW	International Waters
LBS	Land Based Sources of Pollution
LME	Large Marine Ecosystem
MAP	UN Environment Mediterranean Action Plan
MED POL	Mediterranean Pollution Assessment and Control Programme
MIA	Minamata Initial Assessment
NAP	National Action Plan (Barcelona Convention)
NBB	National Baseline Budget
NIP	National Implementation Plan (Stockholm Convention)
PFD	Programme Framework Document
PFOS/PFAS (PFAS)	Perfluorooctanesulfonic acid and other per- and polyfluorinated alkylated substances
POPs	Persistent Organic Pollutants
SAP MED	Strategic Action Programme to combat Pollution from Land Based Sources
SCP	Sustainable Consumption and Production
SCPRAC	Regional Activity Centre – Sustainable Consumption and Production
SDG	Sustainable Development Goals
SEIS	Shared Environmental Information System
TDA	Transboundary Diagnostic Assessment
WWTP	Waste Water Treatment Plant

ANNEX N: PROPOSED TDA TABLE OF CONTENTS

Forward

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Executive Summary

1. Introduction
   1.1. Context
   1.2. Brief description of the Mediterranean region
   1.3. TDA objectives

2. TDA Approach
   2.1. The TDA process and participants
   2.2. TDA methodology
      2.2.1.Identification of priority transboundary problems
      2.2.2.Analysis of causal chains
      2.2.3.Selection and implementation of thematic assessments

Thematic assessments are implemented to inform the TDA development, in particular for areas where lack of data is pronounced. The final set of thematic assessments to be carried out within the TDA process will be decided in project implementation phase by the TDA team. A preliminary proposal (for further consideration by the TDA team) is to carry out:

a) Gender assessment;
b) Assessment of the impact of marine pollution/ litter on biodiversity, including:
   - impacts of maritime traffic-related pollution on marine ecosystems (possibly accompanied with an assessment of harmful impacts of introduction of Non-Indigenous and/ or Invasive Alien Species),
   - impacts of operational releases of oil and other contaminants from offshore activities;
c) Assessment of the costs of degradation of the Mediterranean coastal and marine ecosystems and of the blue economy potential
d) Assessment of ecosystem and socio-economic vulnerabilities related to climate variability and change

      2.2.4.Stakeholder analysis
      2.2.5.Governance analysis
      2.2.6.Prospective studies and scenario analysis

Building up on the existing prospective studies and work on the development of the MED 2050 report, the TDA should explore potential for systemic and transformational change at the 2050 horizon through cross-sectoral foresight scenarios

   2.3. Indicators for a data driven TDA and SAP implementation

Decision on the TDA indicators should be made in the project implementation stage. To facilitate the selection process, mapping of all the indicators used in the MAP – Barcelona Convention system against the relevant SDGs was performed in the preparatory phase. The most relevant indicators, including IMAP Common Indicators, were then selected and structured under three GEF categories (process

indicators, stress reduction indicators and environmental status indicators) to form an initial list for further consideration by the TDA team (Annex K contains potential TDA indicators and their linkages with SDGs). The preliminary proposal/ short list of TDA indictors (annex K) is made having in mind their relevance and data availability for the TDA development, as well as their potential use to monitor and evaluate implementation of the future Strategic Action Programme (to be developed following the TDA findings). The indicators selected in the TDA process should serve a dual purpose: to describe the baseline (TDA) i.e. to assess the Mediterranean Large Marine Ecosystem; and to form a basis for the SAP implementation.

3. Baseline information on the Mediterranean

    3.1. Geographical scope
    3.2. Climate
    3.3. Natural resources
    3.4. Quality of the coastal and marine environment
    3.5. Socio-economic characteristics
        3.5.1.The main drivers of environmental change
            3.5.1.1. Tourism
            3.5.1.2. Fisheries
            3.5.1.3. Marine aquaculture
            3.5.1.4. Maritime transport
            3.5.1.5. Energy
                3.5.1.5.1. Oil and gas
                3.5.1.5.2. Renewable energy (offshore wind farms)
            3.5.1.6. Marine mining (extraction of non-living resources)
            3.5.1.7. Water abstraction
            3.5.1.8. Use of marine waters for wastewater and waste disposal
            3.5.1.9. Infrastructure (underwater cables and pipelines, ports and marinas)
            3.5.1.10. Coastal development

        3.5.2.Population and migrations

        3.5.3.Focus on gender

4. The main findings of thematic assessments

5. Priority transboundary problems

    5.1. Introduction

Identification of transboundary problems is one of the key steps in the consultative TDA process and will be performed in project implementations phase. Based on the recent Mediterranean assessments (reviewed in the course of project preparation), potential list of transboundary problems for further consideration by the TDA team has been identified as follows:

a) Land and sea-based pollution (including airborne depositions)
b) Marine litter and microplastics
c) Non-indigenous species
d) Habitat destruction and loss of biodiversity
e) Declining trend of fish stocks/ exploitation of living resources

f) Climate change related vulnerabilities and risks in the marine and coastal zone (as a transboundary or a problem that affects other identified transboundary problems)

5.2. Transboundary problem 1
- 5.2.1. Description of the problem and its transboundary importance
- 5.2.2. Major environmental impacts and socio-economic consequences (including gender aspects)
- 5.2.3. Linkages with other transboundary problems
- 5.2.4. Immediate, underlying and root causes (with diagrams)
- 5.2.5. Knowledge gaps
- 5.2.6. Conclusions and recommendations

5.3. Transboundary problem 2 etc.
- 5.3.1. Description of the problem and its transboundary importance
- 5.3.2. Major environmental impacts and socio-economic consequences (including gender aspects)
- 5.3.3. Linkages with other transboundary problems
- 5.3.4. Immediate, underlying and root causes (with diagrams)
- 5.3.5. Knowledge gaps
- 5.3.6. Conclusions and recommendations

6. Gender assessment

7. Stakeholders analysis

8. Governance analysis

9. Scenario analysis and potential for long-term transformational change

10. Preliminary recommendations for the Strategic Action Programme (SAP) development

11. TDA (and SAP) indicators and their linkages to SDGs

12. Summary conclusions and recommendations

Annex O: Implementation Arrangements and Technical Support

The institutional arrangements as described in the CEO Endorsement Request (section A.6) are further detailed in this annex, which provides further detail on the roles of the MedPCU and the Executing Partners.
Table 1 below also sets out the deliverables for MedPCU technical assistance and consultants to be hired.

MedPCU

The detailed list of services to be provided by the MedPCU are as follows:

Project management services:

- Manage the flow of information from the field and produce periodic monitoring reports, namely quarterly financial expenditure reports; annual expenditure forecasts and procurement plans; half-yearly narrative reports of progress including the annual Project Implementation Review; annual cofinance report;
- Initiate, validate, sign and implement legal instruments with all bilateral partners including executing partners and countries where appropriate;
- Organize travel and payment of DSA for staff and consultants as needed;
- Coordinate and support the project activities of MED POL and SCP/RAC (Component 1), and MED POL and Plan Bleu (Component 2);
- Organize the meetings of the Project Steering Committee (PSC) and serve as its Secretariat;
- Ensure the Project governance and oversight of the financial resources from the GEF investment and the co-financing delivered by the Project stakeholders.

Programmatic coordination:

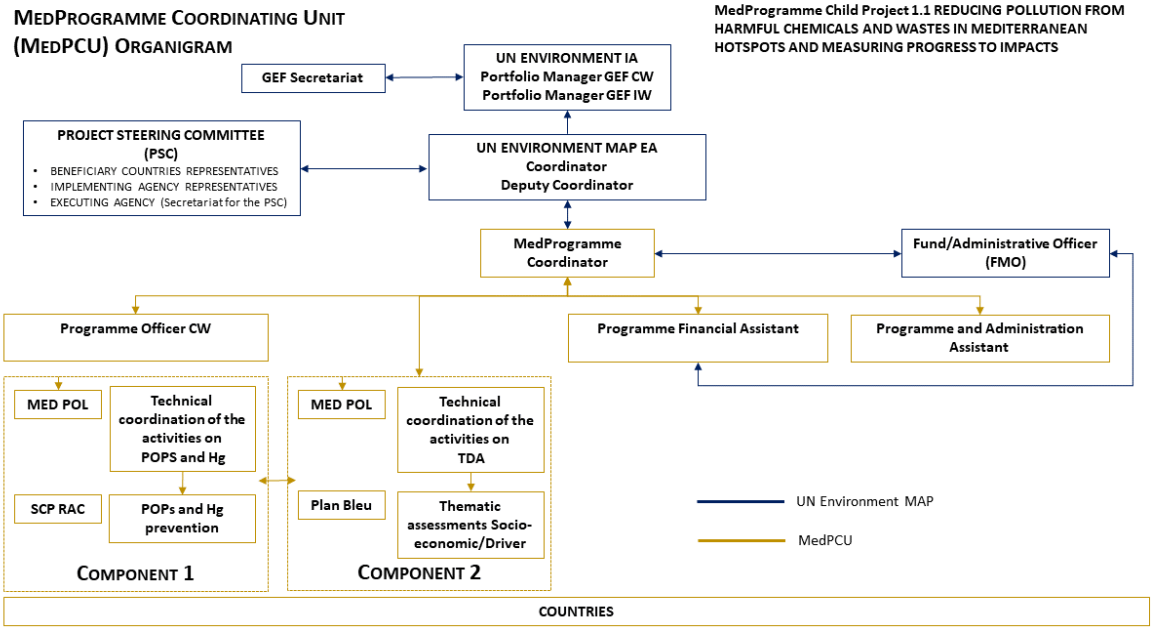
- Ensure that the execution of the entire MedProgramme is aligned and integrated with the priorities of the Contracting Parties to the Barcelona Convention, its 2016-2021 Mid-Term Strategy and biennial Programmes of Work;
- Ensure that the execution of the MedProgramme Gender and Knowledge Management Strategies is consistent across the entire Programme and adequately support and include the Child Project 1.1.
- Record-keeping and facilitation of the delivery of the Programme monitoring and evaluation plan to allow reporting of progress towards the objectives of the MedProgramme as a whole by the Executing and Implementing Agencies.

MedProgramme Visibility:

- Represent the MedProgramme in global events and initiatives.
- Ensure that the Programme Annual Stocktaking Meeting is organized in a coordinated manner to efficiently serve the countries, IA, EA and stakeholders;
- Share the Project achievements, products/outputs with the Project and MedProgramme's stakeholders;

Technical support (please refer to detailed deliverables in Table 1 below).

The proposed organigram for the PCU is:



It is anticipated that the MedPCU will be staffed with the following core positions:

- MedProgramme Coordinator (P4)
- Programme Officer CW (P3)
- Programme Financial Assistant (G5)
- Programme and Administration Assistant (G5)

In addition to this, the MedPCU operations will be supported during specific periods of the lifespan of the Child Project 2.1, by one Gender Specialist and one Knowledge Management Specialist to be engaged through out-sourced contracts. The MedPCU will be established and hosted by UN Environment/MAP in Athens, Greece, following the successful model of the MedPartnership Project.

Executing Partners

The responsibilities and roles of each of the Executing Partners is described in the current document and linked to specific actions, outcome and outputs.
MED POL and SCP/RAC will be Co-Executing Agencies for the national and regional activities foreseen under Component 1 of the project. MED POL and Plan Bleu will be the Co-Executing Agency for regional activities foreseen under Components 2 of the project.

The EPs will report on the project implementation progress to the EA and will take part in and contribute to the PSC as observers. The main roles of Executing Partners are to:

- Provide technical advice and engage with the countries for all aspects of the execution of activities under the relevant Components of the Child Project 1.1;
- Provide staff time and expertise in guiding their respective project activities;
- Supervise experts hired to ensure on time, high-quality deliverables;
- Manage the flow of financial resources earmarked for the implementation of activities;
- Review technical and substantive inputs by partners and countries on workplans etc.;
- Support the MedPCU and provide inputs for the preparation of the CP1.1 workplans, budgets, reports and other documents as relevant;
- Review the technical quality of the Child Project 1.1 outputs in coordination with the MedPCU.

The EP will meet periodically with the MedPCU to: 1) discuss emerging issues and challenges in rode to prepare timely contingency plans and measures; 2) update the MedPCU and the other EP on the progress made in the execution of their respective activities; 3) to prepare the working and information documents for the PSC and key events of the Project and the MedProgramme; and 5) to ensure effective coordination during the execution of the activities.

Table 1: Deliverables and costing of PCU technical support and consultants to be hired

Position Titles	*$ / Person Month, Est Person Month*	*Tasks to Be Performed / Deliverables*	*Related workplan activity*
PCU Technical support			
Chemical and Waste			
P3 Chemicals and Waste Programme Officer	12,000 / 3 months	• Provision of technical inputs for tender preparation related to Phase 1 Disposal of POPs in Algeria and Lebanon, based on UNEP C&W IA team formats. • Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service. • Review of contract documents and related specifications. • Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor.	1.1.1: Phase 1 POPs disposal
	12,000 / 5	• Provision of technical inputs for tender related to Phase 2 POPs Inventory and Prioritization, based on UNEP C&W IA team formats. • Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service. • Review of contract documents and related specifications. • Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor with regards to the following deliverables: o National POPs inventory teams o National site assessment and remediation studies o Laboratory services for POPs and mercury analysis o MapX platform o Environmental Management Plans for stockpiles	1.1.2: Phase 2 POPs inventory and prioritization
	12,000 / 4	• Provision of technical inputs for tender related to Phase 2 Disposal of POPs, based on UNEP C&W IA team formats. • Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service. • Review of contract documents and related specifications. • Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor.	1.1.3: Phase 2 POPs disposal

	12,000 / 4 – 5 months	• Provision of technical inputs for tender related to POPs Remediation and Assessment in Algeria and Lebanon, based on UNEP C&W IA team formats • Provision of input for the technical evaluation of submitted bids by contractors in coordination with UN procurement service. • Review of contract documents and related specifications. • Following up on work progress in the field, validating completed works, and reporting on percentage achievements for payment purposes to the contractor with regards to the following deliverables: o National site assessment and remediation studies o Laboratory services for POPs and mercury analysis o MapX platform o Environmental Assessments contaminated sites	1.1.4: POPs remediation and assessment
	12,000 / 6 - 7	• Provision of technical inputs for tender related to Confirmation and Planning of mercury stocks for disposal (Algeria and Lebanon), based on UNEP C&W IA team formats. • Provision of input for the technical evaluation of submitted bids by consultants in coordination with UN procurement service. • Review of contract documents and related specifications. • Following up on work progress (in the field?) and reporting on percentage achievements.	1.2.1: Confirmation of mercury stocks for disposal 1.2.2: Planning and disposal of mercury
	12,000 / 12 - 13	• Ensure consistency with Stockholm Convention best practices and networks, including through liaison with UNEP Chemicals and Health branch • Technical review of POPs and mercury publications and knowledge products	1.3.1: Pilot demonstration projects in three countries
	12,000 / 8 - 9	• Develops capacity building and awareness raising programme in cooperation with regional consultants and oversees its execution • Technical inputs and delivery of presentations to project steering committees and Annual Stock-taking Meetings	Cross-cutting (all POPs and Hg workplan activities)
International Waters			
MED POL P4 (technical support, 25% of the salary)	4,583 /60	• Overall/ strategic guidance, development of Terms of Reference and review of consultants' deliverables for: o TDA update o Preparation of report on progress to impacts o Extension of monitoring to offshore areas o Data sharing policy • Collecting and providing inputs for and delivery of presentations to project steering committees and Annual Stock-taking Meetings	Cross-cutting (all IW workplan activities)

		• Providing inputs to MedPCU for technical elements of project reports, information for MedProgramme knowledge management platform and for communication purposes	
Consultants			
Chemical and Waste			
Regional Chemicals training consultants	3,500 / 50	• Conducting agency analysis to determine points of weaknesses within agencies to be in charge of implementation of programmes for management and disposal of POPs and Mercury • Drafting tender documents related to Phase 1 Disposal of POPs in Algeria and Lebanon, based on UNEP C&W IA team formats. • Sub-contracting specialized agencies/ institutions with experience in mercury and POPs management to prepare training courses and design capacity building programmes for supporting government agencies and building their capacities based on determined weaknesses which will be in charge with POPs and Mercury disposal • Preparing rosters of people to be trained • Preparing lists of materials and equipment to be procured for supporting agencies • Following up on implementation of capacity building/training programmes • Preparing progress reports on status of implementation of capacity building programme. • Under the overall guidance of P3 Chemical and Waste Programme Officer, develops a capacity building and awareness raising programme on safe management and disposal of PCBs and mercury wastes • Ensures delivery of capacity building and awareness raising programme to selected national stakeholders, including delivery of training sessions	Cross-cutting (all POPs and Hg workplan activities)
Regional POPs Technical Experts	7,500 / 33 - 34	• Review technical documents prepared by contractor for implementation of activities related to management and disposal of POPs and provide feedback to P3 Chemicals and Waste Programme Officer accordingly • Regularly monitor implementation of planned activities as per contractual arrangements between UNEP and the Contractor and provide technical reports on quality of work and observed issues to be addressed • Provide regular reports to the P3 Chemicals and Waste Programme Officer on the status of implementation of work progress in the field and percentage completion of works/activities as per the plan of implementation of the contractor • Coordinate with national agencies in order to ensure that they have no issues to raise with	Cross-cutting (all POPs and Hg workplan activities)

		the contractor during implementation • Sort out any issues that might arise during implementation between the contractor and the national agency, and bring such issues if necessary to the attention of the P3 Chemicals and Waste Programme Officer • Design/ maintain POPs inventory for Phase 2 stocks, extend support to national consultants working on inventories • Preparation of Environmental Management Plans for Phase 2 POPs disposal sites • Provision of inputs for Terms of References for remediation/ assessment studies in Lebanon, Montenegro • Environmental assessments for remediation works/ contaminated sites • Supervision of POPs disposal and EMPs implementation • Supervision of remediation works Lebanon	
Regional Mercury Technical Experts	7,500 / 33 - 34	• Review technical documents prepared by contractor for implementation of activities related to management and disposal of POPs and provide feedback to P3 Chemicals and Waste Programme Officer accordingly • Regularly monitor implementation of planned activities as per contractual arrangements between UNEP and the Contractor and provide technical reports on quality of work and observed issues to be addressed • Provide regular reports to the P3 Chemicals and Waste Programme Officer on the status of implementation of work progress in the field and percentage completion of works/activities as per the plan of implementation of the contractor • Coordinate with national agencies in order to ensure that they have no issues to raise with the contractor during implementation • Sort out any issues that might arise during implementation between the contractor and the national agency, and bring such issues if necessary to the attention of the P3 Chemicals and Waste Programme Officer • Mercury removal environmental assessments and management plans • Provision of inputs for Terms of References for Assessment and management plan for Kasserine site Tunisia • Supervision of mercury disposal and EMPs implementation	1.2.1 and 1.2.2 1.4.1, 1.4.2, 1.4.3 and 1.4.4
Consultants International Waters			
	7500 / 12	• Deliver TDA trainings (based on GEF IW:LEARN training materials)	Cross-cutting (all

Regional consultants IW - TDA		• Develop capacity building programme on indicators and socio-economic assessments; deliver targeted trainings to TDA working group members and other national stakeholders	IW TDA workplan activities)
	7500 / 23	• Coordinates TDA team/ TDA working groups • Leads work on identification and prioritisations of issues, determination of impacts and causal chain analysis • In cooperation with MED POL P4, prepares Terms of References for thematic assessments • Reviews thematic reports • Synthetises inputs from TDA working groups and thematic reports (prepared by Plan Bleu, consultants) to draft TDA • Provides materials and inputs for the PSC	2.1.1 Establishment of TDA team, 2.1.2 Identification and analysis of issues and 2.1.4 TDA drafting
	7500 / 6	• Carry out selected thematic assessments • Prepare thematic reports	2.1.3 Preparation of thematic assessments
	7500 / 6	• Carry out selected thematic assessments of the progress to impact • Prepare thematic reports on progress to impact • Utilization of Programme's knowledge management tools and data to assess progress; • Combining MAP/ Mediterranean and SGDs reporting to assess progress and identify project's impacts; • Preparation of the report.	2.2.1, 2.2.2 and 2.2.3 Progress to impact.
	7500 / 6	• Examines spatial and temporal scope of existing national offshore monitoring programmes • Prepares offshore monitoring strategy, including methodology for establishment of national monitoring stations in offshore areas • Designs and support implementation of selected IMAP indicators at pilot offshore stations	2.3.1 Offshore monitoring strategy, 2.3.2 Identification of sites for offshore monitoring stations and 2.3.3 Implementation of pilots
	7500 / 4	• Assessment of regional (including Info-MAP System) and national databases/ IT platforms • Recommends design of IT model (node) to connect national in a regional network/ platform	2.4.1 and 2.4.2 Assessment of existing databases, and 2.4.3 Design of IT model

	7500 / 2	• Assessment of existing regional governance mechanisms and data sharing approaches • Proposal of regional data sharing policy to facilitate reporting and use of IMAP data collected by the Barcelona Convention Contracting Parties	2.4.1 Assessment of regional approaches and 2.4.4 Data sharing policy development
Cross-cutting			
Gender Specialist	6,500 / 3	• design social factors and gender-focused survey questionnaire for selected sites, with a strong participatory and inclusive focus	1.2.1 and 1.2.2 2.2.1, 2.2.2 and 2.2.3

The Mediterranean Sea Programme (MedProgramme):
Enhancing Environmental Security

Report of the First Regional Consultation

Athens, Greece
7 – 8 March 2018

Final version 20 April 2018

Conclusions

1. The GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia took note of the progress achieved on the preparation of the Child Projects and validated the proposed activities, the sites chosen for their execution at national level and the timelines for the submission of the Child Projects to the GEF Secretariat for CEO endorsement.

2. The implementing and executing partners agreed to evaluate the feasibility of the specific requests of the countries for additional activities (namely those of Algeria under Child Project 2.1 and Bosnia and Herzegovina and Montenegro under Child Projects 1.1 and 1.3).

3. UN Environment/MAP committed to keep the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia fully informed of the progress on the development of the Child Projects and to provide the advanced versions of the project documents for comments at the appropriate time to the GEF Operational Focal Points and the country's nominated national thematic experts, if any.

4. The GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia committed to coordinate the gathering of comments from competent national institutions and thematic experts, and to provide UN Environment/MAP with a single set of official comments.

5. Regarding the letters of co-financing, the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia expressed their preference for a single letter detailing the co-financing contributions for each of the Child Projects of the MedProgramme. The UN Environment / GEF Task Managers for International Waters (IW) and Chemicals and Waste (CW) agreed to seek guidance from the GEF Secretariat and to inform them about how to proceed.

6. The implementing and executing partners and the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia agreed to take the necessary steps to ensure effective coordination with their respective counterparts in the programme (interministerial bodies, stakeholder groups, etc).

7. UN Environment/MAP took due note of the countries' call to ensure effective coordination among all Child Projects and to consider as much as possible cross-cutting issues like climate change and biodiversity.

Next steps

1. UN Environment/MAP will provide the GEF Operational Focal Points with:

    a. an overview of the national and regional activities of the MedProgramme foreseen in each of the participating countries.
    b. a responsibility matrix indicating the executing structure for each Child Project, including the implementing and executing partners and their respective roles.
    c. the contact information for each of the implementing and executing partners.
    d. clear indications about how to proceed with the preparation of co-financing letters including a template.
    e. an overview of the national stakeholders engaged during the development of the project documents.

    (Note: Items a, b and c will be submitted with the final meeting report of the First Regional Consultation. Items d and e will be provided in due course.)

2. The GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia will provide UN Environment/MAP with:

    a. a list of national thematic experts including specific focal points for IW and CW to whom the advanced draft of the project documents will be sent for comments.
    b. co-financing letters from any relevant national partners, including supporting coordination for combined letters across different child projects as needed.

3. The technical execution partners will support the GEF Operational Focal Points and national focal points in the identification of relevant initiatives which can contribute to the co-financing support by countries. They will also provide UN Environment/ MAP with their own organizational co-financing letters.

Background information

1. The objective of the MedProgramme is to accelerate the implementation of agreed upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations. The MedProgramme was endorsed by the GEF Council in October 2016 and is comprised of seven Child Projects which will contribute to the GEF's focal areas of International Waters (IW), Chemicals and Waste (CW), and Biodiversity (BD) (Table 1). Nine countries have endorsed the MedProgramme: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco, and Tunisia. It will be executed over a period of six years starting in 2019.

2. The First Regional Consultation for the MedProgramme was convened by UN Environment/MAP to bring together the participating countries and the implementing and executing agencies to: (i) take stock of progress on the development of the Child Projects; (ii) discuss next steps for completion of the submission package, including letters of co-financing; and (iii) agree upon a timeline for the submission of documents to the GEF Secretariat. The agenda of the consultation is provided in Annex 1.

Table 1 Overview of the MedProgramme components, Child Projects, Executing Agencies and GEF Focal Areas

Mediterranean Sea Programme (MedProgramme)			
MedProgramme Component	**Child Project**	**Indicative lists of executing Agencies**	**GEF Focal Areas**
1. Reduction of Land Based Pollution In Priority Coastal Hotspots, and measuring progress to impacts	1.1 Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts	UNEP/MAP	IW and CW
	1.2 Mediterranean Pollution Hot Spots Investment Project.	EIB UNEP/MAP	IW and CW
	1.3 Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC).	EBRD UNEP/MAP	IW and CW
2. Enhancing Sustainability and Climate Resilience in the Coastal Zone	2.1 Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection.	UNEP/MAP UNESCO-IHP GWP-Med	IW
	2.2 Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS.	GWP-Med UNEP/MAP	IW
3. Protecting Marine Biodiversity	3.1 Management Support and Expansion of Marine Protected Areas in Libya.	UNEP/MAP IUCN WWF Med	BD
4. Knowledge Management and Programme Coordination	4.1 Mediterranean Sea Basin Environment and Climate Regional Support Project.	UNEP/MAP	IW and CW

Attendance

3. The regional consultation brought together 40 participants, including representatives from eight of the nine countries that endorsed the MedProgramme and all seven of the implementing and executing agencies. The complete list of participants is set forth in Annex 2.

4. The names, titles and affiliations of the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia and their nominated representatives that participated in the regional consultation are provided in Table 2. It should be noted that the GEF Operational Focal Point of Libya, Mr. Mustafa Soliman, confirmed his wish to attend the consultation, but was unable to do so as a result of difficulties encountered in the organization of his travel by UN Environment/MAP.

Table 2 Names, titles and affiliations of the GEF Operational Focal Points and the nominated representatives that participated in the First Regional Consultation for the MedProgramme

Country	Representative(s)	Title and affiliation
Albania	Ms. Ornela Çuçi*	Vice Minister, Ministry of Tourism and Environment
Algeria	Ms. Samira Hamidi	Inspectrice Centrale de l'Environnement et du Développement Durable, Ministère des Ressources en Eau et de l'Environnement Direction Générale de l'Environnement et du Développement Durable
Bosnia and Herzegovina	Dr. Senad Oprašic*	Head of Environmental Protection Department, Ministry of Foreign Trade and Economic Relations
Egypt	Mr. Mohamed Shehab AbdelWahab*	Chief Executive officer of Egyptian Environmental Affairs Agency, Ministry of Environment
	Dr. Mohamed Osman	Undersecretary, Head of Sector, Environmental Management Sector, Ministry of Environment
	Mr. Moustafa Fouda	Advisor to the Minister on Biodiversity
Lebanon	Ms. Olfat Hamdan	Head of Protection of Urban Environment Department, Ministry of Environment
	Mr. Adel Yacoub	Head of Department, Protection of Natural Resources Department, Ministry of Environment
	Mr. Paul Moussa	Agricultural Engineer, Department of Natural Resources Protection, Ministry of Environment
Montenegro	Mr. Esef Husic	Acting General Director for Climate Change and Mediterranean Affairs, Ministry of Sustainable Development and Tourism
	Ms. Ivana Stojanovic	Advisor, Department for Mediterranean Affairs, Ministry of Sustainable Development and Tourism
Morocco	Ms. Nassira Rheyati	Chef de Service Coopération Multilatérale, Division de la Coopération Internationale, Direction du Partenariat, de la communication et de la Coopération, Secrétariat d'Etat chargé du Développement Durable
Tunisia	Mr. Karim Sahnoun	Directeur du suivi des conventions et des projets de coopération avec les partenaires étrangers, Direction Générale des Relations Extérieures, Ministère des Affaires Locales et de l'Environnement

* GEF Operational Focal Point

Presentations

5. Presentations were delivered for each of the MedProgramme's seven Child Projects and the GEF Special Climate Change Fund (SCCF) Project, in addition to three presentations on the development process for the MedProgramme. The present report does not attempt to summarize these presentations, but focuses rather on the discussions they prompted.

6. All of the presentations delivered during the regional consultation are available at: https://www.dropbox.com/sh/zp1kqx6jl9ss8jk/AAD-1U2ik3rfHt5RKOkKza6Za?dl=0.

Welcoming remarks and initial discussions

7. Mr. Lorenzo Galbiati, UN Environment/MAP Secretariat (hereafter the Secretariat), welcomed the participants to Athens on behalf of the Coordinator of the Barcelona Convention Mr. Gaetano Leone. The Secretariat recalled the 40 year collaboration among the Convention's Contracting Parties, partners and UN Environment/MAP towards a shared vision for "a healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse contributing to sustainable development for the benefit of present and future generations." The Secretariat observed that the assessments, diagnostics, planning and experimentation carried out during this time had led to a consensus on priority areas for further intervention, and that together, the countries, UN/Environment MAP, the European Investment Bank, UNESCO-IHP, GWP-Med, WWF MedPO and IUCN have responded to this need by developing the Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security. The MedProgramme will support countries by providing a comprehensive response to the provisions of the Barcelona Convention and its Protocols, of other legally binding agreements and other instruments and programmes, among them the Stockholm and Minamata Conventions and the UN Environment Global Programme of Action. The Secretariat reminded participants that the GEF Council approved the MedProgramme at the end of 2016 and will support its execution through grants from the International Waters, Chemical and Waste and Biodiversity Focal Areas. In conclusion, the Secretariat stated that the focus of the regional consultation was to update the countries on the status of the development of the MedProgramme and to agree together on the next steps to complete the process.

8. Participants were also welcomed by the MedProgramme's two implementing agencies: UN Environment and the European Bank for Reconstruction and Development (EBRD).

9. Mr. Yegor Volovic, the UN Environment GEF Task Manager for International Waters (IW), recalled the longstanding collaboration among GEF and the countries in the region, through the Barcelona Convention (for the Mediterranean Sea) and the Bucharest Convention (for the Black Sea). He also noted the forward-thinking vision of the MedProgramme (approved under GEF-6) which has environment security as its focus, a theme that is now well-established in GEF-7.

10. Ms. Eloise Touni, the UN Environment GEF Task Manager for Chemicals and Waste (CW), spoke about the multi-focal area approach of the MedProgramme and explained that this will be the GEF's strategy going forward. She explained that the GEF's activities on CW in the MedProgramme would support countries in efforts to meet obligations for POPs and mercury under the Stockholm, Basel and Minamata Conventions.

11. Ms. Dana Kupova, Principal of Resource Efficiency Investments at EBRD, explained EBRD's 10 year collaboration with the GEF Secretariat, which to present has focused on climate change

adaptation and mitigation, and expressed her positive anticipation about expanding the Bank's activities to the IW and CW focal areas.

12. The Secretariat reviewed the agenda of the consultation with participants and briefly outlined the desired outcomes of the two-day event.

13. The representatives of several countries (Bosnia and Herzegovina, Egypt and Lebanon) asked for clarification on the modality for execution of activities at the national level. The Secretariat first clarified the distinction between GEF implementing and executing agencies. Implementing agencies of the GEF are responsible for delivering project proposals to the GEF Secretariat and liaising with the Secretariat and countries at the GEF Council, in addition to providing general oversight and quality control. Executing agencies of GEF projects are responsible for carrying out project preparation and execution of the activities on the ground with national, regional and international organizations, as appropriate, to achieve the expected results of the project. For the MedProgramme, the two implementing agencies are UN Environment and EBRD, and the seven executing agencies are UN Environment/MAP, EIB, EBRD, UNESCO-IHP, GWP-Med, IUCN and WWF-Med.

14. The Secretariat added that activities would be executed at the national level through a variety of arrangements, including through UN Environment's Regional Activity Centres (RACs), through international organizations like UNESCO, WWF and GWP-Med, and through other execution modalities. The Secretariat informed the participants that consultations organized with the countries to date on individual Child Projects (Annex 3) had clarified these arrangements in a number of cases and that future consultations would provide further opportunities to do so. Ultimately, it is up to the participating countries to express their wishes on the best approach to executing activities at the national level, in a manner that is compatible with the rules and regulations of the GEF Secretariat and the executing UN agencies, as well as the available resources for each Child Project.

15. In response to a question about the need to reflect emerging issues in the MedProgramme, the partners explained that GEF funds are earmarked for specific priority areas. For example, the issue of marine litter was not eligible under GEF-6 and was therefore not reflected in the MedProgramme. The issue of marine litter nevertheless will be tackled in the region thanks to complementary initiatives of the MAP system, and will furthermore be eligible under GEF-7. The UN Environment GEF Task Manager for IW reminded the participants that Mediterranean countries express their priorities on environmental issues via three consultative bodies (the UN Environment Assembly, the GEF Council and the Barcelona Convention) and on chemical-specific issues via their participation as Contracting Parties to the Stockholm and Minamata Conventions.

16. Mr. Esef Husic, Acting General Director for Climate Change and Mediterranean Affairs of Montenegro, also intervened to greet the participants of the meeting on behalf of the Ministry of Sustainable Development and Tourism of Montenegro and Mr. Igor Gradjevic, the GEF Operational Focal Point of Montenegro. He pointed out the positive experience of Montenegro during implementation of the MedPartnership and reminded of the exceptional results achieved in that process such as the preparation and adoption of the National Strategy for Integrated Coastal Zone Management (NS ICZM), preparation of the Integrated Resources Management Plan (IRMP) for the Buna/Bojana Area, vulnerability assessment of the coastal area to climate change including the sea-level rise, and the mapping of the valuable coastal habitats, etc. On the basis of these results and in line with NS ICZM, and the National Action Plan (NAP) for the implementation of the LBS Protocol and NAP for protection of the coastal biodiversity, Montenegro reiterated its priorities for the MedProgramme, including:

- Disposal of harmful waste containing PCBs and remediation of the hotspots, in the framework of the Child project 1.1 and in synergy, if possible, with Child project 1.2;
- Preparation of the local plans which mainstream the adaptation measures to climate change as part of the SCCF Project;
- Realization of priorities determined in the IRMP for the Buna/Bojana Area related to mapping of vulnerability of groundwater, identification of the level of pollution of the groundwater in aquifers, and establishment of the regular monitoring of groundwaters together with their baseline assessment.

Day 1 Agenda Item 1: Setting the scene and objectives of the consultation

17. The Secretariat emphasized that the MedProgramme was designed to accelerate the implementation of agreed actions identified from a series of transboundary diagnostic analyses of the Mediterranean Sea and subsequent strategic action programmes (SAP-MED and SAP-BIO) elaborated in the context of the Barcelona Convention at the request of its Contracting Parties. The MedProgramme is a direct contribution to the implementation of the UN Environment/MAP's Mid-term Strategy 2016 – 2021.

Day 1 Agenda Item 2: Report on progress for preparation of the MedProgramme documents

18. The Secretariat provided an update on the status of the logframes and project documents for each of the Child Projects and the SCCF Project (Table 3)

Table 3 Status of the logframes and project documents for the MedProgramme and the SCCF Project

Project	**Logframe status**	**Project document status**
Child Project 1.1	Preliminary draft prepared	Preliminary draft under preparation
Child Project 1.2	Intermediate draft prepared	Preliminary draft prepared
Child Project 1.3	Intermediate draft prepared	Intermediate draft under preparation
Child Project 2.1	Advanced draft prepared	Advanced draft prepared
Child Project 2.2	Preliminary draft prepared	Preliminary draft under preparation
Child Project 3.1	Preliminary draft prepared	Not yet initiated
Child Project 4.1	Intermediate draft prepared	Intermediate draft prepared
SCCF Project	Advanced draft prepared	Advanced draft prepared

19. The Secretariat provided an overview of the national and regional interventions planned for all countries (Annex 4). A matrix of responsibilities of the executing partners is set forth in Annex 5.

20. The representative from Egypt congratulated the partners on the progress achieved towards preparation of the MedProgramme, and expressed his view that biodiversity and climate change were not adequately addressed in the planned activities. The Secretariat explained that the MedProgramme reflected the GEF Council's priorities and was funded primarily with earmarked funds from the IW and CW focal areas, but that these issues were being addressed through complementary activities in the region. For biodiversity, this includes the MED MPA Project, the 2020 MPA Roadmap, and the technical support activities of SPA/RAC; and for climate change, this includes a variety of GEF interventions, including the Special Climate

Change Fund Project that will address climate change adaptation in six Mediterranean countries. The Secretariat acknowledged that the MedProgramme cannot address every issue, and for this reason it was better to focus on priority areas to achieve greater impacts. The UN Environment GEF Task Manager for IW offered to work with the countries to develop medium-sized projects to address other priorities, as this type of project can be approved faster that full-size projects or programmes.

21. The representative of SPA/RAC thanked the representative of Egypt for drawing attention to the need to strengthen efforts to protect biodiversity in the region, and noted that many other countries have raised this point in other contexts. In the opinion of the representative of SPA/RAC, this is a sign that the GEF Secretariat needs to consider including a regional biodiversity component in all regional projects/programmes, in view of its link to other areas including pollution and coastal zone management. The representative of SPA/RAC asked UN Environment to consider approaching the GEF Secretariat on this issue. The UN Environment GEF Task Manager for IW indicated that there were good opportunities for this in GEF-7 since its priorities include the blue economy and marine biodiversity, and that IW was a good entry point for transboundary MPAs, for example.

22. The representative of Morocco, speaking about her experience in the preparation of the Child Projects of the MedProgramme and the SCCF Project, pointed out that there is a need for the country to nominate a specific focal point for each of the projects, since the GEF Operational Focal Point and the MAP Focal Point (the same person in this case) cannot manage the entire portfolio of projects. The Secretariat suggested that each country could have a national focal point for each specific technical issue and that these focal points could be consulted (along with the GEF Operational Focal Point) when needed and invited to attend steering committee meetings for the projects that fall under their area of expertise. The UN Environment GEF Task Manager for IW agreed that each country needed specific focal points for the various projects.

Day 1 Agenda Item 3: Next steps and timeline for submission of documents to the GEF Secretariat

23. The Secretariat described the next steps for completion of the project documents, including the gathering of additional baseline information, organization of national consultations, preparation of co-financing letters, and validation of project documents by the GEF Operational Focal Points.

24. The Secretariat then presented the tentative timeline for submission of the project documents to the GEF Secretariat (Table 4).

Table 4 Targets for submission of project documents for review and endorsement

Project	**Target for submission of project document to GEF for CEO endorsement**
Child Project 1.1	July 2018
Child Project 1.2	August 2018
Child Project 1.3	July 2018
Child Project 2.1	June 2018
Child Project 2.2	August 2018
Child Project 3.1	October 2018
Child Project 4.1	June 2018
SCCF Project	June 2018

25. The Secretariat recalled that each country would need to indicate clearly the different co-financing contributions for each of the relevant Child Projects, and that these contributions would be monitored on an annual basis. Furthermore, the modality for the preparation of co-financing letters in the context of a programmatic approach needs to be discussed with the GEF Secretariat, considering that normally one co-financing letter would be required per project per country (the MedProgramme would require more than 50 co-financing letters under this arrangement). There is clearly a need to simplify this process for the MedProgramme. The UN Environment IW Task Manager agreed to liaise with the GEF Secretariat to clarify this issue and propose an acceptable solution.

Day 1 Agenda Item 4: Child Project 1.1

26. Child Project 1.1 will be executed by UN Environment/MAP, in coordination between MED POL and two of UN Environment/MAP's Regional Activities Centres – SCP/RAC and Plan Bleu. The project is expected to deliver the following main outcomes:

    - In coastal hot spots, measurable reduction of wastes and hazardous chemicals (POPs, mercury) impacting human health and coastal habitats is achieved;
    - Update of the baseline situation (TDA), harmonization of monitoring protocols, methodologies and procedures in compliance with Integrated Monitoring and Assessment Programme (IMAP) of the Barcelona Convention, including design of offshore reference network and gender assessment.

27. The discussion ensuing the project's presentation by the representatives of MED POL and SCP/RAC touched upon various aspects, including requests for clarifications on the selection of countries, sites and options prioritized in the preliminary proposal for disposal (POPs/PCBs and mercury) activities. Another important question raised by the participating countries was about coordination between various implementing/ executing agencies within MedProgramme as well as with other implementing agencies of related (GEF-funded or not) projects.

28. The representative from Montenegro highlighted the need for cooperation and coordination between Child Projects 1.1 and 1.3 to address national priorities, including contaminated sediments at the former shipyard Bijela (categorized as the hot spot B in the Barcelona Convention National Action Plan – NAP) and provision of incentives to phase out in use PCBs in the aluminum plant in Podgorica. Furthermore, country missions were called for in order to discuss matters in greater detail. The need for coordination with the GEF-UNDP project for safe removal of PCBs was also highlighted.

29. The Secretariat explained that a partner coordination meeting would follow the two-day country consultations to address, among other things, specific issues raised by Montenegro. Missions to countries would be planned based on the partners' meeting discussions. The Secretariat emphasized the need for cooperation within the MedProgramme and with sister agencies, while avoiding double-counting and overlapping between different activities. The representative of UN Environment/MAP - MED POL reminded that endorsement letters for the PCBs management were issued by Montenegrin authorities to both UN Environment/MAP and UNDP. Missions to countries (possibly joint for Child Projects 1.1 and 1.3) could take place in April 2018, to be facilitated by national authorities.

30. The representative of Bosnia and Herzegovina informed of the progress with preparation of the mercury initial assessment (MIA) and pointed out two locations where pronounced mercury contamination problems were identified. A plea was made to include Bosnia and

Herzegovina in the MedProgramme mercury removal activities. The representative of UN Environment/MAP - MED POL explained the reasons for not including Tuzla site in the preliminary plan for mercury disposal under Child Project 1.1, including its location (far outside the Mediterranean watershed) and the fact it was not addressed in the country's NAP, as well as MED POL Focal Point's confirmation of these facts. The representative of Bosnia and Herzegovina was invited to provide the MED POL with the MIA report.

31. The Secretariat considered that the feasibility of inclusion of the sites outside the Mediterranean watershed should be checked with the GEF Secretariat. The UN Environment GEF Task Manager for CW emphasized the importance of the national priorities (as identified in the relevant plans prepared under the Stockholm and Minamata Conventions) for the development of the MedProgramme interventions and welcomed more detailed proposals by the countries. A reference was made to Child Project 1.1 presentation on new POPs prevention opportunities and a recommendation was made to ascertain that calculations of any quantities to be offset through project interventions were acceptable to GEF Secretariat.

32. The representative of Lebanon expressed an agreement with presented criteria for preliminary selection of countries and sites for Child Project 1.1 disposal interventions and enquired about inclusion of specific locations and disposal options for Lebanon. As regards new POPs and mercury prevention, ideas were exchanged on how to validate the baseline data; working with lamps containing mercury was singled out as a viable prevention (and disposal) option.

33. The representative of Tunisia endorsed in principle the national activities included in the preliminary plan/ presentation for Child 1.1 (as well as for Child Project 1.2), emphasizing at the same time the need for assistance with remediation of POPs/ PCBs contaminated sites in the country.

34. The representative of Morocco pointed out the use of the PCBs management platform located in Casablanca could lower disposal costs for the proposed activities (compared to exports to the EU).

Day 1 Agenda Item 5: Child Project 1.2

35. European Investment Bank (EIB) is the main executing agency for the Child 1.2 project, with a contribution from UN Environment/MAP for the regional level activities (development of standards). The following main results are planned to be achieved through the project's components that will be executed by the EIB:

    - Reduction of organic pollution reaching the Mediterranean Sea causing coastal ecosystem degradation;
    - Depollution and water resources management at the level of catchments which are draining into the Mediterranean, in order to improve the human, environmental and health situation and reduce the contaminants loads entering the Mediterranean Sea;
    - Reduction and control of chemical and organic pollution from past and present industrial activities in coastal areas impacting human health and livelihoods, and coastal ecosystems, thereby reducing pollution discharges to the Mediterranean Sea;
    - Preparation of pre-investment studies for mercury decontamination and conversion of industrial processes.

36. Under Child Project 1.2 project, a 7 million USD GEF grant[1] will be utilized to support preparation of investments and strengthen capacities needed to reduce pollution in the Mediterranean hot spots. In the course of the preparation of the programme framework document (PFD), Child Project 1.2 was projected to mobilize up to 500 million USD in co-financing. The representative of EIB presented specific sites and type of interventions considered for technical assistance under the GEF grant, including three projects in Egypt (wastewater treatment plants - WWTPs - and drains depollution), upgrade of a wastewater collection and treatment system (for the city of Tripoli) in Lebanon, upgrade of 10 WWTPs in Tunisia, and mercury depollution projects in Morocco and Tunisia. Following the EIB's presentation, the Secretariat asked whether the initially identified co-financing amount was still applicable.

37. The representative of EIB explained the background to the selection of areas of work presented at the meeting, including linkages to the Horizon 2020 goal of depolluting the Mediterranean and the pipeline of projects identified through the EU-funded Mediterranean Hot Spots Investment Programme (MeHSIP), the latter serving as the starting point for identification of specific projects to be developed through Child Project 1.2. The Barcelona Convention NAPs were also used as references, in particular for identification of hot spots (and in some instances for consideration/ cross-checking of specific projects). The representative of EIB reported that the co-financing is currently assessed at the level of 510 – 550 million USD, depending on bankability of the projects to be developed and willingness of the countries/ project promoters to borrow to implement specific interventions. Without the bankability of the selected projects, and the willingness of the countries to borrow, the co-financing would be not possible.

38. The representative of Lebanon raised a question on the possibility to add Saida WWTP and other projects (referring to reuse of treated wastewater and aquifer recharge) identified by national stakeholders to the MedProgramme/Child Project 1.2 selection process. The representative of EIB explained the selection started from the MeHSIP approved list of 24 projects and that there were delays in signing the cooperation agreement with Lebanon. Nevertheless, the Bank remains open for proposals of other projects for Lebanon (including Saida WWTP) provided that eligibility criteria are met.

39. The representative of Tunisia asked for clarification on the GEF grant funding for the MedProgramme Component 1 projects versus loans planned for specific projects implementation. UN Environment/MAP clarified the loan component (shown in the approved PFD as the Child Project 1.2 co-financing) referred to hard loans/ EIB funding to be approved for mature projects while as the in-kind portion of the total Child Project 1.2 co-financing referred to the share of the EC funds extended for the same purpose. The representative of Tunisia confirmed that the national projects (upgrade of 10 WWTPs in different regions, mercury depollution at SNCPA plant in Kasserine) considered under the Child Project 1.2 were in line with the national priorities, as outlined in the country's NAP and mercury initial assessment/ action plan.

40. The UN Environment/MAP - MED POL presented its work on Child Project 1.2 related to the outcome on standards, i.e. development of common environmental standards for desalination, aquaculture and wastewater treatment. The intent is to develop, in the course of Child Project 1.1 implementation, a set of regional standards to enable better regulation (including eventual adoption of the new/updated Regional Plans) of activities and sectors where the gaps in the Barcelona Convention's regional measures to achieve Good Environmental Status (GES) in the Mediterranean have been identified.

[1] Five million USD from International Waters Focal Area and 2 million USD from Chemicals and Waste.

41. The interventions of the representatives from Lebanon and Egypt emphasized the existence of strong national standards in some of the areas that will be subject to standards development and the sensitivities/ difficulties with adoption of regional ones (including the need for regional standards to be tuned with national ones). For wastewater and sludge management, preparation of guidelines was seen as more pertinent than the development of standards. The need to mobilize and use all the existing technical knowledge in the region in the course of implementing this set of regional activities was recommended.

42. The representative of UN Environment/MAP - MED POL reiterated the development of standards was planned for the areas where the existing regional/ Barcelona Convention measures were assessed as insufficient to reach the GES. The outputs of the Child Project 1.2 activities will feed into the process of updating the existing and/or developing new Barcelona Convention Regional Plans, whereas the decision making process will be fully conducted in line with standard procedures of the Convention and its governing bodies. The work on the development of standards and new/updated Regional Plan is integrated in the UN Environment/MAP Programme of Work for the current biennium.

43. The representative of WWF pointed out the new INTERREG project implemented by WWF France (including work on aquaculture) should be consulted in the course of development of aquaculture standards.

Day 1 Agenda Item 6: Child Project 1.3

44. As the GEF Implementing Agency, the EBRD is leading on the preparation of Child Project 1.3 which will produce the following outcomes:

    - Public/ private investments enable pollution reduction in priority coastal and catchment areas through the improvement of water and waste water management systems and the introduction of modern and efficient technologies and practices;
    - Prevention or elimination of POPs.

45. Compared to Child Projects 1.1 and 1.2, preparation and implementation of the Child Project 1.3 has certain specificities due to the EBRD's different work approaches. The focus will be on municipalities and on private sector, with a dynamic project pipeline identified based on project selection criteria. The IW component of the project will focus primarily at municipal wastewater treatment projects. The areas of interest for the CW component (POPs elimination) will be electricity distribution companies, industries (where POPs/ PCBs disposal and prevention activities are likely to be linked to larger modernization loans/ packages) and potentially agri-business (for possible substitution and disposal of POPs pesticides that are still in use). Due to the dynamic nature of developing the project pipeline, sites and companies (potential beneficiaries of the project), will not be known at this stage, and the Bank's internal rules limit options for their disclosure to third parties.

46. The representative of Montenegro pointed out that no information on the Child Project 1.3 development activities had been received by the country so far and expressed interest/need to hold consultations and learn more about the scope of work of the consultants conducting pertinent assessments for the EBRD. A similar intervention was made by the representative of Albania, emphasizing the need to meet the consultants and discuss priorities with them. The representative of Bosnia and Herzegovina highlighted the need for more detailed discussion as regards prevention of new POPs, and suggested the Child Project 1.1 and Child Project 1.3 activities should be combined. In addressing these interventions, the representative of EBRD explained the work conducted so far was aiming to generate a

snapshot of the countries' situation and that the National Implementation Plans (NIPs) for the Stockholm Convention have been analyzed. Based on these analyses, project selection criteria would be defined and project pipeline built.

47. The representative of EBRD explained the GEF funding would be used for technical assistance (including project preparation) and potentially for grants to overcome specific market barriers associated with the implementation of environmental technologies. Another potential use of the GEF funds is provision of technical assistance (including project preparation). For the time being, EBRD is not considering use of intermediary banks in the projects' implementation phase.

48. The representative of Montenegro pointed out the links between Child Projects 1.1. and 1.3 and expressed interest to explore possibilities to address two priority sites (Aluminum plant and former shipyard Bijela) through the MedProgramme and in coordination with the ongoing UNDP and the World Bank projects (the former funded by the GEF, the latter through the World Bank loan). The representative of EBRD took note of the interventions, flagged the two sites as potential Child Project 1.3 project sites, and emphasized the Bank could provide loans for the larger investment interventions while using GEF funds for technical assistance and grants. Further discussions and coordination are necessary to define possible interventions.

49. The representative of Lebanon raised the question about potential overlap concerning what Child Projects 1.1 and 1.3 are aiming to deliver. The Secretariat pointed out the differences in the targets of the two projects while the representative of EBRD highlighted the difference in the funding approaches: for example, potential disposal of PCBs supported through Child Project 1.3 funding would be coupled with the Bank's loan for new investments leading to improved management of chemicals and wastes.

50. The question of expected submission date of the Child Project 1.3 to the GEF Secretariat was raised. The representative of EBRD explained the process was challenging nevertheless the completion of project preparation phase was planned for mid-summer.

51. The representative of Albania asked for clarification on potential beneficiaries of the projects to be funded through Child Project 1.3. The representative of EBRD explained sovereign lending was not considered for the time being, while as municipal and private sectors were identified as the key potential recipients (municipalities in particular for the IW component and waste water management improvements).

52. Regarding the regional level activities, the representative of EBRD explained the strategy was to ensure that experiences with successful national interventions would be disseminated across the region and potentially replicated in partnership with participating and other companies.

53. The representative of Tunisia emphasized the necessity for coordination between different executing Agencies, since some activities concern three child projects (1.1, 1.2 and 1.3).

Day 2 Agenda Item 2: Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection"

54. Child Project 2.1 will be executed jointly by UN Environment/MAP and two of its RACs (PAP/RAC and Plan Bleu) and by UNESCO-IHP and GWP-Med. The Child Project will achieve the following outcomes:
    - Coastal zone sustainability enhanced through the adoption of comprehensive ICZM strategies, coastal plans and instruments (MedProgramme Outcome 4).

- Increased resilience to climate variability and change, and enhanced water security of coastal populations through improved sustainability of services provided by coastal aquifers and by groundwater related coastal habitats (MedProgramme Outcome 5).

55. The representative of Algeria expressed interest in discussing the possibility of Algeria benefitting from national level activities in the context of Child Project 2.1. The Secretariat responded that Algeria had endorsed the MedProgramme in December 2017, when the preparation of Child Project 2.1 was already well advanced. Algeria will benefit from the regional activities foreseen in this Child Project (e.g., training and capacity building including on submarine groundwater discharges, gender and conjunctive management of water resources; awareness raising; support to ICZM Protocol ratification; etc.). The executing partners agreed to evaluate the possibility of accommodating Algeria's request. However, the representative of UNESCO-IHP expressed concerns about the constraint of the budget available for the MedProgramme Outcome 5 and the risk of jeopardizing the successful implementation of initially foreseen activities by increasing the number of national activities.

56. The representative of Egypt observed that the execution of a project with four partners would be challenging and also pointed out the need to consolidate the monitoring framework for Child Project 2.1. In response, the executing partners first recalled their successful joint execution of activities for the MedPartnership, including the development of the Integrative Methodological Framework (IMF), a practical tool to integrate considerations of integrated coastal zone management, integrated water resources management and groundwater management. This tool will guide the partners in the integration of their individual and joint activities for Child Project 2.1. Next, with respect to monitoring, the executing partners recalled that the project would benefit from an existing monitoring framework established for the Barcelona Convention, including the Integrated Monitoring and Assessment Programme (IMAP) for the achievement of good environmental status in the Mediterranean, and indicators related to implementation of the ICZM Protocol, the Mediterranean Strategy for Sustainable Development, and the ecosystem approach, amongst others. Finally, the Secretariat reminded the participants that one of the objectives of Child Project 4.1 was to ensure the effective coordination among all projects and partners, including through the organization of yearly stocktaking meetings, communication tools such as the MedProgramme website and the establishment of a Programme-wide results monitoring framework.

57. The representative of Montenegro took the opportunity to request assistance on transboundary cooperation with Albania related to Child Project 2.1 and to draw attention to some additional priorities regarding the focus of groundwater activities. First, the representative of Montenegro reminded the participants that the Buna/Bojana area had been officially confirmed as Montenegro's priority area for Child Project 2.1 and that an integrated resource management plan had been developed for this area in the context of the MedPartnership. A framework agreement between Montenegro and Albania for the sustainable development of Skadar Lake and Buna/Bojana was subsequently drafted and is currently awaiting signature by the two countries. The plan includes the establishment of a joint commission between Montenegro and Albania to support its implementation. In view of this, the representative of Montenegro requested that efforts be made under Child Project 2.1 to support the establishment of the joint commission with Montenegro and Albania, once the agreement has been officially adopted. On a related note, the representative of Montenegro also stated that the integrated resource management plan for the Buna/Bojana area called for the preparation of vulnerability maps for the area's aquifer as well as monitoring of groundwater parameters. The representative of UNESCO-IHP congratulated the representatives of Montenegro and Albania on their cooperation and confirmed UNESCO's willingness to work with both countries on the joint commission, and to address the requested

aquifer vulnerability mapping within its activities for Child Project 2.1. UNESCO-IHP highlighted at the same time its concerns about the limitation of available funds.

58. The representative of Morocco recalled the country's request to monitor hydrographic indicators in the context of Child Project 2.1 and to ensure effective coordination between the activities of Child Project 2.1 on ICZM and those of the SCCF Project on climate change adaptation in the coastal zone. The representative of Morocco also thanked the executing partners for integrating its expressed priorities into the design of the activities for Child Project 2.1.

59. The representative of Tunisia indicated that an official letter documenting the country's priorities for Child Project 2.1 would soon be transmitted to UN Environment/MAP, and also confirmed that the priorities of Tunisia for this Child Project are: for the aquifer, it is the Ras Jebel coastal aquifer, and for ICZM, the region of coastal area of the Gulf of Monastir and the Kerkennah Archipelago.

60. As at 7 March 2018, official letters expressing priorities for activities under Child Project 2.1 have been received from the GEF Operational Focal Points of Egypt, Morocco and Lebanon.

Day 2 Agenda Item 3: Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

61. Child Project 2.2 will be executed jointly by UN Environment/MAP and GWP-Med, and will achieve the following outcomes:
    - Enhanced water, food, energy and ecosystems integrated governance, security and sharing of benefits;
    - Reduced trade-offs among sectors and more balanced competing water uses;
    - Sustainability of basin/aquifers and coastal and marine zones as well as supported economic activities and biodiversity.

62. Following an overview of the Child Project, the representative of GWP-Med informed the participants that two sub-regional consultations would be organized in the coming months: one in the Adriatic and one in the MENA region. These consultations will provide ample opportunities for the countries to express their priorities with respect to the planned activities, which include assessments and plans based on the nexus approach.

63. The representative of Albania expressed interest in participating in the activities of this Child Project, provided that the outputs are action-oriented and do not simply involve the elaboration of strategies. The representative of GWP-Med confirmed that the outputs include action plans, but reminded the participants that it was ultimately the country's responsibility to ensure their implementation.

64. The representative of Lebanon inquired about the possibility of undertaking national level activities of this Child Project in Lebanon. The representative of GWP-Med indicated that this was a possibility, especially in view of the strong synergies that could be achieved with the activities foreseen in Lebanon for Child Project 2.1, including sustainable management of the Damour aquifer and the preparation of the National ICZM Strategy.

65. The representative of Morocco expressed interest in exploring the possibility of taking part in the activities of this Child Project, recalling that Morocco has many strategies for water, energy, food and ecosystems and that opportunities existed for improved integration among these domains. Furthermore, Morocco's National Sustainable Development Strategy recognizes each of these domains as priority area, and the activities of Child Project 2.2 could

assist the country in meeting the relevant commitments under this strategy. The representative of Morocco informed the participants that the relevant institutions would be consulted about the country's potential participation in national level activities for this Child Project.

Day 2 Agenda Item 4: Child Project 3.1 "Management Support and Expansion of Marine Protected Areas in Libya"

66. Child Project 3.1 will be executed jointly by UN Environment/MAP, SPA/RAC, IUCN, and WWF-Med, and will achieve the following outcome:
    - Expansion of seascapes under protection in Libya, and improved protected area management through the implementation of the Libyan Marine Protected Areas (MPAs) National Strategy, mapping of marine key habitats, monitoring of marine megafauna (mammals, seabirds, turtles and cartilaginous fish), capacity support mechanisms and adoption of permanent solutions.

67. Following a presentation of the activities of Child Project 3.1, the representative of SPA/RAC explained that development of the project document would soon begin in earnest, with the recruitment of a national expert and the organization of an inception meeting with the relevant stakeholders in Libya. UN Environment/MAP explained that the development of this Child Project had been placed on hold for a specific reason, namely to conduct discussions with other donors about the possibility of expanding activities to countries other than Libya. Finally, however, it was decided in February 2018 to proceed with the development of the project for Libya as originally planned. UN Environment/MAP indicated that the development of the project document would proceed swiftly, in view of the fact that the project involves only one country, and that executing partners have already gathered substantial information for the baseline situation.
68. In terms of the identification of the 24 sites of conservation interest that will comprise the Libyan network of MPAs to be established under Child Project 3.1, the representative of SPA/RAC indicated that the executing partners have made a preliminary assessment based on existing data from SPA/RAC and WWF in Libya as well as through desk studies. The next step will be to conduct a rapid assessment of Libya's coast to identify additional candidate areas and to agree upon a final list of sites to be included in the national network of MPAs.

69. The representative of Egypt cited the country's extensive experience in the management of MPAs and invited the executing partners to consider the organization of capacity building workshops for Libyan experts at MPAs in Egypt. The representative of SPA/RAC thanked the representative of Egypt for this suggestion and explained that capacity building within Child Project 3.1 would focus on the 'train the trainer' approach and would provide opportunities for trainees to apply MPA management strategies in small-scale projects conducted outside of the scope of the MedProgramme. The representative of SPA/RAC observed that the design of training activities – including the possibility of travel – was subject to the available budget.

70. In view of potential synergies between Child Project 3.1 and Child Project 2.1, the representative of UNESCO-IHP recalled to the participants that UNESCO will undertake activities related to submarine groundwater discharge with Libya, in the form of regional trainings and capacity building in collaboration with the General Water Authority.

Day 2 Agenda Item 5: Child Project 4.1 "Mediterranean Sea Basin Environment and Climate Regional Support Project"

71. Child Project 4.1 will be executed by UN Environment/MAP, and will achieve the following outcomes:
    - Increased uptake of lessons and of cutting-edge knowledge generated across the portfolio of interventions, and the active participation in IW LEARN activities, Communities of Practice, and events; improve the capacity of key regional stakeholders and of the global IW community to build climate resilience, maintain coastal resources, protect biodiversity and restore coastal ecosystems.
    - The effective coordination and learning among all Child Projects, consistency with the Programme objectives, and synergies among projects and partners, ensured.

72. The Secretariat informed the participants that a key element of Child Project 4.1 is the Knowledge Management Strategy and associated tools that will facilitate information sharing and promotion of the Programme's results among the partners, the region's stakeholders and beyond. He added that a Knowledge Management Specialist would be recruited in April 2018 to provide guidance on this aspect of the Child Project, including on the requirements for the creation of an appropriate knowledge platform and for populating this platform with appropriate data from the countries and partners. A successful example of an effective knowledge platform was cited: the case of the platform for the GEF's Caribbean Regional Fund for Wastewater Management (GEF-CREW) (http://www.gefcrew.org/).

73. With respect to the Knowledge Management Strategy and the related platform, the UN Environment GEF Task Manager for CW requested that the Knowledge Management Specialist reflect all indicators of all child projects in the establishment of the relevant tools and frameworks. It was furthermore explained that the GEF's Chemical and Waste Focal Area has created a proof-of-concept platform to assist countries in meeting the reporting requirements of the Stockholm and Basel Conventions (https://m.youtube.com/watch?v=BMyc6aIVeh0).

74. The representative of Egypt asked that special attention be given to designing data collection and management tools that support policy development, while at the same time responding to the needs of the GEF Secretariat and the Programme partners. The Secretariat confirmed that one of the aims of the Child Project 4.1 was to strengthen the science-policy interface, and that a great deal of relevant data has already been generated by the countries. Furthermore, the knowledge platform proposed under Child Project 4.1 could be used to aggregate and promote these data, with the clear understanding that no data would be disseminated without the permission of its owner. The Secretariat noted that this knowledge platform could one day become a tool of the Contracting Parties of the Barcelona Convention.

75. The representative of Albania noted that many countries lacked data and asked whether the Programme would support generation of data for the Integrated Monitoring and Assessment Programme (IMAP). The Secretariat confirmed that certain data generated from the MedProgramme could indeed assist countries in meeting the IMAP reporting requirements.

76. In response to the representative of Albania's suggestion to employ social media tools to promote the Programme, the Secretariat confirmed that the use of modern communication tools – including social media, YouTube and thematic videos – would be fully integrated in the Programme's communication and outreach strategy.

Day 2 Agenda Item 6: GEF Special Climate Change Fund (SCCF) Project

77. The SCCF Project will be executed by UN Environment/MAP and GWP-Med and will achieve the following outcomes:

- Stakeholder engagement on climate change adaptation is strengthened and partnerships are enhanced.
- Adaptation mainstreamed into IZCM strategies and coastal plans.
- Public spending relative to climate change adaptation in the coastal zone prioritized and national resources mobilized.
- Facilitated access to international climate change adaptation financing.
- Strengthened science-policy interface, accessibility of related knowledge and enhanced regional climate information.

78. The Secretariat recalled that the SCCF Project is a medium-sized project that will mainstream climate change adaptation into coastal planning using a proven approach that was successfully implemented in a past GEF intervention in the region. New funding opportunities under the GEF-7 Replenishment may provide opportunities for replication of this approach in the region.

79. Regarding the geographic scope of the national level activities foreseen in Morocco for the SCCF Project, the representative of Morocco reiterated her wish to maintain the same scope as Child Project 2.1, namely the Tanger-Tétouan-Al Hoceima region. The representative of Morocco recalled that it would be most efficient to work in this manner, as the same stakeholders would be engaged for both projects. The representative of PAP/RAC (the executing agency that will lead the ICZM activities in Child Project 2.1 and the integration of climate change adaptation in coastal plans for the SCCF Project) concurred that it would be best to work at the regional level.

80. During the discussion of execution modalities for activities foreseen at the national level in the SCCF Project, the representatives of Montenegro and Morocco reiterated their wishes to have PAP/RAC and Plan Bleu execute the planned activities in their respective countries on the preparation of recommendations for integrating climate change adaptation in local coastal planning processes.

81. The representative of Egypt recalled that his country was among the countries most vulnerable to climate change and inquired about why the country was not participating in the SCCF Project. The Secretariat recalled that Egypt had been invited to contribute to and endorse the Project Identification Form (PIF) of the GEF SCCF Project but that unfortunately this did not occur. The Secretariat recalled that an official letter was transmitted to the GEF Operational Focal Points of all GEF eligible countries on 9 September 2016 to inform about the opportunity to participate in the SCCF Project and to request inputs and advice from the countries on the development of the PIF. This communication was followed by a second letter on 30 September 2016 to formally request the endorsement of the PIF by the countries prior to the submission to the GEF Secretariat. Six countries issued letters of endorsement for the SCCF Project, namely Albania, Algeria, Libya, Montenegro, Morocco and Tunisia.

82. The representative of PAP/RAC recalled that a large project entitled “Enhancing climate change adaptation in the North coast and Nile Delta Regions in Egypt” had recently been approved by the Green Climate Fund for execution by UNDP Egypt and the Ministry of Water Resources and Irrigation. The PAP/RAC National Focal Point for Egypt has already undertaken a consultation with the Ministry of Water Resources and Irrigation and with UNDP Egypt and they agreed to build synergies with the GEF MedProgramme CP 2.1.

Day 2 Agenda Item 7: Discussion on timeline for completion of the development phase

83. Following discussions, the GEF Operational Focal Points, the nominated representatives and the implementing and executing partners agreed on the tentative timelines proposed for the completion of the project documents and their submission to the GEF Secretariat for endorsement, as set forth in Table 4 of the present report.

Day 2 Agenda Item 8: Conclusions of the first regional consultation

84. In the closing of the consultation, the GEF Operational Focal Points, the nominated representatives and the implementing and executing partners agreed on a set of conclusions and next steps, which have been reformulated for clarity and are set forth on pages 2 and 3 of the present report.

Annex 1
Agenda of the First Regional Consultation of the MedProgramme

Day 1: 7 March 2018	
9:00 – 9:30	*Registration*
9:30 – 9:45	Welcoming remarks: UN Environment
9:45 – 10:30	1. Setting the scene and objectives of the consultation: UN Environment/MAP
10:30 – 11:00	2. Report on progress for preparation of the MedProgramme documents: UN Environment/MAP
11:00 – 11:30	*Coffee Break*
11:30 – 12:00	3. Next steps and timeline for submission of documents to the GEF Secretariat: UN Environment/MAP
12:00 – 13:00	4. Update on Child Project 1.1: Project partners (MED POL, SCP/RAC, Plan Bleu)
13:00 – 14:30	*Lunch*
14:30 – 15:30	5. Update on Child Project 1.2: Project partners (EIB and MED POL)
15:30 – 15:45	*Coffee Break*
15:45 – 16:45	6. Update on Child Project 1.3: Project partner (EBRD)
16:45 – 17:00	7. Conclusions of Day 1
17:00	*End of Day 1*

Day 2: 8 March 2018	
9:30 – 9:45	1. Opening remarks: UN Environment/MAP
9:45 – 10:45	2. Update on Child Project 2.1: Project partners (PAP/RAC, UNESCO-IHP, GWP-Med and Plan Bleu)
10:45 – 11:15	*Coffee Break*
11:15 – 12:15	3. Update on Child Project 2.2: Project partner (GWP-Med)
12:15 – 13:45	*Lunch*
13:45 – 14:45	4. Update on Child Project 3.1: Project partners (SPA/RAC, WWF and IUCN)
14:45 – 15:15	5. Update on Child Project 4.1: UN Environment/MAP
15:15 – 15:45	6. Update on the GEF Special Climate Change Fund Project
15:45 – 16:15	*Coffee Break*
16:15 – 17:15	7. Discussion: Timeline for completion of the development phase
17:15 – 17:30	8. Conclusions of the first regional consultation
17:30	*Closing of the consultation*

Annex 2
List of participants

COUNTRY REPRESENTATIVES

Ms. Ornela Çuçi
Vice Minister
Ministry of Tourism and Environment
Bulavardi "Zhan d'Ark", No 23
Tirana 1001
ALBANIA
Tel: +355 692817242
Email: d_kaloshi@hotmail.com

Ms. Samira Hamidi
Inspectrice Centrale de l'Environnement
et du Développement Durable
Ministère des Ressources en Eau et de l'Environnement
Direction Générale de l`Environnement et du Développement Durable
3 Rue Caire, Kouba, Alger
République Algérienne Démocratique et Populaire
ALGERIE
Tel: +213 0 21432847
Mob: +213 5 59013340, 213 5 50919596
Email: natechesamira@yahoo.fr

Dr. Senad Oprašic
Head of Environmental Protection Department
Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina
Musala 9
Sarajevo 71000
BOSNIA AND HERZEGOVINA
Tel: +38733953536
Email: senad.oprasic@mvteo.gov.ba

Mr. Mohamed Shehab AbdelWahab
Chief Executive officer of Egyptian Environmental Affairs Agency
Ministry of Environment Egypt
30 Misr Helwan Elzrae Road
Cairo
EGYPT
Tel: +2025256450
Cell: +201000094972
Fax: +202526454
Email: Ceo.eeaa@eeaa.gov.eg

Dr. Mohamed Osman
Undersecretary, Head of Sector
Environmental Management Sector
Ministry of Environment
30, Misr Helwan El-Zeray Rd, El Maadi
Cairo
EGYPT
Tel: +20225256445
Cell: +201005625212

Fax: +20225256445
Email: m_f_osman@hotmail.com

Mr. Moustafa Fouda
Minister Advisor on Biodiversity
4 Ali el-Kordy Street,
Behind Holiday Inn
Maadi, Cairo
EGYPT
Tel: +202 25274700
Email: drfoudamos@gmail.com

Ms. Olfat Hamdan
Ministry Of Environment
Lazarieh Builidng, Block 2-A,
7th Floor, Room 7-16
Beirut
LEBANON
Tel: +961 (0)1 976555- Ext:448
+961(0)3 998334
Fax: +961 (0)1 976530
Email: o.hamdan@moe.gov.lb
Web: www.moe.gov.lb

Mr. Adel Yacoub
Head of Department
Protection of Natural Resources Department
Ministry of Environment
Lazarieh Bldg- Down Town- Beirut District- 8th Floor
P. O. Box 11/2727 Beirut - Lebanon
Beirut
LEBANON
Tel: +9611976555
Cell: +9613370002
Fax: +9611976535
Email: a.yacoub@moe.gov.lb

Mr. Paul Moussa
Agricultural Engineer
Department of Natural Resources Protection
Ministry of Environment
Beirut - Downtown - Aazarieh building -block A4- 8th floor
P. O. Box 11/2727
LEBANON
Tel: +9611976555
Cell: +9613531424
Email: paul_moussa90@hotmail.com

Mr. Esef Husic
Acting General Director for Climate Change and Mediterranean Affairs
Ministry of Sustainable Development and Tourism
IV Proleterske brigade 19

Podgorica 81000
MONTENEGRO
Tel: +38220446383
Email: esef.husic@mrt.gov.me

Ms. Ivana Stojanovic
Advisor
Department for Mediterranean Affairs
Ministry of Sustainable Development and Tourism
IV Proleterske brigade 19
Podgorica 81000
MONTENEGRO
Tel: +38267338108
Email: stojanovic_ivana@hotmail.com

Ms. Nassira Rheyati
Chef de Service Coopération Multilatérale
Division de la Coopération Internationale
Direction du Partenariat, de la communication et de la Coopération
Secrétariat d'Etat chargé du Développement Durable
09, Avenue Al Araar, Secteur 16, Hay Ryad,
Rabat
MAROC
Tel: +212 6 66439948 / 00212 6 62 06 63 90
Email: nassira.rheyati@gmail.com

Mr. Karim Sahnoun
Director of Conventions and Cooperation Projects Follow-up
Directorate General of External Relations
Ministry of Local Affairs and the Environment
Tunis
TUNISIA
Tel : +216 70 243 800- 70 243 809
Fax : +216 71 955 360
Email: karim.sahnoun@mineat.gov.tn

PARTNERS

Dr. Alice Aureli
Chief of Section
Section on Groundwater Systems and Settlements
UNESCO International Hydrological Programme
7 Place Fontenoy
Paris 75007
FRANCE
Cell: +33647431610
Email: a.aureli@unesco.org

Annex 2
List of participants

Mr. Youssef Filali-Meknassi
Senior Programme Specialist
UNESCO International Hydrological Programme
7 place Fontenoy,
Paris 75007 SP, France 75007
FRANCE
Tel: +33145681221
Cell: +33788391729
Email: y.filali-meknassi@unesco.org

Mr. Alexander Nash
Environmental Expert
European Investment Bank
96-100 Boulevard K. Adenauer L-2950
Luxembourg
LUXEMBOURG
Tel: +352437970462
Cell: +212659352341
Email: a.nash@eib.org

Mr. Faouzi Ben Amor
MeHSIP Environmental Expert
Project Directorate
European Investment Bank
70, Ave. Mohamed V
Tunis 1002
TUNISIA
Tel: +21671118900
Cell: +21698206885
Fax: +21671280998
Email: f.benamor@eib.org

Mrs. Souad Farsi
Sector Economist
European Investment Bank
96-100 Boulevard K. Adenauer L-2950
LUXEMBOURG
Tel: +352691286565
Email: s.farsi@eib.org

Mr. Walid Salim
Senior Environmental Expert
European Investment Bank - EIB
Cairo
EGYPT
Tel: +201271110814
Cell: +201271110814
Email: w.salim@eib.org

Annex 2
List of participants

Mr. Mohammad Sutari
Environmental Engineer
European Investment Bank
Amman
JORDAN
Tel: +962790491757
Email: mehsip.jordan@gmail.com

Ms. Dana Kupova
Principal, Resource Efficiency Investments
European Bank for Reconstruction and Development
London
United Kingdom
Tel: +447802510569
Email: kupovad@ebrd.com

Ms. Claudia Neuschulz
Analyst
EBRD
London
United Kingdom
Tel: +44 2073388579
Email: neuschuc@ebrd.com

Mr. Enrique De Villamore Martin
Director
Regional Activity Centre For Sustainable Consumption and Production (SCP/RAC)
Carrer de Sant Antoni Maria Claret, 167
Barcelona 08025
SPAIN
Tel: +34935538792
Cell: +34607070322
Email: evillamore@scprac.org

Mr. Manuel Clar Massanet
Associated Expert
Regional Activity Centre For Sustainable Consumption
and Production (SCP/RAC)
Miquel Santandreu 27 2 2
Palma de Mallorca 07006
SPAIN
Tel: +34678562455
Email: manoloclar@yahoo.com

Ms. Kimberley de Miguel
Project Manager

Toxic Chemicals
Regional Activity Centre for Sustainable Consumption
and Production (SCP/RAC)
Carrer de Sant Antoni Maria Claret, 167
Barcelona 08025
SPAIN
Tel: +34938823501
Cell: +34666481548
Email: kdemiguel@scprac.org

Mrs. Zeljka Skaricic
Director
Priority Actions Programme Regional Activity Centre (PAP/RAC)
Kraj Sv. Ivana 11
Split 21000
CROATIA
Tel: +38521340471
Cell: +385992166663
Fax: +38521340490
Email: zeljka.skaricic@paprac.org

Ms. Daria Povh Skugor
Senior Programme Officer
Priority Actions Programme Regional Activity Centre (PAP/RAC)
Kraj Sv. Ivana 11
Split 21000
CROATIA
Tel: 385 21 340 478
Email: daria.povh@paprac.org

Mr. Antoine Lafitte
Programme Officer
ICZM
Plan Bleu - RAC
15 rue Beethoven
VALBONNE 06560
FRANCE
Tel: +33786381720
Cell: +33786381720
Email: alafitte@planbleu.org

Mr. Atef Limam
Project Officer
SPA Unit
SPA/RAC
Boulevard du Leader Yasser Arafat
P. O. Box B.P. 337
Tunis 1080 Tunis Cedex
TUNISIA

Tel: +21671947162
Cell: +21694243866
Fax: +21671947506
Email: atef.limam@spa-rac.org

Mr. Evangelos Konstantianos
Executive Secretary
Global Water Partnership - Mediterranean
Kyrristou 12
Athens 10556
GREECE
Tel: +302103247490
Email: vangelis@gwpmed.org

Mr. Dimitrios Faloutsos
Deputy Regional Coordinator
Global Water Partnership - Mediterranean
12, Kyrristou str.
Athens 10556
GREECE
Tel: +302103247490
Cell: +306948827451
Email: dimitris@gwpmed.org

Mr. Mohamed Sofiane Mahjoub
Programme Manager
WWF MEDITERRANEAN
NORTH AFRICA
Tunis
TUNISIA
Cell: +21658686880
Email: smahjoub@wwfna.org

UN ENVIRONMENT

Mr. Lorenzo Paolo Galbiati
Project Manager
Ecosystem Division
UN Environment
Athens
GREECE
Tel: +302107273106
Email: lorenzo.galbiati@un.org

Mr. Matthew Lagod
MedProgramme Consultant
UN Environment MAP Coordinating Unit
Athens

GREECE
Tel: +30210 7273135
Email: matthew.lagod@un.org

Ms. Jelena Knezevic
MEDPOL Programme Officer
MED POL
UN Environment/MAP
Vas. Konstantinou 48
Athens 11635
GREECE
Tel: +302107273116
Cell: +38267255604
Email: jelena.knezevic@unep.org

Ms. Marina Markovic
MED POL consultant
UN Environment MAP
Vas. Konstantinou 48
Athens 11635
GREECE
Tel: +302107273116
Cell: +306945836441
Email: marina.markovic@unep.org

Mr. Yegor Volovik
GEF IW Portfolio Manager
Ecosystems Division
UNEP
UN Environment, Headquarter
P. O. Box 30552
Nairobi 00100
KENYA
Tel: +254207626707
Cell: +254716055792
Email: yegor.volovik@unep.org

Ms. Eloise Touni
Task Manager
UN Environment
Geneva
SWITZERLAND
Tel: +41229178607
Email: eloise.touni@un.org

Ms. Shelley Farrington Gavalas
Project Assistant
MedProgramme/GEF Projects

Annex 2
List of participants

UN Environment/MAP
48 Vassileos Konstantinou
Athens 11635
GREECE
Tel: +302107273135
Email: shelley.farrington-gavalas@un.org

INDEPENDENT EXPERTS

Mr. Panagiotis Ioakeimidis
Consultant 'hazardous waste expert'
ECOTERRA Co
Attikhs 49A
Athens 16342
GREECE
Tel: +302109967159
Cell: +306937503282
Email: ioakimidispan@gmail.com

Annex 3
List of consultations organized to date in the context of the MedProgramme

Project/programme	Type of consultation/activity	Location	Dates
Child Project 1.1	Regional Workshop on "Improved and Harmonized POPs Inventories and Action Plan" organized by the Stockholm Convention Regional Centre for North Africa	Rabat, Morocco	30 October to 3 November 2017
Child Project 1.1	Technical mission to Lebanon to identify potential interventions and sites for PCBs disposal/remediation	Beirut, Tripoli, Lebanon	17 – 21 December 2017
Child Project 1.1	Technical mission to Tunisia to identify potential interventions and sites for PCBs and mercury disposal/remediation	Tunis, Tunisia	31 January – 2 February 2018
Child Project 1.1	Technical mission to Algeria to identify potential interventions and sites for PCBs and mercury disposal/remediation	Algiers, Tizi Ouzu, Algeria	12 – 15 February 2018
Child Project 1.2	Meeting mission with promotor and GEF focal point in relation to upgrading and extension of 10 WWTP	Tunis, Tunisia	23-24 March 2017
Child Project 1.2	Technical mission to meet the promotor and GEF focal point in relation to COELMA project	Tetouan, Morocco	24-26 July 2017
Child Project 1.2	Meeting with promoter, GEF focal point and project consultants to kick off technical assistance for project preparation	Rabat, Morocco	5 February 2018
Child Project 1.2	Meeting with promoter, GEF focal point and stakeholders to present COELMA project	Tétouan, Morocco	6 February 2018
Child Project 1.2	Stakeholder consultation and pre-appraisal of the project by EIB	Tripoli, Lebanon	On going
Child Project 1.2	Feasibility studies are on-going for the three projects. A baseline data have been collected and available information on the institutional/policy framework has been prepared for Alexandria West WWTP.	Egypt	On going
Child Project 2.1	Sub-regional consultation with the Adriatic countries	Tivat, Montenegro	26 September 2017
Child Project 2.1	Sub-regional consultation with the Southern Mediterranean countries	Rabat, Morocco	12 – 13 December 2017
SCCF Project	First Regional Consultation	Rabat, Morocco	13 – 14 December 2017
SCCF Project	National consultation with Morocco	Rabat, Morocco	8 – 9 February 2018

Annex 3
List of consultations organized to date in the context of the MedProgramme

Project/programme	Type of consultation/activity	Location	Dates
SCCF Project	National consultation with Montenegro	Podgorica, Montenegro	12 – 13 February 2018
MedProgramme	First Regional Consultation	Athens, Greece	7 – 8 March 2018

Annex 4
Overview of the national and regional interventions planned for all countries in the MedProgramme

(ATTACHED)

Annex 5
Matrix of responsibilities of the executing partners for the MedProgramme

MedProgramme – Overview of responsibilities for execution
Partner countries: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, State of Libya, Montenegro, Morocco, and Tunisia

Lead GEF Agency: UN Environment
Other GEF Agency: EBRD
Executing Partners: UN Environment/MAP, EIB, UNESCO-IHP, GWP-Med, WWFMedPO, IUCN

Component 1: Reduction of Land Based Pollution in Priority Coastal Hotspots, and Measuring Progress to Impacts

Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hotspots and Measuring Progress to Impacts"

Type of activity	Plan Bleu	SCP/RAC	MED POL	UN Environment MAP
Disposal		✓	✓	
Remediation			✓	
Prevention		✓		
Other		✓	✓	
Measuring progress to impacts	✓		✓	
Programme-wide communication and knowledge management				✓

Child Project 1.2 "Mediterranean Pollution Hotspots Investment Project"

Type of activity	EIB	MED POL	UN Environment MAP
WWTP extension and upgrade (incl. reuse)	✓		
Depollution of catchment areas	✓		
Reduction and control of industrial pollution	✓		
Reduction of mercury releases	✓		
Other activities	✓		
Environmental standards		✓	
Programme-wide communication and knowledge management			✓

Child Project 1.3 "Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC)"

Type of activity	EBRD	UN Environment MAP
Water management systems upgrades	✓	
Reduction and prevention of POPs	✓	
Other activities	✓	
Dissemination/ replication	✓	
Programme-wide communication and knowledge management		✓

Annex 5
Matrix of responsibilities of the executing partners for the MedProgramme

Component 2: Enhancing Sustainability and Climate Resilience in the Coastal Zone

Child Project 2.1 "Mediterranean Coastal Zones Climate Resilience, Water Security and Habitat Protection"

Type of activity	GWP-Med	Plan Bleu	PAP/RAC	UNESCO IHP	UN Environment MAP
Coastal zone management	✓	✓	✓		
Management of Coastal Aquifers and Related Ecosystems				✓	
Programme-wide communication and knowledge management					✓

Child Project 2.2 "Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem Nexus"

Type of activity	GWP-Med	UN Environment MAP
Nexus assessments, related capacity building and institutional support	✓	
Identification of bankable nexus interventions	✓	
Communication and outreach	✓	✓
Programme-wide communication and knowledge management		✓

Component 3: Protecting Marine Biodiversity

Child Project 3.1 "Management Support and Expansion of Marine Protected Areas in Libya"

Type of activity	IUCN	SPA/RAC	WWF MedPO	UN Environment MAP
Inventory of marine and coastal sites of conservation interest in Libya	✓	✓		
Strengthening the governance of marine protected areas		✓		
Reduction and control of industrial pollution				
Effective management of MPAs	✓	✓	✓	
Civil society engagement	✓	✓	✓	
Capacity building	✓	✓	✓	
Awareness raising and communication	✓	✓	✓	✓
Programme-wide communication and knowledge management				✓

Annex 5
Matrix of responsibilities of the executing partners for the MedProgramme

Component 4: Knowledge Management and Programme Coordination

Child Project 4.1 "Mediterranean Sea Basin Environment and Climate Regional Support Project"

Type of activity	UN Environment MAP	All partners
Knowledge sharing and dissemination of results	✓	✓
Coordination and synergies	✓	

GEF Special Climate Change Fund (SCCF) Project[2]

SCCF Project "Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas"

Partner countries: Albania, Algeria, State of Libya, Montenegro, Morocco and Tunisia
GEF Agency: UN Environment
Executing partners : UN Environment/MAP, PAP/RAC, Plan Bleu, GWP-Med

Type of activity	GWP-Med	PAP/RAC	Plan Bleu	UN Environment MAP
Stakeholder engagement, capacity building and cooperation	✓	✓	✓	
Mainstreaming climate change adaptation in coastal planning		✓	✓	
Access to financing mechanisms for climate change adaptation	✓			
Knowledge management, communication and dissemination				✓

[2] The SCCF Project "Enhancing Regional Climate Change Adaptation in the Mediterranean Marine and Coastal Areas" was approved after the adoption of the MedProgramnme as an external intervention. However, it was agreed with the GEF Secretariat and the participating countries that the project, would be executed as part of the Programme to maximize synergies and efficient use of resources.

The Mediterranean Sea Programme (MedProgramme):
Enhancing Environmental Security

Report of the Second Regional Consultation

Paris, France
20 and 21 September 2018



Photo credit : Chloé Meyer (UNESCO IHP) and Lucilla Minelli (UN Environment/MAP)

Final version 25 October 2018

MedProgramme
Report of the Second Regional Consultation
(Paris, France – 20 and 21 September 2018)

Conclusions

1. The GEF Operational Focal Points (or their representatives) of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro and Tunisia confirmed the importance of the MedProgramme for their countries and for the region, and endorsed the proposals of UN Environment/MAP on (i) the timeline for finalization of the Child Projects of the MedProgramme and their submission to the GEF Secretariat for endorsement; (ii) the development of the overarching strategies for Knowledge Management and Gender Mainstreaming; and (iii) the arrangements for execution of the MedProgramme through the MedProgramme Coordinating Unit (MedPCU).

2. Following final comments from the GEF Operational Focal Points and the UN Environment Project Review Committee (PRC), Child Project 2.1 and the SCCF Project will be submitted to the GEF for endorsement in October 2018.

3. Child Projects 1.1, 1.2, 1.3, 2.2, 3.1 and 4.1 will be submitted to the GEF for endorsement between October and December 2018.

Next steps

	Action item	Responsibility	Deadline
1.	Circulate links to project documents and substantive annexes for Child Project 2.1 and the SCCF Project via DropBox	UN Environment/MAP	21/09/2018
2.	Circulate link to presentations via DropBox	UN Environment/MAP	21/09/2018
3.	Provide deadlines for comments on Child Project 2.1 and the SCCF Project	UN Environment/MAP	24/09/2018
4.	Initiate discussions with the GEF Operational Focal Points on co-financing for Child Projects 1.1, 2.2 and 3.1	UN Environment/MAP	24/09/2018
5.	Prepare and circulate draft report of the 2nd Regional Consultation	UN Environment/MAP	28/09/2018
6.	Provide the list of national focal points for the UN Environment/MAP Regional Activity Centres to GEF Operational Focal Points	UN Environment/MAP	28/09/2018
7.	Provide Knowledge Management and Gender Mainstreaming Strategies to GEF Operational Focal Points and all partners for comments	UN Environment/MAP	08/10/2018
8.	Provide advanced draft of Child Project 4.1 to GEF Operational Focal Points and all partners for comments	UN Environment/MAP	15/10/2018
9.	Submit co-financing letters for Child Projects 1.1, 2.2 and 3.1	GEF Operational Focal Points	31/10/2018

Background information

1. The Second Regional Consultation was organized by the Coordinating Unit of the UN Environment Mediterranean Action Plan (UN Environment/MAP) and the implementing and executing agencies of the MedProgramme to update the GEF Operational Focal Points about progress on the preparation of the Child Projects, to present the main features of the MedProgramme's overarching strategies for Knowledge Management and Gender Mainstreaming, and to agree on the next steps for the finalization of all project documents prior to their submission to the GEF for endorsement. The agenda of the Second Regional Consultation is provided in Annex 1.

2. The objective of the MedProgramme is to accelerate the implementation of agreed upon priority actions to reduce the major transboundary environmental stresses affecting the Mediterranean Sea and its coastal areas while strengthening climate resilience and water security, and improving the health and livelihoods of coastal populations. The MedProgramme was endorsed by the GEF Council in October 2016 with seven Child Projects contributing to the GEF's focal areas of International Waters (IW), Chemicals and Waste (CW), and Biodiversity (BD) (Table 1). An additional project financed by the GEF's Special Climate Change Fund (SCCF) was subsequently developed and is now also considered one of the Child Projects of the MedProgramme, in support of the GEF focal area on Climate Change (CC). Hence, there is a total of eight Child Projects in the MedProgramme.

3. Nine countries have endorsed the MedProgramme: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco, and Tunisia. It will be executed over a period of five years starting in 2019.

Table 1 Overview of the MedProgramme components, Child Projects, Executing Agencies and GEF Focal Areas

Mediterranean Sea Programme (MedProgramme)			
MedProgramme Component	**Child Project**	**Indicative lists of executing Agencies**	**GEF Focal Areas**
1. Reduction of Land Based Pollution In Priority Coastal Hotspots, and measuring progress to impacts	1.1 Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts.	UN Environment/MAP	IW and CW
	1.2 Mediterranean Pollution Hot Spots Investment Project.	EIB, UN Environment/MAP	IW and CW
	1.3 Mediterranean Sea Finance for Water Systems and Clean Coasts (FINWACC).	EBRD, UN Environment/MAP	IW and CW
2. Enhancing Sustainability and Climate Resilience in the Coastal Zone	2.1 Mediterranean Coastal Zones Climate Resilience Water Security and Habitat Protection.	UN Environment/MAP, PAP/RAC, Plan Bleu, UNESCO-IHP, GWP Med	IW
	2.2 Mediterranean Coastal Zones: Managing the Water-Food-Energy and Ecosystem NEXUS.	GWP Med, UN Environment/MAP	IW
	SCCF Project: Enhancing Regional Adaptation to Climate Change in	UN Environment/MAP, PAP/RAC, Plan Bleu, GWP Med	CC

	Mediterranean Marine and Coastal Areas.		
3. Protecting Marine Biodiversity	3.1 Management Support and Expansion of Marine Protected Areas in Libya.	UN Environment/MAP IUCN, SPA/RAC WWF Med	BD
4. Knowledge Management and Programme Coordination	4.1 Mediterranean Sea LME Environment and Climate Regional Support Project.	UN Environment/MAP	IW and CW

Attendance

4. The Second Regional Consultation brought together 50 participants, including representatives from eight of the nine countries that endorsed the MedProgramme and all 11 of the implementing and executing agencies. Also in attendance were representatives of the Permanent Delegations to UNESCO of Albania, Egypt, Lebanon, Montenegro and Tunisia. The complete list of participants is set forth in Annex 2.

5. The names, titles and affiliations of the GEF Operational Focal Points of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro and Tunisia (or their nominated representatives) that participated in the regional consultation are provided in Table 2.

Table 2 Names, titles and affiliations of the GEF Operational Focal Points and the nominated representatives that participated in the Second Regional Consultation for the MedProgramme

Country	Representative(s)	Title and affiliation
Albania	Ms. Jula Selmani	Chief of Projects Unit, National Agency of Protected Areas, Ministry of Tourism and Environment
Algeria	Ms. Samira Hamidi*	Inspectrice Centrale de l'Environnement et du Développement Durable, Ministère des Ressources en Eau et de l'Environnement, Direction Générale de l'Environnement et du Développement Durable
Bosnia and Herzegovina	Mr. Senad Oprašic*	Head of Environmental Protection Department, Ministry of Foreign Trade and Economic Relations
Egypt	Mrs. Abir Abu Zeid	Undersecretary for International Cooperation and Technical Assistance at EEAA, Ministry of International Cooperation
Lebanon	Ms. Olfat Hamdan	Head of Protection of Urban Environment Department, Ministry of Environment
Libya	Mr. Mustafa Soliman*	Management Committee Member, Environment General Authority
Montenegro	Ms. Ivana Stojanovic	Advisor, Department for Mediterranean Affairs, Ministry of Sustainable Development and Tourism
Tunisia	Mr. Karim Sahnoun	Directeur du suivi des conventions et des projets de coopération avec les partenaires étrangers, Direction Générale des Relations Extérieures, Ministère des Affaires Locales et de l'Environnement

* GEF Operational Focal Point

Presentations

6. Presentations were delivered for the eight Child Projects of the MedProgramme, as well as a progress report on the preparation of all projects and interventions on the development of the MedProgramme's overarching strategies for Knowledge Management and Gender Mainstreaming. The present report does not attempt to summarize these presentations, but focuses rather on the discussions they prompted.

7. All of the presentations delivered during the Second Regional Consultation are available at: https://www.dropbox.com/sh/544agsnimsbag3m/AAB9dRSpwR9Ur5qRkTzNpPO_a?dl=0.

Welcoming remarks and initial discussions

8. Ms. Alice Aureli, Chief of the Section on Groundwater Systems and Settlements at UNESCO's International Hydrological Programme (IHP), welcomed participants on behalf of UNESCO and declared that the preparation of the MedProgramme was an excellent example of effective collaboration between countries, UN organizations, nongovernmental organizations and associations. Ms. Aureli recalled that implementing solutions to the complex environmental challenges in the Mediterranean will require a multi-sector, multi-disciplinary strategy, consistent with the programmatic approach used in the design of the MedProgramme.

9. Mr. Gaetano Leone, Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat, welcomed participants and thanked UNESCO for hosting the event. Mr. Leone observed that the decision to prepare a multi-focal area programme with the GEF had been a risk, but one that was carefully considered and necessary to amplify the positive impacts of the work of the many stakeholders in the region that had joined forces in 2016 to realize a collective vision: "A healthy Mediterranean with marine and coastal ecosystems that are productive and biologically diverse contributing to sustainable development for the benefit of present and future generations". Mr. Leone recalled that the MedProgramme builds on the work undertaken in the region by the Contracting Parties, the UN Environment/MAP Regional Activity Centres and other partners, as well as on the foundations of an important set of tools developed in the framework of the Barcelona Convention, including its Protocols, the Transboundary Diagnostic Analysis, and regional and national action plans, amongst others. Mr. Leone recognized the GEF for its twenty years of investments in the region, many of which directly supported these activities. In closing, Mr. Leone informed participants that significant progress had been made since the First Regional Consultation in March 2018, noting that two Child Projects of the MedProgramme are ready for submission to the GEF, that two additional Child Projects are nearing finalization, and that the remaining four Child Projects will be completed by the close of 2018.

10. Mr. Yegor Volovic, the UN Environment GEF Portfolio Manager for International Waters (IW), declared that the MedProgramme was one of UN Environment's flagship initiatives due to its wide-reaching activities, its innovative programmatic approach, and its ability to convene a diverse set of stakeholders to design interventions on the ground, including international finance institutions, development banks, the MAP system with its Regional Activity Centres, and technical experts. He recalled that the implementation of actions on the ground represents one of the key comparative advantages of UN Environment and the Regional Seas Programme (RSP) that it administers. Mr. Volovic noted that the Barcelona Convention and the Mediterranean Action Plan, which form the legal and policy framework for the MedProgramme, were developed in the context of the RSP for the Mediterranean, one of the first that was established.

11. Ms. Eloise Touni, the UN Environment GEF Task Manager for Chemicals and Waste (CW), recalled that the MedProgramme's activities on CW would support countries in efforts to meet their commitments on Persistent Organic Pollutants (POPs) and mercury under the Stockholm, Basel and Minamata Conventions and announced the corresponding targets for the MedProgramme: removal of 50 tons of mercury and 3,250 tons of POPs. In terms of progress with the development of the MedProgramme's CW activities, Ms. Touni informed participants that quantities of wastes had been confirmed in the participating countries and that life cycle analyses had been undertaken to identify strategies for the prevention of new wastes, especially the new POPs recently added to the Stockholm Convention. Ms. Touni also highlighted a challenge concerning the mercury removal activities intended to assist countries meet obligations under the Minamata Convention: since the Convention only recently entered into force, many countries have still not ratified it, thereby affecting their ability to take part in the mercury removal activities foreseen under the MedProgramme. Ms. Touni asked the representatives of the participating countries to indicate any assistance they may require to ratify the Minamata Convention, and offered the full support of UN Environment in this regard.

Day 1 Agenda Item 1: GEF and the Mediterranean – 20 years of support, and expectations under GEF-7

12. Mr. Steffen Hansen, Environmental Specialist on International Waters for the Europe and Central Asia regional team at the GEF Secretariat (hereafter the representative of the GEF Secretariat), reconfirmed that the MedProgramme is a flagship for the GEF in the region and outlined the interventions leading up to its development that the GEF had financed in the Mediterranean over the past 20 years. These have included the preparation of the previous Transboundary Diagnostic Analyses (TDAs) and of the Strategic Action Programmes on pollution (SAP MED) and biodiversity (SAP BIO) in the Mediterranean. He noted that several factors were creating momentum that will increase the MedProgramme's chances for success, including the update by countries of their National Action Plans (NAPs) for the prevention of land-based pollution; the scaling up of these action plans; and capacity building for institutional reforms. Responding to an earlier statement about the risk involved in developing an ambitious multi-focal area programme, the representative of the GEF Secretariat recalled that the GEF is committed to doing "what is difficult, what might fail" but to ensure that this process leads to positive results for countries.

13. In 2018, countries pledged US$ 4.1 billion for the seventh replenishment of the Global Environmental Facility (GEF) trust fund. This new four-year investment cycle (GEF-7) will provide funds to protect the planet and human wellbeing through activities in the GEF focal areas of Biodiversity, Chemicals and Waste, Climate Change, International Waters, Land Degradation, and through other programs.

14. The GEF has set three strategic objectives for the International Waters focal area under GEF-7: (i) strengthening the Blue Economy opportunities, (ii) improving management in the Areas Beyond National Jurisdiction, and (iii) enhancing water security in freshwater ecosystems. Enhancing water security is one of the primary objectives of the MedProgramme, and is reflected in the Child Projects of Component 2 and the activities to promote the sustainable management of coastal aquifers, integrated water resources management, adaptation to climate change, and the nexus approach for evaluating competing demands for water, energy, food and ecosystem goods and services.

15. Further information about the GEF-7 programming framework and the associated global environmental benefits can be found in the GEF Council Document GEF/R.7/19 GEF-7 Replenishment Programming Directions.

Day 1 Agenda Item 2: Remarks from the Permanent Delegations to UNESCO

16. The representative of UNESCO IHP opened the floor to interventions from the Permanent Delegations to UNESCO, recalling that one of the assets of UNESCO's participation in the MedProgramme was its direct voice with the representatives of the countries, who will be able to support implementation of the programme by providing information and facilitating contacts with institutions, scientist and technicians.

17. H. E. Mr. Ferit Hoxha, Ambassador Extraordinary and Plenipotentiary, Permanent Delegate of Albania to UNESCO, thanked the partners of the MedProgramme for their work to protect the Mediterranean Sea and its coastal areas, and confirmed that the activities of the MedProgramme would assist Albania in its efforts to achieve progress through sustainable development and protection of the environment. The Ambassador recalled that Albania was facing increasing risks associated with climate change and natural hazards and that the country's coastal zone was most vulnerable to these risks, which were affecting water supplies, agriculture and tourism in these areas. The Ambassador also cited a number of expectations for the MedProgramme, including strong coordination, effective exchange of information and opportunities for capacity building, increased resilience to climate change in coastal communities, assistance with the management of groundwater resources, and the protection of biodiversity.

18. H. E. Ms. Dragica Ponorac, Ambassador Extraordinary and Plenipotentiary of Montenegro to France, Permanent Delegate of Montenegro to UNESCO, also thanked the partners and expressed Montenegro's satisfaction with participating in the MedProgramme. The Ambassador underlined the importance of the MedProgramme to Montenegro, which is currently working to meet its obligations under Chapter 27 (Environment) for its accession to the European Union (EU), which will require more than US$ 1.7 billion in investments. The Ambassador reminded participants that Montenegro is defined as an ecological state in its Constitution, and reiterated the country's commitment to meet the objectives of the MedProgramme especially through the activities foreseen in the hotspot areas of the Kotor Bay and the Bijela shipyard.

19. H.E. Mr. Ghazi Gherairi, Ambassador Extraordinary and Plenipotentiary, Permanent Delegate of Tunisia to UNESCO, thanked the partners for their collaboration to implement the MedProgramme, and expressed appreciation for the fact that the programme will address the role of the environment in ensuring security. The Ambassador noted that the overarching challenge for the region is to transmit a healthy Mediterranean to the next generation, and that Tunisia is aware of the stakes at hand and has placed environmental values at the heart of its strategy of growth for the future. The Ambassador also took the opportunity to recognize the IHP for its work with the Government of Tunisia. In closing, the Ambassador pledged the willingness of the Government of Tunisia to provide the tools necessary for the success of the MedProgramme.

20. The Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat thanked the ambassadors for their remarks and recalled that the MedProgramme is being prepared under the leadership of the participating countries and that their guidance is important to move the programme towards success. The Coordinator highlighted that all participating countries of the MedProgramme are Contracting Parties of the Barcelona Convention, and many are participating in the Bureau including Egypt, Montenegro and Tunisia as well as Albania which currently holds the presidency. In closing, the Coordinator expressed gratitude to all countries present and contributing to the MedProgramme.

Day 1 Agenda Item 3: Setting the scene and objectives of the consultation

21. Mr. Lorenzo Galbiati, Project Pool Manager at the UN Environment/MAP-Barcelona Convention Secretariat (hereafter the Secretariat), reviewed the agenda of the consultation with participants and outlined the main objectives of the two-day event: (i) update the GEF Operational Focal Points on the status of the development of all Child Projects; (ii) request their feedback on outstanding issues; (iii) agree on the next steps for finalization of the preparation phase of the MedProgramme; and (iv) present the main features of the Knowledge Management and Gender Mainstreaming Strategies that will be applied to all Child Projects.

22. The Secretariat recalled that the MedProgramme builds on the strong foundations established in the region from more than US$ 70 million in investments from the GEF over 20 years for activities supporting the implementation of the Barcelona Convention. These investments have led to the development of the initial Transboundary Diagnostic Analysis for the Mediterranean Large Marine Ecosystem (TDA-MED) as well as its 2005 update and 2015 supplement on coastal aquifers; Strategic Action Programmes to Address Pollution from Land-based Activities (SAP-MED) and for the Conservation of Biological Diversity (SAP-BIO), as well as their associated National Action Plans (NAPs); and the Protocol on Integrated Coastal Zone Management (ICZM).

23. The Secretariat also informed the participants about the delays encountered in the development of the Child Projects and explained that the period for submission to the GEF would be extended to December 2018. However, this should not affect the anticipated initiation of execution of the MedProgramme, which is foreseen in the first or second quarter of 2019.

Day 1 Agenda Item 4: Progress report on preparation of the MedProgramme Child Projects and their submission to the GEF

24. The Secretariat provided the milestones of the MedProgramme (Figure 1), an update on the status of action items from the First Regional Consultation in March 2018 (Table 3), the status of the development of each of the Child Projects (Table 4), the national and regional consultations foreseen between October and December 2018 (Table 5), the schedule for the completion of the preparation phase of the MedProgramme (Table 6) and the tentative timeline for the initiation of activities (Table 7).

Figure 1 Milestones of the MedProgramme (2016 – 2019)

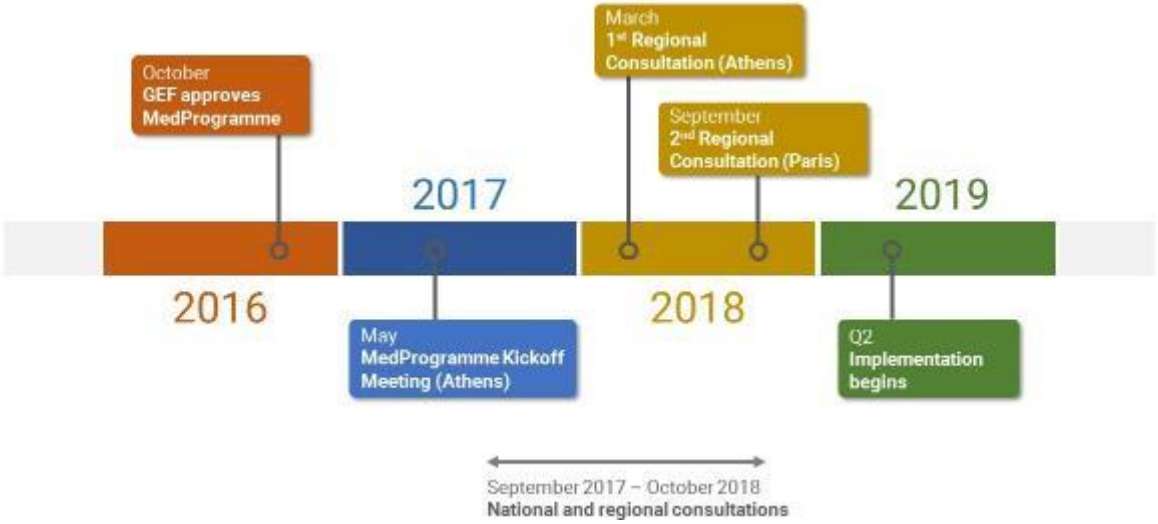


Table 3 Status of action items from First Regional Consultation for the MedProgramme

	Action item	Responsibility	Status
1.	An overview of national and regional activities in each country	UN Environment/MAP	Complete
2.	A responsibility matrix for the executing structure of each Child Project	UN Environment/MAP	Complete
3.	Contact information for all implementing and executing partners	UN Environment/MAP	Complete
4.	Instructions on the preparation of co-financing letters	UN Environment/MAP	Complete
5.	An overview of national stakeholders engaged during project preparation	UN Environment/MAP	Ongoing
6.	A list of national thematic experts for CW and IW that will review project documents	GEF Operational Focal Points	Complete
7.	Letters of co-financing for Child Projects 1.2, 2.1 and 4.1	GEF Operational Focal Points	7 of 9 received
8.	Support the GEF Operational Focal Points in the identification of initiatives that can constitute co-financing contributions to the Child Projects	Executing partners	Complete
9.	Provide letters of co-financing for Child Projects 1.2, 2.1 and 4.1	Executing partners	Complete

Table 4 Status of the development of the Child Projects (CP) of the MedProgramme

Project	Draft application package complete? (Yes/No)	Final application package complete? (Yes/No)	Anticipated timeframe for PRC[1]	Anticipated timeframe for submission to GEF
CP 1.1	Yes	No	November 2018	December 2018
CP 1.2	Yes	No	November 2018	November 2018
CP 1.3	Yes	No	(Not applicable)	December 2018
CP 2.1	Yes	Yes	October 2018	October 2018
SCCF	Yes	Yes	October 2018	October 2018
CP 2.2	Yes	No	December 2018	December 2018
CP 3.1	Yes	No	December 2018	December 2018
CP 4.1	Yes	No	November 2018	November 2018

Table 5 National and regional consultations foreseen between October and December 2018

Project	Type of consultation	Timeframe
CP 1.1	Virtual (comments gathered via email)	November 2018
CP 1.2	Virtual (comments gathered via email)	October 2018
CP 1.3	Virtual (comments gathered via email)	December 2018
CP 2.2	Regional meeting for all countries	November 2018
CP 2.2	Virtual (comments gathered via email)	December 2018
CP 3.1	National meeting	October 2018
CP 4.1	Virtual (comments gathered via email)	October 2018

Table 6 Schedule for the completion of the preparation phase of the MedProgramme

Timeframe	Actions
September – December 2018	• Finalize all application packages • Complete all PRCs • Submit all application packages to GEF for review • Obtain GEF CEO endorsement • Prepare all final reports and expenditure statements for PPG
January – March 2019	• Close all legal agreements for PPG phase with implementing and executing partners • Formal closure of the PPG phase

[1] PRC: UN Environment's Project Review Committee, the internal review undertaken for all GEF projects prior to their submission to the GEF Secretariat for CEO endorsement. EBRD, as an implementing agency for the GEF, is not subject to this review.

Table 7 Tentative timeline for the initiation of activities of the MedProgramme

Timeframe	Actions
November – December 2018	• Establish the legal and procedural frameworks for the Programme execution • Evaluate needs for the new legal agreements that will be established with implementing and executing partners, national institutions, etc. • Prepare terms of reference for staff that will be involved in the Programme
January – March 2019	• Establish new legal agreements • Set an operative budget in the UN Environment Enterprise Resource Planning System (Umoja) • Allocate funds for each Child Project
April – June 2019	• Initiate preparation of the inception report and workshop • Arrange consultations with the countries • Staff the Child Projects

25. Ms. Olfat Hamdan, the representative of the GEF Operational Focal Point of Lebanon (hereafter the representative of Lebanon), inquired about one of the action items from the First National Consultation, namely the nomination by the GEF Operational Focal Points of national CW and IW focal points, indicating that Lebanon had not provided this information. The Secretariat informed that the selection of national focal points for CW and IW for the purposes of the MedProgramme was an internal matter for each country, and that all communications from the Secretariat regarding project development would continue to be directed to the GEF Operational Focal Point. As agreed at the First Regional Consultation, the GEF Operational Focal Point will coordinate the review of project documents with their national experts and provide a single set of comments to the executing agency that is responsible for the preparation of the Child Project.

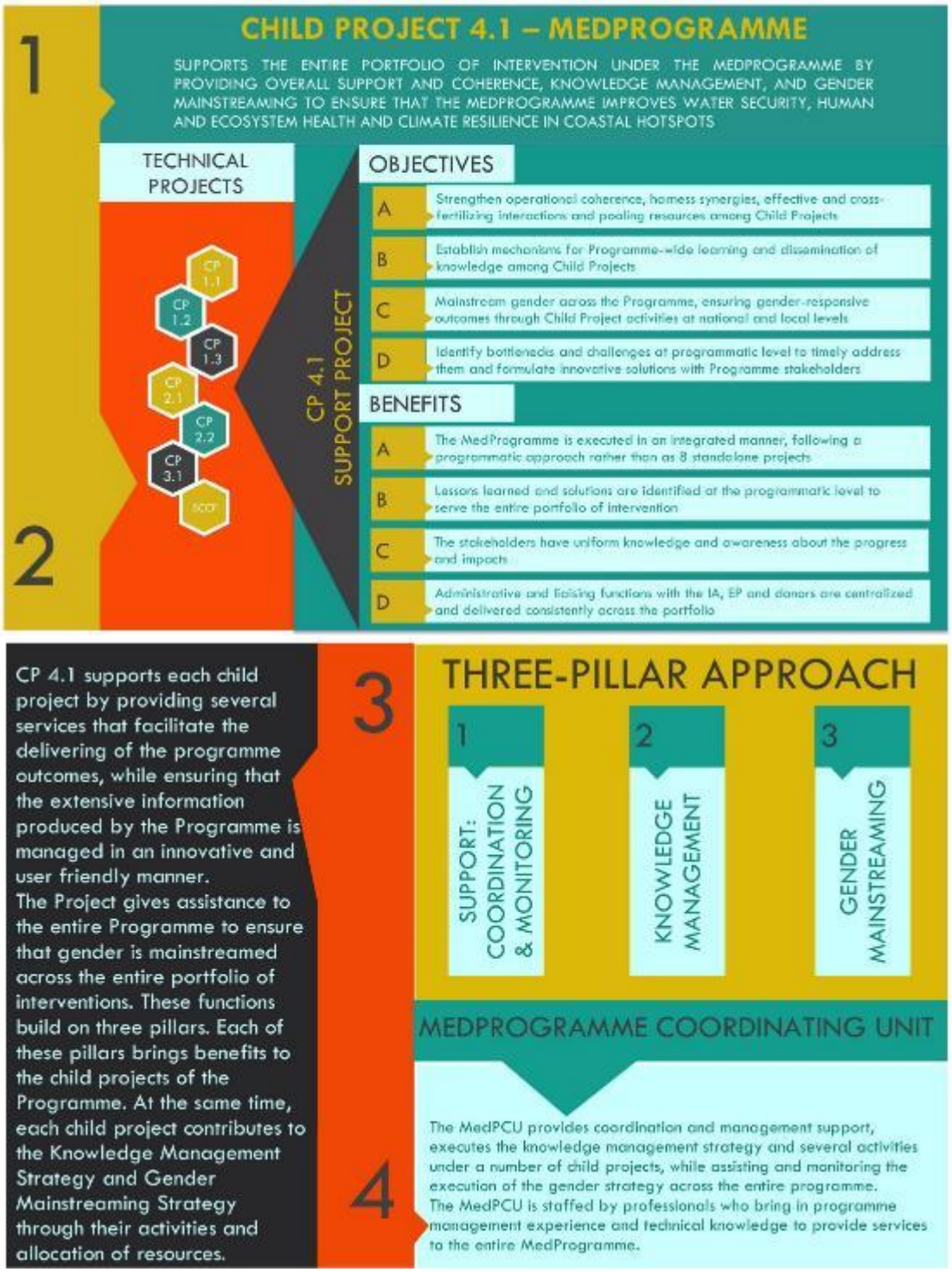
26. Mr. Karim Sahnoun, the representative of the GEF Operational Focal Point of Tunisia (hereafter the representative of Tunisia), asked for clarification about the national activities for Child Project 2.2 presented in the overview of national and regional activities of the Child Projects for each country. Mr. Dimitris Faloutsos, Deputy Regional Coordinator of GWP Med, the leading executing agency for this Child Project, explained that a nexus assessment for the North West Sahara aquifer was foreseen in the context of a project funded by Sida, and that this assessment would contribute to the overall results of Child Project 2.2, but that no GEF funds would be used to finance national level activities in Tunisia for this Child Project.

<u>Day 1 Agenda Item 5: Update on Child Project 4.1</u>

27. Child Project 4.1 will play a key role in the MedProgramme, as it will: (i) monitor the progress of the entire portfolio of projects towards the programme's overarching goal of enhancing environmental security, and (ii) provide essential support functions to all Child Projects of the MedProgramme through three main lines of action: coordination and monitoring; knowledge management; and gender mainstreaming. In addition, Child Project 4.1 will produce technical activities, including the development of databases, the implementation of the Knowledge Management Strategy, as well as preparation of communication materials and the Annual Stocktaking Meetings. A conceptual overview of the objectives, benefits and structure of Child Project 4.1 is provided in Figure 2.

28. The project document and substantive annexes for Child Project 4.1 will be provided to the GEF Operational Focal Points and the partners for comments by 15 October.

Figure 2 Infographic on the objectives, benefits and structure of Child Project 4.1 (Credit: Debasmita Boral)



29. The Secretariat emphasized that the development of programme-level strategies for knowledge management and gender mainstreaming has not been attempted before in the context of a GEF programmatic approach, and therefore represents an important innovation

for the GEF portfolio. These strategies for the MedProgramme will be provided to the GEF Operational Focal Points and the partners by 8 October for comments.

30. The representative of Lebanon confirmed that Child Project 4.1 has an important role in the MedProgramme, especially for overall coordination and to identify synergies with other initiatives and projects at the regional and international level. The representative of Lebanon then asked for clarification about the link between the MedProgramme Coordinating Unit (MedPCU) and the implementation of activities at the national level. The Secretariat explained that the national activities will be developed by the executing partners of the corresponding Child Projects and that the MedPCU – in the framework of Child Project 4.1 – will monitor progress on all Child Projects and help them to promote their knowledge tools at the level of the programme, in addition to providing other services. The specific modalities for execution of national level activities will be discussed during the inception phase of each Child Project. The Secretariat emphasized that the execution of activities with the relevant national and sub-national institutions for all countries will be coordinated by the executing partners (the approach successfully used in the MedPartnership) and that there was no expectation for the governments of the participating countries to create a national coordination structure for the MedProgramme.

31. Ms. Ivana Stojanovic, the representative of the GEF Operational Focal Point of Montenegro (hereafter the representative of Montenegro), expressed support for the cross-cutting approach proposed for the design of Child Project 4.1 and thanked the partners for reflecting the national priorities of Montenegro in the design of Child Project 2.1 and the SCCF Project. Making reference to the activities of Child Project 2.1 on coastal observation, the representative of Montenegro expressed her point of view about how these activities could be linked to Child Project 4.1. Given that the Child Project 2.1 could not address Montenegro's priority related to the development of a coastal database and observatory with the aim of connecting relevant stakeholders and managers of coastal data, Child Project 4.1 is therefore seen as an opportunity to assist the country with this request (in the context of the execution of the Knowledge Management Strategy and its development of knowledge tools).

32. The Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat declared that a centralized approach to knowledge management for the MedProgramme would be more effective and yield more positive impacts than the decentralized approach employed for the MedPartnership, and stated that the knowledge management platform foreseen under Child Project 4.1 would be important to the MAP system during and after the lifespan of the MedProgramme.

33. Mr. Mohamad Kayyal, MED POL Programme Management Officer, observed that the management function of the MedPCU in Child Project 4.1 had been underemphasized with respect to coordination services, and that this management function would require significant efforts across the various Child Projects. The Secretariat explained that this was provided for in the design of the MedPCU, which would ensure traditional management functions for the Child Projects (such as establishment of legal agreements, financial management and procurement), as well as monitoring functions to measure progress to impacts and to prepare the Project Implementation Reports (PIR) of each Child Project for the GEF. The Project Management Cost (PMC) of each Child Project will support the overall management, coordination and monitoring functions delivered by the MedPCU. It was also noted that the MedPCU will execute technical activities under the Child Projects 2.1, 2.2, 3.1 and 4.1 as well as the SCCF Project. This is not the case for the Child Projects 1.1 and 1.2 where dedicated and specific technical assistance will be identified and supported by the project grants for the execution of the activities.

34. Prof. Michael Scoullos, the Chair of GWP Med, recognized the important step taken by the designers of the MedProgramme to coordinate knowledge in the region, and noted the challenge of harnessing all the knowledge generated by activities on the ground in many countries and with many partners. Prof. Scoullos asked what could be done to facilitate the understanding of the countries about the locations of activities and the potential for synergies. The Secretariat indicated that relevant information on this point would be provided during the presentation on the MedProgramme's Knowledge Management Strategy.

Day 1 Agenda Item 6 – Knowledge Management in the MedProgramme

35. Ms. Lucilla Minelli, the Knowledge Management Expert for the preparatory phase of the MedProgramme, recalled that the overall objective for the Knowledge Management Strategy (KM Strategy) is to "provide a structured and centralized approach to leverage and share knowledge assets generated by the Child Projects of the MedProgramme with the intended beneficiaries and audiences." The KM Strategy was developed through analysis of the Programme Framework Document and background documentation, surveys, exchanges with project designers, desk studies, and contact with relevant technical counterparts regarding performance and functionality of information technologies.

36. The representative of Lebanon recognized that a diverse set of ideas and activities must be accounted for under the KM Strategy and that it will be important to develop indicators to track the progress towards operational objectives and targets associated with specific knowledge management activities. The Secretariat explained that objectives and activities had been established for knowledge management and that an appropriate number of indicators for these would be reflected in the design of Child Project 4.1. The Secretariat reminded the participants, however, that the decision to implement a KM Strategy represents an additional task that goes above and beyond what is required by the Programme Framework Document approved by the GEF for the MedProgramme.

37. The Chair of GWP Med urged the Secretariat to ensure that the knowledge management tools of the MedProgramme are tailored to the needs of policy makers in particular, and not only to those of the coordinating and/or executing agencies. This sentiment was reiterated by Ms. Daria Povh Skugor, Senior Programme Officer at the Priority Actions Programme Regional Activity Centre (PAP/RAC), who also inquired about the source of the human and financial resources that would be necessary to implement the KM Strategy. The Secretariat confirmed that governments and policy makers are the primary client for the knowledge tools of the MedProgramme, and that the MedProgramme will dedicate sufficient resources to operationalize the strategy, including through the recruitment of a knowledge management expert for the MedPCU and through trainings for partners on how to generate and package data. The Secretariat reminded participants that the KM Strategy is modular in nature, and will start with simple tools and expand to meet the needs of the programme.

38. The representative of the GEF Secretariat noted that the KM Strategy represents an effective tool for the GEF to distill results from the MedProgramme, and asked if the knowledge products of the MedPartnership could be further disseminated via the Knowledge Management Platform, especially to private sector stakeholders. The Knowledge Management Expert confirmed that the results of the MedPartnership would be promoted on the platform, and that the private sector was a targeted audience and beneficiary of the KM Strategy, as well as a potential provider of knowledge. The Secretariat indicated that efforts could be made under the MedProgramme to create partnerships with the private sector.

39. The Chair of GWP Med added that the private sector holds a great amount of data (sometimes of higher quality than that of governments) and recommended that efforts be taken from the

onset of the MedProgramme to clearly define the requirements for data gathering, to determine with countries what data can be shared, and with whom. The representative of UNESCO IHP recalled that in the context of the Barcelona Convention stakeholders have rights to seek data from the private sector, and that the MedProgramme could support these efforts by creating awareness and encouraging the private sector to communicate more.

40. The Secretariat informed participants that the Integrated Monitoring and Assessment Programme (IMAP) of the Barcelona Convention would be considered in the design of the Knowledge Management Platform, and that relevant data from the MedProgramme would be integrated in the IMAP platform.

41. Ms. Abir Abu Zeid, the representative of the GEF Operational Focal Point of Egypt (hereafter the representative of Egypt), expressed satisfaction with the KM Strategy and its goal to integrate all projects and share lessons across the programme, adding that this will be important for all countries. In response to her question about how data would be collected at the national level, the Secretariat explained that the executing partner of each Child Project will have resources to develop activities with the countries and to support national institutions, and that each Child Project will have a dedicated budget for knowledge management activities to produce and manage harmonized data specific to the focus of each Child Project. This includes if appropriate, the use of raw data on specific issues provided by national institutions to contribute to the MedProgramme KM Strategy. The Secretariat reassured participants that data could be shared in an aggregated manner, but that raw data belonging to the countries would not be made available unless the owners of the data agreed to this.

Day 1 Agenda Item 7: Coordination with IW:LEARN and LME:LEARN

42. Mr. Mish Hamid, Project Manager for the GEF International Waters Learning Exchange and Resources Network (IW:LEARN), recalled that the IW:LEARN platform was created to provide knowledge management services to the GEF's International Waters project managers, since International Waters is the only GEF focal area for which an overarching convention or agreement does not exist. LME:LEARN is a cousin initiative of IW:LEARN, providing services to GEF IW projects in coastal and marine areas, with the goal of strengthening global governance of Large Marine Ecosystems (LME). Mr. Hamid outlined the main services of these initiatives, including knowledge sharing and partnership building, information management, programmatic support, and training (biennial International Waters Conferences, GEF project twinnings, …). Further information on both initiatives is available at https://iwlearn.net/.

43. The Secretariat confirmed that the outputs of the Child Projects of the MedProgramme will feed into the IW:LEARN platform, and that information exchanges with IW:LEARN and LME:LEARN are foreseen in the KM Strategy.

Day 1 Agenda Item 8: Gender Mainstreaming in the MedProgramme

44. Ms. Debasmita Boral, the Gender Expert for the preparatory phase of the MedProgramme, provided a brief history of the evolution of gender considerations in development policies and described the benefits of gender mainstreaming before presenting the MedProgramme's Gender Mainstreaming (GM) Strategy. The GM Strategy comprises three lines of action: (i) address gender-blind hurdles with gender-differentiated consequences; (ii) mitigate gender-specific barriers and discriminatory norms; and (iii) scale up gender-sensitive policies and deliver gender-responsive outcomes. The MedProgramme is operationalizing the GM Strategy in the preparatory phase by conducting tailored gender assessments and preparing

costed gender action plans for each Child Project. Specific activities on gender will be defined and approved during the inception phase with all stakeholders.

45. The Secretariat recalled that Child Project 4.1 will ensure overall monitoring of the implementation of the GM Strategy and that executing partners will receive training on how to mainstream gender in project activities.

46. The Chair of GWP Med suggested that in some cases, project activities should also be designed to consider the specific needs of marginalized groups, in addition to considerations for gender.

Day 1 Agenda Item 9: Update on Child Project 2.1

47. Child Project 2.1 encompasses activities on Integrated Coastal Zone Management (ICZM), protection of coastal aquifers and groundwater-related ecosystems, as well as integrated management of water resources management, including conjunctive management of surface water and groundwater resources. A joint presentation on the development of the project and its activities was made by representatives of the four executing partners: PAP/RAC (Ms. Daria Povh), Plan Bleu (Mr. Antoine Lafitte), GWP Med (Mr. Dimitris Faloutsos) and UNESCO IHP (Mr. Youssef Filali-Meknassi).

48. Mr. Amr Abdallah Morsy, First Secretary of the Permanent Delegation of the Arabic Republic of Egypt to UNESCO, informed the Secretariat that the Government of Egypt will provide written comments to IHP to be reflected in the final version of the project document for Child Project 2.1.

49. The representative of Lebanon also indicated that Lebanon would provide comments on the project document and furthermore asked for clarification on the activities foreseen in the Damour area of Lebanon, including on the management approach that would be employed for the Damour area and on responsibilities for the implementation of the management that will be produced for this area. The executing partners confirmed that a river basin management approach will be used in the design of an integrated resources management plan for the Damour area (taking into account upstream activities that affect the coast) and that the implementation of the plan will be the responsibility of the country.

50. The representative of Montenegro raised a concern about one of the activities of Child Project 2.1 foreseen in Montenegro, "Preparation of the Management Plan for the Buna-Bojana Transboundary Aquifer", noting that the title of this plan was similar to the existing plan for the Buna-Bojana area prepared under the MedPartnership. The Secretariat promised to address this concern in the final project document, based on the comments that the representative of Montenegro will provide.

51. Ms. Samira Hamidi, the GEF Operational Focal Point of Algeria (hereafter the representative of Algeria) expressed a wish to see more reference in the project document to the activities on ICZM already undertaken in Algeria (preparation of a coastal strategy and a coastal plan for the Reghaia area) and to discuss the possibility of having activities on ICZM in Algeria that were more concrete than those described in the project document (support for ratification of the ICZM Protocol). The representative of PAP/RAC recalled that the adoption of the ICZM tools already developed in Algeria would support the adoption of the ICZM Protocol, and that efforts would be made to seek additional investments to support Algeria in this work. The Secretariat clarified that no promises could be made however at this stage about the development of bankable projects and access to loans under the activities of Child Project 2.1.

Day 1 Agenda Item 10: Update on the GEF Special Climate Change Fund (SCCF) Project

52. Mr. Matthew Lagod, Consultant for UN Environment/MAP, outlined the progress achieved on the preparation of the SCCF Project and its activities. The SCCF Project will enhance regional adaptation to climate change in Mediterranean marine and coastal areas through four lines of action: (i) stakeholder engagement and capacity building; (ii) application of best practices for climate resilience in the coastal zone; (iii) access to climate financing mechanisms; and (iv) knowledge management and project coordination. The project document for the SCCF Project is complete and will be submitted to UN Environment's Project Review Committee in October 2018.

Day 2 Agenda Item 1: Update on Child Project 1.1

53. A joint presentation on the development the Child Project 1.1 and its activities was made by representatives of the implementing and executing agencies – Ms. Eloise Touni of the Chemicals and Health Branch/ GEF Team at UN Environment and Ms. Marina Markovic of the UN Environment/ MAP – MED POL. Project activities under the CW component are designed to remove existing stockpiles of persistent organic pollutants (POPs) and mercury, and to prevent the generation of new wastes containing these pollutants. Disposal activities will be carried out in two phases. Phase 1 will target stockpiles verified during the current preparation phase of the project as being ready for immediate disposal, and Phase 2 will entail further inventories and data gathering to identify the remaining stockpiles that can be eliminated to meet the project's disposal targets. Prevention activities will focus on strategies for avoiding further generation of wastes containing mercury and two types of new POPs (PFOS and HBCD). An additional set of activities will be undertaken under the IW project component to produce an updated TDA for the Mediterranean (including gender assessment), a report on progress to impacts, a data sharing policy and an offshore monitoring strategy. The project document for Child Project 1.1 will be submitted to the GEF for endorsement in December 2018.

54. The representative of Lebanon inquired about the modalities for implementation of the activities, whether the new POPs targeted under the project could be expanded to include other chemicals (such as SCCP, a priority chemical for Lebanon), and also about how countries had been consulted about the International Waters (IW) activities. In terms of implementation modalities, Ms. Touni explained for each Phase 1 disposal site an environmental management plan (EMP) would be developed to establish responsibilities, identify national capacities and determine the need to bring in outside assistance. Regarding the possibility of considering additional new POPs for prevention activities, Ms. Touni indicated that it could be discussed, but recalled the existing proposals for Lebanon were designed to address the POPs identified in the country's NIP. Regarding the consultations on the IW activities, Ms. Markovic explained the meetings organized within the MAP system were used to consult the Contracting Parties of the Barcelona Convention (on, for example, national needs for IMAP – Integrated Monitoring and Assessment Programme – implementation, indicators and other relevant topics); proceedings of such meetings were used as a starting point in developing relevant sections of the project document. The Secretariat reconfirmed that the countries would have ample opportunity to review and comment on the project document prior to its submission to the GEF.

55. The representative of Egypt recalled that Egypt had expressed interest in participating in the national project activities, and had recently provided UN Environment with its NIP, the list of relevant national institutions and an indication of candidate companies for the development of prevention pilots. The representative of Egypt inquired about how the country could catch

up to the others in the project, about the possibility of reinforcing national capacities, and about the criteria for allocation of funds to the countries. She also expressed interest to receive more information on the forums used to consult the countries on the needs for the development of IW activities, in particular proceedings of the meeting held in July 2018 in Rome on the IMAP implementation. Ms. Touni, taking the questions in turn, explained that Egypt could not participate in Phase 1 for disposal but that this may be possible for Phase 2. In terms of enhancing national capacities, the EMP process for each disposal site will include an assessment of national capacities, and national experts will gain expertise by participating in execution of the EMP and inspection activities under the supervision of UN Environment consultants. Criteria for allocation of resources to priority sites is based on the presence of verified stockpiles that are ready for immediate disposal and also on the co-financing contribution that countries may bring to dispose additional quantities of waste. Priorities for disposal sites will be reviewed each year during the project's steering committee. Finally, Ms. Markovic assured that the requested information on the Rome meeting deliberations will be shared with the Government of Egypt.

56. The representative of Algeria underlined the importance of the project to the Government of Algeria, its wish to participate in the activities on mercury disposal and its need for capacity building with respect to mercury elimination and implementation of its NAP (National Action Plan). The representative of Algeria also informed participants that experts from UN Environment were currently being hosted in Algeria for a technical mission for the project and that all necessary information would be provided.

57. The representative of Montenegro confirmed that Montenegro's priorities for the project were well represented in the activities considered for the project, while inquiring whether the priorities for Phase 2 had been confirmed and expressing interest for hearing about possible synergies with Child Project 1.3. Ms. Touni responded that the project document would not make reference to sites for Phase 2. The first step of Phase 2 will be to confirm the presence of the chemicals reported in the national inventories/ accounted for in the project document, followed by decisions about site selection during the second or third steering committee meetings.

58. Mr. Roland Weber, Associated Expert of SCP/RAC, called on the GEF to consider activities on POPs that were not in NIPs but that were particularly dangerous, difficult and expensive to remove, and which are seriously affecting drinking water supplies.

Day 2 Agenda Item 2: Update on Child Project 1.2

59. Mr. Mark Pevsner, Senior Advisor – Strategy and Coordination Division Advisory Services Department/Projects Directorate of the European Investment Bank (EIB), explained that the primary objective of Child Project 1.2 is to prepare investments for physical infrastructure projects to reduce the discharges of untreated or partially treated wastewater that impact the sea. The target countries for Child Project 1.2 are Egypt, Lebanon and Tunisia, and the project document is nearly complete. The representative of UN Environment/ MAP – MED POL, Ms. Markovic, presented a component of the project that will support development of regional standards (wastewater management, sludge management, desalinization and aquaculture) for consideration and adoption by the Contracting Parties of the Barcelona Convention.

60. The representative of Tunisia recalled the country's strong involvement in the project. He asked about developments related to his recommendation (expressed at the First Consultation meeting from March 2018) for a coordinated approach in the implementation of the activities on mercury in Child Projects 1.1 and 1.2 , including how Tunisia would benefit from these. Ms. Touni explained that analysis was ongoing about whether mercury activities

originally foreseen under Child Project 1.2 would be taken up by Child Project 1.1, whereas Child Project 1.1 is not aiming to facilitate access to investments for decontamination, but rather focuses on removal of mercury from those countries that had ratified the Minamata Convention. Child Project 1.1 activities in Tunisia will thus be limited to removal of mercury stockpiles. The representative of EIB added that EIB would consider granting a loan for any well-prepared project on mercury decontamination that a country was prepared to undertake. The Secretariat recalled that the priorities of the Child Projects are set in the Programme Framework Document for the MedProgramme approved by the GEF in 2016, and that the first priority is to meet the targets set forth therein for disposal/removal and co-financing.

61. The representative of Lebanon indicated that the country has an important need for wastewater projects and capacity building in this domain, and asked for capacity building activities to be included in the project. Regarding the regional standards to be developed under the project, the representative of Lebanon emphasized the high relevance of regional wastewater and sludge management standards for her country. As regards desalination, the advice was to also take into account/address small and medium sized enterprises in Lebanon and their small-scale desalination capacities.

62. The Chair of GWP Med stated that the Mediterranean region needed active encouragement to shift towards non-conventional water resources, and considered that the regional standards to be developed under the project could contribute to this shift. Ms. Maria Diamanti, Environmental Expert of EIB, agreed that water reuse is important but noted that society's perception of this was poor. EIB works to raise awareness about the quality of treated wastewater, but ultimately it is a country's choice to encourage acceptance for the use of treated wastewater. As water becomes more scarce, the public's opinion about the use of treated wastewater may change. The Chair of GWP Med noted that there has been a rapid shift in the mentality of people regarding non-conventional water resources – including through efforts of religious leaders that have expressed support for the use of these kinds of water resources – and that the partners and countries of the MedProgramme should collectively step up efforts to encourage the use of these resources.

Day 2 Agenda Item 3: Update on Child Project 1.3

63. Two representatives of European Bank for Reconstruction and Development (EBRD) – Ms. Astrid Motta, Principal, Energy Efficiency and Climate Change, and Ms. Claudia Neuschulz, Analyst – presented the progress on the development of activities for Child Project 1.3, which is designed to reduce land-based sources of pollution in hotspots through a combination of technical assistance and investment grants to rehabilitate wastewater treatment plants and increase the volume of wastewater treated in the region. Under the CW component of the project, activities are being developed aiming to reduce and prevent 1,250 t of POPs. Like UN Environment, EBRD is an accredited GEF agency and has its own modalities for project preparation. EBRD intends to submit the project document for Child Project 1.3 to the GEF by December 2018.

64. Two examples of existing on-the-ground support from EBRB were presented. The first is a technology transfer platform designed to assist countries adopt best technologies; EBRD provides a loan to the countries to finance the implementation of the technology and countries later recover up to 25% of the loan from grants. The second example is an infrastructure project preparation facility.

65. The representative of Egypt inquired about the business model for the implementation of Child Project 1.3. Ms. Motta indicated that the project will be implemented through a combination of technical assistance and investment grants. EBRD assists companies to

identify the best technologies for their needs and proposes loans to enable companies to finance implementation of these technologies (for example to shift to PBC-free production methods, to promote water efficiency, …). Following successful implementation of the technologies, EBRD will reimburse a portion of the implementation cost. Countries are eligible for this assistance only if they are bankable (i.e., able to borrow money).

66. The representative of Lebanon asked for clarification about the specific activities foreseen in the project. The Secretariat responded that a portfolio of potential investments will be developed during the project preparation phase, but that it was not possible to commit to specific investments at present. The Secretariat also recalled that EBRD is an implementing agency of the GEF and as a development bank, has different working modalities than UN Environment regarding budgeting, reporting and execution of activities. In the MedProgramme, EBRD will also have its own project management budget which is separate from that of UN Environment. The management of projects in the UN Environment portfolio will be ensured through Child Project 4.1.

67. In response to a question from the representative of Egypt, the Secretariat clarified that the GEF funds provided for Child Project 1.3 are not for loans but rather for pre-investment studies to prepare investments. The representative of the GEF confirmed that the GEF provides seed money to institutions that can scale-up investments to deliver global environmental benefits.

68. The representative of Montenegro inquired about the consultations with countries for Child Project 1.3 that were announced during the First Regional Consultation, and indicated that the Government needed more details about activities (including on possible synergies between Child Projects 1.1 and 1.3) before preparing its letter of co-financing. The representative of EBRD explained that the consultations will take place in the coming weeks to inform the countries about the potential activities and the opportunities for investments/loans in the context of this project.

69. The representative of Tunisia asked whether the technical assistance activities of the project included pilot projects for the private sector to demonstrate the effectiveness of new technologies. The representative of EBRD confirmed that demonstration of new technologies is one of the key objectives for this work and that pilot projects could be financed.

Day 2 Agenda Item 4: Update on Child Project 3.1

70. Mr. Atef Limam, MedMPAnet Project Officer at SPA/RAC, described the main lines of action for Child Project 3.1, a project devoted to enhancing the management of Marine Protected Areas (MPAs) in Libya. These include capacity building for managers of MPAs in Libya, the revision of Libya's National Strategy on MPAs and its draft law on protected areas, and an inventory of marine and coastal sites of ecological importance. A consultation with Libyan stakeholders is planned for October 2018, and the project document will be submitted to the GEF in December 2018.

71. Mr. Mustafa Soliman, the GEF Operational Focal Point for Libya (hereafter the representative of Libya), indicated satisfaction with the proposed intervention in Libya and positive anticipation about the implementation of activities on the ground. Regarding the consultation with Libyan stakeholders, the representative of Libya indicated that his presence will be beneficial and that he will also extend the invitation to the Environment General Authority.

72. In response to a question raised about the possibility of MPAs imposing on navigation rights in the high seas, the representative of SPA/RAC confirmed that none of the MPAs in Libya are beyond national jurisdiction. However, efforts are underway in the context of the Barcelona

Convention to create a framework for the creation of MPAs that are beyond national jurisdiction.

Day 2 Agenda Item 5: Update on Child Project 2.2

73. Mr. Dimitris Faloutsos, Deputy Regional Coordinator of GWP Med, provided an overview of the design of activities for Child Project 2.2 and recalled its overarching objective: fostering water-food-energy security and the reduction of land based nutrient pollution and other pressures, through the adoption of the water-food-energy-ecosystems nexus approach. The project activities will follow four main lines of action: strengthening the capacities of institutions on the nexus approach; addressing nexus issues affecting the Mediterranean Sea LME; testing and upscaling nexus solutions; and engaging stakeholders in these processes. A consultation with the participating countries to confirm interest and priorities in the project will be organized in Beirut, Lebanon on the sidelines of the First MENA Nexus Roundtable that will take place from 26-28 November 2018.

Day 2 Agenda Item 6: Discussion

74. In summary, the representatives of Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro and Tunisia confirmed the importance of the MedProgramme for their countries and for the region, and endorsed the proposals of UN Environment/MAP on (i) the timeline for finalization of the Child Projects of the MedProgramme and their submission to the GEF Secretariat for endorsement; (ii) the development of the overarching strategies for Knowledge Management and Gender Mainstreaming; and (iii) the arrangements for execution of the MedProgramme through the MedProgramme Coordinating Unit (Med PCU).

75. Ms. Jula Selmani, the representative of the GEF Operational Focal Point of Albania (hereafter the representative of Albania), congratulated the partners and acknowledged the excellent quality of the workshop. She also indicated that although she had not been involved in the previous meetings and the development of the MedProgramme, she now had a clear vision of the process, thanks to the organization of the consultation. In closing, the representative of Albania declared that the strategy for the implementation of the MedProgramme appeared to be effective and would serve the needs of the countries.

76. The representative of Algeria asserted that the MedProgramme is an important opportunity for the region and predicted that it would result in success for countries and partners alike. She emphasized that the effective coordination among the countries and project partners during the preparation phase of the MedProgramme represented a positive start to the process. The representative of Algeria also announced that a coordination mechanism at the national level in Algeria will be implemented to ensure effective interaction with the regional coordination mechanism of the MedProgramme. In closing, the representative of Algeria confirmed that the country is committed to involving government institutions, the private sector and the media in the MedProgramme, and thanked the partners and the GEF for their assistance in depolluting the Mediterranean Sea.

77. Mr. Senad Oprašic, the GEF Operational Focal Point of Bosnia and Herzegovina (hereafter the representative of Bosnia and Herzegovina) thanked the partners for the excellent presentations and asserted that the two regional consultations had provided a solid foundation for the effective implementation of the projects of the MedProgramme. He furthermore recalled the priority that the Government of Bosnia and Herzegovina places on the alignment of all activities and results of the MedProgramme with national legislation, EU Directives and the requirements of EU acquis, as well as the SDGs. In closing, the

representative of Bosnia and Herzegovina wished success to all partners for the implementation of activities, and thanked UNESCO for hosting the meeting.

78. The representative of Egypt thanked the partners for the meeting and confirmed that the presentations had provided a clear indication of the links between the projects and how the MedProgramme is being implemented in a holistic manner. She promised to work to ensure effective communication among national partners involved in the activities, and expressed satisfaction with the fact that the countries sharing the Mediterranean were sitting around the same table and working together for the common good of the Sea. In closing, the representative of Egypt indicated her interest in the implementation of the Knowledge Management and Gender Mainstreaming Strategies and indicated her belief that these will assist countries in dealing with environmental challenges.

79. The representative of Lebanon thanked the partners for a fruitful meeting and reconfirmed the country's commitment to contribute to the MedProgramme and to share the necessary knowledge and information to support its successful execution. She underlined the importance of involving national stakeholders, of ensuring effective coordination and management, and of seeking synergies in the MedProgramme. In closing, the representative of Lebanon expressed her satisfaction with the progress achieved to date, and her positive anticipation for the initiation of the activities of the MedProgramme.

80. The representative of Libya recognized the partners for the progress achieved on the preparation of the MedProgramme, and confirmed that the consultation had been extremely useful for gaining a deeper understanding of the activities and how they will be carried out. He furthermore expressed appreciation for the chance to cooperate with the other countries in the region on the protection of the Mediterranean Sea. At the same time, the representative of Libya shared his concern about the MedProgramme's integrated approach to environmental challenges spanning several GEF focal areas, indicating that this can complicate activities on the ground. In closing, the representative of Libya wished all the partners success in the execution of their activities.

81. The representative of Montenegro thanked the partners for the all the work completed to date, and recalled that one of the benefits of a regional programme is the opportunity for activities covering many thematic areas at both the national and regional levels, which has great value for the countries. She recalled that Montenegro is in the stage of pre-accession to the EU and does not have the resources to finance all the corresponding obligations, and that for this reason it is important to identify additional sources of assistance. Besides the MedProgramme, the Government of Montenegro is also participating in the GEF Adriatic Project and the UN Environment Vienna biodiversity assessment in coastal and marine areas, which will lead to the establishment of three new MPAs in Montenegro. The representative of Montenegro also highlighted the synergies that were identified during the design of the MedProgramme, and notably the integration of activities between Child Project 2.1 and the SCCF Project in Montenegro, maintaining that without a programmatic approach this kind of synergy and integration would not have occurred. In closing, the representative of Montenegro acknowledged the effectiveness of the programmatic approach in terms of communication with partners on the design of activities, and her interest in the future implementation of the Knowledge Management and the Gender Mainstreaming Strategies.

82. The representative of Tunisia thanked the MedProgramme team for the progress achieved on the preparation of the projects and recalled the contributions of Tunisia throughout the process. He also underlined the importance of initiating efforts to establish the implementing modalities at the national level with the relevant institutions to avoid delays and to ensure that the objectives of the MedProgramme are achieved. In closing, the representative of Tunisia

stressed the need to identify synergies and complementarities among the activities of the MedProgramme, and more importantly, with other ongoing and future initiative in the region, such as Horizon 2020 and post-Horizon 2020 activities.

Day 2 Agenda Item 7: Conclusions and closing of the meeting

83. The Secretariat presented the conclusions and next steps recorded during the proceedings of the Second Regional Consultation and asked the GEF Operational Focal Points (or their representatives) for their comments and approval. The GEF Operational Focal Points (or their representatives) endorsed these conclusions and approved the next steps, which appear on page 1 of the present report.

84. The Coordinator of the UN Environment/MAP-Barcelona Convention Secretariat declared that the presentations and discussions had been illuminating and had helped to clarify for everyone once again the importance of the MedProgramme and the complex challenges that would be tackled by this ambitious and innovative joint initiative. He asserted that the overall level of buy-in and interest are high for the MedProgramme and assured that all the concerns raised by the Contracting Parties would be duly addressed in the final project documents, prior to their submission to the GEF Secretariat. The Coordinator thanked all participants for their continued commitment of energy, time and resources and expressed positive anticipation for the continued collaboration. In closing, the Coordinator recognized the contributions of the countries, the partners, the UN Environment team, the GEF and UNESCO, a gracious host for the event and an important partner of the programme.

85. The representative of UNESCO IHP expressed UNESCO's pleasure in hosting the participants of the consultation. Recalling that 21 September is the International Day of Peace, the representative of UNESCO IHP explained that people of all cultures and beliefs were present at UNESCO on this day to discuss peace, and declared that peace can also be built on science and environmental sustainability.

86. The Second Regional Consultation for the MedProgramme was closed at 17.00 on 21 September 2018.

Annex 1
Agenda of the Second Regional Consultation of the MedProgramme

Day 1: 20 September 2018	
9:00 – 9:30	*Registration*
9:30 – 10:00	Welcoming remarks: UNESCO-IHP, UN Environment/MAP and UN Environment/GEF
10:00 – 10:15	1. GEF and the Mediterranean Sea: 20 years of support and expectations under GEF-7
10:15 – 11:00	2. Remarks from the Permanent Delegations of UNESCO
11:00 – 11:30	*Coffee Break*
11:30 – 12:00	3. Setting the scene and objectives of the consultation: UN Environment/MAP
12:00 – 12:30	4. Progress report on preparation of the MedProgramme Child Projects and on their submission to the GEF: UN Environment/MAP
12:30 – 13:00	5. Update on Child Project 4.1: UN Environment/MAP
13:00 – 14:30	*Lunch*
14:30 – 15:00	6. Knowledge Management in the MedProgramme: UN Environment/MAP
15:00 – 15:30	7. Coordination with the GEF's established knowledge management platforms: IW:LEARN and LME:LEARN
15:30 – 16:00	8. Gender Mainstreaming in the MedProgramme: UN Environment/MAP
16:00 – 16:15	*Coffee Break*
16:15 – 17:00	9. Update on Child Project 2.1: GWP-Med, PAP/RAC, Plan Bleu and UNESCO-IHP
17:00 – 17:30	10. Update on the GEF Special Climate Change Fund Project: UN Environment/MAP
17:30– 17:45	11. Conclusions of Day 1
17:45	*End of Day 1*

Day 2: 21 September 2018	
9:00 – 9:15	Opening remarks: UN Environment/MAP
9:15 – 10:00	1. Update on Child Project 1.1: UN Environment/Chemicals and Waste, MED POL, SCP/RAC, Plan Bleu
10:00 – 10:45	2. Update on Child Project 1.2: EIB and MED POL
10:45 – 11:15	*Coffee Break*
11:15 – 12:00	3. Update on Child Project 1.3: EBRD
12:00 – 12:30	4. Update on Child Project 3.1: SPA/RAC, WWF and IUCN
12:30 – 14:00	*Lunch*
14:00 – 14:30	5. Update on Child Project 2.2: GWP-Med
14:30 – 16:00	6. Discussion: • Added-value of GEF programmatic approach; • Complementarities among the Child Projects; • Feedback from the GEF Operational Focal Points.
16:00 – 16:30	*Coffee Break*
16:30 – 17:00	7. Conclusions and closing of the meeting – UN Environment/MAP, UN Environment/GEF and UNESCO-IHP
17:00	*End of the consultation*

Annex 2
Participants of the Second Regional Consultation of the MedProgramme

COUNTRY REPRESENTATIVES

Ms. Jula Selmani
Chief of Projects Unit
National Agency of Protected Area (NAPA)
Ministry of Tourism and Environment
Albania
Blvd. Zhan d'Ark, no. 23,Tirana
Tel: +355 4 2225068
Email: Jula.Selmani@akzm.gov.al

Ms. Samira Hamidi
Inspectrice Centrale de l'Environnement
et du Développement Durable
Ministère des Ressources en Eau et de l'Environnement
Direction Générale de l`Environnement et du Développement Durable
3 Rue Caire, Kouba, Alger, Algeria
Tel: +213 0 21432847
Mob: +213 5 59013340, 213 5 50919596
Email: natechesamira@yahoo.fr

Dr. Senad Oprašic
Head of Environmental Protection Department
Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina
Musala 9
Sarajevo 71000 Bosnia and Herzegovina
Tel: +387 33953536
Email: senad.oprasic@mvteo.gov.ba

Ms. Abir AbuZeid
Undersecretary
International Coop. & Tech. Assistance
Egyptian Environmental Affairs Agency
Ministry of Environment
30 Misr Helwan Elzrae Road
Cairo, Egypt
Tel/Fax: +202 2526 6016
Email: aabuzeid.moic@gmail.com

Ms. Olfat Hamdan
Ministry Of Environment
Lazarieh uilidng, Block 2-A,
7th Floor, Room 7-16
Beirut, Lebanon
Tel: +961 (0)1 976555- Ext:448
+961 (0)3 998334
Fax: +961 (0)1 976530
Email: o.hamdan@moe.gov.lb

Mr. Mustafa Soliman
GEF Operational Focal Point
EGA & UNDP Coordinator
Tripoli, Libya
Tel: +218 92 669 8284
+218 91 391 0579
Email: mustafa.ega@gmail.com

Ms. Ivana Stojanovic
Advisor
Department for Mediterranean Affairs
Ministry of Sustainable Development and Tourism
IV Proleterske brigade 19
Podgorica 81000 Montenegro
Tel: +382 67338108
Email: stojanovic_ivana@hotmail.com

Mr. Karim Sahnoun
Director of Conventions and Cooperation Projects Follow-up
Directorate General of External Relations
Ministry of Local Affairs and the Environment
Tunis, Tunisia
Tel : +216 70 243 800- 70 243 809
Fax : +216 71 955 360
Email: karim.sahnoun@mineat.gov.tn

Annex 2
Participants of the Second Regional Consultation of the MedProgramme

PERMANENT DELEGATIONS TO UNESCO

Permanent Delegation of Albania to UNESCO
1, Rue Miollis
75015 Paris, France
Tel : +331.45.68.32.44 / 01.45.68.32.40
Email: dl.albania@unesco-delegations.org
H. E. Mr Ferit Hoxha, Ambassador Extraordinary and Plenipotentiary, Permanent Delegate

Permanent Delegation of the Arabic Republic of Egypt to UNESCO
1, Rue Miollis
75015 Paris, France
Tel : +331.45.68.33.09
Email: dl.egypt@unesco-delegations.org
Mr. Amr Abdallah Morsy, First Secretary

Permanent Delegation of Lebanon to UNESCO
1, Rue Miollis
75015 Paris, France
Tel : +331.45.68.33.80/81/83
Email: dl.lebanon@unesco-delegations.org
S. Exc. Madame Sahar BAASSIRI, Ambassador, Permanent Delegate

Permanent Delegation of Montenegro to UNESCO
5, Rue de la Faisanderie
75016 Paris, France
Tel: +331.53.63.80.30
Email: dl.montenegro@unesco-delegations.org
H. E. Ms Dragica Ponorac Ambassador Extraordinary and Plenipotentiary of Montenegro to France, Permanent Delegate

Délégation permanente de la Tunisie auprès de l'UNESCO
1, Rue Miollis
75015 Paris, France
Tel : +331 45 68 29 92/93
Email: dl.tunisia@unesco-delegations.org
S. Exc. Monsieur Ghazi GHERAIRI, Ambassadeur, Délégué permanent ; & Mr. Anis SAADAOUI, délégué Permanent Adjoint

PARTNERS

Ms. Alice Aureli
Chief of Section
Section on Groundwater Systems and Settlements
UNESCO International Hydrological Programme
7 place Fontenoy
75007 Paris, France
Email: a.aureli@unesco.org

Mr. Youssef Filali-Meknassi
Senior Programme Specialist
UNESCO International Hydrological Programme
7 place Fontenoy
75007 Paris, France
Tel: +33145681221
Email: y.filali-meknassi@unesco.org

Ms. Chloé Meyer
Consultant
UNESCO International Hydrological Programme (IHP)
7 place Fontenoy
75007 Paris France
Tel: +33 (0)1 45 68 19 51
Email: c.meyer@unesco.org

Mr. Ivica Trumbic
Consultant
UNESCO Intergovernmental Oceanographic Commission
Tel: +33145682268
Email: i.trumbic@unesco.org

Mr. Mish Hamid
Programme Specialist
UNESCO Intergovernmental Oceanographic Commission (IW :LEARN)
Tel: +33145682247
Email : m.hambid@unesco.org

Ms. Natalie Degger
Associate Project Officer
UNESCO Intergovernmental Oceanographic Commission (IW:LEARN)
Tel : +33145682246
Email: n.degger@unesco.org

Annex 2
Participants of the Second Regional Consultation of the MedProgramme

Mr. Josu Icaza
Project Assistant, IW :LEARN
UNESCO Intergovernmental Oceanographic Commission
Tel: +33145681756
Email: j.icaza@unesco.org

Ms. Eve El Chehaly
UNESCO Intergovernmental Oceanographic Commission
Consultant, IW :LEARN
Tel: +33145682203
Email: e.el-chehaly@unesco.org

Mr. Mark Pevsner
Environmental Expert
European Investment Bank (EIB)
98-100 Boulevard Konrad Adenauer
L-2950 Luxembourg
Tel: +352 439 85234
Email : m.pevsner@eib.org

Ms. Maria Diamanti
Environmental Expert
European Investment Bank (EIB)
98-100 Boulevard Konrad Adenauer
L-2950 Luxembourg
Tel: +352 439 85234
Email : m.diamanti@eib.org

Mr. Mohammed Sutari
Expert
MeHSIP Jordan
European Investment Bank – EIB
Amman, Jordan
Tel: +962 790491757
Email: m.sutari@eib.org
Email: mehsit.jordan@gmail.com

Mr. Faouzi Ben Amor
MeHSIP Environmental Expert
Project Directorate
European Investment Bank
70, Ave. Mohamed V
Tunis 1002 Tunisia
Tel: +21671118900
Cell: +21698206885
Fax: +21671280998
Email: f.benamor@eib.org

Mr. Walid Salim
Senior Environmental Expert
European Investment Bank - EIB
Cairo, Egypt
Tel: +201271110814
Cell: +201271110814
Email: w.salim@eib.org

Ms. Claudia Neuschulz
Analyst
European Bank for Reconstruction and Development (EBRD)
One Exchange Square
London, United Kingdom
Tel: +44 2073388579
Email: neuschuc@ebrd.com

Ms. Astrid Motta
Principal
Sustainable Resource Investments
European Bank for Reconstruction and Development (EBRD)
One Exchange Square
London, United Kingdom
Tel: +44 2073387173
Email: mottaa@ebrd.com

Mr. Manuel Clar Massanet
Associated Expert
Regional Activity Centre For Sustainable Consumption
and Production (SCP/RAC)
Miquel Santandreu 27 2 2
Palma de Mallorca 07006 Spain
Tel: +34678562455
Email: manoloclar@yahoo.com

Ms. Kimberley de Miguel
Project Manager
Toxic Chemicals
Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC)
Carrer de Sant Antoni Maria Claret, 167
Barcelona 08025 Spain
Tel: +34938823501
Cell: +34666481548
Email: kdemiguel@scprac.org

Annex 2
Participants of the Second Regional Consultation of the MedProgramme

Ms. Magali Outters
Team Leader Policy Area
Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC)
Carrer de Sant Antoni Maria Claret, 167
Barcelona 08025 Spain
Tel: +34938823501
Email: moutters@scprac.org

Mr. Roland Weber
Expert
Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC)
Carrer de Sant Antoni Maria Claret, 167
Barcelona 08025 Spain
Tel: +34938823501
Email: roland.weber10@gmail.com

Ms. Daria Povh Skugor
Senior Programme Officer
Priority Actions Programme Regional Activity Centre (PAP/RAC)
Kraj Sv. Ivana 11
Split 21000 Croatia
Tel: +385 21 340 478
Email: daria.povh@paprac.org

Mr. Antoine Lafitte
Programme Officer
Plan Bleu - RAC
271 Corniche Kennedy
13007 Marseille France
Tel: +33786381720
Cell: +33786381720
Email: alafitte@planbleu.org

Mr. Atef Limam
Project Officer
SPA/RAC
Boulevard du Leader Yasser Arafat
P. O. Box B.P. 337
Tunis 1080 Tunis Cedex
Tunisia
Tel: +21671947162
Cell: +21694243866
Fax: +21671947506
Email: atef.limam@spa-rac.org

Mr. Michael Scoullos
Chairman MIO-ECSDE & GWP-Med
12, Kyrristou str.
Athens 10556 Greece
Tel: +30 210 3247490
Email: scoullos@mio-ecsde.org

Mr. Dimitrios Faloutsos
Deputy Regional Coordinator
Global Water Partnership - Mediterranean
12, Kyrristou str.
Athens 10556 Greece
Tel: +302103247490
Cell: +306948827451
Email: dimitris@gwpmed.org

Ms. Mouna Abaab
Project Officer
WWF MEDITERRANEAN
NORTH AFRICA
Tunis, Tunisia
Tel: +216 71 751550
Email: mabaab@wwfna.org

Annex 2
Participants of the Second Regional Consultation of the MedProgramme

UN SYSTEM ORGANISATION

Mr. Steffen Hansen
Environmental Specialist
Europe and Central Asia regional team,
International waters
Global Environment Facility (GEF)
1899 Pennsylvania Ave NW,
Washington DC, 20006, USA
Tel: +1 202 4588796
Email: shansen@thegef.org

UN ENVIRONMENT

Mr. Yegor Volovik
GEF IW Portfolio Manager
Ecosystems Division
UNEP
UN Environment, Headquarters
P. O. Box 30552
Nairobi 00100 Kenya
Tel: +254207626707
Cell: +254716055792
Email: yegor.volovik@unep.org

Mr. Gaetano Leone
Coordinator
UN Environment/MAP
48 Vas. Konstantinou
11635 Athens Greece
Tel: +30 210 7273100
Email: gaetano.leone@un.org

Mr. Lorenzo Paolo Galbiati
Projects Manager
UN Environment/MAP
48 Vas. Konstantinou
11635 Athens Greece
Tel: +30 210 7273106
Email: lorenzo.galbiati@un.org

Ms. Eloise Touni
Task Manager
UN Environment
Geneva, Switzerland
Tel: +41229178607
Email: eloise.touni@un.org

Ms. Shelley Farrington Gavalas
Project Assistant
MedProgramme/GEF Projects
UN Environment/MAP
48 Vassileos Konstantinou
Athens 11635 Greece
Tel: +302107273135
Email: shelley.farrington-gavalas@un.org

Mr. Matthew Lagod
MedProgramme Consultant
UN Environment/MAP
48 Vas. Konstantinou
11635 Athens Greece
Email: matthew.lagod@un.org

Ms. Marina Markovic
MED POL consultant
UN Environment MAP
Vas. Konstantinou 48
Athens 11635 Greece
Tel: +302107273116
Cell: +306945836441
Email: marina.markovic@unep.org

Mr. Andrea Merla
MedProgramme Consultant
Assisi, Italy
Email: merla.andrea@gmail.com

Ms. Lucilla Minelli
Knowledge Management Specialist
Perugia, Italy
Email: lucilla.minelli@gmail.com

Ms. Debasmita Boral
Gender Consultant
Nairobi, Kenya
Email: debasmita.boral@gmail.com

Annex Q: M&E Plan

Project start:
A Project Inception Workshop will be held within the first 8 months of project start, with participation of those with assigned roles in the project organization structure. The Inception Workshop is crucial to building ownership for the project results and to plan the annual work plans for the first 2 project years. It is anticipated that the Inception Workshop will also be the de facto first meeting of the Project Steering Committee.

The Inception Workshop will address a number of key issues including:

1. Assisting all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UN Environment, MAP and MedPCU staff vis à vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms.
2. Based on the Project Results Framework and the Chemicals and Waste and International Waters GEF Tracking Tools, the Annual Work Plans for the first two years will be finalized. Indicators, targets and their means of verification will be reviewed, revised (as needed) and agreed, and assumptions and risks will be re-checked.
3. A detailed overview of reporting, monitoring and evaluation (M&E) requirements will be provided. The Monitoring and Evaluation work plan budget will be agreed and scheduled.
4. Financial reporting procedures and obligations will be discussed.

Project governance meetings will be planned and scheduled, and the overall project governance mechanisms will be reviewed and further fine-tuned, giving particular attention to cost-efficiency, enhanced stakeholder ownership, and the continuity of efforts towards SAP implementation beyond the project life span. Roles and responsibilities of all project organization structures will be clarified, and a meeting/reporting calendar will be elaborated

Together with the GEF approved Project Document, the Inception Workshop Report will constitute a key reference document for the Project and will be prepared and shared with participants to clarify and formalize various agreements and plans decided during the meeting.

Annually
Project Implementation Report (PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (1 July to 30 June). The PIR combines both UN Environment and GEF reporting requirements. The PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative);
- Project outputs delivered per project outcome (annual);
- Lesson learned/good practice;
- Annual Work Programme (AWP) and other expenditure reports;
- Risk and adaptive management; and
- GEF Chemicals and Waste and International Waters Tracking Tool indicators.

Mid-term of project cycle

The IA Task Managers will organize and coordinate an independent Mid-Term Review, to determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; it will highlight issues requiring decisions and actions, and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the Mid-Term Review will be decided after consultation between the parties. The Terms of Reference for this Mid-Term Review will be prepared by the Implementing Agencies in line with the guidance provided by the UN Environment Evaluation Office.

The Evaluation Office will determine whether an independent Mid Term Evaluation (MTE) is required at the mid-point of project implementation, based on significant delays or implementation issues at that time. This is a more exhaustive and in-depth process which is conducted by the UN Environment Evaluation Office in collaboration with the Implementing Agencies.

Information in the GEF Chemicals and Waste and International Waters Tracking Tools will also be updated during the mid-term evaluation cycle.

End of Project

In-line with UN Environment Evaluation Policy and the GEF's Monitoring and Evaluation Policy the project will be subject to a Terminal Evaluation.

The Evaluation Office will be responsible for the Terminal Evaluation (TE) and will liaise with the Task Manager and Executing Agency(ies) throughout the process. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UN Environment, the GEF, executing partners and other stakeholders. The direct costs of the evaluation will be charged against the project evaluation budget. The Terminal Evaluation will be initiated no earlier than six months prior to the operational completion of project activities and, if a follow-on phase of the project is envisaged, should be completed prior to the submission of the follow-on proposal. Terminal Evaluations must be initiated no later than six months after operational completion.

The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized and further reviewed by the GEF Independent Evaluation Office upon submission. The evaluation report will be publicly disclosed and may be followed by a recommendation compliance process.

Mid-Term Review of the UNEP Project

Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts



August 2024

This report has been prepared by an external consultant as part of a Mid-Term Review, which is a management-led process to assess performance at the project's mid-point. The UNEP Evaluation Office provides templates and tools to support the review process. The findings and conclusions expressed herein do not necessarily reflect the views of Member States or the UN Environment Programme Senior Management.

For further information on this report, please contact:

UN Environment Programme,
Industry and Economy Division
Email: unep-gef@un.org
Telephone: +254 (0) 20 762 3321

Mid-Term Review of the UNEP/GEF project "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts"

(GEF Project ID: 9684)
(Date 07/2024)

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ACKNOWLEDGEMENTS

This Mid-Term Review Report was prepared for UNEP/GEF by Dalibor Kysela.

The reviewer would like to express their gratitude to all persons met and who contributed to this review, as listed in Annex II.

In particular, the reviewer would like to thank the Medprogramme PCU members, namely Mr. Mohamad Kayyal, Ms. Olfat Hamdan, Ms. Maren Mellendorf, as well as Mr. Jordi Moles Matinero from MedWaves, for their contribution and collaboration throughout the review process.

The review consultant hopes that the findings, conclusions and recommendations will contribute to the successful finalisation of the current project, formulation of a next phase and to the continuous improvement of similar projects in other countries and regions.

BRIEF EXTERNAL CONSULTANT BIOGRAPHY

Dalibor Kysela (MSc., Dipl. Ing.) is an independent consultant with 25+ years of experience in planning, implementation, monitoring and evaluation of projects and programmes on industrial, communal and health care waste management, river basin and coastal management, renewable energy and energy efficiency, and environmental monitoring. Throughout his professional carrier, Mr. Kysela served in three UN agencies, namely UNIDO, IAEA and UNDP. In retirement, he acts as independent consultant for evaluation and implementation of development assistance projects implemented by various agencies of the UN system.

ABOUT THE REVIEW

Joint Review: No

Report Language: English

Review Type: Mid-term Review

Brief Description: This report is a management-led Mid Term Review of a UNEP/GEF project implemented between 2020 and 2024. The project's overall development goal is to achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas. This goal is to be achieved through a multi-focal area collaboration between the respective two project components related to the GEF Chemicals and Waste and International Waters focal areas.

The review assesses the project performance (in terms of relevance, effectiveness and efficiency), and determines outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The review has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the GEF and the relevant agencies in the project participating countries.

Key words: POPs, PCBs, mercury, waste management, marine environments;

Primary data collection period: April – June 2024

Field mission dates: 10-15 June 2024 (Bosnia and Herzegovina) and 17-22 June 2024 (Tunisia)

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LIST OF ACRONYMS

ASM	Annual Stocktaking Meeting
BRS	Basel-Rotterdam-Stockholm
CETI	Centre for Eco-Toxicological Investigations
CI	Common Indicator
CIEMAT	Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas
CP	Child Project
CW	Chemicals and Waste
EA	Executive Agency
EP	Executing Partner
EMP	Environmental Management Plan
EOP	End-of-Project
GEB	Global Environmental Benefits
GRID	Global Resource Information Database
HBCD	Hexabromocyclododecane
HEIS	Hyydro-Engineering Institute Sarajevo
IA	Implementing Agency
IW	International Waters
MAP	Integrated Monitoring and Assessment Programme
MAP	Mediterranean Action Plan
MC	Minamata Convention
MEAs	Multilateral Environmental Agreements
MED QSR	Mediterranean Quality Status Report
MoU	Memorandum of Understanding
MTR	Mid-Term Review
M&E	Monitoring & Evaluation
NBB	National Baseline Budget
NGO	Non-Governmental Organisation
PCBs	Polychlorinated Biphenyls
PCU	Project Coordinating Unit
PFD	Programme Framework Document
PFOS	Perfluorooctane Sulfonic Acid
PIR	Project Implementation Reports
PMC	Project Management Costs
POPs	Persistent Organic Pollutants
PRC	Project Review Committee
PRF	Project Results Framework
ProDoc	Project Document (must be reviewed by PRC before any project can be undertaken, with the approval of the managing division director)
PSC	Project Steering Committee
SCCPs	Short-Chain Chlorinated Paraffins
SCP/RAC	Regional Activity Centre for Sustainable Consumption and Production
DG	Sustainable Development Goals

SSFA	Small Scale Funding Agreement
TDA	Transboundary Diagnostic Assessment
ToC	Theory of Change
ToR	Terms of Reference
UNEP	United Nations Environment Programme
UNEG	United Nations Evaluation Group
UNDP	United Nations Development Programme
UNON	United Nations Office in Nairobi
UNOPS	United Nations Office of Project Services

PROJECT IDENTIFICATION TABLE

Table 1: Project Summary

GEF Project ID/SMA ID:	33512		
Implementing Agency (UNEP Division/Branch/Unit):	UNEP Industry and Economy Division (C&W focal area) and UNEP Ecosystems (IW focal area)	**Executing Agency:**	UNEP Mediterranean Action Plan (UNEP/MAP)
Sources of Funding (Co-finance):	*Country (ies):*	*Institution Name/Type:*	
Relevant SDG(s):	SDG 12		
MTS (at approval):		**UNEP approval date:**	2 March 2020
POW Output(s) number/reference ***(applicable for projects approved pre-2022)***	*POW Output:*	**POW Expected Accomplishment(s) number/reference** ***(applicable for projects approved pre-2022):***	*POW Expected Accomplishment:*
Sub-programme:	Chemicals and pollution action	**Programme Coordination Project:**	
UNEP approval date:	2 March 2020	**GEF approval date:**	21January 2020
GEF Operational Programme #:		**GEF Strategic Priority:**	
Project type:	Full Size Project	**Focal Area(s):**	Chemicals and Waste, International Waters
***Expected* start date:**		**Actual start date:**	7 May 2020
***Planned* completion date:**	31 March 2025	**Actual operational completion date:**	
***Planned* total project budget at approval:**	14,250,000 US$	**Actual total expenditures reported as of 31 March 2024:**	5,983,343.85 US$
GEF grant allocation:	114,030,000 US$	**GEF grant expenditures reported as of 03/2024:**	5,983,343.85 US$
***Expected* Medium-Size Project/Full-Size Project co-financing:**	53,146,727 US$	**Secured Medium-Size Project/Full-Size Project co-financing:**	*Not provided*
No. of formal project revisions:	n/a	**Date of last approved project revision:**	n/a
No. of Steering Committee meetings:	4	**Date of Last Steering Committee meeting:**	5 March 2024
Mid-term Review/ Evaluation *(planned date):*	September 2023	**Mid-term Review/ Evaluation (actual date):**	April – August 2024
Coverage - Country(ies):	Albania, Libya, Montenegro, Morocco, Tunisia, Bosnia-Herzegovina, Egypt, Lebanon, Algeria, Turkey	**Coverage - Region(s):**	
Dates of previous project phases:	n/a	**Status of future project phases:**	n/a

EXECUTIVE SUMMARY

Project Background

1. The objective of the UNEP/GEF project "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts" (GEF ID 9684) is to achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas to be achieved through a multi-focal area collaboration between the respective two project components related to the GEF Chemicals and Waste and International Waters focal areas. It is the Child Project 1.1 of the regional Mediterranean Sea Programme.

This Review

2. This document presents the final report for the Mid-Term Review (MTR) of the MedProgramme Child Project 1.1 "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts". In line with the UNEP Evaluation Policy, MTRs are undertaken approximately half-way through the project implementation to analyse whether the project is on track, what problems and challenges the project is encountering and which corrective actions are required.
3. As a standard requirement for all projects financed by GEF, this MTR was initiated by the Implementing Agency, in this case the UNEP Industry and Economy Division.
4. The purpose of this MTR is to assess the project performance to date (in terms of relevance, effectiveness, efficiency, and sustainability, determine the likelihood of the project delivering the planned outputs and achieving its intended outcomes. It covers all activities undertaken in the framework of the project since the official start of the project implementation in April 2020.

Key Findings

5. The particular strength of the project design is the aim to develop linkages between the Stockholm and Minamata Conventions and their delivery mechanisms at national and regional level for capacity on chemicals and waste to be linked across thematic and sectoral boundaries. The justification of the project is based on the fundamental and pressing issue linking environmental quality and human health.
6. By focusing on the Barcelona Convention processes and its governance mechanisms, the project offers a framework for the regional cooperation with the potential to consolidate all the information derived from various fragmented initiatives implemented in the Mediterranean and produce a comprehensive and coherent diagnostic focused on transboundary issues. Another strength of the project is its focus on harmonization of the existing data platforms, monitoring protocols and common indicators to comply with the Barcelona Convention's ecosystem approach-based Integrated Monitoring and Assessment Programme (IMAP).
7. The linking of the Chemicals and Waste and International Waters components under the umbrella of a single Child Project was driven by the aim to see how the reduction of land-based pollution by POPs and mercury is reflected in reduced environmental stress and improved status of coastal waters in the Mediterranean.
8. The above underlying idea of the project is at the same time also its main weakness as it aims to combine interventions on scattered land-based pollution hotspots as purely national initiatives with very few possibilities for regional grouping with transboundary assessment of the marine ecosystem as essentially regional in nature. Moreover, reduction of land-based pollution and work on transboundary issues in coastal regions

involve different stakeholders and face dissimilar technical as well as political challenges.

9. The project is on track for delivery of the two waste reduction outputs under Component 1 in terms of management and safe disposal of PCBs and management and safe storage of mercury waste (Outputs 1.1 and 1.2), although the progress has been relatively slow as a result of the initial delays in contracting the waste removal services and time-consuming procedures for obtaining all documentation required in line with the provisions of the Basel Convention.

10. On the contrary, the progress on the two outputs addressing prevention of waste has been only marginal, in particular on Output 1.4 dealing with prevention of mercury waste. The project is behind the planned schedule, and it is likely that it will not achieve the planned waste prevention target by the original project completion date (end of March 2025). Recently, the project got approved extension until March 2026.

11. While there has been visible progress towards development of three out of four outputs of Component 2, these are general outputs not directly linked to identification of impacts of the specific land-based pollution reduction addressed through the waste reduction and prevention outputs of Component 1. Implementation of the fourth output that is based on analysis and compilation of information generated under Component 1 has not started yet.

12. Despite invitations to PSC meetings included GEF Focal Points and the Project Focal Points, representation in the PSC meetings of national focal institutions involved in the International Waters part of the project was weak for several countries. Consequently, discussion at the PSC meetings has almost exclusively focussed on implementation of the Chemicals and Waste part of the project with almost non-existent focus on links and cooperation between the two project components.

13. The project reporting has been conducted in line with the requirements of GEF and the progress reports found to be sufficiently detailed and the reporting formats in compliance with the UNEP and GEF reporting standards. In general, the project reporting ensured transparent information flow across the executing partners and the project key stakeholders.

14. However, access of the MTR consultant to various project-related documents, such as workplans, budget revisions, terms of references, contracts and their deliverables, was possible only on basis of ad-hoc requests as there is no repository of the relevant project documentation required for the MTR.

15. The project's financial resources have been managed in compliance with relevant UNEP/GEF financial management standards and procedures. The project financial information broken down by components and years of implementation was available for the MTR. However, information on actually realised co-financing by the project partners and beneficiary has not been systematically tracked during the project implementation.

Conclusions

16. The project has successfully enabled collaboration among a large set of stakeholders, including high ranking national authorities and educational/research institutions. It has also taken advantage of complementarities with parallel projects implemented by sister UN agencies in several participating countries and achieved thus synergies and faster progress towards the planned results while making savings on project financial resources.

17. Furthermore, the project has been successful in building ownership, interest and commitment of the participating government institutions and stakeholders despite

political challenges in few project countries and related difficulties in planning and execution of specific activities in those countries. However, the very slow progress towards ratification of the Minamata Convention in two project countries hampers implementation of specific activities on mercury waste disposal.

18. The effectiveness of implementation was affected by Covid-19 pandemic in the first year of the project, slow and complicated procurement of waste disposal services, lack of coordination at the level of some participating countries, as well as by temporary shortfall of staffing at the Project Coordination Unit. The project team has taken several steps of adaptive management in order to address the above issues.

19. The project is now at the start of the 5th and last year of implementation. Due to the combined effect of covid-19 restrictions in the 1st year and slow progress of work on delivery of some sub-components in the following years, several project activities were delayed and/or modified. Despite several adaptive management measures of the project team, the delivery of some outputs has been slower than expected. The executing partners expressed uncertainty whether all activities for delivery of planned results could be completed within the remaining time period of the project. Therefore, extension of the project will be proposed under recommendations.

20. Based on the findings from this review, the project has demonstrated strong performance in the areas of adaptive management, reporting and communication. Areas that require attention in the remaining project time period include delivery of POPs and mercury waste prevention outputs, monitoring of co-financing information, as well as links between the institutions involved in the CW and IW components at the level of participating countries.

Lessons Learned

21. Lesson 1: Experience from implementation of the project has demonstrated the need for full staffing of the dedicated PCU to ensure timely implementation, reporting and delivery of planned outputs.

22. Lesson 2: The lack of a TOC and 'output to outcome' analysis during the project design resulted in lost opportunities to better test project assumptions and drivers, which would have provided valuable data to inform and refine project implementation strategies and approach.

23. Lesson 3: There are positive and negative aspects of UN-to-UN transfer agreements. For conclusion of such agreements, the UN partner organisations need time for review and approval of specific agreement provisions. While such agreement might meet the needs in case of ineffective coordination structures at the country level, the speed of implementation might be affected by specific rules and regulations of the receiving UN partner.

24. Lesson 4: Weak national stakeholder representation in the PSC for the IW component of the project did not ensure internal coherence and links between the two project components at the level of the participating countries. The national representation should be based on consultations on CP 1.1 at the level of each participating country.

25. Lesson 5: Linking the component comprising concrete measures for reduction of coastal pollution hotspots with a component on general coastal pollution monitoring does not ensure ability to track impacts of the reduced pollution.

Recommendations

26. Recommendation 1: Project extension: The project executing partners should prepare estimates for completion of their respective activities that will serve for preparation of a justified proposal for project extension of at least 6 months to be presented for approval

by the extraordinary PSC meeting in September 2024. This proposal should also include budget revision to cover the increased costs of project management during the project extension period.

27. Recommendation 2: Stakeholder representation: The project executing partners should ensure that representation of all project countries at the PSC meetings includes also national focal institutions responsible for Component 2.
28. Recommendation 3: Budget revision: The Executing Agency (MedPCU) should request approval of the Implementing Agency for revision of the project budget to repurpose part of the budget for mercury disposal for increase of the amount of PCB waste disposed.
29. Recommendation 4: Revision of PRF target: MedProgramme PCU should elaborate justified estimation of quantities of PCB waste that can be realistically disposed of within the remaining project time and budget and prepare a proposal for revised end-of-project target for Output 1.1 for presentation to the next PSC meeting.
30. Recommendation 5: Reporting: The MedProgramme PCU should systematically collect information on the actually realised co-financing broken down by sources of co-financing and report this information in 2024 PIR and subsequent annual PIRs.
31. Recommendation 6: Repository of documents for TE: The MedPCU should systematically compile all documents relevant for the project MTR and TE in line with the "List of Documents for MTR" and store them in a dedicated repository of project documentation available to project evaluators.
32. Recommendation 7: Monitoring of PCB and mercury sites: In order to see direct impacts of the pollution reduction, the project partners should consider support for establishment of pollution monitoring programmes at the PCB- and mercury-contaminated sites.
33. Recommendation 8: PCU strengthening: The MedPCU should strengthen its administrative arm through accelerated recruitment of the Finance Budget Officer and Finance Assistant of the MedPCU.
34. Recommendation 9: Gender assessment: The MedPCU should ensure that the gender specialist recruited by UNOPS conducts assessment of implementation of the CP 1.1 Gender Action Plan and provide recommendations for a more targeted approach of future interventions so that these can benefit from the gender-responsive actions and capacity building.

I. PROJECT OVERVIEW

35. The Mediterranean Sea - the largest semi-enclosed sea in the world - is shared by 21 countries and its coastal areas are undergoing a dramatic process of development. As a result of the increased demand for space, water and natural resources, the stress on coastal ecosystems and the infringement on natural and agricultural land is continuously increasing.

36. Eighty per cent of the pollution load of the Mediterranean Sea originates from land-based sources, mainly in the form of untreated discharges of urban waste (which includes microbiological, nutrient and chemical contaminants) and releases of untreated industrial wastewater. Lack of sewage collection, as well as insufficient treatment and disposal infrastructures remain to be the greatest challenge in many Mediterranean countries. To add to this, agricultural practices cause significant soil erosion and pesticide pollution of surface and groundwater resources, consequently affecting the coastal and marine ecosystems. Uncontrolled coastal development, population expansion and increasing coastal tourism, unregulated and often unsustainable freshwater extraction from coastal aquifers, are among the greatest threats to the marine and coastal ecosystems.

37. The continued degradation of the Mediterranean coastal zone and marine environments, coupled with the urgent growing impacts of climate variability, the loss of livelihoods and dramatic deterioration of social conditions along critical sections of the Southern and Eastern Mediterranean shores, prompted the development of the Mediterranean Sea Programme: Enhancing Environmental Security (MedProgramme) representing the first GEF programmatic multifocal area initiative in the Mediterranean Sea. Its eight Child Projects cut across four different Focal Areas of the GEF and involve a wide spectrum of developmental and societal sectors.

38. Child Project 1.1 contributes to the MedProgramme Component 1: Reduction of Land-Based Pollution in Priority Coastal Hotspots and Measuring Progress to Impacts. The project focuses on land-based sources of hazardous chemicals pollution, namely Persistent Organic Pollutants (POPs) controlled under the Stockholm Convention, and mercury addressed under the Minamata Convention. Partner Child Projects 1.2 and 1.3 focus on wastewater as a source of excess nutrient pollution to the Mediterranean.

39. Objective/Outcome of the Child Project 1.1 is to achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas to be achieved through a multi-focal area collaboration between the respective two project components related to the GEF Chemicals and Waste and International Waters focal areas.

40. Component 1 was designed to assist participating countries on the provision of disposal options (for POPs) and long-term containment (for mercury), as well as on raising awareness about new POPs in products and mercury in the healthcare sector and introduce alternatives through targeted pilot activities. It is envisaged these activities will lead to environmentally sound management and disposal of PCB containing waste, safe containment of mercury and mercury-containing waste, as well as to reduction in use of new POPs and mercury in the region via a transition to environmentally sound alternatives.

41. Component 2 aims at strengthening regional cooperation frameworks through the project interventions identifying priorities and actions that will lead to increased environmental and socioeconomic benefits in the Mediterranean. Specifically, the assistance is rendered for update of the 2005 baseline with regard to priority transboundary issues that affect the state of marine and coastal environments and

analysis of their causes and impacts of identified priority issues. The expected results comprise enhanced capacities for monitoring and reporting that enable (in conjunction with other MedProgramme projects and components) the assessment of progress towards stress reduction impacts and achievement of relevant SDG targets.

42. In terms of Global Environmental Benefits (GEB), the project target is to dispose of over 2,000 tons or POPs, preventing their future release into the environment. The target also comprises repackaging and disposal of over 50 tonnes of mercury and mercury contaminated waste, preventing thus future release into the environment. Any stocks of obsolete new POPs identified may be disposed along with the other POPs wastes, thus counting towards the GEB target.

Table 2: Project budget

Component/Outcome ***(All figures as USD)***	**GEF budget at design**	**Co-financing at design**
Component 1 / Outcome 1	11,122,000	43,704,097
Component 2 / Outcome 2	2,908,000	8,577,120
Total for substantive outcomes	**14,030,000.00**	**52,281,217**

43. The project is organized in two substantive and one support project components for achievement of three outcomes and total ten expected outputs.

Table 3: Project outcomes and outputs

Component/Outcome	**Expected outputs**
Outcome 1. Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas	1.1: Management and disposal of 2,000 tonnes of POPs 1.2: Management and safe storage of 50 tonnes of mercury wastes 1.3: New POPs reduction and alternatives pilot projects completed 1.4: Mercury reduction through pilot activities on mercury alternatives
Outcome 2: Littoral countries enabled to identify trends and progress to impacts	2.1: Updated TDA including gender assessment 2.2: Report on progress to impacts 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations 2.4: Data sharing policy for the Mediterranean
Outcome 3: Project results and knowledge are effectively disseminated and used to adaptively manage the project	3.1 Knowledge Management strategy shares knowledge from Child Project 1.1 3.2 Regular monitoring and evaluation of project progress and results

II. REVIEW METHODS

44. The MTR adheres to the UNEG Norms and Standards[1] as well as to the guidance, rules and procedures stipulated in the GEF Evaluation Policy[2]. The MTR process was based on a participatory and collaborative approach ensuring close engagement with internal and external project stakeholders with the aim to provide evidence-based information that is reliable and useful based on predetermined objective evaluation criteria.

45. The MTR used a mixed-method approach to collect both quantitative and qualitative data through various data collection methods and ensure triangulation and validation of data collected from different sources for enhanced credibility of MTR findings, conclusions and recommendations. The data was collected from primary sources (stakeholder interviews, project document outputs, project progress reports, etc.) as well as from secondary sources (literature review, nationally published data, relevant evaluation reports, etc.).

46. As an initial step and part of MTR Inception Report preparation, screening and a limited desk review was conducted of essential documents mainly those covering project design and implementation progress. The approved Project Document (ProDoc) was the starting point for the review in terms of understanding the basics on which the project was designed and funded. Study of the ProDoc was complemented by the review of other essential information sources such as the Minutes of the Inception Workshop and the annual GEF Project Implementation Reports (PIRs).

47. As the next step, the evaluator conducted a detailed review and analysis of the available project substantive and financial progress reports, as well as other documents relevant for the MTR, including documents from similar and complementary initiatives, as well as reports on the specific context of the project.

48. Collection of first-hand information about the project implementation was conducted through semi-structured interviews with a representative selection of project stakeholders. The interviews were designed to solicit responses to a set of predetermined open-ended questions aiming to obtain in-depth information about the key informants' experiences from the project implementation, their attitudes, and preferences, as well as their opinions on the progress towards achievement of the planned results. The semi-structured format of the interviews allowed the respondents to express their perception of the main issues related to the project implementation.

49. Draft interview questions are provided in Annex C of the Inception Report. The MTR criteria and the questions will be used as a check list to raise eventual additional and/or more specific questions on the issues mentioned. Triangulation of results, i.e. comparing information from different sources, such as documentation and interviews, or interviews on the same subject with different stakeholders, were used to corroborate or check the reliability of evidence. This approach verified the information obtained in the document review phase, got some missing data and informed about the opinion of stakeholders and project participants to interpret the information. The interviews also served the purpose of collecting additional contextual documents to support the evidence base of the evaluation.

50. Detailed MTR mission plans to Bosnia and Herzegovina and Tunisia were prepared upon discussion with the respective project national focal points and the MedProgramme Coordination Unit.

[1] Norms and Standards for Evaluation, UNEG (2016)
[2] GEF Evaluation Policy, GEF/ME/C.56/02/Rev.01

51. After the data collection phase, data analysis followed as the final phase of the MTR. This step was conducted in a systematic manner that involves organizing and classifying the information collected, tabulating it, summarizing it, and comparing the results with other appropriate information to extract useful information that responds to the evaluation questions and fulfils the purposes of the MTR. It is the process ensuring accuracy of the collected information and translating the data into usable formats or units of analysis related to each evaluation question.

52. Progress towards the results of the project was measured against the performance indicators specified in the Project Results Framework. Relevant financial data (planned, actually committed, actually spent at outcome level) were analysed and compared with the implementation progress data against the performance indicators. This stage of the MTR assessed preliminary indications of potential impact and sustainability of results including the contribution to capacity development and progress towards achievement of sustainable development goals.

53. Based on the classified findings, the MTR drew a set of conclusions and elaborated actionable recommendations for the project. Moreover, the MTR compiled lessons learnt and best practices from the initial implementation period in order to inform the remaining phase of the project implementation.

III. THEORY OF CHANGE

Theory of Change at Review

Original Theory of Change

54. The original Theory of Change of the CP 1.1 was supposed to set a logical pathway for the intervention. It was prepared during the project formulation phase and is included as Annex A to the Project Document. It consists of two substantive outcomes and eight outputs, as well as one supporting outcome with two outputs. It served as a basis for formulation of the project results framework (PRF).

55. Outcome 1: Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas.

The stated outputs for Outcome 1 were as follows:

Output 1.1: Management and disposal of 2,000 tonnes of POPs;

Output 1.2: Management and safe storage of 50 tonnes of mercury wastes;

Output 1.3: New POPs reduction and alternatives pilot projects completed;

Output 1.4: Mercury reduction through pilot activities on mercury alternatives

56. Outcome 2: Littoral countries enabled to identify trends and progress to impacts.

Output 2.1: Updated TDA including gender assessment;

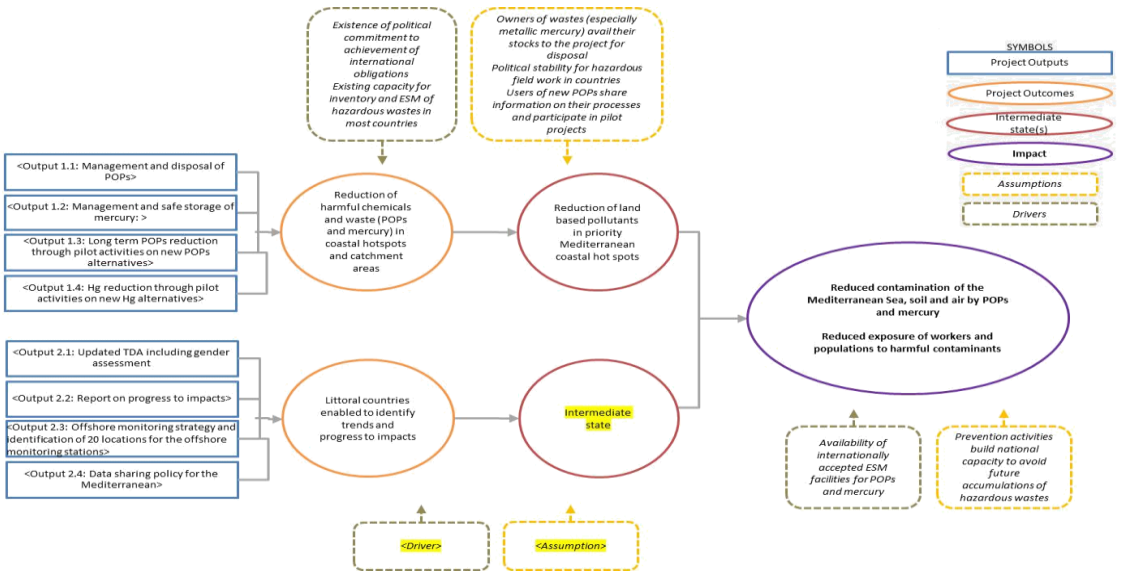
Output 2.2: Report on progress to impacts;

Output 2.3: Offshore monitoring strategy and identification of 20 locations for offshore monitoring;

Output 2.4: Data sharing policy for the Mediterranean stations

57. Annex B of the Project Document contains a Problem Tree that covers only Outcome 1, as well as the Theory of Change diagram. The latter is provided as Figure 1 below.

Figure 1: The original Theory of Change (source – approved Project Document)



58. The main weakness of the diagram of the original ToC is that it presents the intermediate state only for Outcome 1 (the upper red oval shape in the middle) while does not define and present the intermediate state for Outcome 2 (the lower red oval shape in the middle). Also, it displays drivers and assumptions (grey and yellow dotted rectangles) formulated

as conditions or factors that need to be in place for the project to work only for Outcome 1.

59. The original TOC does not sufficiently present the causal pathway from the outputs, through direct outcomes (changes in the project stakeholders' behaviour) and intermediate states towards the desired impact and is thus not sufficiently coherent to capture the complexity of the desired changes that need to be realised.

Reconstructed Theory of Change

60. Based on the above analysis of the ToC, the evaluator reconstructed the Theory of Change to better capture the complexity of the intervention logic, re-establish the logical chain and contribution of outputs under Outcome 2 and further to the intermediate states and impact. As the formulation of Outputs 2.3 and 2.4 in the original ToC was found vague, these were reformulated in order to ensure the internal consistency of formulation within the results chain under Outcome 2.

61. Table 4 below outlines the originally proposed linkages between the Project outcomes and outputs as set out within the Project Document and compares them with the Reconstructed TOC as proposed by the evaluator.

Table 4: Comparison of results between the Project Document PRF and the reconstructed ToC

Formulation in original project document(s)	Formulation for Reconstructed ToC	Justification for Reformulation
(LONG LASTING) IMPACT		
Reduced contamination of the Mediterranean Sea, soil and air by POPs and mercury	Moved under Intermediary State for Component 1	This is an intermediary state leading to reduced exposure
Reduced exposure of workers and populations to harmful contaminants	No change	As formulated in the ProDoc
Component 1		
INTERMEDIATE STATE		
Reduction of land-based pollutants in priority Mediterranean coastal hot spots	Reduced contamination of the Mediterranean Sea, soil and air by POPs and mercury	The statement originally formulated as Impact describes the Intermediate State as its achievement leads to the above long lasting impact
OUTCOME		
Outcome 1. Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas	No change	As formulated in the ProDoc
OUTPUTS		
Outputs 1.1 – 1.4.	No changes	As formulated in the ProDoc
Component 2		
INTERMEDIATE STATE		
Not formulated	Governments and other stakeholders strengthen the regional cooperation for production and exchange of quality data, identification of emerging issues and fostering policy actions	
OUTCOME		
Outcome 2. Littoral countries enabled to identify trends and progress to impacts	Littoral countries able to make informed decision on prioritisation of issues and actions	The original outcome formulation is vague and does not clearly link with the outputs
OUTPUTS		
Outputs 2.1 and 2.2:	No change	As formulated in the ProDoc
Output 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations	Offshore monitoring strategy elaborated based on established offshore monitoring network	The original formulation contains a mix-up of the output definition and the target for measurement of the achievement, does not define the required status

Output 2.4: Data sharing policy for the Mediterranean	Data sharing policy for the Mediterranean adopted and implemented	The original formulation of the output does not define the required status of the deliverable

62. The Problem Tree diagram in Annex A to the Project Document identified the following 3 priority environmental concerns for Outcome 1 of the project:
    - Continued use and release of PCB-contaminated oil;
    - Accumulated mercury waste in multiple locations; and
    - Continued use of new POPs in products;

63. The same Problem Tree diagram does not list the main environmental concerns for Outcome 2. However, the text of the Project Document contains the following 3 major environmental concerns:
    - Lack of common indicators to assess drivers, pressures and responses in a framework of revised TDA;
    - Insufficient data due to lack of relevant monitoring programmes on the marine and coastal environment; and
    - Lack of integration of the existing national and regional databases and systems of data sharing;

Causal pathways from outputs to outcomes

64. The original project ToC is based on the following assumptions at the outcome level:
    - Owners of waste avail their stock to the project for disposal;
    - Political stability is sufficient for work with hazardous waste;
    - Users of new POPs share information on their processes and participate in pilot projects;

65. The evaluator found these underlying assumptions largely valid, however, it was noted that they stand only for Outcome 1. Two additional relevant assumptions stand for Outcome 1, namely:
    - Uncertainty about baseline quantities of POPs and mercury waste will be addressed through inventories and verification of data.;
    - Improved collection of data and monitoring of POPs waste supports sound management of contaminated sites;

66. To achieve Outcome 1 through combined delivery of Outputs 1.1 - 1.4, it is assumed not only that owners of waste avail their waste stocks to the project for disposal, but also that uncertainty about baseline quantities of POPs and mercury waste will be addressed through inventories and verification of data.

67. Furthermore, suitable land must be designated for upgrading or construction of temporary storage facilities for POPs waste and the available waste stocks must be safeguarded through construction and/or upgrade of temporary waste storage facilities.

68. The original ToC does not present any assumptions for achievement of Outcome 2. For the purpose of the reconstructed ToC, the main assumptions for achievement of Outcome 2 through combined delivery of Outputs 2.1 – 2.4:
    - Improved structure of information and communication technology of the UNEP/MAP Barcelona Convention system (InfoMAP);
    - Inter-sectoral coordination and law enforcement at the level of the participating countries;
    - Integration of data and information from different initiatives;

69. For the purpose of the ToC reconstruction, the following are considered main drivers for progress from outputs to outcomes:
    - Political commitment of the governments for compliance with obligations under the Stockholm, Minamata and Barcelona Conventions;
    - Governments and owners of waste are convinced of the utility and value of adopting sound environmental management practices;
    - Commitment of UNEP and governments to work toward the attainment of SDGs related to waste management and international waters;
    - Pressure from coastal communities, media, civil society, and the general public to address the challenge of contamination of water and coastal areas;
    - Strong ownership of the project by the country stakeholders due to progress towards mitigation of environmental challenges;

Causal pathways from outcome to intermediate state

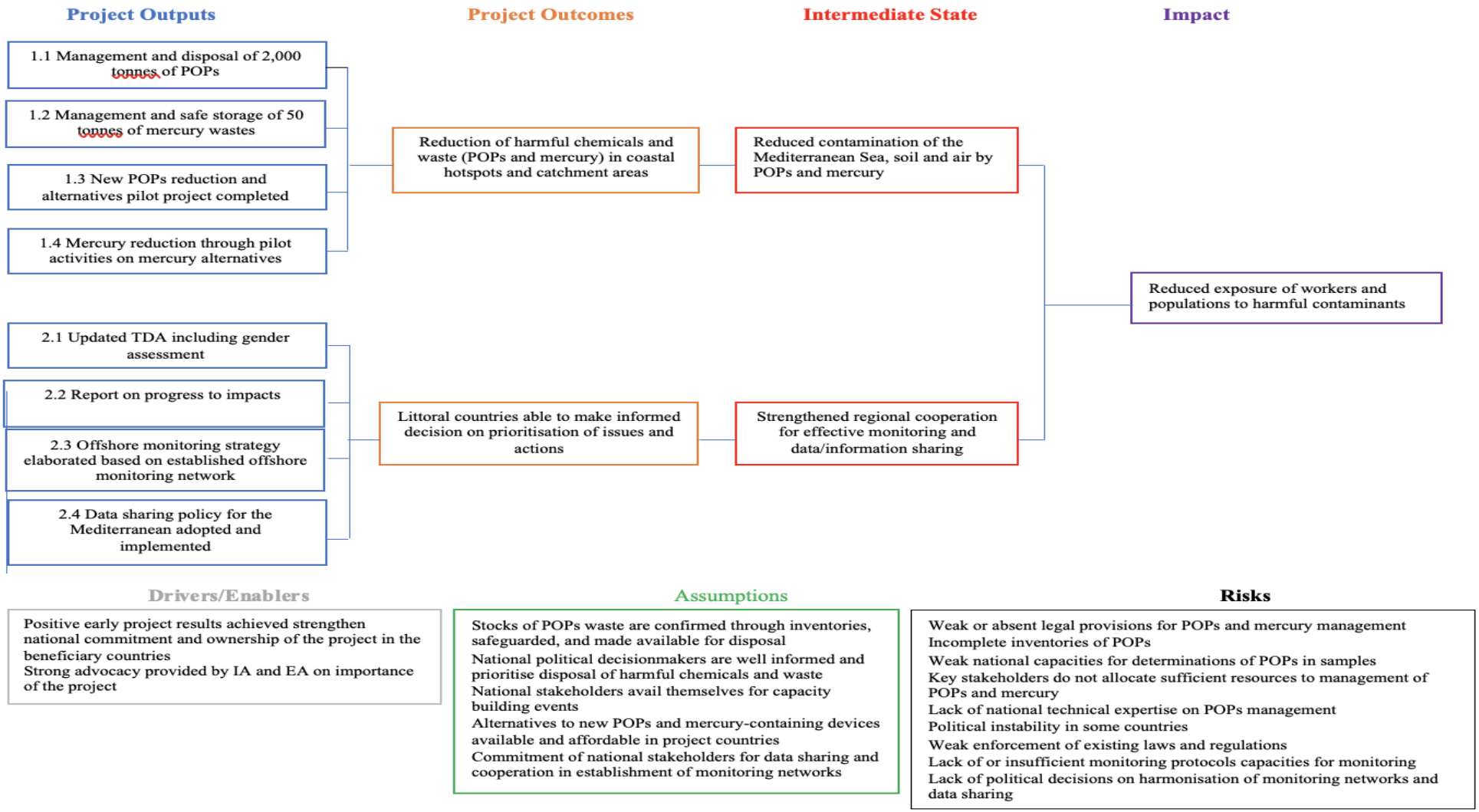
70. The achievement of the intermediate states can be seen as an essential precondition for achievement of the project objective and realisation of the desired project impact.

71. Successful disposal of PCB wastes, containment and safeguarding of mercury wastes, and environmentally sound management of contaminated sites directly lead to achievement of the intermediate state of reduced contamination of the Mediterranean Sea, soil and air by POPs and mercury.

72. Improved water quality assessments and indicator-based reporting with credible data and information, is directly linked to the participation of the project countries in regional water and coastal area monitoring networks. It will reinforce the regional cooperation for production and exchange of quality data, identification of emerging issues and fostering policy actions.

73. Figure 2 below shows the reconstructed Theory of Change.

Figure 2: The reconstructed Theory of Change



IV. REVIEW FINDINGS

A. Strategic Relevance

Alignment to UNEP's, Donors and Country (global, regional, sub-regional and national) Strategic Priorities

74. Outputs 1.1 and 1.3 of Component 1 support implementation of the Basel, Rotterdam and Stockholm conventions (BRS), the three Multilateral Environmental Agreements dealing with chemicals and waste. Polychlorinated biphenyls (PCB) belong to the group of chemicals included among the original twelve POPs covered by the Stockholm Convention and listed in Annexes A and C of the Convention. The 3 new POPs targeted by the project, namely perfluorooctane sulfonic acid (PFOS), hexabromocyclododecane (HBCD), and short-chain chlorinated paraffins (SCCPs) belong to the 16 new POPs added to Annexes A, B and C of the Stockholm Convention since the 4th Conference of the Parties in 2009. All participating countries of the project are Parties and Signatories to the BRS conventions.

75. Outputs 1.2 and 1.4 are in line with the Minamata Convention that aims at protection of human health and the environment from the adverse effects of mercury. Since it entered into force in 2017, Albania, Algeria, Lebanon, Montenegro and Türkiye became Parties to the Minamata Convention, while Libya, Morocco and Tunisia are Signatories but not Parties. At the time of preparation of this report, Bosnia and Herzegovina was neither Signatory nor Party to the MC.

76. All four outputs of Component 2 are in line with the Barcelona Convention and its Protocols, in particular the Dumping Protocol, Land-Based Source Protocol, and Hazardous Waste Protocol adopted in the framework of the Mediterranean Action Plan (MAP). Specifically, Output 2.3 supports implementation of the Integrated Monitoring and Assessment Programme (IMAP) adopted by the 19th Meeting of the Contracting Parties to the Barcelona Convention, in particular the IMAP Ecological Objective 09: Contaminants. All project countries belong to the 22 Contracting Parties of the Barcelona Convention.

77. Furthermore, the project corresponds with the UNEP mandate to deliver GEF initiatives in relation to the Multilateral Environmental Agreements, including support to meet national commitments to relevant MEAs. It contributes to two of the three outcomes of the thematic subprogramme on chemicals and pollution action within the 2022-2025 UNEP Strategy and to the respective GEF-6 programming strategies for Chemicals & Waste and International Waters.

78. Component 1 of the project is aligned with Outcome 1 of the Chemicals and Pollution Action in the UNEP Strategy that calls for optimisation of human health and environmental outcomes through enhanced capacity and leadership in the sound management of chemicals and waste for significant reduction of the harmful effects of chemicals of major public health concern. It also corresponds to Objective 2 of the GEF-6 Chemicals and Waste Focal Area Strategy that aims at reduction of prevalence of harmful chemicals and waste and at support to implementation of clean alternative technologies/substances.

79. Component 2 of the project conforms to Outcome 3 of the Chemicals and Pollution Action in the UNEP Strategy that calls for reduction of pollutants' releases to air, water, soil and the ocean. It also aligns with Objective 3 of the GEF-6 International Waters Focal Area designed to enhance multi-state cooperation, catalyse investments to foster sustainable fisheries, restore and protect coastal habitats, and reduce pollution of coasts and large marine ecosystems.

80. Component 2 of the project also responds to regional initiatives including two regional plans adopted in the framework of the implementation of the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources and Activities (LBS Protocol), namely the Regional Plan on the Reduction of Inputs of Mercury and the Regional Plan Regional Plan on the Phasing out of Perfluorooctane Sulfonic Acid, Its Salts and Perfluorooctane Sulfonyl Fluoride.

81. At the global level, the project is well aligned with the framework of the UN Sustainable Development Goals (SDGs) and contributes to SDG #3: Good health and well-being; SDG #5: Gender equality; SDG #12: Responsible consumption and production; and SDG #17: Partnerships for sustainable development.

82. Based on the above findings, the alignment to UNEP's, donors and country strategic priorities is rated **Satisfactory.**

Rating for Alignment to UNEP's, Donors and Country (global, regional, sub-regional and national) Strategic Priorities: Satisfactory

Complementarity/Coherence with Existing Interventions

83. The project was designed to be complementary to several ongoing or planned interventions, including PCB/POPs and mercury disposal projects in the region, demonstrating commitment of governments to meeting their obligations for environmentally sound management of PCB wastes under the Stockholm Convention and mercury wastes under the Minamata Convention. These are summarised in the following Table.

Table 5: Parallel projects implemented for PCB and mercury management

Country	Project Title	Donor	Timeline
Bosnia and Herzegovina	Environmentally Sound Management of Persistent Organic Pollutants (POPs) in industrial and hazardous waste sectors	SIDA	2020-
Lebanon	Minamata Convention Initial Assessment in Lebanon	GEF	2019-2023
	Environmental Pollution Abatement Project	Italy	2014-2022
Montenegro	Comprehensive Environmentally Sound Management of PCBs	GEF	2017-2023
Morocco	Making Polychlorinated Biphenyls Management and Elimination Sustainable in Morocco	GEF	2017-2024
Tunisia	Improve Mercury Management in Tunisia	GEF	2014-2021
Türkiye	Minamata Convention: Initial Assessment in Turkey	GEF	2016-2022
	Remediation of contaminated sites with POPs	EU	2019-2024
Global	International Waters Learning Exchange and Resources Network (IW LEARN)	GEF	2015-2021

84. The design of CP 1.1 shows complementarity of results to other recent and ongoing interventions working in the project countries on the same problem/issue, but no concrete active collaboration is anticipated. no active Therefore, the complementarity/coherence with existing interventions is rated **Satisfactory.**

Rating for Complementarity/Coherence with Existing Interventions:

Rating for Strategic Relevance: **Satisfactory**

B. Quality & Revision of Project Design

85. The assessment focused on the quality of the approved ProDoc, its logical framework and Theory of Change.

86. The particular strength of the project design is the aim to develop linkages between the Stockholm and Minamata Conventions and their delivery mechanisms at national and regional level for capacity on chemicals and waste to be linked across thematic and sectoral boundaries. The justification of the project is based on the fundamental and pressing issue linking environmental quality and human health.

87. By focusing on the Barcelona Convention processes and its governance mechanisms, the project offers a framework for the regional cooperation with the potential to consolidate all the information derived from various fragmented initiatives implemented in the Mediterranean and produce a comprehensive and coherent diagnostic focused on transboundary issues. Another strength of the project is the focus on harmonization of existing data platforms, monitoring protocols and indicators to comply with the Barcelona Convention's ecosystem approach-based Integrated Monitoring and Assessment Programme (IMAP).

88. The linking of the Chemicals and Waste and International Waters components under the umbrella of a single Child Project was driven by the aim to see how the reduction of land-based pollution by POPs and mercury is reflected in reduced environmental stress and improved status of coastal waters in the Mediterranean.

89. The above underlying idea of the project is at the same time also its main weakness as it aims to combine interventions in the respective fields of land-based pollution in priority coastal hotspots and transboundary assessment of the Mediterranean large marine ecosystem. By nature, interventions on scattered land-based pollution hotspots are purely national initiatives with very few possibilities for regional grouping. On the contrary, transboundary assessment of the marine ecosystem is very important for protection of the marine environment in an array of countries and is therefore essentially regional in nature. Moreover, reduction of land-based pollution and work on Transboundary Diagnostic Analysis in coastal regions involve different stakeholders and face dissimilar technical as well as political challenges. A clear and convincing rationale for addressing these two interventions within the same project is not given.

90. The Project Document encompasses all sections that comprise standard requirements for GEF-funded projects. It contains tables with information on national baselines of the participating countries and description of relevant project baseline scenarios. Furthermore, the project design provides a summary stakeholder analysis, and comprehensive description of stakeholder consultation during the project formulation phase. However, the consultations were held mainly at the level of participating country governments and did not include representatives of communities from the target region.

91. For justification of the proposed alternative scenario, the ProDoc describes the root causes of the existing challenges, makes brief assessment of barriers to their effective addressing at the national and regional level, and provides reasoning for incremental cost of the GEF support.

92. The project consists of two technical components comprising 2 outcomes and total 8 outputs (4 outputs per component), and one non-technical component comprising two respective outputs on knowledge management strategy and on monitoring and evaluation. Total 31 substantive activities were designed for delivery of the two outcomes, with 12 activities for Outcome 1 and 19 activities for Outcome 2.

V. ASSESSMENT OF THE PROJECT RESULTS FRAMEWORK

93. The Project Results Framework (PRF) contains the Project Objective, two substantive outcomes outputs, description of the project baselines, definition of performance indicators and related mid-term and end-of-project targets, sources of verification as well as risks and assumptions.

94. Analysis of the PRF shows several inconsistencies with regard to definition of indicators and related mid-term and end-of-project targets. Several indicators and targets do not comply with the SMART[3] criteria that are used in monitoring and evaluation to ensure that the indicators chosen are well-defined and can be effectively measured to track progress towards specific goals and objectives, as shown in Table 6 below.

Table 6: Analysis of PRF indicators and targets

Result	Indicator	MTR/EOP Targets	Comment
Output 1.2	Number of EMPs approved for stockpiles and contaminated sites	4 EMPs drafted for mercury waste removal	The target does not match the indicator
Output 1.3	No of trained staff applying new POPs approaches	None	Target not defined
Output 1.4	No of detailed national mercury stock-takes at hospitals and HCFs No. of pilot project approaches developed to replace mercury in health care	2 national inventories of mercury medical devices (Lebanon, Tunisia) None	2 completed EOP target not realistic MTR target not defined
Output 2.1	Multi-disciplinary TDA team representing key stakeholders Thematic assessments (including gender) Meetings and capacity building workshops	Transboundary issues prioritized, and causal chain analysis performed Thematic assessments completed Final TDA document approved by the Project Steering Committee	MTR targets not defined Indicator/target not SMART
Output 2.2	Report on progress to impacts	None	No MTR target defined
Output 2.3	Offshore monitoring strategy outlining rational and methodology for selection of stations and providing guidance for IMAP compatible offshore monitoring Up to 5 pilots to support IMAP Implementation (selected indicators) at offshore monitoring stations	Guidance for IMAP compatible offshore monitoring prepared Countries assisted with IMAP implementation at selected offshore monitoring stations	Targets not SMART
Output 2.4	Assessment of national and regional databases Recommendations on the design of the IT model to connect national with regional network/ platforms	None None	No targets defined for indicators 1-2
Output 3.1	Number of knowledge products from CP 1.1 disseminated and used by stakeholders	National POPs and Hg inventories available on MapX Pilot project case studies disseminated	No match btw the indicator and targets

Rating for Quality & Revision of Design: **Moderately Satisfactory**

[3] SMART indicators are Specific, Measurable, Achievable, Relevant, and Time-bound.

A. Effectiveness

Theory of Change

95. Based on the assessment contained in Section III, the original Theory of Change of the project is rated **Moderately Unsatisfactory.**

Rating for Theory of Change: **Moderately Unsatisfactory**

Availability of Outputs

96. The information for assessment of effectiveness is sourced from annual Progress Implementation Reports and reports and presentations for the meetings of the Project Steering Committe. This information was subsequently verified with information collected through on-line interviews with selected projects stakeholders and in-person meetings during the evaluation missions to two beneficiary countries, namely Bosnia and Herzegovina and Tunisia. Additional sources of information were various technical reports and knowledge products produced by the project. The list of documents consulted is provided as Annex III to this report.

97. Tables 7 and 8 contain the summary of the actually delivered project results under the two substantive outcomes using the format of the project results framework. The last column in the tables summarises the achieved results in a bullet point format. The tabular summary is followed by a short narrative text with additional facts and details on how and why the results have or have not been achieved. By this token, the text following each table summarizes some important issues related to the delivery of project results that could not be captured in the tables but are important for the justification of the rating of the project outcomes. At the end, the narrative also explains the basis for rating of individual project outputs and outcomes.

Table 7: Summary of achievements for Outcome 1

Project objective/outcome	Objective/Outcome-level Indicators	Targets and Monitoring Milestones	Status
Outcome 1. Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas	-No. of tonnes of POPs waste and new POPs eliminated - No. of tonnes of POPs prevented	Mid-Term Target: 586 t POPs removed End of project Target Disposal of 2,000 tonnes of POPs, including estimated 650 tonnes new POPs prevented	Two disposal contracts for total 722.95 tons of PCB waste signed (Algeria 451.95 t, Lebanon 271 t) HSE plans completed Work on Basel notification documents in progress Contract amendment for inclusion of Phase 2 quantities for Algeria in progress
	-No. of tonnes of Hg waste disposed of/safely stored - No. of tonnes of Hg prevented		Not applicable yet
Output 1.1: Management and disposal of 2,000 tonnes of POPs	Number of tenders awarded for POPs management/ disposal No. of national POPs inventories completed Number of Environment Management Plans approved for stockpiles and contaminated sites	Mid-Term Target: 1 tender awarded for disposal of Phase 1 stocks (from Algeria, Lebanon) 5 national Phase 2 inventories available EMPs drafted in at least 3 countries End Project Target: 5 national EMPs approved Minimum 2 tenders awarded covering Total of 2,000 tonnes of POPs	• Two disposal contracts for total 722.95 tons of PCB waste signed (Algeria 451.95 t, Lebanon 271 t) • HSE plans completed, Basel notification documents under preparation • Proposed contract amendment for inclusion of additional 500 t from Phase 2 for Algeria in progress • National PCB phase 2 inventory completed in Algeria, Albania, on-going in Morocco and Tunisia • National inventories in BiH and Montenegro available through cooperation with parallel UNDP-implemented projects • Confirmed for phase 2: Albania (255 t), BiH (12 t), Montenegro (80 t) • Regional PCB Elimination Plan completed • EMP drafts for PCB-contaminated sites for Albania, BiH and Montenegro Not applicable yet

Project objective/outcome	Objective/Outcome-level Indicators	Targets and Monitoring Milestones	Status
Output 1.2: Management and safe storage of 50 tonnes of mercury wastes	Number of Environment Management Plans approved for stockpiles and contaminated sites	Mid-Term Target: 4 EMPs drafted for mercury waste removal End Project Target: Assessment and management plan for Tunisia site	• EMP for mercury waste management at Kasserine , Tunisia completed • Assessment of HAK-1 site contaminated with mercury in Tuzla completed • Draft EMP for mercury waste management at Tuzla, BiH • SSFAs for sites in Montenegro and Algeria awarded Not applicable yet
Output 1.3: New POPs reduction and alternatives pilot projects completed	No. of new POPS alternatives demonstrated through pilot projects No of trained staff applying new POPs approaches on regulation, procurement, and adoption of alternatives	Mid-Term Target: 3 new POPs inventories and databases completed End Project Target: At least 30 trained individuals actively support pilot projects Three case studies published	• Sampling for PFOS and HBCD inventories completed for Morocco, and Tunisia • Samples sent for analysis to CETI laboratory in Montenegro • National experts recruited for update of legislation with regard to management of new POPs in line with the Stockholm Convention in Tunisia Not applicable yet
Output 1.4: Mercury reduction through pilot activities on mercury alternatives	No of detailed national mercury stock-takes at hospitals and health centres No. of pilot project approaches developed to replace mercury in health care	Mid-Term Target: 2 national inventories of mercury medical devices (Lebanon Tunisia) End Project Target: 3 national inventories completed 3 national pilot projects completed	• 2 national inventories of mercury medical devices completed (Lebanon and Tunisia) • National legal experts recruited for update of national legislation on mercury in Tunisia and Morocco Not applicable yet

Output 1.1 Management and disposal of 2,000 tonnes of POPs (UNEP/MAP)

98. Output 1 has been implemented in two phases. Phase 1 addressed collection of 586 tonnes of PCB from 17 sites in Algeria and Lebanon, for which respective Environmental Management Plans (EMP) were completed and verified during the PPG phase of the project and were thus ready for disposal. This work was commenced almost immediately upon launching the project, but the procurement process was protracted due to complicated approval procedures at UNON. In April 2023 two contracts for disposal of PCB-contaminated equipment were signed for Algeria (451.95 tons) and Lebanon (271 tons).

99. Since then, an additional 500 tons of PCB equipment were identified and made ready for disposal. The additional quantity will be addressed through amendment of the contract for Algeria. At the time of the MTR, there was little progress on that as the contract is administered by UNON and is subject to approval by the UN Headquarters Committee on Contracts. Technical work under the two contracts has been in progress and includes development of Health, Safety and Environmental (HSE) plans and consultations for preparation of the notification documentation required under the Basel Convention for transboundary shipment of hazardous waste.

100. For identification of PCB stocks for Phase 2, UNEP/MAP signed SSFAs for Albania and Morocco, provided on-line trainings and procured PCB screening equipment for the national teams to conduct the inventories. The PCB inventory in Albania was conducted by the National Environmental Agency and in Morocco by the Ministry of Energy Transmission and Sustainable Development. For Bosnia and Herzegovina and Montenegro, the PCB inventories were conducted under the parallel projects implemented by UNDP.

101. Results of the national PCB inventories from Albania, Algeria, Bosnia and Herzegovina, and Montenegro were compiled into the regional plan for PCB disposal that was finalised in May 2024. The plan also used a techno-economic analysis for validation of the most efficient options for PCB waste disposal based on the inventory results, the MedProgramme prioritization criteria, and costs of PCB waste elimination, and outlined scenarios for phase 2 PCB waste disposal.

102. For Phase 2 of PCB disposal, total 347 tons were confirmed including stocks in Montenegro (80 t), BiH (83 t), in Albania (255 t) and in Algeria (500 t) as the available PCB waste for disposal. The total confirmed amount of PCB waste for Phase1+2 disposal (as of June 2024) was thus 1,689 t, i.e. about 84% of the end-of-project target.

103. Based on the inventory done during the update of the National Implementation Plan for the Stockholm Convention, Tunisia indicated availability of 490 tons of PCB waste but as of June 2024 this was not confirmed through provision of verified PCB data. National PCB inventory was included as one of outputs in the UN-to-UN agreement signed with UNDP Tunisia. However, at the time of the MTR, UNDP was still in the process of selection of consultants for the inventory.

104. As procurement of services for PCB disposal in Phase 1 through UNON faced long delays due to complicated approval processes, it was decided to engage with UNOPS for procurement of Phase 2 disposal of the PCB waste in Albania, Bosnia and Herzegovina and Montenegro. The Phase 2 PCB waste in Algeria will be addressed through amendment of the existing contract for Phase 1.

105. As the originally planned site assessment of the Bijela shipyard in Montenegro had been addressed under a World Bank project on industrial waste management and clean-up, the Government of Montenegro proposed to conduct assessment of

contamination of the harbour beds with PCBs and mercury and related risks assessment for another location, namely the Tivat Bay and Risan Harbour. The assessment was conducted by the Centre for Ecotoxicological Researches of Montenegro (CETI) and completed in April 2024.

106. Environment Management Plans for stockpiles and contaminated sites were prepared under the UNDP-implemented projects in Bosnia and Herzegovina and Montenegro.

107. The total identified PCB waste quantities stand at 2,166 t which exceeds the end-of-project target. However, based on the cost of the two signed Phase 1 disposal contracts, it is estimated that the total cost of disposal of the 2,166 t will be higher than the funds available in the project budget for Output 1.1.

108. However, the PRF is inconsistent with regard to the end-of-project targets for POPs disposal. The total target for Outcome 1 (and also as per the project GEBs) is "*Disposal of 2,000 tonnes of POPs, including estimated 650 metric tonnes of new POPs*", i.e. it was set as a combined target for Outputs 1.1 and 1.3. However, the single target listed under Output 1.1 is *"Minimum 2 tenders awarded covering total of 2,000 tonnes of POPs prevented",* while the target of 650 tonnes of new POPs is not set for Output 1.3.

109. Therefore, it will be necessary to remove the Output 1.1 target of 2,000 t of disposed PCB waste in order to address the above discrepancies and ensure internal consistency of the PRF.

Output 1.2: Management and safe storage of 50 tonnes of mercury wastes (UNEP/MAP)

110. At the project formulation phase, Bosnia and Herzegovina indicated presence of mercury waste at the decommissioned chlorine-alkaline industrial complex at Tuzla known as HAK. The complex comprises two industrial units HAK 1 and HAK 2 that served for production of chemicals required for polyurethane foam production, namely polyol (HAK1) and toluene diisocyanate (HAK2) with used of mercury electrodes for electrolysis,

111. The University of Tuzla conducted assessment of mercury pollution at HAK-1 that determined the concentrations and spatial distribution of mercury pollution in soil, water and the construction materials at the electrolysis plant. The highest mercury concentrations were found in the construction materials of the HAK-1 facility while concentrations in soil and water were found significantly lower. Overall, the study identified a considerable source of mercury pollution with a potential to spread to a wider area through surface and underground water runoff.

112. As a follow-up, the University of Tuzla was contracted to prepare an Environmental Management Plan (EMP) for mercury waste disposal and remediation of the HAK-1 site. The draft EMP submitted in May 2024 proposes to use of *in-situ* approaches based on combination of immobilization, stabilization/solidification and possibly phytoremediation technologies the time of the MTR the draf. At t EMP was under review by a UNEP technical expert.

113. In Tunisia, the mercury assessment at Kasserine that had been planned for CP 1.1 was conducted and already completed under another GEF-funded project with UNIDO before the start of CP 1.1. Therefore, UNEP/MAP contracted the Spanish research centre CIEMAT for preparation of EMP for the Kasserine site. The contract with CIEMAT also included organisation of a meeting on mercury and three training workshops on assessment and remediation of sites polluted with mercury. The first meeting on mercury was organised in September 2023. The EMP for the Kasserine site was completed in June 2024. The current project will contract disposal of total 389 metric tonnes of mercury and associated wastes identified at the site. The training meeting at CIEMAT facilities planned for May 2024 had to be rescheduled for November 2024.

114. Two other activities on mercury in were included in the UN-to-UN transfer agreement with UNDP Tunisia, namely assessment of another polluted site at Oued Maaden and assessment of socio-economic impacts of ratification of the Minamata Convention. The latter study was completed in May 2024 and will be used to support the process of ratification of the Minamata Convention. It is envisaged that following the assessment of the Oued Maaden site, an Environmental Management Plan (EMP) will be prepared for containment and eventually removal However, the removal could be financed from CP 1.1 only once Tunisia ratifies the Minamata Convention.

Output 1.3: New POPs reduction and alternatives pilot projects completed (MedWaves)

115. For this output, the Project Document envisages demonstration of environmentally sound alternatives to three new POPs highlighted in the National Implementation Plans of the project beneficiary countries, namely perfluorooctane sulfonic acid (PFOS), hexabromocyclododecane (HBCD), and short-chain chlorinated paraffins (SCCPs). The proposed activities include promotion of fluorine- and solvent-free firefighting foams as replacement to PFOS, promotion of alternative flame retardants (such as butadiene-styrene brominated copolymer) as alternative to HBCD, and inventory of currently used SCCPs. The 2023 PSC agreed on prioritisation of pilot activities on PFOS and HBCD in three countries, namely Lebanon, Morocco and Tunisia, with the Lebanon pilot to include also SCCPs.

116. MedWaves as the implementing partner initiated the work on inventories in the identified priority sectors (civil defence, airports) and legal support for updating the legislation with mandatory provisions for restriction of import, export and use of PFOS/PFOA fire-fighting foams in line with the Stockholm Convention requirements. However, the progress slow due to several administrative challenges that included change of MedWaves officers in charge, delays in procurement of services of local laboratories and complexity of national regulatory frameworks in the target countries, as well as restrictive contractual frameworks and complicated administrative structures governing the operational processes in MedWaves. Furthermore, activities in Lebanon were put on hold due to difficult political situation in the country.

117. There was some progress after arrival of the new MedWaves Project Manager in September 2023. A proposal of a sampling plan for the inventory of new POPs was sent to the Morocco and Tunisia in November 2023. The plan was based on collection of samples from foam fire extinguisher reservoirs and from nearby sediments/groundwater was agreed with the two countries. The collection of samples was completed in June 2024 and all samples were sent to the CETI accredited laboratory for analysis. The results are expected by the end of 2024.

118. In June 2024, one national legal expert was recruited for update of legislation on management new POPs in Tunisia. This assignment will deliver a comprehensive legislative text on management of new POPs locally produced and imported, as well as monitoring in water and air. It has to include the entire cycle, from their importation as substances or raw materials, their use as finished products, to their disposal as waste.

119. The end-of-project target for Outcome 1 is prevention of estimated 650 tonnes of new POPs. The PSC meeting held in March 2024 encouraged the project countries to submit proposals for pilot projects on prevention of contamination with new POPs in their countries (including proposed outcomes in terms of tonnage of POPs to be prevented) for consideration at the extraordinary PSC meeting that is scheduled for September/ October 2024. However, as the planned project completion date is 31 March 2025, the available time for implementation of the pilots will be about 6 months which is extremely tight and therefore unrealistic.

Output 1.4: Mercury reduction through pilot activities on mercury alternatives

120. Based on the approaches developed by WHO, national inventories on use of mercury-containing measuring devices in health sector facilities were completed in Lebanon and Tunisia. However, the inventories had a limited scope as only total 10 heath sector facilities participated (4 in Lebanon and 6 in Tunisia). The total amount of mercury in use was estimated using a standard formula for mercury content in the various medical devices identified through the inventory. The total estimated amount of mercury was thus established at 17.3 kg only. Moreover, Tunisia informed that it had already banned use of medical devices containing mercury and therefore does not need further support from the project.

121. Legal experts were recruited for updating national legislation on use and management of mercury and mercury waste in line with the binding provisions of the Minamata Convention. The focus of this work is particularly on use of mercury in healthcare facilities (thermometers, sphygmomanometers, dental amalgams, amalgam separators, mercury lamps and tubes, etc.), as well as on proposal of new national standards and maximum permitted concentration of mercury in drinking water, wastewater, and consumer products.

Table 8: Summary of achievements for Component 2

Project objective/outcome	Objective/Outcom-level Indicators	Targets and Monitoring Milestones	Status
Outcome 2.			
Output 2.1: Updated TDA including gender assessment	Multi-disciplinary TDA tea representing key stakeholders Thematic assessments (including gender) Meetings and capacity building workshops	Transboundary issues prioritized, and causal chain analysis performed Thematic assessments completed Final TDA document approved by the Project Steering Committee	• 5 national TDA thematic assessments prepared (Albania, Bosnia and Herzegovina, Lebanon, Montenegro and Morocco) • Mediterranean Sea and Coasts TDA Report (regional synthesis document) compiled (version for publishing)
Output 2.2: Report on progress to impacts	Report on progress towards project's impacts and on the achievement of relevant SDGs	By the end of the Programme, report on progress to impacts is prepared	Not initiated
Output 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations	Number of additional monitoring stations Offshore monitoring strategy outlining rational and methodology for selection of stations and providing guidance for IMAP compatible offshore monitoring Up to 5 pilots to support IMAP Implementation (selected indicators) at offshore monitoring stations	At least 20 offshore monitoring stations defined and guidance for IMAP compatible offshore monitoring prepared Countries assisted with IMAP implementation at selected offshore monitoring stations	• Stocktaking Report for preparation of offshore • Draft offshore monitoring strategy (Final (proposal) Report: Offshore Protocol – IMAP Monitoring Programme and Strategy) • List of Proposal for 20 offshore monitoring sites, • Proposal for a list of selected Common Indicators to be monitored at the offshore monitoring sites • Proposal for 5 pilot stations.
Output 2.4: Data sharing policy for the Mediterranean	Assessment of national and regional databases Recommendations on the design of the IT model to connect national with regional network/ platforms Proposal of a data sharing policy	Data sharing regional policy prepared as an input for the deliberation of the Contracting Parties to the Barcelona Convention	No information available

Output 2.1: Updated TDA including gender assessment

122. The work on the update of the 2005 TDA report was performed using a phased approach according to the GEF IW TDA/SAP Methodology Guidelines.[4] Phase 1 (overall set up, definition of the TDA report structure, and engagement of stakeholders) was initiated in March 2021 with creation of the TDA Core Team and preparation of the TDA report roadmap. The latter included TDA objectives, milestones and workplan, setting of the internal UNEP/MAP coordination group, and development of the stakeholders' engagement strategy. The initial phase culminated at the 1st meeting of the TDA Steering Committee held on 4 November 2021 that approved the roadmap.

123. Phase 2 (development, analysis, and diagnostic) started in November 2021 until March 2023. This phase elaborated all necessary elements considered relevant for a successful delivery of the Mediterranean TDA Report to fulfil its objective towards the development of a Strategic Action Plan contributing to the management of the Mediterranean Large Marine Ecosystem (LME) beyond 2025. It comprised technical as well as managerial activities, namely contributions of the regional expert and 'the UNEP/MAP Plan Bleu Regional Activity Center, mobilisation of national expert teams from 5 project countries, as well as organization of national stakeholders' workshops. Phase 2 concluded with preparation of the full TDA pre-publication document in March 2023.

124. Phase 3 (review) was initiated in April 2023 and received contributions from the Barcelona Convention Contracting Parties and from the CP1.1. project partners. Main findings and recommendations of the TDA report were presented to the meeting of MED POL Focal Points in May 2023. The Meeting requested the Contracting Parties to undertake a final review of the report before submission for publication.

125. Phase 4 (publication) included approval of the TDA report for publication by the UNEP Publication Board, it was stopped as a decision was taken to develop a shorter version of the report taking into consideration updated information from countries on the national TDA issues, and to integrate with the findings of the 2023 Mediterranean Quality Status Report (MED QSR)[5].

126. The work on the TDA was further extended as the 2024 PSC meeting agreed to provide funding to the 9 project countries for development of the National Action Plan (NAP) and National Baseline Budget (NBB) reports in accordance with the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources (the LBS Protocol). The NAP reports will address the identified national transboundary priority issues that will be further considered in the TDA development process. A consultant will be hired to link the TDA assessment to the MED QSR and prepare a summary TDA report for policymakers in the Mediterranean countries.

Output 2.2: Report on progress to impacts

127. Implementation of this output was not initiated.

Output 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations

128. Preparation of the offshore monitoring activities started with preparation of a stocktaking report that aimed at identification of the actual capabilities in offshore monitoring in the 9 project countries, in particular availability of infrastructures for

[4] GEF IW:LEARN (2020).Transboundary Diagnostic Analysis/Strategic Action Programme Manual. TDA-SAP Methodology (https://iwlearn.net/manuals/methodologies)
[5] The 2023 MED Quality Status Report was released in May 2024.

offshore monitoring, human and technical resources, as well as inventory of past and current marine and offshore monitoring activities.

129. The stocktaking report completed in August 2022 indicates that all the nine countries have the legal frameworks that enable the countries to conduct the required monitoring and assessment programmes. At the same time, the report highlighted some distinctions between the countries in terms of completeness of facilities for offshore monitoring and acknowledged that few countries lack some essential facilities such as laboratories and operational seagoing infrastructures.

130. A draft proposal for an offshore monitoring strategy as part of under the existing Integrated Monitoring and Assessment Programme (IMAP) was prepared in December 2022. Based on a review of the national IMAP reports and the monitoring sampling locations for each country, the draft strategy proposed 20 offshore monitoring sites, a list of selected common indicators for monitoring at the offshore monitoring sites, as well as selection of 5 pilot stations for long-term monitoring observations distributed to cover the main geographic features of the Mediterranean Sea.

131. The draft offshore monitoring strategy was further reviewed with the aim to align it with the IMAP Work Plans, IMAP Guidance Fact Sheets and IMAP Monitoring Guidelines, assess linkages of pollution in sensitive areas of the Mediterranean to the IMAP, and develop a concrete proposal for presentation to the countries.

Output 2.4: Data sharing policy for the Mediterranean

132. A their 22nd meeting in December 2021, the Contracting Parties to the Barcelona Convention took a decision to adopt the UNEP/MAP Data Policy.[6] As such, this policy covers data owned by UNEP/MAP as well as data owned by the Contracting Parties to the Barcelona Convention and its Protocols or data produced by third parties that are of interest to environmental policies in the Mediterranean. It concerns the environmental data and information collected, acquired, processed and disseminated through the InfoMAP Platform.

133. In line with the adopted Policy, data providers are expected to follow the principle that all data and products, financed with public means should be fully available for use by public bodies, and that these data should be made available for others to use with as few restrictions as possible. The Policy was designed to explore and use technological shifts in information and communication technologies for data collection, processing and use in innovative ways.

134. In summary over the two substantive components, the project has made decent progress on the two outputs addressing disposal of POPs and mercury waste. However, progress on the two outputs addressing prevention of waste has been only marginal, in particular on Output 1.4 dealing with prevention of mercury waste. The decision of the 2024 PSC meeting that invites submission of pilot projects on prevention of new POPs can bring implementation of Output back on track, Output 1.4 for prevention of mercury waste does not show any prospect of achievement of the as one of the target countries is no longer interested in continuation of the activities.

Output 3.1: Knowledge Management strategy shares knowledge from Child Project 1.1

135. Component 3 cuts across the two substantive components of the project and its delivery is coordinated with the Child Project 4.1. Under this output, the two projects prepared and shared posts on social media, and produced several knowledge management products, such as case studies, technical materials, reports from

[6] Decision IG.25/10 on MAP Data Policy

trainings and field visits, as well as contributions to the MedBulletin, BRS COP and various awareness-raising events. Specifically, this included interactive visualisation of the results of the PCB inventory and mercury assessment from BiH on MapX.

136. In October 2023, MedProgramme initiated development of a Knowledge Management (KM) platform with the Global Resource Information Database - Geneva (GRID-Geneva). The KM products from CP 1.1 will be uploaded to the platform once it is operational (expected in fall 2024). More details on the development of the platform are in sub-section Communication and Public Awareness.

Output 3.2: Regular monitoring and evaluation of project progress and results

137. Regular monitoring of the project was conducted in line with the Monitoring and Evaluation Plan that is contained in the Project Document (section C). Detailed results of the monitoring are documented in the annual Project Implementation Reports (PIRs) for the GEF fiscal years 2021, 2022 and 2023. The PIRs were produced in the required format and adequate level of details with due reference to the PRF. Monitoring results were also summarised in the PSC meeting minutes and reports from the MedProgramme Annual Stocktaking Meetings.

138. The Midterm Review (MTR) was initiated after the 2023 PSC meeting. According to the Project Document, the MTR was to be conducted in the 3rd year of the project. The original target was to complete the MTR by September 2023. However, the process was delayed and the MTR consultant was contracted as of 1 March 2024 with the expected completion date of mid-August 2024

Availability of outputs is rated **Moderately Satisfactory.**

Progress Towards Project Outcomes

139. Component 1 of the project foresees only one expected outcome, namely *Reduction of harmful chemicals and waste (POPs and mercury) in coastal hotspots and catchment areas*.

140. In consideration of the actual status of delivery of the planned outputs, this Outcome appears to be difficult to achieve. The mid-term target of removal of 586 t of POPs has not been achieved. Although the total quantities of PCBs contracted for Phase 1 removal exceeds the mid-term target, the PCB waste has not been removed yet due to initial slow progress in contracting the removal services and time-consuming procedures for obtaining all documentation required for physical removal of the waste stocks in line with the provisions of the Basel Convention.

141. Outcome 2 of the project is defined in terms of enabling the littoral countries of the Mediterranean to identify trends and progress to impacts based on updating the previous TDA, establishing offshore monitoring stations and development of a policy for data sharing.

142. While there has been visible progress towards development of three out of four outputs (Outputs 2.1, 2.3 and 2,.4) under this component, these are general outputs not directly linked to identification of impacts of the specific land-based pollution reduction addressed under Component 1. However, achievement of Outcome 2 is dependent on delivery of the Output 2.2 that is based on analysis and compilation of information generated under Component 1 and through knowledge management activities of the CP 4.1, that, together with the updated TDA, should identify key areas of the project impacts substantiate findings with quantitative and qualitative data. Work on delivery of the Output 2.2 has not started yet.

Based on the above, progress towards project outcomes is rated **Moderately Unsatisfactory.**

Likelihood of Impact

143. CP 1.1 was designed to combine the waste reduction component with the pollution monitoring component to see impacts of the pollution reduction. While Outcome 1 is designed at a concrete level for reduced pollution by POPs and mercury at selected pollution hotspots, Outcome 2 is defined at a rather general level for systemic and transformational change at the longer-term horizon through establishment of offshore monitoring network and exchange of pollution monitoring data.

144. The offshore monitoring strategy developed under Output 2.3 proposes 20 Common Indicators for monitoring concentration and effects of various types of pollution. However, there are only two Common Indicators related to pollution by PCBs and mercury that is addressed under the project while the new POPs are not included among the key harmful contaminants under the offshore monitoring strategy.

145. Common Indicator 17 (CI-17) is proposed to monitor concentrations of key harmful contaminants in relevant matrices (biota, sediment, seawater) and includes total mercury as well as organochlorinated compounds, including PCBs. Common Indicator 18 (CI-18) is proposed to determine effects of the pollution by the key harmful pollutants by monitoring biological effects.

146. While the implementation of CI-17 will be based on the existing monitoring system of UNEP/ MAP MED POL monitoring programme, the biological effects monitoring for CI-18 is generally less widely established in both national and international pollution monitoring programmes. However, there is no spatial and time relation between the reduced pollution by POPs and mercury in the pollution hotspots and the results of the assessments using CI-17.

147. Therefore, it will not be possible to identify the immediate impacts of pollution reduction achieved under Component 1 with results from the offshore monitoring network.

Likelihood of impact is rated **Moderately Unsatisfactory**.

Adaptive Management

148. Measures of adaptive management were taken by the PCU in response to various implementation challenges resulting from delays due to complex administrative processes on the side of UNON. On the side of the project countries, the implementation challenges resulted from changed preferences, impact of political changes on negotiations of the SSFAs, as well as limited capacity and weak coordination at the national level in certain countries. Specific implementation challenges also occurred as a result of slow progress towards ratification of the Minamata Convention in Bosnia and Herzegovina and Tunisia.

149. As a response to slow progress in procurement of Phase 1 PCB disposal services for Algeria and Lebanon, UNEP/MAP engaged with UNOPS for procurement of Phase 2 disposal services of the PCB stocks in Albania, Bosnia and Herzegovina and Montenegro, as well as mercury and PCB in Tunisia. The engagement with UNOPS has been further supported by recruitment of national consultants for coordination with governmental agencies and follow-up/reporting on disposal in the above countries.

150. Due to delays in implementation of the project activities in Tunisia, a decision was taken to conclude UN to UN Transfer Agreement between UNEP and UNDP to coordinate execution of national activities on a national PCB inventory, conduct of socio- economic assessment of impact of Minamata Convention ratification, national report on TDA, as well as assessment of mercury contamination at Oued Maaden site and development of an Environmental Management Plan for the site.

Based on the above, Adaptive Management is rated **Satisfactory.**

Rating for Effectiveness: **Moderately Satisfactory**

B. Financial Management

Adherence to UNEP's/Donor Financial Policies and Procedures

151. The financial monitoring of project delivery includes quarterly financial reports to the Implementing Agency as well as annual reports to GEF. Based on that, the MTR consultant believes that the project has been implemented in line with the GEF and UNEP financial policies and procedures. However, full assessment of the adherence with the GEFP/UNEP financial policies and procedures is beyond the scope of the MTR as such assessment should be based on a financial audit.

Rating for Adherence to UNEP's/Donor Financial Policies and Procedures: N.A.

Completeness of Financial Information

152. Financial information was provided in the form of quarterly expenditure reports for the 4th quarters of calendar years 2021-2023 and for the 1st quarter of 2024. Apart from information about expenditures in the 4th quarter, these reports contain cumulative expenditures for previous quarters of given calendar year and therefore contain total annual expenditures. These reports were not readily available from the project team as part of the project information package and were provided upon request of the Evaluator.

153. The expenditures in the quarterly expenditure reports are broken down by individual budget lines (personnel, travel, sub-contracts) and contain subtotals for the two substantive components of the project. This data enabled comparison of estimated (budgeted) and actual project expenditures by component/outcome as listed in Table 9 and projection expenditures by calendar years as shown in Table 10.

Table 9: Expenditures by substantive outcomes

Component/sub-component/output *(All figures as USD)*	**Budget at design**	**Actual expenditure (as of 31 March 2024)**	**Expenditure ratio (actual/budget)**
Component 1 / Outcome 1	11,122,000.00	3,309,237.28	29.75%
Component 2 / Outcome 2	2,908,000.00	2,674,106.57	91.96%
Total for substantive outcomes	**14,030,000.00**	**5,983,343.85**	**42.65%**

Table 10: Expenditures by calendar years

Component	**2021***	**2022**	**2023**	**2024****	**All years**
Outcome 1	115,823.20	475,251.74	1,276,610.44	1,441,551.90	3,309,237.28
% of total for Outcome 1	3.50%	14.36%	38.58%	43.56%	100.00%
Outcome 2	251,276.15	493,370.57	939,155.76	990,304.08	2,674,106.57
% of total for Outcome 2	9.40%	18.45%	35.12%	37.03%	100.00%

* Data for 2021 is cumulative from the start of the project until 4th Q 2021
** Data for 1st Q 2024

154. It follows from Table 99 that as of 31 March 2024, the total project delivery under Outcome 1 reached only 30% while delivery under Outcome 2 exceeded 90%. The

historical data in Table 10 shows very slow delivery at the start of the project when annual expenditures for Outcome 1 and Outcome 2 reached only 3.5% and 9.4 %, respectively. This was mainly due to the effect of Covid-19 pandemic at the start of the project implementation. The still low expenditures in 2022 show the effect of slow procurement, particularly for Phase 1 PCB disposal services under Component 1.

155. The total budget for Monitoring & Evaluation (M&E) and the Project Management Costs (PMC) is 3% and 4.8%, respectively, which is in line with GEF/UNEP policies and is considered adequate and reasonable for a project of this complexity. However, the expenditure reports provided to the Evaluator do not contain subtotals for M&E and PMC and therefore do not allow further analysis of the budget to actual comparison for PMC.

156. There is no information on co-financing commitments for the project at the CEO Endorsement. As the project team does not track co-financing by the project partners and stakeholders, no information on actually realised co-financing at MTR was available for this report.

157. According to the workplan for the remaining period of the project that was presented at the 2024 PSC meeting, the project will not be able to fully use the available funding by the completion date of the project (March 2025). The budget forecast that was also presented to the 2024 PSC suggests that the unspent balance at the end of March 2025 could be about 3 million USD, mainly from funds allocated for Outputs 1.3 and 1.4. Therefore, the project would benefit from extension by 12 months.

Rating for Completeness of Financial Information: **Moderately Unsatisfactory**

Table 11: Financial Management Table

Financial management components:		Rating	Evidence/ Comments
1. Adherence to UNEP's policies and procedures:		n/a	
Any evidence that indicates shortcomings in the project's adherence to UNEP or donor policies, procedures or rules		No	
2. Completeness of project financial information[7]:			
Provision of key documents to the reviewer (based on the responses to A-H below)		MS	
A.	Co-financing and Project Cost's tables at design (by budget lines)	Yes/No	No co-financing at design information
B.	Revisions to the budget	Yes	As part of PSC meetings
C.	All relevant project legal agreements (e.g. SSFA, PCA, ICA)	Yes	List of SSFAs provided
D.	Proof of fund transfers	n/a	
E.	Proof of co-financing (cash and in-kind)	No	
F.	A summary report on the project's expenditures during the life of the project (by budget lines, project components and/or annual level)	Yes Not	For substantive components For M&E and PMC
G.	Copies of any completed audits and management responses *(where applicable)*	n/a	
H.	Any other financial information that was required for this project (list):	n/a	
3. Communication between finance and project management staff		n/a	
Project Manager and/or Task Manager's level of awareness of the project's financial status.		n/a	
Fund Management Officer's knowledge of project progress/status when disbursements are done.		n/a	
Level of addressing and resolving financial management issues among Fund Management Officer and Project Manager/Task Manager.		n/a	
Contact/communication between by Fund Management Officer, Project Manager/Task Manager during the preparation of financial and progress reports.		n/a	
Project Manager, Task Manager and Fund Management Officer responsiveness to financial requests during the review process		n/a	
Overall rating		MS	

Rating for Financial Management: Moderately Satisfactory

C. Efficiency

158. The project was approved for implementation in January 2020. The official start date of the project is considered April 2020 which is the date of the first disbursement. The Project Inception Report is part of the overall Inception Report for the MedProgramme and its 7 Child Projects, dated September 2020 and was published following review of the draft report at the Project Inception Workshop conducted in July 2020.

159. The start of the project was affected by the outbreak of Covid-19 pandemic in early 2020 and related travel and social distancing restrictions. After the initial slow progress,

[7] See also document 'Criterion Rating Description' for reference

the project execution accelerated in 2022 and 2023 when the MedPCU was fully staffed including short time gender and knowledge management experts.

160. Other reported issues affecting project implementation are related to delays in procurement. The protracted and complicated procurement of the PCB Phase 1 disposal contracts through UNON led to engagement with UNOPs for procurement of Phase 2 contracts on expectation of accelerated procurement processes. The procurement arrangement with UNOPS includes recruitment of a consultant to follow-up on disposal of PCB in Albania, Bosnia and Herzegovina, Montenegro and Tunisia, as well as mercury in Tunisia.

161. In early 2024, the MedPCU experienced shortfall of staff caused by resignation of the technical Programme Management Officer and Finance/Budget Officer that was exaggerated by slow progress with recruitment for the vacant posts. At the time of the MTR, the two posts were still officially vacant although the recruitment processes were reportedly near completion.

162. The project has successfully enabled collaboration among a large set of stakeholders, including high ranking national authorities and educational/research institutions. It has also taken advantage of complementarities with parallel projects implemented by sister UN agencies in Bosnia and Herzegovina, Montenegro, and Tunisia and achieved thus synergies and faster progress towards the planned results while making savings on the CP 1.1 financial resources.

163. However, the executing partners expressed uncertainty whether all activities for delivery of planned results could be completed within the remaining time period of the project. Therefore, extension of the project will be proposed under recommendations.

Rating for Efficiency: Moderately Satisfactory

D. Monitoring and Reporting

Monitoring of Project Implementation

164. The Project Document contains a detailed Monitoring and Evaluation Plan. The monitoring part of the Plan comprises the Inception Workshop, Annual Stocktaking Meetings (ASM), and PSC meetings. The main monitoring tool for CP 1.1 were the PSC meetings organised annually specifically by the project itself while the Inception Workshop and ASMs were organised in the context of the entire MedProgramme.

165. The project monitoring has been conducted in line with the Monitoring and Evaluation Plan and documented in the PSC meeting minutes and reports from the ASMs.

Rating for Monitoring of Project Implementation*: Satisfactory*

Project Reporting

166. Project reporting consisted of compilation of quarterly progress and financial reports and annual PIRs prepared according to the UNEP and GEF reporting requirements. Progress reports were also prepared specifically for the annual meetings of the PSC.

167. The MTRR found the available project reports sufficiently detailed and the reporting formats in compliance with the UNEP and GEF reporting standards. The MTRR observation is that, in general, the project reporting ensured transparent information flow across the executing partners and the project key stakeholders.

168. However, access of the MTR consultant to various project-related documents, such as workplans, budget revisions, terms of references, contracts and their deliverables, as well as the periodic documents like PIRs and financial plans, was possible only on basis

of ad-hoc requests to the MedPMU as there was no repository of the relevant project documentation required for the MTR.

Rating for Project Reporting: *Satisfactory*

Rating for Monitoring and Reporting:	**Satisfactory**

E. Exit Strategy & Sustainability

Exit Strategy

169. Development of an exit strategy was not planned in the Project Document hence no activity was conducted in this regard.

Rating for Exit Strategy: N.A.

Socio-political Sustainability

170. Project has been successful in building up ownership, interest and commitment of Government institutions and stakeholders despite political challenges in few project countries and related difficulties in planning and execution of specific activities in those countries. However, the very slow progress towards ratification of the Minamata Convention hampers implementation of specific activities on mercury waste disposal and prevention.

Rating for Socio-political Sustainability: Moderately Likely

Financial Sustainability

171. The CP 1.1 was designed to attract considerable amounts of co-financing. However, the co-financing contributions were only modest in the first three years of the project. Increased mobilisation of co-financing from Governments and private sector will be required particularly for Component 1 on disposal of PCB and mercury waste.

Rating for Financial Sustainability: Moderately Likely

Institutional Sustainability

172. There is a well-established regional network as the project contributes to the programme of work adopted by the Conference of Parties of the Barcelona Convention. There is variable level of institutional stability at the level of the project countries with currently visibly higher institutional stability in the countries of the Eastern Mediterranean. The on-going project activities contribute to strengthening of national institutional frameworks through cooperation between the project countries.

Rating for Institutional Sustainability: Likely

Rating for Sustainability:	**Moderately Likely**

F. Factors Affecting Performance and Cross-Cutting Issues

Project Inception

173. According to the implementation practice of GEF-funded projects, the Inception Meeting for the entire MedProgramme was held on 20-22 July 2020. Due to Covid-19 travel restrictions it was held in a videoconference modality. The meeting was attended by representatives of the participating countries as the Contracting Parties to the Barcelona Convention, representatives of UNEP as the GEF Implementing Agency,

representatives of the Executing Partners, as well as representatives of the UNEP/MAP Coordinating Unit, including the MedProgramme Coordination Team.

174. The Inception Meeting (IM) was organised with a set of objectives, namely:
    - Launch the Programme;
    - Provide an update on the plans to execute the activities of each CP;
    - Review and provide feedback on complementarities and interactions among the CPs
    - Submit for consideration of the Contracting Parties the work plans and budgets for the first year of execution.
175. The Inception Report (IR) from the meeting was published in September 2020[8] and reflects the discussion on the MedProgramme and its seven Child Projects Inception Meeting. Annex A to the IR can be considered as a revision of the Project Document for CP 1.1. In comparison with the original Project Document, the revision contains a structured and numbered list of activities for Component 2 with more detailed description of each activity.
176. The UNEP/MAP and EPs agreed to start the execution after the conclusions of the IM of the MedProgramme and to continuously assess the impacts of the COVID-19 pandemic. They also agreed to establish a Steering Committee to be held by spring 2021 where updated implementation plans and budgets would be presented. In addition to the revision of activities under Component 2, the IM also considered several adjustments of the activities under Component 1 described in further paragraphs below.
177. With regard to Output 1.1, the IM participants requested UNEP/MAP and EPs to reconsider the phased approach for including additional countries at the onset of the project (in addition to Algeria and Lebanon). However, UNEP/MAP explained that the above two countries considered for phase 1 have already completed the inventory of equipment with PCB, and site-specific environmental management plan for immediate disposal at the project preparation phase. Hence it was agreed to pursue the same task in other interested countries in preparation for disposal of PCBs in Phase 2 of the project.
178. Participants of the Inception Meeting requested UNEP, UNEP/MAP and EPs to further explore the mandatory conditions under the Minamata Convention with regard to eligibility for the GEF funds. They also encouraged the interested countries, namely Albania, Algeria and Bosnia and Herzegovina, to engage in discussion with the GEF Secretariat considering that these countries are not party to the Minamata Convention but took legally binding measures to reduce the mercury contamination in line with the Article 15 of the LBS Protocol of the Barcelona Convention. As the latter advocates stricter conditions than the Minamata Convention, this was considered to support eligibility of the above countries for realization of CP 1.1 activities related to decontamination of mercury hot spots identified in the Project Document.
179. With regards to Output 1.4 on mercury reduction, the IM participants considered information on a review of on-going or planned audits under the Minamata Convention Initial Assessments to be undertaken by MedWaves/SCP RAC in the targeted countries in order to avoid overlapping with the specific inventory of mercury-containing devices in public hospitals planned under CP 1.1.

[8] UNEP/MED WG.481/4

180. Regarding Outputs 1.3 and 1.4 on reduction of new POPs and mercury, the IM participants requested to undertake a cost-benefit analysis for the substitution of news POPs by other alternatives, as expensive alternatives might be difficult to implement.

181. There was discussion about selection of national experts and it was agreed that the countries have the full right to select their own consultants and to inform UNEP/MAP on the selection. However, selection with regards to Outputs 1.3 and 1.4 related to the reduction of new POPs and mercury would be made directly by MedWaves-SCP/RAC according to its procurement rules and procedures, in full consultation of the Ministries of Environment of the participating countries.

182. The MTR considers organisation of the IM timely and in line with the aims and expectations. Therefore, the MTR rating for preparation and readiness is **'Satisfactory'.**

Quality of Project Management and Supervision

183. UNEP/MAP is the Executing Agency of this project with activities being led jointly by the MED POL and the MedProgramme Coordinating Unit (MedPCU). The latter was created in 2020 in line with the provisions in the Project Document and is hosted and supervised by UNEP/MAP. The MedPCU ensures coordination across the entire MedProgramme and provides management functions to the Child Projects executed by UNEP/MAP.

184. Since the beginning of the project implementation, the MedPCU was staffed in two technical posts, namely two Programme Management Officers, and two support posts, namely the Administration Assistant, and Financial Assistant. However, there has been high staff turnover in the positions. In 2022, the new Programme Management Officer for the technical part was recruited but remained in post only until February 2024. In 2023, the MED POL and MedPCU Programme Management Officers swapped their positions. At the time of preparation of this report, the MedPCU had just the single Programme Management Officer (PMO) and two assistants while the respective posts of the technical PMO and Associate Finance and Budget Officer were under recruitment.

185. Two UNEP/MAP's regional activity centers are co-executing partners. The MedWaves, previously known as the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC) is responsible for execution of Outputs 1.3 and 1.4. The respective roles of MedPCU and MedWaves are distinctive with very little opportuntities for direct collaboration. The Plan Bleu Regional Activity Centre is designated for co-execution of Component 2. Until the MTR, there was no information available about direct involvement of Plan Bleu in the project.

186. There was also staff turnover at the MedWaves. The Project Manager for the Policy Area resigned from the post in June 2023 and the successor was appointed as of September 2023.

187. There have been periodic on-line meetings between Med/PCU and MedWaves organised to exchange information about the progress made in the execution of the distinct activities, discuss implementation challenges, and coordinate preparation of working and information documents for the PSC and other events of the project.

188. There have been almost no constraints regarding cooperation with the designated National Focal Points for the project as political situation in almost all partner countries has been stable since the start of the project implementation. The only exception is Lebanon that was very active in the initial phase of the project but more recently the communication broke down and the in-country project activities were put on hold as a result of in-country political challenges.

Rating for Quality of Project Management and Supervision: Moderately Satisfactory

Stakeholders Participation and Cooperation

189. Participation of stakeholders in the project preparatory phase is well documented in Annex P to the CEO that contains proceedings from the two regional consultations where the representatives of the project countries had opportunity to discuss pertinent issues of the project formulation. Further opportunity was given through virtual consultations immediately after the 2nd regional consultation meeting.

190. Stakeholder participation in the first year of the project implementation comprised mainly establishment of the Project Steering Committee with overall project oversight and advisory functions. The Committee was established in late 2020 and consists of representatives of the project beneficiary countries at a technical decision-making level (e.g. GEF Operational Focal Points or national focal points for Stockholm, Minamata or Barcelona conventions), the UNEP Task Managers for CW and IW focal areas, the MedProgramme Coordinator, and representatives of the executing agencies. The MedPCU acts as Secretariat for the PSC.

191. Eight of the GEF Operational Focal Points of the participating countries took part in the first Project Steering Committee (PSC) meeting in March 2021 that reviewed preliminary progress and approved the 2021-2022 workplan and budget. The committee has met on three occasions at 12-month intervals, namely in March 2022, 2023 and 2024. There is an extraordinary PSC meeting scheduled for September 20224 as a project mid-term stocktaking meeting for consideration of results of the MTR.

192. Further stakeholder participation was based on implementation of the stakeholder engagement plan contained in Section A.3 of the approved Project Document and consisted of coordination of project activities with and among the countries to ensure that pertinent activities were implemented. The priority was given to exchanges with stakeholders in Algeria and Lebanon as the Phase 1 countries with the aim to encourage collection of data needed for preparation of the PCB disposal and ensure readiness of the two countries (including private sector owners of PCB waste) for execution of the disposal contracts once the procurement of PCB disposal services is completed.

193. Under Component 1, stakeholders from the level of national governments and from the national technical teams participated in the Annual Stocktaking Meeting and in PCB trainings. The collaboration of national stakeholders in Bosnia and Herzegovina, good collaboration between the government, UNDP and Tuzla University led to successful completion of the mercury assessment at HAK-1 complex in Tuzla. For Tunisia, extensive consultation between the EA, UNDP Tunisia and the Government led to the development of a UN-to-UN transfer agreement for accelerated implementation of the planned national activities in Tunisia. MedWaves engaged with national stakeholders from Lebanon, Tunisia and Morocco on respective inventories of mercury-containing medical devices and PFOs-containing extinguishers.

194. In Component 2, the main avenue for stakeholder participation was the establishment of the Steering Committee for the Transboundary Diagnostic Analysis. Further participation included engagement of relevant institutions in five project countries for preparation of national TDA reports, and engagement for preparation of a stocktaking report on technical and scientific capabilities for offshore monitoring. However, there was no attempt for systematic involvement of the Mediterranean EU member countries. Participation of those countries would increase the value of the regional TDA and establish grounds for expansion of the offshore monitoring network.

195. Following the model of the PPG Regional Consultation Meetings, the PSC meetings were supposed to bring together both Chemicals and Waste and International Water stakeholders. However, this was the case only for few countries while others were

represented only by Chemicals and Waste stakeholders. Weak representation of the IW stakeholders did not contribute to transparency and collaboration of stakeholders across the two Focal Areas. This point was also raised at the 2024 ASM that recommended to increase the connectivity between C&W / IW not only for CP 1.1 but also for the other relevant child projects.

Rating for Stakeholders Participation and Cooperation: Moderately Satisfactory

Responsiveness to Human Rights and Gender Equality

196. Human rights-based approach and inclusion of marginalised communities were not explicitly addressed in the project design. Nevertheless, a safe, clean, healthy and sustainable environment is integral to the full enjoyment of a wide range of human rights, including the rights to life, health, food, water and sanitation. Since the project directly tackles environmental degradation in priority land-based and coastal pollution hot spots of the Mediterranean, it implicitly addresses human rights implications of environmental damage as these are felt most severely by disadvantaged groups in the society, including rural communities and the urban poor, women, children, ethnic minorities, and people with disabilities.

197. The MedProgramme has developed a Gender Mainstreaming Strategy (contained as Annex I of the CP 1.1 Project Document) with the aim to meet gender equality objectives and bring cohesive gender-responsive actions throughout its diverse portfolio. The Strategy envisages development of gender action plans under the Child Projects to address objective-specific gender and socioeconomic dimension, and pioneer a pan-Mediterranean effort towards greater gender equality and environmental security.

198. In this context, a specific Gender Action Plan for Component 1 was developed during the CP 1.1 formulation phase. In addition to engagement of a gender consultant for design of gender-focused surveys and training sessions, the Plan also calls for regulatory frameworks, disposal plans and pollution prevention policies to have gender-responsive focus and inclusive approach.

199. To support the above, the MedProgramme Gender Community of Practice (Gender CoP) was established in June 2021 as a forum for executing partners and national counterparts to enhance knowledge on gender equality and women's empowerment in sustainable environment development within the context of MedProgramme activities.

200. The Gender CoP meeting held in October 2022 focused on gender issues in chemicals and waste and presented extensive information on importance of this topic (POPs and mercury particularly), given women and men's different exposure to harmful chemicals and associated impacts, due to biological differences, social gender roles and gender-specific division of labour in occupational roles. An update on the implementation of gender activities in the context of CP 1.1 was provided, mainly on gender capacity-building activities at the national level and knowledge exchange with relevant international actors.

201. The capacity of project implementation staff for mainstreaming gender in project activities in the context of chemicals and waste was enhanced through participation in the 3rd Gender CoP meeting. An in-depth presentation was prepared for that meeting, building on the presentation/training delivered previously during the training held in Algeria on in June 2022. This constitutes one of concrete gender actions for the chemicals and waste component under CP 1.1. Further activities included presentation on gender aspects in occupational health and safety for handling PCBs in Lebanon in November 2022, on-line presentation on "Gender Issues in Chemicals & Waste" held in Tunisia in June 2023, as well as outlines of case studies with gender aspects of occupational exposure to mercury in hospitals in Tunisia and Lebanon.

202. As a matter of fact, there are no links of the Gender Action Plan (GAP) for Component 1 to the PRF and there are no gender mainstreaming indicators in the PRF. Although the Gender CoP meeting made recommendations for implementation of the GAP, this issue was not addressed at the 2023 and 2024 PSC meetings for CP 1.1. Consequently, no gender disaggregated statistics were collected for the various activities under Component 1.

203. Through the agreement with UNOPs, the MedPCU recruited a gender specialist for effective implementation of the MedProgramme Gender Strategy endorsed for all eight Child Projects. As of July 2024, the recruitment was still on-going. The consultant is expected to support execution of the Gender Strategy and ensure coherence of gender-responsive actions throughout the portfolio of child projects. However, the ToR for the assignment does not contain any reference to the GAP of Component 1 of CP 1.1.

204. Component 2 of the CP 1.1 envisages a dedicated gender assessment in the course of TDA update that will help to establish a baseline, showing the differences in gender norms, roles, power structures, activities, needs, opportunities, and rights, which affect men, women, in the context of changing environmental and socio-economic situation in the Mediterranean. This envisages collection and analysis of sex-disaggregated data and gender information to understand gender differences and gaps, and determine gender differentiated impacts and risks. Also, an action plan will be produced to identify measures to avoid adverse gender impacts, and to act on opportunities to address gender gaps and inequalities.

205. As part of the TDA update, a gender/socio-economic assessment was developed focusing on how gender relates to transboundary water issues, pollution of marine ecosystems, identifying also future scenarios and gender-specific risks in the use of chemicals. A gender presentation providing an overview of Chapter 5 of the TDA on gender was developed and delivered during the 2nd meeting of the TDA Steering Committee in December 2022.

206. This exercise will be the first-ever TDA for the Mediterranean region to include a gender thematic assessment based on collection and analysis of sex-disaggregated data and assessment of gender indicators.

Rating for Responsiveness to Human Rights and Gender Equality: Satisfactory

Environmental and Social Safeguards

207. At the formulation phase, the CP 1.1 was subject to UNEP Environmental, Social and Economic Screening conducted using a standardised procedure for assessment and rating of probability, impact and significance of risks related to nine thematic safeguards that UNEP considers important for implementation of its projects.

208. The result of the screening is summarised in the Environmental, Social and Economic Review Note provided as Annex I to the Project Document. The screening identified moderate risks related to the possibility of an accident or spill during the repackaging, transport and environmentally sound destruction of PCB and mercury wastes addressed by the project.

209. The identified risks will be managed though preparation of an initial Environmental Management Plan (EMP) prepared by qualified consultants for each site where waste related operations will be conducted, and a Environment, Health and Safety (EHS) document prepared by waste disposal contractors detailing the precautionary and emergency measures to be in place before operations begin, including ongoing monitoring of worker exposure, air quality, and other relevant measures depending on the type of wastes being handled.

210. The project design includes a Phase 1 of disposal activities in two countries (Algeria and Lebanon), for which the site-specific EMPs have been included as Annex J to the request for GEF CEO Endorsement.

211. For Bosnia and Herzegovina and Montenegro, draft EMPs are available as Annex for a PCB disposal procurement request. The EHS documents will be developed by the selected bidders to include assessment of risks which are regularly monitored by the national authorities and Executing Agency during the supervision of implementation of the PCB disposal contracts.

212. The initial Environmental, Social and Economic Screening was conducted and documented in line with the standard procedure and implementation of the project follows conclusions from this process.

Rating for Environmental and Social Safeguards: Satisfactory

Country Ownership and Drivenness

213. The entire MedProgramme and its Child Projects were developed in a participatory manner through consultation with the project countries. However, there is no documentation available about involvement of the countries in the initial phase of the MedProgramme concept development. Available documentation suggests that the Programme Framework Document (PFD) for the MedProgramme was developed between April and October 2016 through technical consultations between involved GEF Implementing Agencies and execution partners.

214. These consultations culminated at the kick-off meeting in May 2017 that gathered 12 partner institutions for consultation about preparation of 7 Child Projects of the MedProgramme. The GEF Implementing Agencies and execution partners defined contributions of each actor to the overall MedProgramme outcome, discussed their integration creation of synergies, determined specific components of the proposed Child Projects, and set a timeline for preparation of the fully-fledged project documents.

215. Specifically with regard to the CP 1.1, a regional workshop on Improved and Harmonized POPs Inventories and Action Plan was organized by the Stockholm Convention Regional Centre for North Africa in Morocco on 30 October – 3 November 2017. The workshop was followed by technical missions to Algeria, Lebanon and Tunisia to identify potential interventions and sites for PCBs and mercury disposal and site remediation in the period December 2017 – February 2018.

216. The first regional consultation for the MedProgramme in March 2018 was attended by the GEF Operational Focal Points from eight project countries, namely Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Montenegro, Morocco and Tunisia. The country representatives took note of the progress achieved on the preparation of all Child Projects and validated the proposed activities, the sites chosen for their execution at the national level and the provisional timeline for submission of the CPs to the GEF Secretariat.

217. The second regional consultation for the MedProgramme in September 2018 was organised with participation of the GEF OFPs (or their representatives) from Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro and Tunisia. The country representatives confirmed the importance of the MedProgramme for their countries and for the region, and endorsed the proposals of UNEP/MAP on (i) the timeline for finalization of the Child Projects of the MedProgramme and their submission to the GEF Secretariat for endorsement; (ii) the development of the overarching strategies for Knowledge Management and Gender Mainstreaming; and (iii) the arrangements for execution of the MedProgramme through the MedProgramme Coordinating Unit (MedPCU).

218. For the regional consultation meetings, the country representatives coordinated gathering of comments from their respective competent national institutions and thematic experts and provided UNEP/MAP with a set of official comments on maters pertinent for development of the MedProgramme and its CPs. Also, they agreed to take the necessary steps to ensure effective coordination with their respective national counterparts in the programme (e.g. interministerial bodies, stakeholder groups, etc).

219. According to the minutes of the two regional consultations, the bulk of the contributions from the countries to discussion on the CP 1.1 was related to Component 1 on management of POPs and mercury waste while discussion on Component 2 was almost non-existent.

220. Ownership of the project was further maintained during the first years of implementation by active participation of the countries in the PSC, , coordination with relevant national bodies and institutions, as well as direct involvement of national experts in execution of project activities. Again, the minutes of the PSC meetings show that emphasis in the discussion was put on Component 1 with focus on national pollution hot spots and less attention was paid to Component 2 with focus on regional cooperation in TDA and offshore monitoring. Although the 2024 ASM recommended MedProgramme-wide national events for bringing national stakeholders from all child projects together to exchange information and build on the programme aspects, there is no evidence of such events so far.

221. The rating on country ownership and drivenness for the CP 1.1 is Moderately Satisfactory reflecting that the development of the MedProgramme PDF and initial discussion about the CP 1.1 appear to have been driven by the GEF IAs and co-executing partners, while further development of the CP 1.1 was done with full and active participation of the participating countries.

Rating for Country Ownership and Drivenness: Moderately Satisfactory

Communication and Public Awareness

222. In the framework of the PPG phase of the MedProgramme, the Knowledge Management Strategy was prepared in the period June - September 2018 in close coordination with the UNEP/MAP Secretariat. The Strategy is based on analysis of the MedProgramme PFD and other various background documentation, including the Report from the First Regional Consultation, in-depth review of available drafts of Child Project documents, results of a dedicated online survey, etc.

223. The KM Strategy is presented as Annex H to the MedProgramme Project Document. It is built within the MedProgramme Support Child Project 4.1 and executed by the MedPCU in close coordination with all Child Projects. The purpose of the Strategy is to offer a structured and integrated approach to leverage and systematically share knowledge assets generated by the Child Projects with the intended beneficiaries and target audiences.

224. Between June 2022 and August 2023, the MedPCU was supported by a Knowledge Management Specialist who provided assistance to the Child Projects and the MedPCU for use of a wide spectrum of communication channels and tools for promotion of the MedProgramme and disseminate lessons learned and emerging good practices. In addition, a Medprogramme Communication Road Map was prepared as a recognition of the critical role communication plays for dissemination of results to a wide audience in the region, and for harmonisation and coordination of communication activities across the eight Child Projects.

225. In October 2023, the MedProgramme launched a project with the Global Resource Information Database - Geneva (GRID-Geneva)[9] for development of a web-based Knowledge Management (KM) platform consisting of a data and information management system (with both public and restricted access) and a combination of visualization tools. Duration of the project is 1 year with completion expected in October 2024.

226. The KM platform is structured around three major components: a public facing website, an information visualization tool (using MapX) and a project management tool along with a collaborative working environment. It is expected to serve as a central repository of all the data generated by the nine Child Projects (CP) of the MedProgramme, with a view to fulfil a number of strategic knowledge management objectives. At the same time, each Child Project will be granted individual identities within the overall MedProgramme-branding in terms of creation of sub-websites within the KM platform, preparation of specific publications and social media services, among others.

227. In cooperation with the sister CP 4:1, the CP 1.1 has paid considerable attention to raising awareness at all levels about project itself as well as about the environmental issues facing the Mediterranean Sea. To date, it produced a considerable number of communication and public awareness materials, shared posts on social media, technical materials, field visit reports, contributions to the MedBulletin[10], brochures with information on CP 1.1 (jointly with CP 1.3), technical information, as well as photos and videos from project activities. Those products were used to support participation at the Conferences of the Parties to the Basel, Rotterdam, and Stockholm Conventions, as well as at various awareness-raising events. Under cooperation with UNDP, data from PCB inventories and mercury assessment from Bosnia and Herzegovina has been visualised on MapX. Support has also been provided in terms of drafting. All the knowledge products are prepared for uploading to the KM platform once the latter is operational.

228. Information about the MedProgramme and its child projects is also available at the UNEP/MAP trilingual (English, French, some contents also in Arabic) public website that contains different types of documents and materials such as technical reports, meeting reports, case studies, country fact sheets, photos and videos. It also contains links to the websites of the co-executing partners.

229. Annual Stocktaking Meeting of the MedProgramme is yet another channel and modality of communication. The primary objective of the meeting is to enable face-to-face knowledge exchanges and promote broader adoption of MedProgramme approaches and solutions through synergistic interactions among the Child Projects. At the same time, the meeting provides an opportunity to engage with a broader audience of peers and stakeholders that share similar objective of achieving environmental security in the Mediterranean Basin.

230. Two Annual Stocktaking Meetings of the MedProgramme were organised on 2-3 November 2022 and on 22-24 April 2024, respectively. The meetings brought together representatives of the Contracting Parties to the Barcelona Convention, as well as the MedProgramme's implementing and executing agencies. The meetings featured keynote speeches/lectures feeding into the themes of the MedProgramme, round table discussions on the scientific basis of the implemented activities, and panel discussions on challenges and lessons learned for the delivery of planned outputs of each CP.

[9] The Global Resource Information Database - Geneva (GRID-Geneva), is a partnership between the UNEP, the Swiss Federal Office for the Environment and the University of Geneva with the main role to transform data into information and knowledge to support the decision making process related to environmental issues.

[10] MedBulletin is the dedicated Newsletter of the MedProgramme It was launched in November 2022 and is produced semi annually.

231. The above knowledge products and communication channels are designed mainly for reaching out to rather specialised audience such as relevant government agencies in the project countries, international and national technical practitioners, and academia. The attempts on extension for awareness raising of general population was only marginal.

232. Through the contract with UNOPS, the MedProgramme recruited a knowledge management and communications specialist to support execution of MedProgramme KM Strategy and develop a Communication Strategy and related products for implementation of the KM Strategy. This assignment is expected to elaborate a solid narrative about the MedProgramme and its Child Projects and thus improve effectiveness of communication processes for information and engagement of project stakeholders, partners, and all categories of target audiences.

233. The above shows good progress made for achievement of systematic communication and information exchange about the MedProgramme approaches and with strong participation the CP 1.1. However, the progress could have been faster if the development of the KM platform was pursued from the very start of the MedProgramme implementation.

Rating for Communication and Public Awareness: Satisfactory

Rating for Factors Affecting Performance and Cross Cutting Issues: Moderately Satisfactory

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

234. The Child Project 1.1. is one of the eight child projects of the Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security that was designed as the third step in the 20 years of cooperation of UNEP/MAP and GEF in the Mediterranean Region and builds on the legal framework provided by the Barcelona Convention and its protocols.

235. The CP 1.1 was endorsed for implementation in February 2020, i.e. almost three years after its formulation had started in May 2017 and more than one year after the final Project Document was submitted to the GEF Secretariat for the GEF CEO endorsement. It is regional in nature as it includes 9 participating countries, and its planned duration is 60 months (5 years). This Mid-term Review was undertaken after the four years of the project implementation. The project is subject to joint execution by UNEP/MAP as the lead executing partner and two regional activity centres, namely MedWaves (previously SCP/RAC) and Plan Bleu, as co-executing partners

236. As the project was designed to be part of the GEF multi-focal area programmatic approach, it consists of two substantive components, one in the Chemicals and Waste focal area and the other in the International Waters focal area, and one supporting component on results dissemination and knowledge management that cuts across the two substantive components.

237. The project formulation was based on robust baseline data and highlighted two critical issues of environmental management in the Mediterranean, namely land-based pollution in coastal hotspots and catchment areas, and integrated water quality monitoring and data sharing systems.

238. Component 2 was designed for strengthening the integrated cooperation frameworks and is therefore strictly regional by nature, Component 1 addressing the reduction of wastes and harmful chemicals (POPs and mercury) in priority pollution hotspots scattered across the nine participating countries is in fact a packet of national projects. The links between the two components are missing at the level of the project design while there are only weak links at the level of implementation in few participating countries.

239. The initial phase of the project was impacted by the covid-19 restrictions that negatively affected the already complex process of converting the project planned activities into concrete interventions both at the regional and national levels. The main constrains were difficulties in direct assessment of the situation on the ground due to the covid-19 travel and social distancing restrictions in the first year of the project. Limited opportunities for direct consultations with national competent authorities and other relevant national stakeholders confounded definition of precise timelines for development of effective and timely actions and stakeholder involvement on the ground.

240. In addition to the above external challenge, the project faced internal challenge in terms of staff turnaround and reassignment in the executing partners that affected continuity of activity planning and execution as well as monitoring of progress at the level of the beneficiary countries. These challenges were further aggravated by complicated bureaucratic procedures for procurement of waste disposal services through UNON.

241. The CP 1.1 was conceived at the time when the GEF enabled exceptional access to funding for countries that have not yet ratified the Minamata Convention on expectation that such countries would accelerate the ratification process. Despite this expectation,

few project countries faced challenges that slowed down the ratification process. At the time of the MTR, three project countries (Bosnia and Herzegovina, Morocco and Tunisia were not yet parties to the Convention and this casted doubts on their eligibility to use the project funding for disposal of POPs.

242. The project team has taken several cases of adaptive management for addressing the above challenges and mitigate their negative effects in order to smoothen and accelerate implementation of the planned activities.

243. The project is now at the start of the 5th year of implementation. Due to the combined effect of covid-19 restrictions in the 1st year and slow progress of work on delivery of some sub-components in the following years, several project activities were delayed and/or modified. Despite several adaptive management measures of the project team, the delivery of some outputs has been slower than expected. Consequently, there is a risk that some end-of-project targets will not be achieved by the original project completion date of September 2025.

Table 12: Project Performance Ratings[11]

Criterion	Summary assessment	Rating
Strategic Relevance		**S**
1. Alignment to UNEP's, Donors and Country (global, regional, sub-regional and national) Strategic Priorities	The CP 1.1 is fully aligned with the relevant parts of the Stockholm and Minamata Conventions as well as with the Barcelona Convention and its Protocols. It contributes to the thematic subprogramme on chemicals and pollution action within the 2022-2025 UNEP Strategy and to the respective GEF-6 programming strategies for Chemicals & Waste and International Waters.	**S**
2. Complementarity with existing interventions/ Coherence	The implementation of the project shows proves complementarity to other recent and ongoing interventions working in the project countries on the same problem/issue, particularly for the CW component.	**S**
Quality of Project Design	Baseline situation identified and alternative scenarios defined in the Project Document. While the composition of activities under the four outputs of Component 1 is well structured with numbering and detailed description, the text on Component 2 contains mostly background information for the four outputs and activities are only listed at the end of each output section without further details.	**MS**
Effectiveness		
1. Theory of Change	The project design included a simplified version of the ToC with not full explanation of the intervention logic and missing ToC elements, in particular for the IW component.	**MS**
2. Availability of outputs	Despite several implementation challenges, the project has made decent progress towards delivery of the outputs on reduction of pollution. However, the progress on outputs for pollution prevention has been only marginal. There has also been steady progress on delivery of three of four outputs under the IW component.	**MS**

[11] Most criteria will be rated on a six-point scale as follows: Highly Satisfactory (HS); Satisfactory (S); Moderately Satisfactory (MS); Moderately Unsatisfactory (MU); Unsatisfactory (U); Highly Unsatisfactory (HU). Sustainability and Likelihood of Impact are rated, also on a six-point scale, from Highly Likely (HL) down to Highly Unlikely (HU) and Nature of External Context is rated from Highly Favourable (HF) to Highly Unfavourable (HU).

Criterion	Summary assessment	Rating
3. Progress towards project outcomes	Progress towards the outcomes under the CW component had been hampered by the procurement and staffing issues. Despite the progress achieved on three out of four outputs under the IW component, the work on the critical Output 2.2 has not started yet.	**MU**
4. Likelihood of impact	Based on the design of the project, it will not be able to identify immediate impacts of the reduced pollution in the coastal pollution hotspots.	**MU**
5. Adaptive management	Interventions of adaptive management to address implementation challenges taken in a timely manner. Their effectiveness remains to be seen as the AM interventions not fully completed	**S**
Financial Management	*To be inserted*	
Efficiency	Despite delays caused initially by Covid-19 and later by procurement issues, the project has made decent progress on delivery of the planned outputs. However, a no-cost project extension is necessary for completion of all activities within the remaining project time period.	**MS**
Monitoring and Reporting		
1. Monitoring of project implementation	M&E conducted in line with the ME Plan defined in the Project Document.	**S**
2. Project reporting	Available project reports sufficiently detailed and the reporting formats in compliance with the UNEP and GEF reporting standards.	**S**
Exit Strategy and Sustainability	No exit strategy planned in the Project Document.	**N.A.**
Factors Affecting Performance		
1. Project inception	The Inception Meeting for the entire MedProgramme was held in July 2020, 3 months after the official start of the implementation. The results for CP 1.1 are in line with the aim of the IM.	**S**
2. Quality of project management and supervision		**MS**
2.1 UNEP/Implementing Agency:	Participation of IA through annual PSC ensured systematically for the CW component but less for the IW component.	**MS**
2.2 Partners/Executing Agency:	The Project Management in general is of a satisfactory quality. However, resignation of staff at UNEP/MAP and MedWaves, slow succession recruitment and complicated procurement procedures at both EPs slowed down execution of outputs under Component 1.	**MS**
3. Stakeholders' participation and cooperation	Good stakeholders' participation through annual PSC and Stocktaking meetings and involvement of national experts in activities at country level. Most of the countries represented in PSC meetings by institutions mandated in CW only hence opportunities for cooperation btw CW and IW FAs not fully used.	**MS**
4. Responsiveness to human rights and gender equality	Gender Action Plan developed for the entire MedProgramme during the formulation phase. Regional gender assessment made for compilation of the regional TDA report based on inputs by 5 countries only.	**MS**
5. Environmental and social safeguards	Initial Environmental, Social and Economic Screening conducted and documented in line with the standard procedure and implementation of the project follows conclusions from ESES.	**MS**
6. Country ownership and driven-ness	Country ownership of Component 1strong, for Component 2 is a bit weaker due to less intensive participation of IW stqkeholders.	**MS**

Criterion	Summary assessment	Rating
7. Communication and public awareness	Implemented jointly with sister project 4.1. MedProgramme Knowledge Management Strategy produced during the formulation phase. A number of KM products prepared by CP 1.1 used in communication with stakeholders.	S
Overall Project Performance Rating at Mid-Point		**MS**

B. Lessons learned

Lesson Learned #1:	Experience from implementation of the project has demonstrated the need for full staffing of the dedicated PCU to ensure timely implementation, reporting and delivery of planned outputs.
Context/comment:	The fully staffed PCU was very effective in adaptive management, monitoring implementation progress, engaging with external stakeholders, communicating results and knowledge products, and presenting the project at relevant international gatherings..

Lesson Learned #2:	The lack of a TOC and 'output to outcome' analysis during the project design resulted in lost opportunities to better test project assumptions and drivers, which would have provided valuable data to inform and refine project implementation strategies and approach.
Context/comment:	Project results achieved early on in the implementation create enthusiasm for achieving the project objectives and strengthen ownership by the participating countries.

Lesson Learned #3:	There are positive and negative aspects of UN-to-UN transfer agreements. For conclusion of such agreements, the UN partner organisations need time for review and approval of specific agreement provisions. While such agreement might meet the needs in case of ineffective coordination structures at the country level, the speed of implementation might be affected by specific rules and regulations of the receiving UN partner.
Context/comment:	The project used the UN-to-UN agreement mechanism for acceleration of regional procurement and implementation at country level. In reality, preparation of such agreements required considerable time. Nevertheless, experience gained from this project will be useful to UNEP for use of the UN-to-UN agreement mechanism in future projects with sizeable procurement components and for offsetting lack of presence at the country level as a non-resident UN agency.

Lesson Learned #4:	Weak national stakeholder representation in the PSC for the IW component of the project did not ensure internal coherence and links between the two project components at the level of the participating countries. The national representation should be based on consultations on CP 1.1 at the level of each participating country.

Context/comment:	The project was designed for establishing links between pollution reduction and environmental quality monitoring. As such links have not been established at the level of the participating countries, implementation of the CW and IW project components has been disjointed.

Lesson Learned #5:	Linking the component comprising concrete measures for reduction of coastal pollution hotspots with a component on general coastal pollution monitoring does not ensure ability to track impacts of the reduced pollution.
Context/comment:	The original idea of establishing impact of the reduction of pollution hotspots could work only if concrete monitoring programmes are established with indicators relevant to the pollutants addressed in the hotspots.

C. Recommendations

Recommendation #1:	Project extension: The project executing partners should prepare estimates for completion of their respective activities that will serve for preparation of a justified proposal for project extension of at least 6 months to be presented for approval by the extraordinary PSC meeting in September 2024. This proposal should also include budget revision to cover the increased costs of project management during the project extension period.
Challenge/problem to be addressed by the recommendation:	The project has been affected by Covid-19 restrictions in the 1st year and then by slow delivery in several areas. The remaining time until the originally planned project completion date is not sufficient for completion of all planned activities, particularly under Component 1.
Priority Level:	Critical
Type of Recommendation	PRF/target revision
Responsibility:	UNEP/MAP, MedWaves, Plan Bleu, UN Environment Economy Division
Proposed implementation time-frame:	Urgent – until 3Q 2024

244. Cross-reference(s) to rationale and supporting discussions:

- Section V/C on Effectiveness and sub-section on Availability of Outputs

Recommendation #2:	Stakeholder representation The project executing partners should ensure that representation of all project countries at the PSC meetings includes also national focal institutions responsible for Component 2.
Challenge/problem to be addressed by the recommendation:	Representation of national focal institutions involved in Component 2 (International Waters) in the PSC meetings was weak for several countries. Consequently, discussion at the PSC meetings has almost exclusively focussed on implementation of the Chemicals and Waste part of the project with almost non-existent focus on links and cooperation between the two project components.
Priority Level:	Urgent
Type of Recommendation	Improvement
Responsibility:	UNEP/MAP, MedWaves, Plan Bleu, UN Environment Economy Division
Proposed implementation time-frame:	3Q 2024

245. Cross-reference(s) to rationale and supporting discussions:

- Section V/F on Factors Affecting Performance and sub.-section on stakeholder participation

Recommendation #3:	Budget revision: The Executing Agency (MedPCU) should request approval of the Implementing Agency for revision of the project budget to repurpose part of the budget for mercury disposal for increase of the amount of PCB waste disposed
Challenge/problem to be addressed by the recommendation:	The project will make considerable savings from the planned budget for mercury waste disposal while at the same time exceeding the planned end-of-project target. However, due to delays in inventories and protracted procurement of disposal contracts not all planned targets will be achieved.

Priority Level:	High
Type of Recommendation	Budget revision
Responsibility:	Implementing Agency
Proposed implementation time-frame:	3 Q 2024

246. Cross-reference(s) to rationale and supporting discussions:

- Section V/C on Effectiveness and sub-section on Availability of Outputs in relation to Outputs 1.1, 1.2, and 1.3

Recommendation #4:	Revision of PRF target MedProgramme PCU should elaborate justified estimation of quantities of PCB waste that can be realistically disposed of within the remaining project time and budget and prepare a proposal for revised end-of-project target for Output 1.1 for presentation to the next PSC meeting.
Challenge/problem to be addressed by the recommendation:	There is a slow progress with identification of PCB waste for disposal in Tunisia. Based on estimation of required funding for achievement of the planned end-of-project target of disposal of 2,000 tons of PCB waste, the project will not be able to achieve this target.
Priority Level:	High
Type of Recommendation	EoP target revision
Responsibility:	MedProgramme PCU
Proposed implementation time-frame:	3 Q 2024

247. Cross-reference(s) to rationale and supporting discussions:

- Sectionon V/C Effectiveness and sub-section on Availability of Outputs in relation to Outputs 1.1, 1.2, and 1.3

Recommendation #5:	Reporting: The MedProgramme PCU should systematically collect information on the actually realised co-financing broken down by sources of co-financing and report this information in 2024 PIR and subsequent annual PIRs
Challenge/problem to be addressed by the recommendation:	The CP 1.1 was designed to attract considerable amount of co-financing. The actual status of co-financing is not reported with regard to co-financing sources.
Priority Level:	High
Type of Recommendation	Reporting
Responsibility:	MedProgramme PCU
Proposed implementation time-frame:	annually

248. Cross-reference(s) to rationale and supporting discussions:

- Section V/B on Financial Management and sub-section on Completeness of Financial Information

Recommendation #6:	Repository of documents for TE The MedPCU should systematically compile all documents relevant for the project TE in line with the "List of Documents for MTR" and store them in a dedicated repository of project documentation available to project evaluators.
Challenge/problem to be addressed by the recommendation:	Relevant documents for MTR was provided on basis of ad-hoc requests to the MedPCU that slowed down the work of the evaluation consultant.
Priority Level:	High
Type of Recommendation	Reporting
Responsibility:	MedPCU
Proposed implementation time-frame:	Before TE

249. Cross-reference(s) to rationale and supporting discussions:

- Section V/D on Monitoring and Reporting

Recommendation #7:	Monitoring of PCB and mercury sites In order to see direct impacts of the pollution reduction, the project partners should consider support for establishment of pollution monitoring programmes at the PCB- and mercury-contaminated sites
Challenge/problem to be addressed by the recommendation:	There are no links between the concrete pollution reduction measures under Component 1 and general coastal area pollution monitoring under Component 2.
Priority Level:	High
Type of Recommendation	Progress to impact
Responsibility:	Project partners
Proposed implementation time-frame:	Before end of the project

250. Cross-reference(s) to rationale and supporting discussions:

- Section V/F Quality of Project Management and Supervision

Recommendation #8:	PCU strengthening The MedPCU should strengthen its administrative arm through accelerated recruitment of the Finance Budget Officer and Finance Assistant of the MedPCU
Challenge/problem to be addressed by the recommendation:	The 2024 PSC agreed on budget repurposing for strengthening of the administrative arm of the MedPCU. Recruitment for the two administrative posts should be accelerated so that the project can benefit from stronger financial management for the remaining part of the implementation.
Priority Level:	Urgent
Type of Recommendation	PCU strengthening
Responsibility:	MedPCU
Proposed implementation time-frame:	Immediately

251. Cross-reference(s) to rationale and supporting discussions:

- Section V/F Responsiveness to Human Rights and Gender Equality

Recommendation #9:	Gender assessment The MedPCU should ensure that the gender specialist recruited by UNOPS conducts assessment of implementation of the CP 1.1 Gender Action Plan and provide recommendations for a more targeted approach of future interventions so that these can benefit from the gender-responsive actions and capacity building.
Challenge/problem to be addressed by the recommendation:	A specific Gender Action Plan was developed at the outset of CP 1.1. Several gender-related actions were reportd in the annual PIRs but gender mainstreaming was not reported in a systematic manner with relation to the CP 1.1 GAP.
Priority Level:	Urgent
Type of Recommendation	Gender mainstreaming
Responsibility:	MedPCU
Proposed implementation time-frame:	Immediately

ANNEX I. RESPONSE TO STAKEHOLDER COMMENTS

Response to stakeholder comments received but not (fully) accepted by the reviewers, where appropriate

Page Ref	Stakeholder comment	Reviewer Response
Par-14	Documents were made available on TEAMS, awaiting the completion and operation of the platform/Project Management tool	Yet the reviewer did not have the ful package of documents before the start of the data collection. No action taken.
Par. 23	Question whether it is with regard to UN-to-UN agreements or SSFAs.	The text of the paragraph clearly says it is with regard to UN-to-UN agreements. This is based on the experience with UNOPs and UNDP agreements. No action taken.
Par. 24	Reference to earlier comment on para 12.	Text of par. 12 (which is finding) was amended in line with the comment. However, par. 24 is a lesson learned based on the finding in par. 12 therefore no change needed.
Par.26	The decision is already taken in the 4th SCM, as per the ICA dated 12 July 2024	This decision was not available during the report drafting phase. This fact should be reflected in management response to recommendations. No change needed in this report.
Par. 28	Request for budget repurpose	Text revised that EA should request the approval of IA (also changed in Recommendation 3 on p. 55)
Par.33	Staffing of the PCU	The same as the response on par. 26. At the time of drafting of the report, the two post were still vacant (at https://www.unep.org/unepmap/who-we-are/contact-us)
Fig. 2	Add comparison between the original and revised ToC	The comparison is clear from the text (Paras 64-73). It is not possible to add all this into the figure.

ANNEX II. PEOPLE CONSULTED DURING THE REVIEW

Organisation	Name	Position	Role in the project	Gender
UNEP	Eloise Touni	GEF CW Task Manager	IA representative	F
UNEP/MAP	Mohamad Kayyal	Programme Management Officer	PCU member	M
UNEP/MAP	Olfat Hamdan	Programme Management Officer	MED POL PCU member	F
UNEP/MAP	Maren Mellendorf	Programme Management Officer (April 2022 - February 2024)	PCU member	F
UNEP/MAP	Alessandro Candeloro	Short-term expert	IW specialist	M
UNEP/MAP	Marialena Vyzaki	Short-term expert	Gender specialist	F
UNEP/MAP	James Kenge Gunya	Short-term expert	Information specialist	M
MedWaves	Jordi Moles Matinero	Project Manager	Executive partner representative	M
EBRD	Hande Yukseler	Project Manager ENVITECC	IA representative (CP 1.3)	F
National Environmental Agency Albania	Enkeleda Shkurta	Head of Information Sector, GIS and Environmental Registers	Country Focal Point	F
Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina	Senad Oprašić	Head of Environmental Protection Department	Country Focal Point	M
	Azra Rogović-Grubić	Senior Adviser for International Cooperation	Focal Point for the Stockholm and Minamata Conventions	F
FBiH Ministry of Environment and Tourism	Almira Kapetanović	Head of Waste Management Department	Ministry with executive responsibility for waste management	F
UNDP Bosnia and Herzegovina	Alma Mirivić	Energy and Environment Sector	Project Manager – PCB project	F
	Marina Mujezinović		Field Officer – PCB project	F
Enova d.o.o. Bosnia and Herzegovina	Maja Maretić-Tiro	Department for Environmental Protection and Waste Management	Experts on PCB inventory	F
	Melina Valjevac			F
University of Tuzla, Bosnia and Herzegovina	Zvjezdan Karadžin	Faculty for Mining, Geology and Civil Engineering	Technical Coordinator of SSFA on HAK-1 mercury assessment	M
	Jasmin Isabegović		Technical Expert, SSFA	M
				M
Hydro-Engineering Institute Sarajevo Bosnia and Herzegovina	Selma Cengić	Executive Director	Co-authors of TDA National Assessment for Bosnia and Herzegovina	F
	Senida Dzajić-Rghei	Independent Researcher		F
Ministry of Environment, Lebanon	Sabbagh Bassam	Head of Service, Urban Environment	Country Focal Point	M
Center for Ecotoxicological Research	Danijela Suković	Advisor to the Executive Director for Laboratory Affairs	Technical experts for SSFA on Boka Bay Assessment	F

Organisation	Name	Position	Role in the project	Gender
Podgorica, Montenegro	Vladimir Živković	Research Associate		M
Ministry of Environment, Tunisia	Youssef Zidi	Director of Industrial Environment	Country Focal Point National FP for the Stockholm Convention	M
UNDP Tunisia	Bochra Jaouani	Project Officer	Coordinator of UN-to-UN agreement in Tunisia	F
University of Tunis El Manar	Saïd Tlig	Professor, Hydrogeology Department	Expert for SSFA on socio-economic assessment of the Minamata Convention	M
Tunisia's Association de l'Education Environnementale pour les Futures Générations	Semia Gharbi	Chairperson	Representative of NGO active in gender in waste management	F
Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT)	Rocio Millan Gomez	Senior Expert	Coordinator of SSFA on EMP for Kasserine site	F

ANNEX III. KEY DOCUMENTS CONSULTED

Project planning and reporting documents

- Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts, Project Document with annexes, UNEP, 2018
- Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts, GEF CEO Endorsement Letter, 2020
- Report from the Kickoff and Inception Meeting of the Mediterranean Sea Programme (MedProgramme), UNEP, 2020
- Project Implementation Reports (PIRs) for GEF fiscal years 2021, 2022, and 2023, UNEP/GEF
- Project Steering Committee Meetings for 2021, 2022, 2023 and 2024, UNEP

Project Output 1.1: Management and disposal of 2,000 tonnes of POPs

- Contract for provision of service for the drainage, packaging, labelling, transportation, shipment and sound disposal of PCB oils, PCB contaminated oils, and PCB equipment from Lebanon, UNON Procurement Section, 2023
- Contract for provision of service for the drainage, packaging, labelling, transportation, shipment and sound disposal of PCB oils, PCB contaminated oils, and PCB equipment from Algeria, UNON Procurement Section, 2023
- Regional PCB waste elimination plan under Child Project 1.1, MedPCU, 2024

Project Output 1.2: Management and safe storage of 50 tonnes of mercury

- PCB disposal, Its prioritization, and capacity-building for mercury: Report from the meting in Athens, MedPCU, 2023
- Environmentally sound management (ESM) plan towards mercury disposal and remediation at HAK 1, Tuzla: Final Report, University of Tuzla, 2024
- Conceptual plan of construction waste management for the removal of electrolysis facility in the former HAK 1 complex in Tuzla, University of Tuzla, 2024
- Conceptual project for removal or remediation of contaminated facility, water and soil with mercury from HAK 1 area Tuzla, University of Tuzla, 2024
- Assessment of the contamination of the harbor beds with PCBs and mercury, and its risks assessment at Tivat Bay and Risan Harbour in Montenegro, Centre for Ecotoxicological Research, 2024
- Evaluation des impacts environnementaux, sociaux et économiques de la ratification de la Convention de Minamata sur le mercure, UNDP, 2024

Project Output 2.1: Updated TDA including gender assessment

- Mediterranean Sea and Coasts – Transboundary Diagnostic Analysis, Pollution & Ecosystems, MEDPOL/UNEP/MAR, 2023
- Analysis of transboundary issues of relevance for coastal belts in BiH including determination of impacts and causal chain analysis and recommendation, Hydro-Engineering Institute Sarajevo, 2023
- Analyse diagnostique transfrontaliere: rapport d'evaluation de la mediterranee Marocaine, National team of consultants, 2023

Project Output 2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations

- Integrated monitoring and assessment programme of the mediterranean sea and coast (IMAP) - a strategy for an extension offshore: Stocktaking Report, MEDPOL/UNEP/MAP 2022
- Integrated monitoring and assessment programme of the mediterranean sea and coast (IMAP) - a strategy for an extension offshore:: Offshore Protocol – IMAP monitoring programme and strategy, MEDPOL/UNEP/MAP 2022
- Review of the draft offshore strategy document (2022) and opperational modlities to support imap implementation in offshore areas, MEDPOL/UNEP/MAP 2024

Project Output 2.4:

- MAP Data Policy: Decision IG.25/10, UNEP/MED IG.25/27, 2021

Previous reviews/evaluations

- Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem – Regional Component: Implementation of agreed actions for the protection of the environmental resources of the Mediterranean Sea and its coastal areas, Terminal Evaluation Report, UNEP/GEF, 2016
- Strategic Partnership for the Mediterranean Large Marine Ecosystem – Regional Component: Implementation of Agreed Actions for the Protection of the Environmental Resources of the Mediterranean Sea and its Coastal Areas, Mid-Term Evaluation Report, UNEP/GEF 2013
- Environmentally Sound Management of Persistent Organic Pollutants (POPs) in industrial and hazardous waste sectors in BiH, Mid-Term Evaluation Report, UNDP, 2022

Reference documents

- UNEP Evaluation Policy, rev. October 2022
- Glossary of Results Definitions, UNEP, ver. 8, 2023
- Guidance on the Structure and Contents of the Mid-Term Evaluation Report, UNEP, 2023
- GEF Monitoring and Evaluation Policy, GEF Evaluation Office, 2010
- Integrating Human Rights and Gender Equality in Evaluations, UNEG, 2014
- Ethical Guidelines for Evaluations, UNEG, 2020

ANNEX IV. REVIEW SCHEDULE

The review schedule in the MTR Terms of Reference was adapted to the available time frame for conduct and completion of the MTR. The main phases of the MTR schedule is presented below.

MTR Milestone	**Timeline**
Initial review of essential documents and preparation of the MTR Inception Report	March to mid- April 2024
On-line interviews, review of the Project Information Package and preparation of the evaluation field missions	Until end of May 22024
MTR missions to selected countries, in person interviews and data analysis	June 2024
Submission of draft MTR report	15 July 2024
Submission of final MTR report and Audit Trail	15 August 2024

ANNEX V. COMMUNICATION AND OUTREACH TOOLS

https://www.unep.org/unepmap/news/news/three-pronged-endeavor-pcb-free-mediterranean

https://www.unep.org/unepmap/index.php/news/news/tackling-mercury-pollution-bosnia-and-herzegovina-qa-medprogramme

https://www.unep.org/unepmap/news/news/first-stocktaking-meeting-gef-unep-medprogramme

https://fintecc.ebrd.com/news/second-annual-stocktaking-meeting-of-the-medprogramme

https://iwlearn.net/news/outcomes-of-the-2nd-annual-stakeholders-meeting-medprogramme

https://fintecc.ebrd.com/news/invisible-threat---new-pops-in-water

https://fintecc.ebrd.com/news/first-issue-of-the-medbulletin

https://www.youtube.com/watch?v=ruxy9S1fzgU

Insert any communication and outreach tools used to disseminate results (e.g. power point presentations, charts, graphs, videos, case studies, etc.) or provide links.

ANNEX VI. BRIEF CV OF THE REVIEWER

Name	Dalibor Kysela
Profession	Independent Consultant to UN organisations, former staff member of UNIDO, IAEA and UNDP
Nationality	Czech Republic/Slovak Republic
Country experience	• Europe: Albania, Belarus, Bosnia and Herzegovina, Hungary, Montenegro, North Macedonia, Poland, Serbia, Russian Federation, Ukraine • Africa: Burkina Faso, Cameroon, Cape Verde, Egypt, Ethiopia, Ghana, Kenya, Mali, Madagascar, Maldives, Mauritius, Namibia, Niger, Nigeria, Rwanda, Senegal, South Africa, Sudan, Tanzania, Tunisia, Uganda, Zambia • Americas: Bolivia, Brazil, Chile, Costa Rica, El Salvador, Jamaica, Mexico, Peru • Central Asia and Caucasus: Azerbaijan, Armenia, Georgia, Kazakhstan, Tajikistan, Uzbekistan • South and East Asia: Bangladesh, China, DPR Korea, India, Indonesia, Malaysia, Mongolia, Myanmar, the Philippines, Singapore, Sri Lanka, Viet Nam • West Asia: Kuwait, Saudi Arabia, Syria, Yemen
Education	• MSc. – Pollution and Environmental Control • Dipl. Ing. – Analytical Chemistry

Dalibor Kysela graduated in Analytical Chemistry at the Bratislava Technical University and in Polution and Environmental Control at the Victoria University of Manchester. After serving as a Head of Environmental Laboratory of the Public Health Institute in Slovakia, he joined the international development community and served as Project Officer in the UNDP Regional Burreau for Europe and CIS, as Evaluation Officer in the IAEA, and Project Management Officer in UNIDO. In retirement, he acts as an independent Evaluation Consultant to UN agencies.

Key specialties and capabilities cover:

- Chemicals and waste management
- Renewable energy and energy efficiency
- River basin and coastal management

Selected assignments and experiences
Independent reviews/evaluations:

- Reducing UPOPs and Mercury Releases from the Health Sector in Africa (UNDP/GEF) – TE
- Eliminating POPs through Sound Management of Chemicals in the Maldives (UNDP/GEF) - Mid-Term Review
- PCB Management in Ethiopia to meet the 2025 Stockholm Convention deadline - Phase 1 (UNDP/GEF) - Mid-Term Review
- Integrated Sound Management of Mercury in Indonesia's Artisanal and Small-scale Gold Mining (ISMIA) - (UNDP/ GEF) Mid-term Review.
- Sound Chemicals Management Mainstreaming and UPOPs reduction in Kenya (UNDP/GEF) - Terminal Evaluation
- Belarus POPs Legacy and Sustainable Chemicals Management (UNDP/GEF) - MTR
- Comprehensive Environmentally Sound Management of PCBs in Montenegro (UNDP/GEF) - Mid-Term Review
- Rwanda Management of PCB Stockpiles and Equipment Containing PCBs (UNDP/GEF) - Terminal Evaluation 30
- Vietnam POPS and Sound Harmful Chemicals Management Project - Mid-term review
- Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region (UNDP/GEF) – TE
- Advancing Integrated Water Resource Management Across the Kura River Basin (UNDP/GEF) - Mid-term Review

- Implementation of the Arafura and Timor Seas Regional and National Strategic Action Programs (ATSEA-2); Second Phase of the Arafura Timor Seas Ecosystem Action (ATSEA) Programme, (UNDP/GEF), Mid-Term review

ANNEX VII. REVIEW TORS (WITHOUT ANNEXES)

UNITED NATIONS **NATIONS UNIES**

Terms of reference

Job Opening number	:	23-United Nations Environment Programme-222215-Consultant
Job Title	:	Midterm Review Consultant
General Expertise	:	Programme Management
Category	:	Project Management
Department/ Office	:	United Nations Environment Programme
Organizational Unit	:	UNEP ODED IED CHEM GEF

Purpose

The objectives of the work are to support the UNEP/Industry and Economy Division/Chemicals and Health branch/ GEF C&WU by conducting Midterm Review for the project "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts" (GEF ID 9684).

Duties and Responsibilities

Organizational Setting:

The United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment. The overall objective of the UNEP's Economy Division is to encourage decision-makers in government, local authorities and industry to develop and adopt policies, strategies and practices and technologies that promote sustainable patterns of consumption and production, make efficient use of natural resources, ensure safe management of chemicals and contribute to making trade and environment policies mutually supportive. It promotes the development, use and transfer of policies, technologies, economic instruments, managerial practices and other tools that assist in environmentally sound decision making and the building of corresponding activities. The GEF Chemicals and Waste Unit of the Chemicals and Health Branch is responsible for the development and management of all GEF projects implemented by UNEP in the Chemicals and Wastes focal area. The Programme Management Officer is primarily responsible for the supervision of and support to the GEF Unit Task Manager (GEF implementation) team based in Geneva and Nairobi and home based for consultant. The team is responsible for the identification, development and implementation of projects funded by the Global Environment Facility (GEF) and implemented by UNEP.

UNEP is the implementing agency (IA) for GEF projects and is tasked to carry out Midterm Reviews (MTR) of eligible projects as per the GEF and UNEP evaluation rules. To carry out such reviews of project, UNEP requires the services of specialized consultants to measure progress made towards the achievement of outcomes and to provide necessary recommendations.

To this end, project entitled "Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts" (GEF ID 9684) requires carrying out a MTR. It is a Child Project under the GEF/UN Environment "Mediterranean Sea Programme (MedProgramme): Enhancing Environmental Security", a GEF programmatic multi-focal area initiative in ten beneficiary countries sharing the Mediterranean basin: Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco, Tunisia and Turkey.

This MTR will analyse whether the child project is on-track, what problems or challenges the project is encountering, and what corrective actions are required. The MTR will assess project performance to date (in terms of relevance, effectiveness and efficiency), and determine the likelihood of the project achieving its intended outcomes and supporting their sustainability.

Reporting Lines:

Under the overall supervision of the GEF C&W Unit portfolio manager, the consultant shall report directly to the GEF C&W and International Waters Task Manager, Ms Eloise Touni, Programme Management Officer on day-to-day basis. Final deliverables shall also be approved by the C&W Portfolio Manager.

Specific duties and responsibilities:

All the activities related to the MTR are to be carried out as per UNEP Evaluation Policy and the UNEP Programme Manual. The Mid-Term Review will use a participatory approach whereby key stakeholders are kept informed and consulted throughout the review process. Both quantitative and qualitative review methods will be used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. It is highly recommended that the Review Consultant maintains close communication with the project team and promotes information exchange throughout the review implementation phase in order to increase their (and other stakeholder) ownership of the review findings.

The Review Consultant should provide a geo-referenced map that demarcates the area covered by the project and provide geo-reference photographs of key intervention sites (e.g. sites of habitat rehabilitation and protection, pollution treatment infrastructure, etc.)

The findings of the Review will be based on the following:

- A desk review of:
  o Relevant background documentation, inter alia:
  o Project Document and Appendices
  o Project design documents (including minutes of the project design review meeting at approval); Annual Work Plans and Budgets or equivalent, revisions to the project (Project Document Supplement), the logical framework and its budget;
  o Project reports such as six-monthly progress and financial reports, progress reports from collaborating partners, meeting minutes, relevant correspondence and including the Project Implementation Reviews and Tracking Tool etc.; o Evaluations/Reviews of similar projects.
- Interviews (individual or in group) with:
  o UNEP Task Manager (TM) and team members;
  o Representatives of Executing Agencies and national governments; o UNEP Fund Management Officer (FMO);
  o Representatives from civil society and specialist groups (such as women's, farmers and trade associations etc).
- Field visits: A minimum of two country visits, one to a South Mediterranean and one to an Eastern Mediterranean country, to be proposed by the Reviewer in their Inception Report; plus visits to the Executing Agency in Athens and MedWaves in Barcelona.
- Other data collection tools: to be determined by the Review Consultant at the inception phase

Ultimate result of service

Midterm Review of 9684 MedProgramme Child Project 1.1 project completed as per the requirements of UNEP and GEF

Travel Details

A minimum of two country visits, one to a South Mediterranean and one to an Eastern Mediterranean country, to be proposed by the Reviewer in their Inception Report; plus visits to the Executing Agency in Athens and MedWaves in Barcelona.

Travel	Per Diem	Other	Total

0	0	0	0

Output/Work Assignments

Inception report cleared by Task Manager (Payment amount: USD 8,000; Estimated delivery date: March 2024)

Preliminary findings power-point and draft MTR report cleared by Task Manager (Payment amount: USD 15,000; Estimated delivery date: May 2024)

Final MTR report cleared by all stakeholders (Payment amount: USD 10,000; Estimated delivery date: August 2024)

Contract Duration

Overall Contract Duration:	5.5 months
Estimated amount of actual time to worked (days, weeks, months):	5.5 months
Regular Working Hours (if applicable):	
Total Remuneration:	33,000
Payment Terms:	Fees only basis, as per schedule of payment

Qualification Requirements/Evaluation Criteria

Education: A university degree in environmental sciences/engineering, marine or ecosystem science, international development or other relevant area is required. An advanced degree in the same areas is desirable.

Language: Fluency in English and knowledge of French languages is required. Knowledge of Arabic is desirable.

JFQ/JSQ: A minimum of 7 years of technical / evaluation experience in projects and programmatic approaches is required.

Experience evaluating large, regional or global programmes and using a Theory of Change approach is desirable.

Good/broad understanding of POPs, mercury and hazardous waste is desirable.

Working knowledge of the UN system and specifically the work of UNEP is desirable.

Supervisor Name: _____

Title: _____

ANNEX VIII. GEF PORTAL INPUTS

The following table contains text to be uploaded to the GEF Portal. It is drawn from the Review Report, either as copied or summarised text. In each case, references are provided for the paragraphs and pages of the report from which the responses have been copied or summarised.

Table 13: GEF portal inputs

Question: What is the performance at the project's mid-point against Core Indicator Targets? *(For projects approved prior to GEF-7, these indicators will be identified retrospectively and comments on performance provided)*	
Responses:	
GEF Core Indicators	**Indicative expected Results**
Indicator 7: Number of shared water ecosystems (fresh or marine) under new or improved cooperative management	Visible progress on update TDA Mediterranean Sea (paragraph 122-126) A draft proposal for an offshore monitoring strategy as part of under the existing Integrated Monitoring and Assessment Programme (IMAP) prepared (paragraph 130)
Indicator 7.1: Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation - 4	Updated regional TDA report based on 5 national TDA reports approved for publication by the UNEP Publication Board and for development of the National Action Plan (NAP) and National Baseline Budget (NBB) reports in 9 countries
Indicator 7.2: Level of Regional Legal Agreements and Regional management institution(s) (RMI) to support its implementation -	Not applicable. This indicator is not transferred into the Project Results Framework and to planned activities
Indicator 7.3: Level of National/Local reforms and active participation of Inter-Ministeral Committees - 1	Not applicable. This indicator is not transferred into the Project Results Framework and to planned activities
Indicator 7.4: Level of engagement in IWLEARN through participation and delivery of key products- 1	Not applicable. This indicator is not transferred into the Project Results Framework and to planned activities
Indicator 9.1: Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type) Polychlorinated biphenyls 1,350 MT Perfluorooctane sulfonic acid. 20 MT Hexabromocyclododecane 630 MT	Two disposal contracts for total 721 tons of PCB waste signed (Algeria 451.95 t, Lebanon 271 t). Confirmed for phase 2: Albania (255 t), BiH (12 t), Montenegro (80 t) - Table 7 Output 1.1 Inventory of new POPs in progress (Morocco and Tunisia) but achievement of the target not realistic (paragraph 117 and 119)
Indicator 9.2: Quantity of mercury reduced – 50 MT	Assessment of mercury-contaminated sites completed in Bosnia and Herzegovina and Tunisia, contract to be signed for disposal of 389 MT mercury waste from Kasserine, Tunisia
Indicator 9.4: Number of countries with legislation and policy implemented to control chemicals and waste - 3	Legislation in place in all project countries, but slow progress towards ratification of Minamata Convention on Bosnia/Herzegovina and Tunisia (paragraph 110 -113)
Indicator 9.5: Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing and cities - 3	Not applicable. This indicator is not transferred into the Project Results Framework and to planned activities
Indicator 9.6: Quantity of POPs/Mercury containing materials and products directly avoided – 300 MT	Inventories of mercury in only total 10 health care facilities completed in Tunisia and Lebanon. Unlikely to reach the target (paragraph 119 and 120)

Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment – 4,000 (2,000 F + 2,000 M)	Not applicable. This indicator is not transferred into the Project Results Framework and to planned activities, hence information not collected

Question: What has been the progress, challenges and outcomes regarding engagement of stakeholders in the project/programme?

Response: Under Component 1, stakeholders from the level of national governments and from the national technical teams participated in the Annual Stocktaking Meeting and in PCB trainings Cooperation with national stakeholders facilitated progress and in some countries completion of PCB inventories and mercury assessments (paragraph 193).

In Component 2, the main avenue for stakeholder participation was the establishment of the Steering Committee for the Transboundary Diagnostic Analysis. Further participation included engagement of relevant institutions in five project countries for preparation of national TDA reports, and engagement for preparation of a stocktaking report on technical and scientific capabilities for offshore monitoring. However, there was no attempt for systematic involvement of the Mediterranean EU member countries. Participation of those countries would increase the value of the regional TDA and establish grounds for expansion of the offshore monitoring network (paragraph 194).

The PSC meetings were supposed to bring together both Chemicals and Waste (CW) and International Water (IW) stakeholders. However, this was the case only for few countries while others were represented only by Chemicals and Waste stakeholders. Weak representation of the IW stakeholders did not contribute to transparency and collaboration of stakeholders across the two Focal Areas (paragraph 195).

Question: What has been the progress, challenges and outcomes regarding gender-responsive measures and any intermediate gender result areas?

Response: An in-depth presentation was prepared for the 3rd meeting of the MedProgramme Gender Community of Practice Further activities included presentation on gender aspects in occupational health and safety for handling PCBs in Lebanon in November 2022, on-line presentation on "Gender Issues in Chemicals & Waste" held in Tunisia in June 2023, as well as outlines of case studies with gender aspects of occupational exposure to mercury in hospitals in Tunisia and Lebanon. (paragraph 201)

As part of the TDA update, a gender/socio-economic assessment was developed focusing on how gender relates to transboundary water issues, pollution of marine ecosystems, identifying also future scenarios and gender-specific risks in the use of chemicals. A gender presentation providing an overview of Chapter 5 of the TDA on gender was developed and delivered during the 2nd meeting of the TDA Steering Committee in December 2022 (paragraph 205).

Question: What has been the experience at the project's mid-point against the Safeguards Plan submitted at CEO Approval? The risk classifications reported in the latest PIR report should be verified and any measures taken to address identified risks assessed.

Response: At the formulation phase, the CP 1.1 was subject to UNEP Environmental, Social and Economic Screening conducted using a standardised procedure for assessment and rating of probability, impact and significance of risks related to nine thematic safeguards that UNEP considers important for implementation of its projects. The result of the screening is summarised in the Environmental, Social and Economic Review Note provided as Annex I to the Project Document. The screening identified moderate risks related to the possibility of an accident or spill during the repackaging, transport and environmentally sound destruction of PCB and mercury wastes addressed by the project. The identified risks will be managed though preparation of an initial Environmental Management Plan (EMP) prepared by qualified consultants and an Environment, Health and Safety (EHS) document prepared by waste disposal contractors detailing the precautionary and emergency measures to be in place before operations begin (paragraph 207, 208 and 209).

The project design includes a Phase 1 of disposal activities in two countries (Algeria and Lebanon), for which the site-specific EMPs included as Annex of the request for GEF CEO Endorsement. For Bosnia and Herzegovina and Montenegro, draft EMPs are available as Annex for a PCB disposal procurement request. The EHS documents will be developed by the selected bidders to

include assessment of risks which are regularly monitored by the national authorities and Executing Agency during the supervision of implementation of the PCB disposal contracts (paragraph 210 and 211).

Question: What has been the progress, challenges and outcomes regarding the implementation of the project's Knowledge Management Approach, including: Knowledge and Learning Deliverables (e.g. website/platform development); Knowledge Products/Events; Communication Strategy; Lessons Learned and Good Practice; Adaptive Management Actions.

Response: The MedProgramme engaged with the Global Resource Information Database - Geneva (GRID-Geneva) for development of a web-based Knowledge Management (KM) platform consisting of a data and information management system (with both public and restricted access) and a combination of visualization tools. The KM platform is expected to serve as a central repository of all the data generated by the nine Child Projects (CP) of the MedProgramme, with a view to fulfil a number of strategic knowledge management objectives while, at the same time, granting individual identities to the Child Projects (paragraph 225 and 226).

In cooperation with the sister CP 4.1, the CP 1.1 has paid considerable attention to raising awareness at all levels about project itself as well as about the environmental issues facing the Mediterranean Sea. To date, it produced a considerable number of communication and public awareness materials, shared posts on social media, technical materials, field visit reports, contributions to the MedBulletin , brochures with information on CP 1.1 (jointly with CP 1.3), technical information, as well as photos and videos from project activities. 230. Two Annual Stocktaking Meetings of the MedProgramme were organised on 2-3 November 2022 and on 22-24 April 2024, respectively. The meetings brought together representatives of the Contracting Parties to the Barcelona Convention, as well as the MedProgramme's implementing and executing agencies (paragraph 227 and 2230).

Question: What are the main findings of the review?

Response: The particular strength of the project design is the aim to develop linkages between the Stockholm and Minamata Conventions and their delivery mechanisms at national and regional level for capacity on chemicals and waste to be linked across thematic and sectoral boundaries. The justification of the project is based on the fundamental and pressing issue linking environmental quality and human health.

By focusing on the Barcelona Convention processes and its governance mechanisms, the project offers a framework for the regional cooperation with the potential to consolidate all the information derived from various fragmented initiatives implemented in the Mediterranean and produce a comprehensive and coherent diagnostic focused on transboundary issues. Another strength of the project is its focus on harmonization of the existing data platforms, monitoring protocols and common indicators to comply with the Barcelona Convention's ecosystem approach-based Integrated Monitoring and Assessment Programme (IMAP).

The linking of the Chemicals and Waste and International Waters components under the umbrella of a single Child Project was driven by the aim to see how the reduction of land-based pollution by POPs and mercury is reflected in reduced environmental stress and improved status of coastal waters in the Mediterranean.

The above underlying idea of the project is at the same time also its main weakness as it aims to combine interventions on scattered land-based pollution hotspots as purely national initiatives with very few possibilities for regional grouping with transboundary assessment of the marine ecosystem as essentially regional in nature. Moreover, reduction of land-based pollution and work on transboundary issues in coastal regions involve different stakeholders and face dissimilar technical as well as political challenges.

The project is on track for delivery of the two waste reduction outputs under Component 1 in terms of management and safe disposal of PCBs and management and safe storage of mercury waste (Outputs 1.1 and 1.2), although the progress has been relatively slow as a result of the initial delays in contracting the waste removal services and time-consuming procedures for obtaining all documentation required in line with the provisions of the Basel Convention.

On the contrary, the progress on the two outputs addressing prevention of waste has been only marginal, in particular on Output 1.4 dealing with prevention of mercury waste. The project is behind

the planned schedule, and it is likely that it will not achieve the planned waste prevention target by the project completion date at the end of March 2025.

While there has been visible progress towards development of three out of four outputs of Component 2, these are general outputs not directly linked to identification of impacts of the specific land-based pollution reduction addressed through the waste reduction and prevention outputs of Component 1. Implementation of the fourth output that is based on analysis and compilation of information generated under Component 1 has not started yet.

Representation in the PSC meetings of national focal institutions involved in the International Waters part of the project was weak for several countries. Consequently, discussion at the PSC meetings has almost exclusively focussed on implementation of the Chemicals and Waste part of the project with almost non-existent focus on links and cooperation between the two project components.

The project reporting has been conducted in line with the requirements of GEF and the progress reports found to be sufficiently detailed and the reporting formats in compliance with the UNEP and GEF reporting standards. In general, the project reporting ensured transparent information flow across the executing partners and the project key stakeholders.

However, access of the MTR consultant to various project-related documents, such as workplans, budget revisions, terms of references, contracts and their deliverables, was possible only on basis of ad-hoc requests as there is no repository of the relevant project documentation required for the MTR.

The project's financial resources have been managed in compliance with relevant UNEP/GEF financial management standards and procedures. The project financial information broken down by components and years of implementation was available for the MTR. However, information on actually realised co-financing by the project partners and beneficiary has not been systematically tracked during the project implementation. (paragraphs 5-15)

ANNEX IX. GEF RISKS TO ACHIEVING PROJECT OUTCOMES *(for GEF funded projects)*

Summarize risks that might affect the achievement of desired outcomes and the mitigation measures which are planned or already undertaken to address these. The risk rating should reflect the *residual* risk to achieving outcomes after considering the implementation of mitigation measures. The rating scale is: High, Substantial, Moderate, Low. See the *GEF Risk Appetite* document (GEF/C.66/13) for more information and its Annex B for a description of each risk category. Note that the rating for the "Environment and Social" category should be the same as the risk rating for Safeguards.

RISK CATEGORIES	RATINGS	ASSESSMENT AND MITIGATION MEASURES
	CONTEXT	
Climate	Low	No mitigating measures needed
Environment and Social	Moderate	Risk of environmental degradation during PCB and mercury waste collection, packing and transport. Monitor implementation of the disposal activities I line with the Environment, Health and Safety (EHS) document.
Political and Governance	Moderate	Project has been successful in building up ownership, interest and commitment of Government institutions and stakeholders despite political challenges in few project countries. However, political instability in southern part of the region persists. Monitor political development and adjust implementation accordingly.
	INNOVATION	
Institutional and Policy	Moderate	Slow progress in ratification of the Minamata Convention in few countries could hamper disposal of mercury waste. Assist the countries in the ratification process.
Technological	Low	No mitigation measures needed
Financial and Business Model	Moderate	Lack of government co-financing could decrease completion of waste disposal activities. Mobilise co-financing from the participating governments.
	EXECUTION	
Capacity for Implementation	Moderate	Implementation could slow down in case of understaffed PMU. Accelerate recruitment for full staffing of the PMU.
Fiduciary	Low	No mitigating measures needed
Stakeholder	Moderate	Lack of participation of stakeholders in the International Waters component could hinder work on the impact report. Encourage more active participation of the IW stakeholders.
Other	n.a.	n.a.
Overall Risk Rating	Moderate	Aggregate of the above rating

GEF - PROJECT IMPLEMENTATION REPORT (PIR)

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1 PROJECT IDENTIFICATION

1.1 Project Details

GEF ID: 9684	**Umoja WBS:**SB-007468.11; SB-007468.12
SMA IPMR ID:33512	**Grant ID:**S1-32GFL-000632 (CW); S1-32GFL-000621
Project Short Title: GEF-CW.9684.Med Programme Hotspots	
Project Title: Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts	
Duration months planned:	60
Duration months age:	49
Project Type:	Full Sized Project (FSP)
Parent Programme if child project:	9607
Project Scope:	Regional
Region:	Europe
Countries:	Albania,Algeria,Bosnia and Herzegovina,Egypt,Lebanon,Libya,Montenegro,Morocco,Tunisia,Turkey
GEF Focal Area(s):	Chemicals and Waste,International Waters
GEF financing amount:	$ 14,250,000.00
Co-financing amount:	$ 53,146,727.00
Date of CEO Endorsement/Approval:	2020-01-21
UNEP Project Approval Date:	2020-03-02
Start of Implementation (PCA entering into force):	2020-04-27
Date of Inception Workshop, if available:	2020-07-20
Date of First Disbursement:	2020-04-01
Total disbursement as of 30 June 2024:	$ 5,114,297.00
Total expenditure as of 30 June:	$ 1,541,709.00

Midterm undertaken?:	Yes
Actual Mid-Term Date, if taken:	2024-07-31
Expected Mid-Term Date, if not taken:	
Completion Date Planned - Original PCA:	2025-09-30
Completion Date Revised - Current PCA:	2026-09-30
Expected Terminal Evaluation Date:	2026-09-30
Expected Financial Closure Date:	2026-09-30

1.2 Project Description

"Child Project 1.1 (GEF ID 9684) is dedicated to reducing pollution from harmful chemicals and wastes in Mediterranean hotspots and measuring progress to Impacts. The objective of this project is to achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas. This objective will be achieved through a multi-focal area collaboration between the GEF Chemicals and Waste and International Waters focal areas.

UNEP/MAP is the Executing Agency of this Child Project and its activities are led jointly by MED POL and the MedProgramme Coordinating Unit. Two of UNEP/MAP's regional activity centers are also Executing Partners: the Plan Bleu Regional Activity Centre and the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC). The countries participating in the project are Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco, Tunisia and Turkey.

This project is composed of three Components:

Component 1: Chemicals and Waste

Component 2: International Waters

Component 3: Monitoring and Evaluation and information dissemination

Component 1 focuses on the reduction of hazardous chemicals pollution, namely Persistent Organic Pollutants (POPs) banned under the Stockholm Convention, and mercury banned under the Minamata Convention. It covers national activities in up to eight countries, as well regional activities to share lessons learned. The Child Project will remove over 3,000 tonnes of POPs and mercury wastes from the coastal zones of the project countries, directly removing the land-based sources of chemical pollution and breaking the source-pathway-receptor linkages to the Mediterranean Sea ecosystem and inhabitants. This will be achieved through a two-phased activity for the

identification, safe storage and disposal of PCBs and POPs; an activity dedicated to the disposal of mercury; as well as pilot projects aimed at the prevention of the generation of wastes containing new POPs and mercury. Component 1 is linked with the other Child Projects of the MedProgramme which focus on reductions of the other main source of Mediterranean pollution, namely excess nutrients (Child Projects 1.2 [GEF ID 9717] and 1.3 [GEF ID 9691]).

Component 2 is dedicated to the identification of priority actions that will increase environmental and socioeconomic benefits in the region, and to the strengthening of countries' capacity to monitor and report on environmental trends to support evidence-based policy making and decisions. The centerpiece of Component 2 is an update of the Transboundary Diagnostic Analysis (TDA) for the Mediterranean Sea Large Marine Ecosystem, including a gender assessment. This gender assessment is expected to allow for a better understanding of the crosscutting issues of gender, water, and environmental security, and to provide updated inputs for the overall MedProgramme gender agenda. Next, a report will be prepared to assess the impact of the project activities on progress towards the MedProgramme's objectives as well as countries' commitments in the context of the SDGs, on the basis of the results of Component 1's pollution reduction activities, the TDA indicators and their linkages with SDGs, and literature reviews of the SDG progress in the participating countries. Another important activity of Component 2 will be support to the GEF eligible countries of the Mediterranean to upgrade their national monitoring programmes in line with IMAP requirements to also cover the offshore areas, and to ensure better availability and accessibility of monitoring data. This will be accomplished through the development of an Offshore monitoring strategy, the selection of 20 sites for this strategy and pilot activities in a limited number of them.

Component 3 will ensure that knowledge generated by the project is used effectively for project activities and shared with the wider MedProgramme portfolio, and will also execute the project's monitoring and evaluation plan. The knowledge management activities will include the development of interactive visualizations of chemicals inventories across the countries using the MapX application, the preparation of case studies to document results and best practices from the project's activities on pollution reduction as well as the TDA process, and the elaboration of a data sharing protocol to support the monitoring activities foreseen in Component 2. Finally, this Component includes activities supporting the project's monitoring and evaluation plan, including the regular monitoring of project results and delivery, including quarterly progress and financial reports to the Implementing Agency, annual reports to GEF and effective documentation of project lessons learnt. It also includes periodic independent evaluation of project results and achievement of intended outcomes, through external reviews at project midterm and completion.

1.3 Project Contacts

Division(s) Implementing the project	Industry and Economy Division
Name of co-implementing Agency	
Executing Agency (ies)	UNEP Mediterranean Action Plan (MAP)
names of Other Project Partners	Plan Bleu, MedWaves, EBRD
UNEP Portfolio Manager(s)	Kevin Helps
UNEP Task Manager(s)	Eloise Touni; Hartwig Kremer

UNEP Budget/Finance Officer	Edward Aput; Ruth Irungu
UNEP Support Assistants	
Manager/Representative	Tatjana Hema
Project Manager	Mohamad Kayyal
Finance Manager	Rachel Kagiri
Communications Lead, if relevant	

2 Overview of Project Status

2.1 UNEP PoW & UN

UNEP Current Subprogramme(s):	Thematic: Chemicals and pollution action subprogramme
UNEP previous Subprogramme(s):	Subprogramme 5: Chemicals and Pollution Action
PoW Indicator(s):	• Pollution: (iv)Reduction in releases of pollutants to the environment achieved with UNEP support
UNSDCF/UNDAF linkages	The project is aligned with the priorities of the participating countries, as evidenced in the following linkages to the relevant UN cooperation framework documents: Albania: Programme of Cooperation for Sustainable Development (2017-2021): Priority IV "Environment and climate change" and its Outcome 4 "Government and non-government actors adopt and implement innovative, gender-sensitive national and local actions for environmental sustainability, climate change mitigation and adaptation, and disaster risk reduction". Algeria: UN Strategic Cooperation Framework (2019-2021): Priority 3 "Environment" and its Outcome 4 "By 2021, the wellbeing and resilience of citizens are improved as a result of an inclusive and sustainable management of natural and urban ecosystems", including through the sustainable management of natural resources in the context of climate change, support for pollution reduction, and sustainable consumption and production. Bosnia and Herzegovina: Sustainable Development Cooperation Framework (2021-2025): Strategic Priority I "Sustainable, resilient and inclusive growth" and its Outcome 1 "By 2025, people benefit from resilient, inclusive and sustainable growth ensured by the convergence of economic development and management of environment and cultural resources", including through actions supporting a stronger policy and regulatory environment and stimulus measures to enable low-carbon development, spur business development and increased competitiveness, and support the creation of green and decent jobs, complemented by environmental action. Egypt: United Nations Partnership Development Framework (2018-2022): Outcome Area "Environmental Sustainability and Natural Resources Management", including through actions to promote management of hazardous waste and to support Egypt in its obligations under relevant global conventions and protocols, sustainable use of scarce water and agricultural land resources, capacity for the sound management of biodiversity resources (including eco-tourism), and to promote eco-innovation in production. Lebanon: United Nations Strategic Framework (UNSF) (2017-2020): Core priority 3 "Lebanon reduces poverty and promotes sustainable development while addressing immediate needs in a human rights/gender-sensitive manner" and its Outcome 3.3 "Lebanon has improved environmental governance", including through the effective management of solid waste and the protection of water quality, support for climate change adaptation and mitigation, and the protection of coastal zones. Libya: United Nations Strategic Framework (2019-2021): priority actions under the "Environmental aspects" section, including national

	capacities for environmental management, water and waste services, response to climate change; strengthened management of natural resources, particularly water, land and biodiversity; increased resilience of vulnerable populations to environmental risks and climate change; assessment of soil and water pollution; and increased capacity for generation and use of environmental data. Montenegro: Integrated United Nations Programme for Montenegro (2017-2021): Priority Area "Environmental Sustainability "and its Strategic Outcome "By 2021, the people of Montenegro are benefitting from sustainable management of cultural and natural resources, combating climate change and disaster risk reduction" including through strengthened capacity for chemical waste management in line with international standards, support for resource efficiency and sustainable consumption and production, integration of climate change mitigation measures in national policies and strategies, and data collection and capacity building for evidence-based planning and decision making. Morocco: United Nations Development Assistance Framework (2017-2021): Core priority 2 "Inclusive sustainable development" and actions in partnership with the UN system to promote sustainable industrial development and cleaner production techniques; improved management and access to natural resources and ecosystem services, including through the protection of biodiversity; evaluation and characterization of water resources to promote evidence-based management approaches; opportunities for civil society to participate in territorial planning that integrates the principles of sustainable development, human rights, sustainable management of natural resources and biodiversity and the green economy; and reinforced capacities for accessing environmental information to support decision making. Tunisia: United Nations Sustainable Development Cooperation Framework (2021-2025): Outcome 4 "Natural resources management, climate change and resilience to climate risks and crises" and actions in partnership with the UN system, the public and private sectors and civil society, to promote sustainable management of natural resources and ecosystem services, including through the participation of local populations in the management of water and sanitation services; the development of an integrated territorial approach for the management of ecosystems and natural resources; capacity building for tools to elaborate and finance public policies that contribute to green economic growth in domains including water, food security, industry and territorial management; capacity building to reduce and management all kinds of risks; and capacity building to elaborate and implement integrated policies to ensure food security, improve nutrition and promote sustainable agricultural systems. Turkiye: United Nations Development Cooperation Strategy (2016-2020): Strategic Area of Cooperation "Sustainable, inclusive growth and development" and its Result 3 "By 2020, improved implementation of more effective policies and practices for all men and women on sustainable environment, climate change, biodiversity by national, local authorities and stakeholders, including resilience of the system/communities to disasters".
Link to relevant SDG Goals	• Goal 6: Ensure availability and sustainable management of water and sanitation for all • Goal 12: Ensure sustainable consumption and production patterns
Link to relevant SDG Targets:	• 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals

	and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally • 6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate • 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

2.2. GEF Core and Sub Indicators

GEF core or sub indicators targeted by the project as defined at CEO Endorsement/Approval, as well as results

	Targets - Expected Value			
Indicators	**Mid-term**	**End-of-project**	**Total Target**	**Materialized to date**
2.2- Marine protected areas under improved management effectiveness	N/A	1	1	
9.1-Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)	N/A	2050 tons	2050 tons	722 tons PCB under contract for collection and disposal389 tonnes of mercury and mercury contaminated wastes confirmed for disposal in Tunisia
11- People benefitting from GEF-financed investments	N/A	4000 beneficiaries	4000 beneficiaries	1300 (4 project SCMs, 1 training in Algeria, 1 training in Lebanon, 3 meetings for the TDA, 1 training in Turin, 1 training in Albania, 2 awareness raising workshop in Tunis, 1 meeting in Montenegro, 1 field visit and community meeting in Tuzla, 1 meeting on management of POPs in Athens, 2 ASM meetings in Athens and Podgorica)

Implementation Status 2024: 4th PIR

2.3. Implementation Status and Risks

	PIR#	Rating towards outcomes (section 3.1)	Rating towards outputs (section 3.2)	Risk rating (section 4.2)
FY 2024	4th PIR	MS	MS	M
FY 2023	3rd PIR	MU	MS	M
FY 2022	2nd PIR	MU	MU	M
FY 2021	1st PIR	MS	MS	M

Summary of status

In Component 1, progress was made during the reporting period under Output 1.1 on POPs and mercury disposal. In Algeria, the contractor visited most sites included under the Phase 1 contract to confirm the 427 tonnes of PCB, and obtained consent for Basel notification by the Ministry of Environment and importing countries. The contractor expects to start work for removal of PCB in the summer and will finish by 1st quarter of 2025. An inventory for further stocks in Algeria confirmed and additional 637 tonnes, which is being added via a contract amendment to the existing contract (total 1,067 tonnes). With regards to Lebanon, a final internal review is under way by the contractor for the Basel notification, to be submitted afterwards to the Ministry of Environment. Given it will take 3 months to get consent of transit countries, collection of PCB will start in Nov. 2024, and will take 6 months to complete (mid 2025). In this regard, the contract for the Contractor in Lebanon has been extended till end of 2025. Over 1,400 tonnes of additional PCB stocks were confirmed during the Phase 2 inventories in the last year, and procurement has started for new disposal contracts for disposal of PCB in Tunisia, Montenegro, Albania and Bosnia and Herzegovina. Further to the recommendation of the 4th Project Steering Committee, the procurement will be administered via UNOPS, for which the legal agreement was prepared and is currently under review by UNEP legal department. The disposal contract in Tunisia will also include disposal of over 350 tonnes of mercury wastes (Output 1.3). Progress on the prevention of new POPs (Output 1.3) and mercury (Output 1.4) has continued to be slow. Only about 30 kg of mercury equipment was confirmed in hospitals and health centres so the project will increase the amount of mercury to be disposed under Output 1.3 to make up the shortfall in prevention. The project is awaiting the recommendation from the midterm review on how to proceed with Outputs 1.2 and 1.4 respectively.

For Component 2, the project has completed the draft Transboundary Diagnostic Assessment, with the aim to prepare a summary policy document next year. With regards to offshore monitoring, a draft offshore strategy has been prepared. It is currently being reviewed and updated. Twenty (20) sites were identified and 5 pilots will be selected for offshore monitoring. Funding is available for the Countries to procure monitoring equipment.

Component 3 together with CP 4.1 completed knowledge management activities and products, including the 2nd MedProgramme Annual Stocktaking Meeting, which provided for roundtable discussions, panel discussions, video film transcripts, short stories (MedBulletin), etc. Due to administrative delays in recruiting key positions in the MedPCU (including KM, gender and communications specialists), progress on these important aspects was delayed in the last reporting period.

2.4 Co Finance

Planned Co-finance:	$ 53,146,727
Actual to date:	13,691,711
Progress	**Justify progress in terms of materialization of expected co-finance. State any relevant challenges:** To date, the EA has documented US$ 13,691,711 in co-Financing for the project , all of which is in-kind co-financing. The co-financing In this reporting period was mobilized through (i) the In-Kind staff time of UNEP/MAP; and (ii) the organization of a workshop gathered national focal points of the BRS Conventions from Mediterranean countries, stakeholders and convention committee members, to promote the understanding of the scientific and technical aspects of the BRS Conventions by SPC/RAC. The cofinancing report is attached to the PIR. The requirement for the participating countries to deliver on their co-financing commitments has to be re-emphasized in the upcoming Steering Committee Meeting and is anticipated to increase in the coming period as field operations to remove POPs and mercury are delivered.

2.5. Stakeholder

Date of project steering committee meeting	2024-03-05
Stakeholder engagement (will be uploaded to GEF Portal)	MedPCU organized the “Second Annual Stocktaking Meeting of the GEF-UNEP Mediterranean Sea Programme (MedProgramme),” convened in cooperation with the implementing agencies UNEP and the European Bank for Reconstruction and Development (EBRD), and the executing partners of the MedProgramme’s eight (8) Child Projects. The meeting is held in Podgorica, Montenegro from 22 to 24 April 2024. Eight beneficiary countries attended: Albania, Bosnia and Herzegovina, Lebanon, Libya, Montenegro, Morocco, Tunisia and Türkiye. Also, in attendance were the executing agencies, relevant regional and global NGOs, bilateral and multi-lateral donors and International Financing Institutions. The primary objective of this 2nd Annual Stocktaking Meeting is to enable face-to-face knowledge exchanges and promote broader adoption of MedProgramme approaches and solutions. The aim of the meeting is to establish synergistic interactions among the Child Projects while providing an opportunity to engage with a broad audience of peers and stakeholders sharing similar objectives within the overarching goal of achieving environmental security in the Mediterranean Basin. Participants were exposed to knowledge transfer and exchange through 4 keynote lectures consisting of selected topics of relevance to the financing of the outcomes of the MedProgramme; eight roundtable discussion groups addressing the scientific aspects behind the

	underlying science of the Child Projects. These are delivered in a setting of roundtables led by technical experts from the executing agencies responsible for implementation of the Child Projects followed by Q/A sessions; and panel discussions consisting of knowledge/experience sharing/learning tools on the challenges stemming from implementation of the MedProgramme Child Projects. The Panel discussions were moderated by MedPCU. Countries' representatives/experts from the various Child Project were presented with specific questions related to the panel in question. One panel discussion group focused specifically on the dissemination of knowledge management. In addition, the knowledge management (KM) platform - the "go to" place for knowledge for the Child Projects within the MedProgramme was launched. It focuses on the tools provided by the KM platform for strengthening the institutional format and systematic documentation of the progress in the implementation of Programme activities including the progress to impact, for improving the dissemination and transfer of results, lessons learned and good practices, and for supporting the knowledge exchanges between and across Child Projects, among participating countries and involved stakeholders; thereby contributing to a region wide knowledge exchange experience. Proactive engagement of stakeholders via the KM Platform will be intensified in 2024/2025 as recruitment of a new KM expert was not completed yet.

2.6. Gender

Does the project have a gender action plan?	Yes
Gender mainstreaming (will be uploaded to GEF Portal):	Due to the incomplete process for recruitment of the gender expert, gender action plan was not implemented fully in 2023/2024. Rather gender aspects were observed in the invitation letters where gender parity was encouraged as well as in the ASM and SC meetings where gender aspects were monitored. In principle, gender parity was always achieved with many occasions where number of female participants exceed male participants. The substantive work on gender aspects was carried out during the 2nd ASM meeting from 22 to 24 April 2024. A dedicated panel discussion group related to gender mainstreaming in the MedProgramme was held. Questions posed to members included definition of gender mainstreaming within the context of the MedProgramme; the role of women in improving the effectiveness of Programme actions; how gender considerations are integrated into the policy-making and planning processes of the MedProgramme; specific areas within the MedProgramme where gender mainstreaming is particularly challenging; ensuring gender-inclusive participation and representation; examples of successful gender mainstreaming within the MedProgramme; etc. The outcomes of the panel discussion indicated that the MedProgramme was the first initiative to put an accent on gender and to reflect on this new thematic for many of the executing partners, including the ones where the question is the least obvious (such as MedWaves dealing with chemicals and wastes). The Panel confirmed that country specificities should always be taken into account when addressing gender equality, and the discourse needs to be adapted to the national context. It was also observed that in addition to a stand-alone topic on gender, it is important to ensure that gender is mainstreamed in all panels and project discussions.

2.7. ESSM

Moderate/High risk projects (in terms of Environmental and social safeguards)	**Was the project classified as moderate/high risk CEO Endorsement/Approval Stage?** Yes **If yes, what specific safeguard risks were identified in the SRIF/ESERN?** SS2
New social and/or environmental risks	**Have any new social and/or environmental risks been identified during the reporting period?** No

	If yes, describe the new risks or changes? One new risk was identified, which is that copper cores are stolen from the stored PCB wastes. See risk mitigation table for further information.
Complaints and grievances related to social and/or environmental impacts	**Has the project received complaints related to social and/or environmental impacts (actual or potential) during the reporting period?** No **If yes, please describe the complaint(s) or grievance(s) in detail, including the status, significance, who was involved and what actions were taken?** NA
Environmental and social safeguards management	The environmental and social risks of the project relate to the execution of the PCB disposal contracts where health, safety and environmental plans are crucial. HSE plans for Lebanon and Algeria have been developed and are currently under review by the environmental authority of the government (HSE plans attached to PIR report). In the case of Albania, Bosnia and Herzegovina and Montenegro, draft environmentally sound management plans are being currently drafted. The HSEs will be developed by the selected bidders. The HSEs all include a section related to the assessment of risks which are regularly monitored by the national authorities and Executing Agency during the supervision of implementation of the PCB disposal contracts, and risks will be further assessed.The project benefits from the MedProgramme's overarching Gender Mainstreaming Strategy and therefore due attention is being given to UNEP Safeguard Standard 8 (Gender equity), including through the development of a gender action plan with actions tailored to the technical assistance activities of both Component 1 (CW) and Component 2 (IW), including a gender assessment for the Transboundary Diagnostic Analysis (see section above on gender mainstreaming for further details).

2.8. KM/Learning

Knowledge activities and products	Due to the ongoing incomplete process for recruitment of the KM management expert, the main KM activities were carried out during the panel discussions of the ASM meeting held in Podgorica from 22 to 24 April 2024. The panel had membership of representatives of countries and executing partners of the MedProgramme. Key messages from the panel indicated that the KM platform is to be used to support the preparation of documented story maps and replication atlas in order to establish linkages between the implementation and delivery progress and changes in the environmental indicators and data displayed on the Dashboard; additional relevant datasets produced or gathered in the framework of the implementation of the MedProgramme should, where possible, be published on the platform; a Task Force is to be created to include participating countries to steer the development and utilization of the Platform, in

	particular concerning the relevancy of the information posted. The platform is essential for ensuring proper visibility to planned, ongoing and finalized activities and deliverables under each Child Project. Executing Partners, under each Child Project should set out a continuous and sustainable contribution. This would ensure that the MedProgramme community is informed and that potential synergies and collaboration among Child Project and Countries are timely identified and activated. The Platform can also serve as a mechanism for promoting the possible extension and replication of MedProgramme actions.
Main learning during the period	Stakeholders found the methodologies used in the 2nd ASM meeting of great value for knowledge dissemination. Of particular interest were the roundtable discussions featuring the science behind the various Child Projects as well as the keynote lectures by renowned world experts in their fields. These methodologies will be further developed in the 3rd ASM meeting for more effective knowledge exchange and transfer between the countries.

2.9. Stories

Stories to be shared	Due to lack of KM expert, no stories were created. An expert/consultant was recruited however to create two videos : 1. Bosnia and Herzegovina: https://vimeo.com/905757138/4a583718a7 Filmed at the HAK1 Site, a decommissioned chemicals factory in Tuzla, Bosnia and Herzegovina, the video includes interviews with Zvjezdan Karadzin, professor at the University of Tuzla in Tuzla and Senad Oprašić, Head of Environmental Protection, Government of Bosnia and Herzegovina in Sarajevo. 2. Montenegro: https://vimeo.com/905362400/d1dda07e42 Filmed sediment sampling at the Port of Montenegro by the Center for Ecotoxicological Research of Montenegro (CETI) and sediment testing at the laboratory of CETI in Podgorica. The video includes interviews with Danijela Šuković, Director of CETI and laboratory staff as well as with Jelena Kovačević and Arina Maraš of the Government of Montenegro in Podgorica. For both films, scripts and storyboards were developed based on interview quotes from all participants and supplemented with voiceover narration. The two films are edited under three minutes, with created motion graphics, utilizing UNEP and all partner branding graphics according to guidelines, procured music and a professional voiceover artist.

3 Performance

3.1 Rating of progress towards achieving the project outcomes

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or binary entry only)	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
To achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas.	Capacity in project countries to address land-based sources of pollution in Mediterranean catchments (POPs and mercury) and monitor pollution levels	Despite extensive regional and national activities in Mediterranean countries to safeguard, collect and dispose of PCBs, significant stock of PCB contaminated oil and equipment and mercury remain, and new POPs are widely used in the project countries.	NA	Capacity of national authorities to eliminate PCB and POPs stockpiles, updated legislation and greater awareness of decision-makers on new POPs, updated assessment and monitoring arrangements	40%	Through support provided under CP 1.1, countries have developed better capacities for decision making on pollution remediation, based on PCB inventories and site assessments that have been completed in all countries. To note awareness on PCBs and new POPs has been raised through a regional workshop held in Athens on 19 and 20 September 2023. The primary objective of this meeting was to present national PCB inventories, inform about PCB equipment for next PCB disposal phase; and to build capacity on site characterization and mercury disposal. With regards to support on new POPs and prevention of mercury, progress has been slow with evaluation of legislation and roadmaps for new POPs delayed by the implementing partner MedWaves.	MS
Reduction of wastes and hazardous chemicals (POPs and mercury) in coastal hotspots	No. of tonnes of POPs waste and new POPs eliminated	POPS = 3,346 tonnes inventoried	586 t POPs removed	Disposal of 1350 tonnes of POPs	60%	Phase 1 contracts for Lebanon and Algeria have confirmed sites, imported packaging equipment and initiated Basel	S

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or binary entry only)	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
		during PPG (refer to Table 9–Quantified summary table of potential GEB by country)				consent procedures. Disposal planned for Q4/2024 to Q1/2025. Total amounts under phase 1 are 722 tons. Algeria contract amendment will achieve the original disposal target. Phase 2 contracts with UNOPS are under review by UNEP legal section for Tunisia, Albania, Montenegro and BiH. Phase 2 are approx 750 tons including an additional quantity of 490 tons provided by Tunisia.	
	No. of tonnes of POPs prevented	POPS = 3,346 tonnes inventoried during PPG (refer to Table9–Quantified summary table of potential GEB by country)	586 t POPs removed	Prevention of 650 tonnes new POPs	20%	The implementing partner has confirmed that pilots with tangible new POPs reductions will not be possible based on the data available. Sampling from Morocco and Tunisia has been completed with delay and results expected before end of 2024. Legislation reviews are also delayed for both countries.	U
	No. of tonnes of Hg of/safely stored waste disposed	Mercury wastes= 84.7 tonnes inventoried during PPG		Reduction and safe storage of 50 tonnes of mercury wastes	50%	UNOPS will be engaged to collect and remove 389 tons of mercury from Tunisia at the Kasserine site. EMP has been completed. The agreement prepared by UNOPS is under review by UNEP legal section. In parallel, ESM will be undertaken in Algeria for metallic mercury sties. ESM will serve to provide for future funding for removal of	S

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or binary entry only)	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
						mercury from Algeria.	
	No. of tonnes of Hg prevented	Mercury wastes= 84.7 tonnes inventoried during PPG	NA	Reduction and safe storage of 50 tonnes of mercury wastes	70%	In Tunisia, inventory of 200 thermometers, 150 sphygmomanometers and other equipment has been completed accounting to an estimated of 15kg Hg. For Lebanon, and further to extending the inventory process, the final inventory consists of about 370 thermometers, 29 sphygmomanometers, and 2 other items containing mercury, totaling around 3.5 kg.	MU
Littoral countries enabled to identify trends and progress to impacts.	Updated TDA including gender assessment	Changed context in the Mediterranean since previous TDA		TDA is updated by the end of the programme	85%	Further to concluding the national thematic assessments for identification of transboundary priority issues and impacts based on pollutants releases and proposed mitigation measures, detailed chapters of the TDA 2023, including gender assessment & supporting information were developed. A summary version, constituting a policy document for decision makers, is under preparation. It is expected to be completed by mid-2025.	S
	Report on progress to impacts	Data gaps affect quality and applicability of assessments, ability to track progress and		Report on progress to impacts and on the achievement of relevant SDGs is	25%	KM platform development completed with the support of GRID Geneva. Trial data are provided to pilot utilization of platform by the countries. Platform launched during the 2nd ASM meeting. Tools and data are used to assess progress.	MU

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or binary entry only)	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
		formulate adequate responses		prepared			
	Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations	Monitoring programs focused on areas close to coasts		Minimum 20 locations for offshore monitoring stations identified	60%	Draft offshore strategy has been reviewed and aligned with national IMAPs. Identification of at least 20 sites for offshore monitoring proposed based on a set of criteria. Identification of 5 pilots stations for implementing the offshore monitoring strategy in 5 piloting areas is finalized. piloting IMAP implementation for selected indictors at the 5 offshore stations will be initiated in 2025.	MS
	Data sharing policy for the Mediterranean stations	Availability of synchronized datasets and accessibility of data need to be improved with the view to improve knowledge on the Mediterranean marine environment		Data sharing regional policy prepared for the deliberation of the Contracting Parties to the Barcelona Convention	10%	To date, work in progress for promoting regional cooperation and exchange of best practices.	MU
Project results and knowledge are effectively disseminated and used to adaptively manage the project	Project delivery is effective and responsive to beneficiary and stakeholder needs	NA	Mid-term review results	Terminal evaluation results	30%	Technical knowledge about chemicals and waste has been shared through the development of a PCB inventories and	MU

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or binary entry only)	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
			endorsed by project partners	endorsed by project partners		undertaking of relevant assessments providing pertinent data and information. Technical meetings for PCB and Mercury disposal aiming to promote for knowledge exchange and transfer of local experiences in the region have been also organized. The 2nd Annual Stocktaking Meeting provided all participating countries with the opportunity to share knowledge and raise concerns and challenges with the aim to address them. MedBulletins also provide another vehicle for promoting actions to address concerns of stakeholders.	

3.2 Rating of progress implementation towards delivery of outputs (Implementation Progress)

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
1 Chemicals and Waste	1.1 Management and disposal of 2,000 tonnes of POPs	2026-03-31	30%	50%	With regards to Algeria, the contractor visited most sites included under Phase 1 contract. Consent for Basel notification has been given by the Ministry of Environment, it needs however extension to cover delays in collection and additional quantities under Phase 2. Work in progress for organizing the shipment of PCB and for covering any incidents during transport. Expected quantities to be removed are 427 tons. A contract amendment till end of 2025 is under preparation for Phase 2 removal further to the provision of an inventory of PCB for collection. Expected amounts of PCB to be removed are 637 tons. Contractor expects to start work for removal of PCB in the summer and will finish by 1st quarter of 2025.With regards to Lebanon, the Ministry of Environment provided its comments to the HSE plan. The contractor has loaded a shipping container for storage/collection materials from the UK. Shipment is expected to arrive to Beirut by beginning of July. Further to customs clearance, container will be unloaded and stored on one of the sites.	S

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					For the Basel notification, a final internal review is underway to be submitted afterwards to the Ministry of Environment. Given it will take 3 months to get consent of transit countries, collection of PCB cannot start before Nov. 2024, and will take 6 months to complete (mid 2025). In this regard, the contract for removal and disposal of PCB has been extended till end of 2025.With regards to Phase 2 disposal contracts, inventories have been completed in Albania, BiH and Montenegro, as well as Tunisia. Findings show the potential for removal of 255 tons in Albania, 83 tons in BiH, 81 tons in Montenegro, as well as 35 tons in Tunisia. Further to the above, Tunisia requested further removal of 490 tons of PCB oil from transformer equipment. In parallel, EMPs are being completed for the three Balkan countries (EMP for Tunisia Kasserine site has been already concluded). Accordingly, and as per the request of the CP1.1 SCM, UNOPS was approached to administer the disposal contract. The agreement was developed, cost estimate provided, and contractual documents are currently under review by UNEP legal department to confirm	

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					modality for the agreement and to proceed in signing the contract. To note however, the additional quantities of PCB oil to be removed from Tunisia require the reallocation of funds from mercury activities to PCB, necessitating GEF approval for this purpose.	
1 Chemicals and Waste	1.2 Management and safe storage of 50 tonnes of mercury wastes	2026-03-31	20%	30%	Further to the inventory of mercury carried out in Tunisia, approximately 389 tons of mercury waste were identified in Kasserine site. ESM for mercury available on site is completed. At the request of the 4th SCM for CP1.1, UNOPS was approached to administer the disposal contract. The agreement was developed, cost estimate provided, and contractual documents are currently under review by UNEP legal department to confirm modality for the agreement and to proceed in signing the contract. To note, activities related to mercury in Algeria will be limited to undertaking EMP for metallic mercury sites as a requirement for future disposal of Mercury, particularly that Algeria has ratified the Minamata Convention.	S
1 Chemicals and Waste	1.3 New POPs reduction and alternatives pilot activities completed	2026-03-31	40%	55%	For this output, Medwaves as Executing Partner (EP) for this output has completed the sampling in Morocco and Tunisia. Both ended in June, and the	U

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					samples are already with CETI in Montenegro, where they will be analyzed by the end of 2024. The samples from Lebanon have just been analyzed.Two consultants (one for Morocco and another for Tunisia) are already working on a proposal for legislation according to POPs, in close contact with the focal points of both countries, as approved by the Steering Committee. These drafts must be completed by the end of this year.	
1 Chemicals and Waste	1.4 Mercury reduction through pilot activities on mercury alternatives	2026-03-31	40%	50%	The total number of thermometers that were inventoried was around 546 thermometers, 185 sphygmomanometers, and 19 other items containing mercury, totaling around 17 kg. Each inventory from Tunisia and Lebanon was shared with the respective focal point. It was not possible to dispose of them. Many different alternatives were explored, but none of them were feasible or realistic.A different approach was considered. Due to non-responsiveness from Lebanon, because of the lack of a focal point, no new activities were carried out there. In Tunisia, a new consultant has been hired, and we expect a full draft on the management of mercury, disposal, legislation, and a	MU

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					compilation of all the data back to 2022. It should be completed by the end of 2024.	
2 International Waters	2.1: Updated Transboundary Diagnostic Assessment including gender assessment	2026-03-31	85%	90%	Further to the preparation of the draft TDA report, there is a need to update the report to include findings from the QSR report as well as transboundary priority issues and impacts based on pollutants releases and proposed mitigation measures. This output provides the necessary activities to achieve this aim in order to produce a summary TDA report to be reviewed by the countries and submitted for publication.	S
2 International Waters	2.2: Report on progress to impacts	2026-03-31	10%	40%	KM platform development in progress with the support of GRID Geneva. Trial data are provided to pilot utilization of platform by countries. KM platform inaugurated during the 2nd ASM meeting in Podgorica. It will be fully launched once the KM expert is on board.	MS
2 International Waters	2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations	2026-03-31	70%	85%	Offshore strategy is being updated to be aligned with national IMAPs for GEF eligible countries. Criteria for selection of 20 offshore sites prepared. Work in progress to determine the 5 locations where pilot offshore monitoring will be undertaken. Procurement modality of monitoring equipment under review.	S

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
2 International Waters	2.4: Data sharing policy for the Mediterranean	2026-03-31	0%	20%	Work for developing a data sharing policy is intended to include a review of structure, functions and content of national databases/IT platforms, leading to formulation of recommendations on the design of IT model to connect national into a regional network/platform. This work has not been initiated. To date, work in progress for promoting regional cooperation and exchange of best practices.	MU
3 Monitoring and Evaluation and information dissemination (IW and CW)	3.1 Knowledge Management strategy shares knowledge from Child Project 1.1	2023-03-31	50%	65%	Knowledge management strategy was culminated by the convening of the 2nd ASM meeting in Podgorica. As part of this meeting, KM was featured in roundtable discussions whereby the operational aspects of collection and disposal of PCB was presented. Also, information was provided to meeting participants of new POPs under the title of "the invisible threat: new POPs in water - challenges in detection and prevention."As part of the ASM meeting, the knowledge management (KM) platform - the “go to” place for knowledge for the Child Projects within the MedProgramme was launched. Panel discussions featured also knowledge management and dissemination. Data from the PCB inventories in Albania, Algeria,	MS

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					BiH and Montenegro were added to existing data from Lebanon, Algeria and posted on MapX providing quantitative data on PCB quantities for disposal and exact locations/countries of origin.The MedProgramme Coordinating Unit held a two-day meeting on PCB disposal, its prioritization, and capacity-building for mercury on 19-20 September 2023 in Athens, Greece. The primary objective of this meeting was to present national PCB inventories, inform about PCB equipment for next PCB disposal phase; and to build capacity on site characterization and mercury disposal. The meeting was attended by representatives from the participating countries of Albania, Algeria,Bosnia and Herzegovina, and Morocco; and from executing partners of CETI and CIEMAT and from UNDP Bosnia & Herzegovina.Finally, two videos were produced under CP1.1. The first was filmed at the HAK1 Site; a decommissioned chemicals factory in Tuzla, Bosnia and Herzegovina. The 2nd video was filmed for sediment sampling at the Port of Montenegro by the Center for Ecotoxicological Research of Montenegro (CETI) and sediment testing	

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					at the laboratory of CETI in Podgorica. In both video interviews were conducted with various stakeholders and government officials. Scripts and storyboards were developed for both films based on interview quotes from all participants and supplemented with voiceover narration. The two films were edited of under three minutes, created motion graphics, utilized UNEP and all partner branding graphics according to guidelines. A music and a professional voiceover artist was procured for this purpose.	
3 Monitoring and Evaluation and information dissemination (IW and CW)	3.2 Regular monitoring and evaluation of project progress and results	2023-03-31	50%	70%	During the present period, quarterly reports and expenditure reports have been submitted for the respective quarters, and also the PIR for 2023/2024. The Mid-term evaluation is in progress and will be concluded in Q3/2024.	S

The Task Manager will decide on the relevant level of disaggregation (i.e. either at the output or activity level).

4 Risks

4.1 Table A. Project management Risk

Please refer to the Risk Help Sheet for more details on rating

Risk Factor	EA Rating	TM Rating
1 Management structure - Roles and responsibilities	Substantial	Substantial
2 Governance structure - Oversight	Low	Low
3 Implementation schedule	Substantial	Moderate
4 Budget	Moderate	Moderate
5 Financial Management	Low	Low
6 Reporting	Low	Low
7 Capacity to deliver	Substantial	Substantial

If any of the risk factors is rated a Moderate or higher, please include it in Table B below

4.2 Table B. Risk-log

Implementation Status (Current PIR)

Insert ALL the risks identified either at CEO endorsement (inc. safeguards screening), previous/current PIRs, and MTRs. Use the last line to propose a suggested consolidated rating.

Risks	Risk affecting: Outcome / outputs	CEO ED	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current PIR	Δ	Justification
PCB contaminated equipment identified in inventories is no longer available for removal during project	Output 1.1	M	M	L	L	L		L	=	Contractor has verified sites. risk did not materialize
Basel permits take too long to process.	Outputs 1.1 and 1.2	M	M	M	M	L		L	↑	Basel permits time for issue have

Risks	Risk affecting: Outcome / outputs	CEO ED	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current PIR	Δ	Justification
exceeding project work plan										been obtained and are not substantially affecting delays in project.
Lack of sustained political commitment of beneficiary countries	All outputs	L	L	L	L	L		L	=	As previous PIR
Data gaps continue to affect quality and applicability of assessments. ability to track progress and formulate adequate responses	Output 2.1	M	M	M	L	L		L	=	As previous PIR
Lack of monitoring and reporting capacities; reluctance with provision/ sharing of data	Outputs 2.3 and 2.4	L	L	L	L	L		L	=	As previous PIR
Due to rising oil prices. estimations for procurement tenders have increased-	Output 1.1	N/A	N/A	L	L	L		L	=	As previous PIR
C1: Prevention of new POPs is not measurable in tonnes	Output 1.3	M	M	M	H	H		H		The prevention of new POPs work has confirmed this risk has materialized.
1: Accident or spill during field disposal operations	Component 1	L	L	L	M	M		M		Since repackaging operations will start the risk is present.
C1: in addition to PCB stocks, there is also a risk of copper materials being stolen from transformers,	Component 1							S		This is a new risk that has arisen in some other PCB projects
		M	M	L	L	M		M	↑	With some new risks this year, the overall risk is higher.

4.3 Table C. Outstanding Moderate, Significant, and High risks

Additional mitigation measures for the next periods

Risk	Actions decided during the previous reporting instance (PIRt-1, MTR, etc.)	Actions effectively undertaken this reporting period	What	When	By Whom

Risk	Actions decided during the previous reporting instance (PIRt-1, MTR, etc.)	Actions effectively undertaken this reporting period	What	When	By Whom
PCB contaminated equipment identified in inventories is no longer available for removal during project	Follow up with the countries and stakeholders through official correspondence and continuous meetings	Same	Field visits to the countries	During the implementation phase	PMC. contractor. MoE and MoEW
Implementation schedule. capacity to deliver	Planning contracts in bigger amounts and more integrated activities. IA review of administration capacity and improvement plan agreed with EA	Management review completed by IA with EA and recommendations made to strengthen the MedPCU. Budget revision completed	Hiring key personnel notably finance officers. KM. gender. comms specialists and replace technical disposal coordinator.	By Sept 2024	Executing Agency
C1: Prevention of new POPs is not measurable in tonnes	Alternative approach to be developed. in tandem with MTR	MTR reviewed prevention work and recommendations pending	Review MedWaves contract with countries at extraordinary PSC meeting	Oct 2024	EA/ IA/ Medwaves
C1: Accident or spill during field disposal operations	Contractor HSE plan to be developed. approved & monitored	HSE plans developed for Lebanon & Algeria.	HSE plans to be monitored, including approval by national authorities. HSE plans for Phase 2 countries (Bosnia. Albania. Montenegro. Tunisia) to be developed	Nov 2024	Contractors. governments. EA
Copper material in transformers is stolen due to its high value resulting in soil contamination on site	None	Awareness is raised about issue with government for better security measures. Contractor is informed. and actions taken for safety concerns	Security measures to be implemented. Revisit the ESERN/SRIF to determine if any safeguard measures need to be updated.	August 2024	Contractors. governments. EA
Management structure	Delays in recruitment of	Advertisement of positions	Prioritize HR/ recruitment	Sept 2024	EA

Risk	Actions decided during the previous reporting instance (PIRt-1, MTR, etc.)	Actions effectively undertaken this reporting period	What	When	By Whom
	consultants and replacement staff	was completed with delays	processes		
Budget	Forecast expenditures are not met due to delays in disposal operations	Support import of disposal equipment & PPE	Supervision of disposal contractors & support by national consultants	Jun 2025	EA

High Risk (H): There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks. Significant Risk (S): There is a probability of between 51% and 75% that assumptions may fail to hold and/or the project may face substantial risks. Moderate Risk (M): There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only modest risks. Low Risk (L): There is a probability of up to 25% that assumptions may fail to hold or materialize, and/or the project may face only modest risks.

5 Amendment - GeoSpatial

Project Minor Amendments

Minor amendments are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5% as described in Annex 9 of the Project and Program Cycle Policy Guidelines.Please tick each category for which a change occurred in the fiscal year of reporting and provide a description of the change that occurred in the textbox. You may attach supporting document as appropriate

5.1 Table A: Listing of all Minor Amendment (TM)

Minor Amendments	Changes
Results Framework:	No
Components and Cost:	No
Institutional and implementation arrangements:	No
Financial Management:	No
Implementation Schedule:	
Executing Entity:	No
Executing Entity Category:	No
Minor project objective change:	No
Safeguards:	No
Risk analysis:	No
Increase of GEF financing up to 5%:	No
Location of project activity:	No
Other:	No

Minor amendments

Project extension agreed in 2023 by 1 year to March 2026. The extended period will compensate for delays caused in the start-up phase in April 2020, due to the COVID pandemic. Procurement and contracts are back on track but will require additional time to complete field operations.

The amendment also includes a budget revision to strengthen the project management unit, and to reallocate funds within the C&W Component to allow disposal of the full quantities of both POPs and mercury. Since the prevention work will not achieve the prevention targets (650 tonnes of new POPs and 300 tonnes of mercury), these quantities will be disposed of. Budget is also reallocated from mercury disposal to PCB disposal to account for the higher costs of PCB removal compared to mercury waste.

5.2 Table B: History of project revisions and/or extensions (TM)

Version	Type	Signed/Approved by UNEP	Entry Into Force (last signature Date)	Agreement Expiry Date	Main changes introduced in this revision
Original Legal Instrument MAP		2020-04-27	2020-04-27	2025-09-30	Internal Agreement with UNEP MAP
Amendment 1 MAP for MedWaves	Revision	2022-09-21	2022-09-21	2025-09-20	Budget revision: Re-allocate funds within budget lines under the Chemicals and Waste portion of the budget for additional requirements for a SSFA with BiH under Component 1
	Revision				
Amendment 2 MAP	Extension	2024-07-08	2024-07-12	2026-09-30	Extension of the project by 1 year. Reallocation of budget within components including repurposing of PMC to accommodate budget and administrative support.; and reallocating funds between Outputs within Component 1 on mercury and PCB disposal

GEO Location Information:

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as OpenStreetMap or GeoNames use this format. Consider using a conversion tool as needed, such as: https://coordinates-converter.com Please see the Geocoding User Guide by clicking here

Location Name	Latitude	Longitude	GEO Name ID	Location Description	Activity Description
Tuzla	44.538333333333334	18.666944444444447		Bosnia and Herzegovina	Tuzla HAK 1 mercury site assessment
Bosnia and Herzegovina	43.8456898	18.3255782		Bosnia and Herzegovina	Location of PCB-equipment for Phase 2 (https://app.mapx.org/?language=en&project=MX-ON9-MA9-O1D-KKO-BER&viewsListFlatMode=true&views=MX-XN6PC-G2KZE-UOM50%2CMX-7G6NY-IDN3L-N063O&viewsListFilterActivated=true&p=0&b=0&z=6.894&lat=44.073&lng=16.374&t3d=false&sat=false&theme=water_light)
Vrapce	44.1188949	18.1143306		Bosnia and Herzegovina	Location of PCB-equipment for Phase 2
Modrica	42.934681	17.831044		Bosnia and Herzegovina	Location of PCB-equipment for Phase 2
Capljina	42.436388888888885	18.695833333333333		Montenegro	Location of assessment study
Tivat Bay	42.4415238	19.2621081		Montenegro	Location of PCB-equipment for Phase 2
Podgorica	36.737583	3.976569		ENIEM	The PCBs storage location in Algeria
Algeria	36.739692	3.976636		ETATIT	The PCBs storage location in Algeria
Algeria	36.706714	3.105167		CABEL	The PCBs storage location in Algeria
Algeria	36.736089	3.309608		SNVI	The PCBs storage location in Algeria
Algeria	36.742458	2.991903		EDIEL	The PCBs storage location in Algeria

Location Name	Latitude	Longitude	GEO Name ID	Location Description	Activity Description
Algeria	36.733117	3.159489		SAFEX	The PCBs storage location in Algeria
Algeria	36.700539	3.213956		ENNA AIRPORT	The PCBs storage location in Algeria
Algeria	36.760414	3.065114		Sonelgaz spa Algiers Port power plant	The PCBs storage location in Algeria
Algeria	36.656631	3.082481		ENNA spa Antennas/ Baraki Algiers	The PCBs storage location in Algeria
Algeria	36.872408	6.975228		Stockage spécial SONATRACH Unité 1 et 2	The PCBs storage location in Algeria
Algeria	36.86335	6.955136		Stockage spécial SONATRACH Unité 1 et 3	The PCBs storage location in Algeria
Algeria	34.476219	35.929017		Bauchrieh storage	The PCBs storage location in Lebanon
Lebanon	34.498406	36.004847		Behsas Depot	The PCBs storage location in Lebanon
Lebanon	34.637644	36.267767		Hraiche Depot	The PCBs storage location in Lebanon
Lebanon	34.610881	36.492636		Qadisha-Arjess	The PCBs storage location in Lebanon
Lebanon	34.421056	36.558897		Qadisha-Abou Ali plant	The PCBs storage location in Lebanon
Lebanon	34.441231	36.527125		Qadisha-Bcharre	The PCBs storage location in Lebanon
Lebanon	34.609306	36.441372		Qadisha-Zgharta	The PCBs storage location in Lebanon
Lebanon	34.368114	36.477908		Zahleh	The PCBs storage location in Lebanon
Lebanon	34.226194	36.091583		Jbeil	The PCBs storage location in Lebanon

Location Name	Latitude	Longitude	GEO Name ID	Location Description	Activity Description
Lebanon	34.334808	35.991522		Aley	The PCBs storage location in Lebanon
Lebanon	33.959214	35.863831		Awali plant	The PCBs storage location in Lebanon
Lebanon	33.841128	35.559419		Zahrani refinery	The PCBs storage location in Lebanon
Lebanon	33.448439	35.869514		Taybeh	The PCBs storage location in Lebanon
Lebanon	34.489517	36.11885		Selaata	The PCBs storage location in Lebanon
Lebanon	34.186489	36.450939		Qartaba depot	The PCBs storage location in Lebanon
Albania	40.7	19.55222222		Near Drize village. Fier	PCBs storage location
Albania	41.09	20.06277778		KING FIELD ELBASAN	PCBs storage location
Albania	42.21166667	19.45583333		KOPLIK. BAJZA.SHKODRA	PCBs storage location
Albania	41.28111111	19.625		Tirana-Durrës Highway. KM 9. Kashar	PCBs storage location
Algeria	36.701312	4.14789		ENIEM	PCBs storage location
Algeria	36.739732	3.976566		EATIT	PCBs storage location
Algeria	36.733282	3.158291		SAFEX	PCBs storage location
Algeria	36.656716	3.082552		ENNA BARAKI	PCBs storage location
Algeria	36.700453	3.21399		ENNA AIRPORT	PCBs storage location
Algeria	36.742442	2.992296		EDIEL	PCBs storage location
Algeria	36.692337	3.083425		CABEL	PCBs storage location
Algeria	36.876602	6.97423		SONATRACH	PCBs storage location
Algeria	35.414432	8.099216		ELATEX	PCBs storage location
Algeria	36.70665	3.1044		SONELGAZ DISTRIBUTION	PCBs storage location

Location Name	Latitude	Longitude	GEO Name ID	Location Description	Activity Description
Algeria	36.735126	3.306924		SNVI	PCBs storage location
Algeria	36.760453	3.065372		SPE SONELGAZ	PCBs storage location
Bosnia and Herzegovina	43.8456898	18.3255782		JP "Elektrodistribucija" BiH	PCBs storage location
Bosnia and Herzegovina	44.1188949	18.1143306		Cementara Kakanj	PCBs storage location
Bosnia and Herzegovina	44.4193351	19.1120143		Alumina Zvornik	PCBs storage location
Bosnia and Herzegovina	44.959434	18.3128418		Rafinerija Modriča	PCBs storage location
Bosnia and Herzegovina	42.934681	17.831044		Pumped Storage HPP Čapljina (Čapljina Hydroelectric Power Station)	PCBs storage location
Montenegro	42.3900687	19.2280906		Aluminum Plant Podgorica	PCBs storage location

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate. *

None

[Annex any linked geospatial file]

Additional Supporting Documents:

Filename	File Uploaded By	File Uploaded At	
9684 CP1-1_2024 Semester 1 Co-fin report signed.pdf	Executing Agency	2024-09-12 11:52:56	**Download**
HSE Plan Algeria.pdf	Executing Agency	2024-07-26 00:36:19	**Download**
HSE Plan Lebanon.pdf	Executing Agency	2024-07-26 00:33:48	**Download**

GEF - PROJECT IMPLEMENTATION REPORT (PIR)

2025-09-09 12:03:12

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1 PROJECT IDENTIFICATION

1.1 Project Details

GEF ID: 9684	**Umoja WBS:**SB-007468.11; SB-007468.12
SMA IPMR ID:33512	**Grant ID:**S1-32GFL-000632 (CW); S1-32GFL-000621
Project Short Title: GEF-CW.9684.Med Programme Hotspots	
Project Title: Reducing Pollution from Harmful Chemicals and Wastes in Mediterranean Hot Spots and Measuring Progress to Impacts	
Duration months planned:	72
Duration months age:	65
Project Type:	Full Sized Project (FSP)
Parent Programme if child project:	9607
Project Scope:	Regional
Region:	Europe
Countries:	Albania,Algeria,Bosnia and Herzegovina,Lebanon,Libya,Montenegro,Morocco,Tunisia,Türkiye,Egypt
GEF Focal Area(s):	Chemicals and Waste, International Waters
GEF financing amount:	$ 14,250,000.00
Co-financing amount:	$ 53,146,727.00
Date of CEO Endorsement/Approval:	2020-01-21
UNEP Project Approval Date:	2020-03-02
Start of Implementation (PCA entering into force):	2020-04-27
Date of Inception Workshop, if available:	2020-07-20
Date of First Disbursement:	2020-05-07
Total disbursement as of 30 June 2025:	$ 11,988,319.00
Total expenditure as of 30 June:	$ 4,775,470.00

Midterm undertaken?:	Yes
Actual Mid-Term Date, if taken:	2024-07-31
Expected Mid-Term Date, if not taken:	2024-07-31
Completion Date Planned - Original PCA:	2025-09-30
Completion Date Revised - Current PCA:	2026-03-31
Expected Terminal Evaluation Date:	2026-07-31
Expected Financial Closure Date:	2026-09-30

1.2 Project Description

Child Project 1.1 (GEF ID 9684) is dedicated to reducing pollution from harmful chemicals and wastes in Mediterranean hotspots and measuring progress to Impacts. The objective of this project is to achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas. This objective will be achieved through a multi-focal area collaboration between the GEF Chemicals and Waste and International Waters focal areas.

UNEP/MAP is the Executing Agency of this Child Project and its activities are led jointly by MED POL and the MedProgramme Coordinating Unit. Two of UNEP/MAP's regional activity centers are also Executing Partners: the Plan Bleu Regional Activity Centre and the Regional Activity Centre for Sustainable Consumption and Production (SCP/RAC). The countries participating in the project are Albania, Algeria, Bosnia and Herzegovina, Egypt, Lebanon, Libya, Montenegro, Morocco, Tunisia and Turkey.

This project is composed of three Components:

Component 1 focuses on reducing hazardous chemical pollution, specifically Persistent Organic Pollutants (POPs) banned under the Stockholm Convention and mercury banned under the Minamata Convention. It covers national activities in up to eight countries, as well as regional activities aimed at sharing lessons learned. The Child Project will remove over 3,000 tonnes of POPs and mercury waste from the coastal zones of the project countries, directly addressing the land-based sources of chemical pollution and breaking the source-pathway-receptor linkages to the Mediterranean Sea ecosystem and its inhabitants. This will be achieved through a two-phase activity for the identification, safe storage, and disposal of PCBs and POPs, as well as an activity dedicated to the disposal of mercury. Additionally, pilot projects will be implemented to prevent the generation of waste containing new POPs and mercury. Component 1 is linked to the other Child Projects of the Med Programme, which focus on reducing the other main source of Mediterranean pollution, namely excess nutrients (Child Projects 1.2 [GEF ID 9717] and 1.3 [GEF ID 9691]).

Component 2 is dedicated to identifying priority actions that will enhance environmental and socioeconomic benefits in the region, and to strengthening countries' capacity to monitor and report on environmental trends, thereby supporting evidence-based policy making and decision-making. The centerpiece of Component 2 is an

update of the Transboundary Diagnostic Analysis (TDA) for the Mediterranean Sea Large Marine Ecosystem, including a gender assessment. This gender assessment is expected to facilitate a deeper understanding of the cross-cutting issues of gender, water, and environmental security, and to provide updated inputs for the overall MedProgramme gender agenda. Next, a report will be prepared to assess the impact of the project activities on progress towards the MedProgramme's objectives as well as countries' commitments in the context of the SDGs, based on the results of Component 1's pollution reduction activities, the TDA indicators and their linkages with SDGs, and literature reviews of the SDG progress in the participating countries. Another important activity of Component 2 will be to support GEF-eligible countries in the Mediterranean in upgrading their national monitoring programs in line with IMAP requirements, covering both offshore areas and ensuring better availability and accessibility of monitoring data. This will be accomplished through the development of an offshore monitoring strategy, the selection of 20 sites for this strategy, and pilot activities in a limited number of them.

Component 3 will ensure that knowledge generated by the project is used effectively for project activities and shared with the wider MedProgramme portfolio, and will also execute the project's monitoring and evaluation plan. The knowledge management activities will include the development of interactive visualizations of chemicals inventories across the countries using the MapX application, the preparation of case studies to document results and best practices from the project's activities on pollution reduction as well as the TDA process, and the elaboration of a data sharing protocol to support the monitoring activities foreseen in Component 2. Finally, this Component includes activities supporting the project's monitoring and evaluation plan, including regular monitoring of project results and delivery, quarterly progress and financial reports to the Implementing Agency, annual reports to the GEF, and effective documentation of project lessons learned. It also includes periodic independent evaluation of project results and the achievement of intended outcomes, through external reviews at the project's mid-term and completion.

1.3 Project Contacts

Division(s) Implementing the project	Industry and Economy Division
Name of co-implementing Agency	
Executing Agency (ies)	UNEP Mediterranean Action Plan (MAP)
names of Other Project Partners	Plan Bleu, MedWaves, EBRD
UNEP Portfolio Manager(s)	Kevin Helps
UNEP Task Manager(s)	Girum Haile; Kaisa Uusimaa
UNEP Budget/Finance Officer	Edward Aput; Ruth Irungu
UNEP Support Assistants	
Manager/Representative	Tatjana Hema
Project Manager	Mohamad Kayyal
Finance Manager	Rachel Kagiri
Communications Lead, if relevant	Ivana Popovic

2 Overview of Project Status

2.1 UNEP PoW & UN

UNEP Current Subprogramme(s):	Thematic: Chemicals and pollution action subprogramme
UNEP previous Subprogramme(s):	Subprogramme 5: Chemicals and Pollution Action
PoW Indicator(s):	• Pollution: (iv)Reduction in releases of pollutants to the environment achieved with UNEP support
UNSDCF/UNDAF linkages	The project is aligned with the priorities of the participating countries, as evidenced in the following linkages to the relevant UN cooperation framework documents: Albania: Programme of Cooperation for Sustainable Development (2017-2021): Priority IV "Environment and climate change" and its Outcome 4 "Government and non-government actors adopt and implement innovative, gender-sensitive national and local actions for environmental sustainability, climate change mitigation and adaptation, and disaster risk reduction". Algeria: UN Strategic Cooperation Framework (2019-2021): Priority 3 "Environment" and its Outcome 4 "By 2021, the wellbeing and resilience of citizens are improved as a result of an inclusive and sustainable management of natural and urban ecosystems", including through the sustainable management of natural resources in the context of climate change, support for pollution reduction, and sustainable consumption and production. Bosnia and Herzegovina: Sustainable Development Cooperation Framework (2021-2025): Strategic Priority I "Sustainable, resilient and inclusive growth" and its Outcome 1 "By 2025, people benefit from resilient, inclusive and sustainable growth ensured by the convergence of economic development and management of environment and cultural resources", including through actions supporting a stronger policy and regulatory environment and stimulus measures to enable low-carbon development, spur business development and increased competitiveness, and support the creation of green and decent jobs, complemented by environmental action. Egypt: United Nations Partnership Development Framework (2018-2022): Outcome Area "Environmental Sustainability and Natural Resources Management", including through actions to promote management of hazardous waste and to support Egypt in its obligations under relevant global conventions and protocols, sustainable use of scarce water and agricultural land resources, capacity for the sound management of biodiversity resources (including eco-tourism), and to promote eco-innovation in production. Lebanon: United Nations Strategic Framework (UNSF) (2017-2020): Core priority 3 "Lebanon reduces poverty and promotes sustainable development while addressing immediate needs in a human rights/gender-sensitive manner" and its Outcome 3.3 "Lebanon has improved environmental governance", including through the effective management of solid waste and the protection of water quality, support for climate change adaptation and mitigation, and the protection of coastal zones. Libya: United Nations Strategic Framework (2019-2021): priority actions under the "Environmental aspects" section, including national

	capacities for environmental management, water and waste services, response to climate change; strengthened management of natural resources, particularly water, land and biodiversity; increased resilience of vulnerable populations to environmental risks and climate change; assessment of soil and water pollution; and increased capacity for generation and use of environmental data. Montenegro: Integrated United Nations Programme for Montenegro (2017-2021): Priority Area "Environmental Sustainability "and its Strategic Outcome "By 2021, the people of Montenegro are benefitting from sustainable management of cultural and natural resources, combating climate change and disaster risk reduction" including through strengthened capacity for chemical waste management in line with international standards, support for resource efficiency and sustainable consumption and production, integration of climate change mitigation measures in national policies and strategies, and data collection and capacity building for evidence-based planning and decision making. Morocco: United Nations Development Assistance Framework (2017-2021): Core priority 2 "Inclusive sustainable development" and actions in partnership with the UN system to promote sustainable industrial development and cleaner production techniques; improved management and access to natural resources and ecosystem services, including through the protection of biodiversity; evaluation and characterization of water resources to promote evidence-based management approaches; opportunities for civil society to participate in territorial planning that integrates the principles of sustainable development, human rights, sustainable management of natural resources and biodiversity and the green economy; and reinforced capacities for accessing environmental information to support decision making. Tunisia: United Nations Sustainable Development Cooperation Framework (2021-2025): Outcome 4 "Natural resources management, climate change and resilience to climate risks and crises" and actions in partnership with the UN system, the public and private sectors and civil society, to promote sustainable management of natural resources and ecosystem services, including through the participation of local populations in the management of water and sanitation services; the development of an integrated territorial approach for the management of ecosystems and natural resources; capacity building for tools to elaborate and finance public policies that contribute to green economic growth in domains including water, food security, industry and territorial management; capacity building to reduce and management all kinds of risks; and capacity building to elaborate and implement integrated policies to ensure food security, improve nutrition and promote sustainable agricultural systems. Turkiye: United Nations Development Cooperation Strategy (2016-2020): Strategic Area of Cooperation "Sustainable, inclusive growth and development" and its Result 3 "By 2020, improved implementation of more effective policies and practices for all men and women on sustainable environment, climate change, biodiversity by national, local authorities and stakeholders, including resilience of the system/communities to disasters".
Link to relevant SDG Goals	• Goal 6: Ensure availability and sustainable management of water and sanitation for all • Goal 12: Ensure sustainable consumption and production patterns
Link to relevant SDG Targets:	• 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals

	and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally • 6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate • 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

2.2. GEF Core and Sub Indicators

GEF core or sub indicators targeted by the project as defined at CEO Endorsement/Approval, as well as results

	Targets - Expected Value				
Indicators	**Mid-term**	**End-of-project**	**Total Target**	**Materialized to date**	**Remarks**
7-Number of shared water ecosystems (fresh or marine) under new or improved cooperative management		1	1		In this reporting period, the project has contributed to the introduction and piloting of better management practices, regulatory measures, and capacity-building activities, which are already showing positive effects in certain hotspots and sectors. However, while these practices demonstrate clear

	Targets - Expected Value				
Indicators	**Mid-term**	**End-of-project**	**Total Target**	**Materialized to date**	**Remarks**
					potential and early evidence of impact, their full scaling and long-term sustainability will require continued commitment, replication, and integration into national and regional frameworks.
9.1-Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)		2000	2000	486	In Algeria, 401 tons of PCB-contaminated equipment were safely disposed of during Phase 1, while an additional 613 tons are currently undergoing disposal as part of Phase 2. In Lebanon, disposal operations are underway for 271 tons of PCBs.

	Targets - Expected Value				
Indicators	**Mid-term**	**End-of-project**	**Total Target**	**Materialized to date**	**Remarks**
					Preparatory work is also in progress for the disposal of 700 tons of PCB-contaminated material across Albania, Algeria, Bosnia and Herzegovina, Montenegro, and Tunisia.Regarding mercury waste disposal in Tunisia, the disposal target is 50–100 tons. The contract for mercury disposal is expected to be awarded in July 2025.While the new POPs prevention output has not directly contributed to this indicator, the project has supported regulatory and technical reform

	Targets - Expected Value				
Indicators	**Mid-term**	**End-of-project**	**Total Target**	**Materialized to date**	**Remarks**
					including national-level actions in Tunisia, Morocco, and Montenegro—such as policy revisions, PFOS sampling, and the identification of mercury hotspots. These have directly contributed to reducing the risks posed by hazardous substances and set the scene for future prevention of new POPs over and above the project targets.
11- People benefitting from GEF-financed investments	2000	4000	4000	12000	As of the current reporting period, the total number of individuals who have benefitted from CP 1.1 activities has exceeded 12,000 people.A total of

	Targets - Expected Value				
Indicators	**Mid-term**	**End-of-project**	**Total Target**	**Materialized to date**	**Remarks**
					1,300 people were recorded in previous Project Implementation Reports (PIRs). These beneficiaries include participants of four Project Steering Committee Meetings, training workshops held in Algeria, Lebanon, Albania, and Turin, as well as attendees of three Transboundary Diagnostic Analysis (TDA) meetings, two awareness-raising workshops in Tunis, a regional meeting in Montenegro, a field visit and community engagement meeting in Tuzla, a regional meeting

	Targets - Expected Value				
Indicators	**Mid-term**	**End-of-project**	**Total Target**	**Materialized to date**	**Remarks**
					on the management of POPs in Athens, and two Annual Stocktaking Meetings (ASM) held in Athens and Podgorica.During the current reporting period, 644 individuals benefitted directly from CP 1.1 activities. These include participants in ASM 2025, the CIEMAT workshop, national workshops organized in Albania, Libya, Montenegro, and Tunisia, two side events conducted under the Basel-Rotterdam-Stockholm (BRS) Conventions, the project's Steering

	Targets - Expected Value				
Indicators	**Mid-term**	**End-of-project**	**Total Target**	**Materialized to date**	**Remarks**
					Committee Meetings, the LME24 Meeting, and the United Nations Ocean Conference (UNOC).In addition to the above, it is estimated that at least 10,000 people in Algeria have indirectly benefitted from the project, specifically due to the successful completion of Phase 1 of the PCB disposal operation during this reporting period. This figure reflects the number of individuals potentially protected from the harmful effects of PCB contamination as a result of the

	Targets - Expected Value				
Indicators	**Mid-term**	**End-of-project**	**Total Target**	**Materialized to date**	**Remarks**
					intervention.Across all reported and estimated activities, the gender distribution of beneficiaries is approximately balanced, with female and male participants represented equally at 50 percent each. This reflects the project's commitment to ensuring gender inclusivity and equitable participation in all capacity-building, awareness, and technical engagement efforts.

Implementation Status 2025: 5th PIR

2.3. Implementation Status and Risks

	PIR#	Rating towards outcomes (section 3.1)	Rating towards outputs (section 3.2)	Risk rating (section 4.2)
FY 2025	5th PIR	MS	MS	M
FY 2024	4th PIR	MS	MS	M
FY 2023	3rd PIR	MU	MS	M
FY 2022	2nd PIR	MU	MU	M
FY 2021	1st PIR	MS	MS	M
FY 2020				
FY 2019				
FY 2018				
FY 2017				
FY 2016				
FY 2015				

Progress: Information on progress outcomes of project implementation activities

In Component 1 (Chemicals and Waste), significant progress was made during the reporting period under Output 1.1 on POPs. In Algeria, under Phase 1, 401 tons of PCB-contaminated equipment were successfully disposed of. In Phase 2, the procurement contract was renewed by UNON on 27 May 2025, targeting an additional 613 tons for disposal by 31 March 2026. In Lebanon, the target is the disposal of 271 tons of PCB-contaminated equipment. Operational activities, including drainage, collection, and packaging, began in March 2025 and are proceeding on schedule. Final disposal is pending approval of the Basel Notification for international shipment. A shortfall of ~40 tons has been identified, with further discrepancies expected. Documentation has been submitted to the notifier (Toxivia), and additional requirements from the Ministry of Environment are under review. In Albania, Bosnia and Herzegovina, Montenegro, and Tunisia, an agreement between UNEP and UNOPS was signed in January 2025 to manage ~700 tons of PCB-contaminated equipment. Key achievements for the three Balkan countries and Tunisia include: EMPs for Albania, Bosnia and Herzegovina, and Montenegro completed (Nov 2024); UNOPS initiated field missions and consultations in all countries, strengthening coordination with national stakeholders; In Tunisia, UNOPS is reassigned for the inventory, and contract award is expected in July 2025 for the disposal operations in three waste sites identified. An optional 80-ton lot was added in Tunisia to mitigate shortfall risks, increasing the expected volume to 406 tons. Under Output 1.2 (Mercury Waste Disposal), an agreement between UNEP and UNOPS was signed for the disposal of ~390 tons of mercury waste in Tunisia in Jan 2025. Originally targeting 50 tons, this was revised to 389 tons based on updated inventory data. Due to elevated disposal costs, the target may be adjusted to 50–100 tons to fit within budget constraints. The disposal contract is expected to be awarded in July 2025. On New POPs and Regulatory Framework Development (Output 1.3): In Tunisia, a consolidated report on mercury-containing medical devices was completed. Additionally, regulatory framework updates, national mercury inventory, and a report on mercury waste and hotspots were delivered; In Albania, a national workshop was hosted on safer alternatives in firefighting foams (March 2025). In Lebanon, inventory and sampling campaign for PFOS, HBCD, and SCCP was completed; In Libya, a workshop on new POPs was organized (June 2025); In Montenegro, a foam sampling contract was signed with CETI, and E-waste prevention materials are under development. In Morocco, a report on PFAS/HBCD with regulatory recommendations has been finalized.Component 2: International Waters: Under Output 2.1 of

Transboundary Diagnostic Analysis (TDA), progress continued on developing the TDA Summary Report, with completion projected by the end of 2025. The report will consolidate findings from national TDAs, integrate the 2023 MED QSR results, and include gender-responsive analysis to support regional planning and the Strategic Action Programme. Efforts are also ongoing to consolidate and disseminate data via the KM portal and MapX for completion by the end of 2025 (Output 2.2). Moreover, preparation for aligning MAP/Mediterranean frameworks with SDGs and developing the final consolidated KM report is planned for the coming months. Under Output 2.3, the draft offshore monitoring strategy was aligned with national IMAPs and reviewed extensively; more than 20 potential offshore monitoring sites were identified; five pilot stations were established to test IMAP methodologies; piloting is ongoing, with activities on biodiversity, pollution, and marine litter indicators. Completion is expected by Q3 2025. Under Output 2.4, Data Sharing Policy and Regional IT Model, significant progress was made on establishing a regional data-sharing framework, including i) the completion of a comprehensive review of national databases/IT systems, ii) ongoing activities on developing recommendations for a regional IT model to interconnect national platforms, iii) informal consultations made with partners which laid the foundation for an implementation roadmap, including identification of integration needs and capacity-building priorities. The component on regional cooperation and exchange of best practices has not yet been launched, but remains scheduled within the same timeframe.For Component 3, the Knowledge Management (KM) and Communications Strategy and Action Plan were revised through collaboration with the GEF KM Lead, University of Geneva, Info/RAC, and the GEF Communications Unit (Output 3.1). The strategy now includes clearly defined outputs and timelines aligned with feedback from Executing Partners and the Mid-Term Review. Key achievements also include: Strategy endorsement during the 2025 ASM and SCM of CP 4.1; Public launch of the revised KM platform, incorporating improved structure, new UX/UI features, and missing datasets; Refresher trainings delivered in June 2025; The Knowledge Management Task Force was reactivated and held its first session on 30 June 2025; MedPCU was invited by the GEF Secretariat to contribute to the GEF-wide KM/Comms blueprint. Under Output 3.2, the Mid-Term Evaluation of CP 1.1 (2020–2024) was finalized in Q3 2024; Progress is being made in addressing all nine MTR recommendations, with actions underway to integrate the recommendations into ongoing implementation.

Challenges: Information on challenges of project implementation activities

Project implementation challenges primarily stem from the timely provision of services by external partners, including UN sister agencies, as well as compliance with legal agreement standards and application procedures by the Executing Agency. These risks are currently mitigated by revising contracts and TORs for specific services and by signing new agreements to deliver expected outputs.In Lebanon, project delays due to poor security were a challenge, and are currently managed by expediting implementation through signed disposal notification documents for immediate operation. Moreover, project delays caused by unresolved Basel disposal notification permits for shipping PCB disposal pose a risk to project operations.Moreover, other challenges include potential shortfalls in PCB quantities to be collected from participating countries in the project, in order to achieve the overall target of disposing of 2,000 tons of PCB-contaminated equipment across the participating countries. This issue was previously encountered during Phase 1 of the project, particularly in Algeria. Additionally, the cost of PCB disposal per ton exceeded the initial estimate, prompting a revision of certain project activities.

2.4 Co Finance

Planned Co-finance:	$ 53,146,727

Actual to date:	14,280,470
Progress	**Justify progress in terms of materialization of expected co-finance. State any relevant challenges:** To date, the EA has documented US$14,280,470 in co-financing for the project, all of which is in-kind co-financing. The co-financing in this reporting period was mobilized through (i) the In-Kind staff time of UNEP/MAP; and (ii) the organization of a workshop gathered national focal points of the BRS Conventions from Mediterranean countries, stakeholders and convention committee members, to promote the understanding of the scientific and technical aspects of the BRS Conventions by SPC/RAC. The cofinancing report is attached to the PIR. The level of co-financing reported by the partners—both countries and executing agencies—remains significantly low. Despite the Finance Unit's best efforts, including official communications via email and the organization of dedicated online training sessions, there has been a consistent lack of response. Unfortunately, partners have shown limited engagement and have not responded to any of the outreach attempts to date. The requirement for participating countries to deliver on their co-financing commitments needs to be re-emphasized. It is expected to increase in the coming period as field operations continue to be implemented to remove POPs and mercury.

2.5. Stakeholder

Date of project steering committee meeting	2025-05-12
Stakeholder engagement (will be uploaded to GEF Portal)	During the reporting period, the project established key partnerships through stakeholder engagements, which included: • The partnership with the European Bank for Reconstruction and Development (EBRD) in Tunisia has been a strong example of how inter-agency and multi-sectoral cooperation can maximize PCB disposal. Close coordination between UNEP and EBRD revealed that National Implementation Plans often underestimated the true scale of PCB waste, partly because companies were reluctant to

	disclose holdings due to reputational concerns and a lack of clear solutions. Through EBRD's engagement, however, it became clear that both public and private companies were already maintaining detailed asset inventories of PCB-containing equipment, treating it as a liability in their operational planning. By aligning these data sources with UNEP's technical expertise and facilitating joint procurement processes, the collaboration not only improved transparency but also simplified and accelerated the safe removal and disposal of PCBs. This model, bringing together UN agencies, development banks, ministries, and waste holders, has proven highly effective in advancing PCB management in Tunisia and provides a strong blueprint for future efforts under the Stockholm Convention. • Moreover, the project established key partnerships with stakeholders at the 3rd MedProgramme Annual Stocktaking Meeting (ASM), which took place in April 2025, held in Istanbul, Turkey, with the theme *"The MedProgramme: Greater than the Sum of its Parts"*. The 3rd Annual Stakeholder Meeting (ASM) was organized in collaboration with the United Nations Environment Programme (UNEP) and the European Bank for Reconstruction and Development (EBRD). This initiative is significant as it aims to connect with other Child Projects under the MedProgramme to facilitate knowledge exchange and foster partnerships. During the event, the executing partners of the MedProgramme's eight Child Projects highlighted the significance of collaboration and synergy in order to achieve the programme's results. They shared insightful examples of how joint efforts and partnerships have led to innovative solutions and improved outcomes across various initiatives. The GEF 9684 project gained significant advantages from the 3rd ASM meeting due to the collective efforts and partnerships formed during the event, amplifying coordination and programmatic approach, knowledge sharing and integration, leveraging resources for knowledge management, and gender mainstreaming activities. These collaborations not only enhance the effectiveness of the project but also support the broader objectives of the MedProgramme. This highlights the importance of teamwork in promoting sustainable development and facilitating positive change.

2.6. Gender

Does the project have a gender action plan?	Yes
Gender mainstreaming (will be uploaded to GEF Portal):	During the reporting period, implementation of the Gender Action Plan under Child Project 1.1 progressed through the application of gender-sensitive approaches to the TDA analysis and two stakeholder meetings (the Gender Action Plan is attached to the main PIR report). However, most of the six outcomes could not be implemented due to the absence of a dedicated gender expert within the MedPCU before January 2025. These activities, listed below, have since been integrated into Child Project 4.1, which is part of the same Internal Cooperation Agreement (ICA) with Child Project 1.1, with the associated targets expected to be achieved by April 2026. - Outcome 1: Gender issues in managing harmful chemicals and wastes in coastal hotspots are identified - Outcome 2: Factors contributing to women's particular difficulties in redressing environmental imbalance addressed - Outcome 3: Project implementation staff promote gender equality effectively - Outcome 4: Gender equality and women's empowerment (GEWE) is a cornerstone of environmental management and governance - Outcome 5: Environmental policies, plans, strategies developed are gender-responsive - Outcome 6: Collection of sex-disaggregated data and knowledge exchange contribute to the achievement

	of SDG5 Following the onboarding of a gender specialist in January 2025, a gap assessment of the Gender Action Plan was conducted. Based on the assessment, support was provided for preparatory work for communication campaigns and training targeting the Roma community of waste collectors in Montenegro. Terms of Reference and communication materials were reviewed, coordination meetings were attended, and one of the community trainings in Berane was observed in May 2025 to assess implementation and local dynamics. Two interviews were conducted during this visit with a female community member and a youth. Gender mainstreaming was also integrated into the April 2025 Annual Stocktaking Meeting (ASM), where guiding questions and recommendations were reflected in the CP 4.1 work plan. At the Steering Committee Meeting (SCM) in May 2025, CP 4.1's gender-responsive work plan—featuring stakeholder engagement, national focal points, and capacity-building activities—was presented to country delegates. Across the MedProgramme's eight Child Projects, gender-oriented activities have been guided by individual Gender Action Plans aligned with the overarching MedProgramme Gender Mainstreaming Strategy. The 2024 mid-term review of CP 4.1 emphasized the need for a more holistic, traceable, and impactful gender mainstreaming approach. It recommended strengthening community-level stakeholder engagement and establishing sustainable mechanisms through local ownership. In response, the MedProgramme Coordination Unit (MedPCU) is preparing a new regional initiative aimed at raising awareness and building capacity on hazardous chemicals with a gender-responsive approach in Albania, Algeria, Bosnia and Herzegovina, Tunisia, and Morocco.

	Training sessions are scheduled between September 2025 and January 2026, with Tunisia, Albania, Bosnia and Herzegovina, Morocco, and Algeria as host countries. Deliverables will include participant lists, finalized training methodologies, session materials, one-page training reports per country, and visual documentation. These combined efforts are expected to significantly strengthen gender integration across CP 1.1 and CP 4.1 while enhancing inclusive stakeholder engagement and advancing gender equity in the management of hazardous chemicals in the Mediterranean region.

2.7. ESSM

Moderate/High risk projects (in terms of Environmental and social safeguards)	**Was the project classified as moderate/high risk CEO Endorsement/Approval Stage?** Yes **If yes, what specific safeguard risks were identified in the SRIF/ESERN?** SS2: Resource Efficiency, Pollution Prevention and Management of Chemicals and Waste
New social and/or environmental risks	**Have any new social and/or environmental risks been identified during the reporting period?** No **If yes, describe the new risks or changes?**
Complaints and grievances related to social and/or environmental impacts	**Has the project received complaints related to social and/or environmental impacts (actual or potential) during the reporting period?** No **If yes, please describe the complaint(s) or grievance(s) in detail, including the status, significance, who was involved and what actions were taken?**
Environmental and social	

safeguards management	During the project design stage, the project was rated as a moderate-risk project in the ESERN, as Safeguard Standard 2 was triggered, which is “Resource Efficiency, Pollution Prevention and Management of Chemicals and Waste”. This is mainly due to the risk associated with the project activities on the collection, packaging, and export of PCB-contaminated oil and equipment, as well as mercury waste, which may result in accidental oil spillage and release of pollutants to the environment during field operations and exposure of workers to the chemicals. Currently, the risks identified during the project design phase have not occurred due to the environmental and health protection measures implemented during the collection, packaging, and transportation of PCB-contaminated equipment and mercury waste at each project site. This is attributed to the preparation and execution of effective health, safety, and environmental (HSE) management plans in the participating countries of the project, which ensured protection of the environment and created a safe and healthy working environment for workers and contractors. Additionally, environmental and social management plans (EMPs) were implemented for managing PCB-contaminated equipment and mercury waste, with a focus on safeguarding, transporting, decontaminating, and environmentally sound disposal of PCB-laden materials and mercury waste at each project site,aligned with the legal and institutional frameworks of the project countries. The other Safeguard Standards in the ESERN have not been triggered during the project implementation period, and the risks associated with them remain low as defined during the project design stage. As mentioned above, the environmental and social risks associated with the project are primarily linked to the execution of PCB disposal contracts, where comprehensive Health, Safety, and Environmental (HSE) management is critical to ensuring the protection of human health and the environment. Under Output 1.1, HSE plans were developed and implemented for Lebanon and Algeria during Phase 1 POPs disposal operations within the reporting period (HSE plans are attached to the PIR report).For Phase 2, the development of HSE management plans for Albania, Bosnia and Herzegovina, Montenegro, Tunisia, and Algeria is scheduled to commence in the third quarter of 2025. These country-specific plans will build on lessons learned from Phase 1 and will reflect national legal frameworks, site-specific risks, and the operational context in each country.Each HSE plan includes a dedicated section for the identification and assessment of environmental, health, and safety risks. These are subject to continuous monitoring by national authorities and the Executing Agency throughout the supervision and implementation of the PCB disposal contracts. Additional risk assessments will be carried out as needed to ensure that mitigation measures remain effective and responsive to evolving circumstances.During the reporting period, Environmental Management Plans (EMPs) have also been finalized for Albania, Bosnia and Herzegovina, Montenegro, and Algeria, in support of POPs remediation and mercury-related activities (EMPs attached to the PIR report). In Montenegro, a new agreement has been signed with the contractor for the development of an EMP covering POPs and heavy metals—including mercury—in contaminated areas of ports and bays.In Lebanon, operational activities are progressing, but final disposal is pending the issuance of the Basel Permits from the Ministry of Environment. To help expedite this process, an official letter was sent to the newly appointed Minister of Environment in April 2025, formally requesting their support in accelerating permit approvals. In addition, for security reasons, in Q3 2024, the international contractor temporarily rented a well-protected facility for the secure storage of operational equipment, ensuring that all materials remain safeguarded until disposal can proceed.Moreover, the project is fully aligned with the MedProgramme’s

	overarching Gender Mainstreaming Strategy and is committed to upholding UNEP's Safeguard Standard 8 on Gender Equity. A gender action plan (attached) has been developed to mainstream gender considerations across technical assistance activities under Component 1 (Chemicals and Waste) and Component 2 (International Waters). Furthermore, a dedicated gender assessment has been conducted as part of the Transboundary Diagnostic Analysis to ensure the integration of gender-responsive perspectives in regional environmental planning and decision-making.

2.8. KM/Learning

Knowledge activities and products	During the reporting period, key knowledge management activities included participation in the GEF International Waters Conferences (IWC), which took place in Punta del Este, Uruguay, from September 23 to 26, 2024. This conference served as an important event for learning and exchanging ideas among projects funded by the Global Environment Facility (GEF) in the International Waters focal area, focusing on transboundary cooperation in shared marine and freshwater ecosystems. Additionally, contributions were made through panels and roundtable discussions at the 3rd MedProgramme Annual Stocktaking Meeting (ASM), held in Istanbul, Türkiye, from April 8 to 10, 2025. The MedProgramme Delegation to the IWC10 included the UNEP/MAP MED POL Pollution Officer, the MedWaves Project Officer, the Partnership and Communication Officer, and a Delegation from Montenegro. MedProgramme contribution mainly was focused on illustrating tools, methods, experiences and lessons learned from Child Projects implementation and MedPCU coordination work with focus on the marine environment and on the linkages with the Barcelona Convention, highlighting MedProgramme distinctive features, starting from the multisectoral programmatic dimension, and contributing to the global exchange with other GEF funded projects on those aspects. The panel discussion "Enhancing Regional Collaboration for Effective Management of Hazardous Chemicals and Marine Environment Monitoring" at the 3rd Annual Stocktaking Meeting (ASM, held in Istanbul in April 2025) brought together a diverse group of stakeholders, including GEF Secretariat, contractors, national

	consultants, government representatives, and technical agencies, each offering insights into their respective roles, progress made, and the challenges faced during implementation. The discussion underscored the importance of coordination, innovation, and inclusivity in navigating the complex landscape of hazardous chemical management and marine ecosystem preservation. The roundtable discussion on "Circular Economy and the Prevention of New Persistent Organic Pollutants (POPs)" at the 3rd ASM provided an overview of the multilateral environmental agreements addressing chemical and waste challenges through life-cycle approaches. Linking this to the circular economy, the urgency of redesigning the system, rethinking production, consumption, and waste, to eliminate waste and toxic substances at their source, was emphasized. Participants offered a diverse array of insights, concerns, and proposals, which led to a set of consolidated recommendations. As part of the 3rd ASM meeting, the Knowledge Management Platform, Partnerships, and Science Communications were also discussed and next steps have been taken to advance on these fronts: 1. The KM platform was updated with most recent project data and publicly launched to enhance contribution of Executing Partners and Partner Countries. This launch was accompanied by a refreshment training in both English and French languages. In addition, new features were added to the platform (feedback and rating mechanisms) and other items were updated for enhanced UI/UX (new event page). Furthermore, the home page was redesigned to include a visual representation of all project sites. Lastly, the new Knowledge Management Task Force, consisting of both Country Representatives and Executing Partners, was reinitiated to strengthen engagement and co-design Knowledge Management activities. 2. The Knowledge Managment component will be supported by offline Knowledge Exchange to effectively share common experiences on policies and institutional models, best practices, challenges, and collectively design solutions, building a collective vision of a future in which conservation and

	development go hand-in-hand. Outcomes will be captured and shared through products, serving as guidance for replicable courses of action. Country missions have been planned and will take place from September 2025. 3. To bridge the gap between Knowledge & Data and Accessibility thereof, it was determined that Science Communications and Knowledge Brokerage are pivotal, as the KM platform itself is merely a supporting tool, and training, communications and partnership building are needed to inform and activate an ample public of diverse stakeholders, such as policymakers, technical agencies, CSOs, the media, youth, the general public, academia, and many others. To start off this process, MedProgramme hosted a Science Communications workshop, including project best practices, during the 24th Annual Large Marine Ecosystems Consultation Meeting (LME24). Link: https://drive.google.com/drive/folders/1i8tdl1WrQb6vOZsQMmbMNK6a-SaEwfDK?usp=share_link The ASM meeting requested the MedPCU and the Executing Partners, under each Child Project, to provide continuous and sustainable contributions in order to ensure that the MedProgramme community is informed and that potential synergies and collaboration among Child Projects and Countries are timely identified and activated. During the BRS COP, held in Geneva in April-May 2025, the MedProgramme was represented at two side events, where supporting presentations and visualizations of the programme were used. At one side event, the MedProgramme participated in the panel "International Cooperation Support: Showcasing positive impact of inter-agency and multi-sectoral cooperation in the field of POPs management," showcasing PCB disposal best practices. The BRS COP presence was shared in the IW:LEARN newsletter and on the UNEP GEF website. In addition, the PCB disposal best practices visualization was included in a display video for the GEF CEO visit to UNEP HQ and AMCEN. In June 2025 MedProgramme contributed to UNOC3, celebrated in Nice, with two Source-to-Sea case studies. These were included in a guidance document and presented by UNECE.

	For better integration within the UNEP system, MedProgramme joined the UNEP GEF Chemicals & Waste Communications Task Force.
Main learning during the period	Key lessons learnt from the POPs prevention work in the project during the reporting period include: • While the project interventions successfully raised awareness and built capacity for safer alternatives, it was not possible to quantify the prevention results in terms of tonnage. This limitation stemmed from the fact that prevention is largely theoretical: although project actions demonstrated how POPs could be avoided through better practices and substitution, there were no verifiable amounts of chemicals physically collected or destroyed. Instead, the outcomes were reflected in improved management systems, regulatory frameworks, and knowledge transfer, rather than measurable quantities of POPs removed. These lessons stress the need for developing more robust methodologies and indicators to capture the impact of prevention initiatives in future new POPs projects, balancing qualitative achievements with feasible quantitative measurements. Other important lessons during the reporting period include: • Impact is reached through enhanced collaboration and making better use of the UNEP (GEF) system and channels, and tapping into opportunities provided by IW: LEARN • Converting data into visualizations and stories is crucial for knowledge transfer, which was highlighted during the ASM, but also during the SCM of Child Project 1.1 and Child Project 4.1 • Engaging Country Partners and Executing Partners is pivotal for driving effective learning outcomes

Reflows

Reflows (for NGIs only)	

2.9. Stories

Stories to be shared	During the 3rd ASM, a new Communications Strategy was presented, which was further elaborated and presented during the May 2025 Steering Committee Meetings (SCMs) of Child Projects 1.1. and 4.1. The presented strategy focuses on communicating MedProgramme best practices through success stories in both owned and earned media, on- and offline, considering that timelines for communications efforts are limited due to the upcoming project closure. It was identified that owned media such as UNEP, UNEP GEF, and GEF channels were low-hanging fruits for ample distribution of content. Another important communication channel identified was the IW: LEARN newsletter, which features content organized by monthly themes. A journalism training structure was created and launched for enhanced local, regional, and overall programme and project communications, serving as a vehicle of content, distribution, and capacity-building. An overview of some first coverage results: Overall coverage: https://drive.google.com/file/d/10rOUBzoaHDP5b6v9z9vTfY8oyJUChMsY/view?usp=share_link Coverage BRS COP: https://drive.google.com/file/d/1ejs475zeFAGbrw8bFO1X1A5nHHWMsvUT/view?usp=share_link Coverage IW: LEARN: https://drive.google.com/drive/folders/1mQtk4s_92J42NrJ9Wf6ijlXyMDdKiQQg?usp=share_link Visualization AMCEN: https://drive.google.com/drive/folders/1mQtk4s_92J42NrJ9Wf6ijlXyMDdKiQQg?usp=share_link Other AMCEN materials: https://drive.google.com/drive/folders/1M5C5reIPVaISGAeZbEl8b7HTS0DGZ1db?usp=share_link Journalism and Science Communications materials: https://drive.google.com/drive/folders/1BPQY2vfoyomVUKIvWm4S3g6bVg2Xo1fb?usp=sharing

3 Performance

3.1 Rating of progress towards achieving the project outcomes

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or binary entry only)	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
To achieve measurable reductions in levels of POPs and mercury in priority Mediterranean coastal hot spots and catchment areas.	Capacity in project countries to address land-based sources of pollution in Mediterranean catchments (POPs and mercury) and monitor pollution levels	Despite extensive regional and national activities in Mediterranean countries to safeguard, collect and dispose of PCBs, significant stock of PCB contaminated oil and equipment and mercury remain, and new POPs are widely used in the project countries.	N/A	Capacity of national authorities to eliminate PCB and POPs stockpiles, updated legislation and greater awareness of decision-makers on new POPs, updated assessment and monitoring arrangements	90%	Through support provided under CP 1.1, countries have developed better capacities for decision-making on pollution remediation, based on PCB inventories and site assessments that have been completed in all countries. With regards to support on new POPs and prevention of mercury, good progress has been achieved with the evaluation of legislation and roadmaps for new POPs by the implementing partner, MedWaves.The monitoring capacity of pollutants through offshore monitoring has undergone a thorough review process and has been aligned with the national Integrated Monitoring and Assessment Programmes (IMAPs) of participating countries, ensuring coherence with national priorities and regional commitments	MS
Reduction of wastes and hazardous chemicals (POPs and mercury) in coastal hotspots	No. of tonnes of POPs waste and new POPs eliminated	POPS = 3,346 tonnes inventoried	586 t POPs removed	Disposal of 2000 tonnes of POPs	30%	401 tons of PCB contaminated equipment shipped and disposed from Algeria and destructed in France in the incineration facility of the contractor. A further	MS

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or binary entry only)	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
		during PPG (refer to Table 9–Quantified summary table of potential GEB by country)				613 tonnes in Algeria, 271 tonnes in Lebanon, and 700 tonnes in the Balkan countries and Tunisia, are under contract and progressing, albeit with some delays.	
Reduction of wastes and hazardous chemicals (POPs and mercury) in coastal hotspots	No. of tonnes of POPs prevented	POPS = 3,346 tonnes inventoried during PPG (refer to Table9–Quantified summary table of potential GEB by country)	586 t POPs removed	Prevention of 650 tonnes new POPs	100%	All prevention activities (country missions, workshops, seminars, updating national legislation, etc.) completed. However since these cannot be quantified the prevention target of 650 tonnes has been moved to the disposal component and 2000 tonnes are scheduled to be disposed of.	MU
Reduction of wastes and hazardous chemicals (POPs and mercury) in coastal hotspots	No. of tonnes of Hg of/safely stored waste disposed	Mercury wastes= 84.7 tonnes inventoried during PPG	Mercury wastes= 84.7 tonnes inventoried during PPG	Reduction and safe storage of 50 tonnes of mercury wastes	0%	An agreement was signed with UNOPS at the beginning of 2025, under which UNOPS will be responsible for the collection and removal of 389 tons of mercury from the Kasserine site in Tunisia. Currently, the evaluation of bids is still in progress. Once the process is finalized, the contract for mercury disposal will be awarded, with operations expected to begin in the third quarter of 2025.	MU
Reduction of wastes and hazardous chemicals (POPs and mercury) in coastal hotspots	No. of tonnes of Hg prevented	Mercury wastes= 84.7 tonnes inventoried	NA	Reduction and safe storage of 50 tonnes of	90%	Most of the prevention activities—such as country missions, workshops, seminars, and the revision of national legislation—have been successfully completed by MedWaves.An SSFA is currently	MS

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or binary entry only)	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
		during PPG		mercury wastes		underway in Montenegro, focusing on the development of an environmental management plan for selected bays and ports. This includes the assessment of heavy metals, particularly mercury. The activity is expected to be finalized by the end of 2025. Similar to the new POPs prevention, the quantity of mercury prevented by this output was not able to be quantified as a contribution to the Core Indicator. Thus the prevention target of 50 tonnes was added to the disposal target, for a total of 100 tonnes. This is being exceeded by the operation in Tunisia.	
Littoral countries enabled to identify trends and progress to impacts.	Updated TDA including gender assessment	Changed context in the Mediterranean since previous TDA	N/A	TDA is updated by the end of the programme	90%	Two options are currently being considered for the preparation of the TDA summary report—either engaging a specialized consultant or collaborating with GRID-Arendal. Due to the ongoing decision process, the activity has experienced delays. Completion is now expected by the end of 2025. The report will integrate findings from national transboundary assessments, priority issues, the 2023 MED QSR, and gender considerations.As of the current reporting period, over 12,000 individuals have benefited from CP 1.1 activities. The gender distribution is approximately equal, with 50% female and 50% male participation, reflecting the project's strong commitment to gender inclusivity and equitable engagement across all interventions.	MS
Littoral countries enabled to identify trends and progress to impacts.	Report on progress to impacts	Data gaps affect quality and	N/A	Report on progress to impacts and	50%	The activity related to the utilization of MedProgramme knowledge management tools and data is currently in progress and on track to be	MS

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or binary entry only)	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
		applicability of assessments, ability to track progress and formulate adequate responses		on the achievement of relevant SDGs is prepared		completed by the end of 2025. Activities on integration of MAP/Mediterranean and SDG reporting and preparation of the final report have not yet started but are also planned for completion by the end of 2025.	
Littoral countries enabled to identify trends and progress to impacts.	Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations	Monitoring programs focused on areas close to coasts	N/A	Minimum 20 locations for offshore monitoring stations identified	90%	The draft offshore monitoring strategy has been reviewed and aligned with national IMAPs. A preliminary list of over 20 offshore sites has been proposed based on defined selection criteria. Additionally, five pilot stations have been identified for implementing the offshore monitoring strategy across five piloting areas. The piloting of IMAP implementation for selected indicators at these stations is currently underway and is expected to be completed in the third quarter of 2025.	S
Littoral countries enabled to identify trends and progress to impacts.	Data sharing policy for the Mediterranean stations	Availability of synchronized datasets and accessibility of data need to be improved with the view to improve knowledge on the Mediterranean marine environment	N/A	Data sharing regional policy prepared for the deliberation of the Contracting Parties to the Barcelona Convention	30%	Under the data sharing policy for Mediterranean stations, the review of the structure, functions, and content of national databases and IT platforms has been completed. Work is currently underway on developing recommendations for the design of an IT model to interconnect national systems into a regional data-sharing platform. This activity is expected to be finalized in the third quarter of 2025. The activity on promoting regional cooperation and the exchange of best practices has not yet started but is also scheduled for completion within the same timeframe.	MS

Project Objective and Outcomes	Indicator	Baseline level	Mid-Term Target or Milestones	End of Project Target	Progress as of current period(numeric, percentage, or binary entry only)	Summary by the EA of attainment of the indicator & target as of 30 June	Progress rating
Project results and knowledge are effectively disseminated and used to adaptively manage the project	Project delivery is effective and responsive to beneficiary and stakeholder needs	N/A	Mid-term review results endorsed by project partners	Terminal evaluation results endorsed by project partners	60%	During the reporting period, significant progress was made in implementing the MedProgramme's Knowledge Management (KM), Communications, and Outreach Strategy. Key achievements included the revision and endorsement of the KM/Comms Strategy and Action Plan in collaboration with key partners and the Community of Practice, as well as the successful public launch of the MedProgramme KM platform. The platform was enhanced with new features and populated with missing data, while capacity was strengthened through refresher trainings. The KM Task Force was reactivated, and the Med Programme's KM efforts gained recognition from the GEF Secretariat, with an invitation to contribute to the GEF-wide KM strategy. Strong engagement was observed from Child Projects and partners through trainings and events. In addition, quarterly progress and expenditure reports were submitted on time, and the Mid-Term Evaluation of Child Project 1.1 was completed. Concrete actions are being taken to address all nine recommendations from the MTR.	MS

3.2 Rating of progress implementation towards delivery of outputs (Implementation Progress)

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
1 Chemicals	1.1 Management and disposal of 2,000 tonnes of POPs	2026-03-31	50%	60%	Algeria:Under Phase 1, a total of 401 tons of PCB-	MS

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
and Waste					contaminated equipment was successfully disposed of.For Phase 2, the procurement contract was renewed by UNON on 27 May 2025, with a target of disposing an additional 613 tons of PCB-contaminated equipment by 31 March 2026.Lebanon:The project targets the disposal of 271 tons of PCB-contaminated equipment. Operational activities began in March 2025 and are progressing on schedule. These include the drainage, collection, and packaging of contaminated equipment. However, final disposal is pending the issuance of the Basel Notification for international shipment. There is currently a shortfall of approximately 40 tons, with further discrepancies expected as site assessments continue. All required documentation has been submitted to the notifier (Toxivia) for signature, and the Lebanese Ministry of Environment has requested additional Third-Party Liability documentation. The dossier has been signed by the waste generators and is under review. UNEP/MAP has formally requested ministerial support to expedite the Basel Notification process. Albania, Bosnia and Herzegovina, Montenegro and Tunisia: An IPS Agreement between UNEP and UNOPS was signed in January 2025 to support the environmentally sound management and disposal of approximately 700 tons of PCB-contaminated equipment in the region. Key milestones and progress include;- Environmental Management	

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					Plans (EMPs) for Albania, Bosnia and Herzegovina, and Montenegro were completed in November 2024.- In Tunisia, the planned inventory was reassigned from UNDP to UNOPS due to recruitment challenges. UNOPS will proceed using existing data from the Ministry of Environment.- UNOPS initiated operations with field missions and stakeholder consultations in all four countries, establishing strong coordination with national authorities and Resident Coordinators. Procurement and Operations:Terms of Reference (ToRs) for PCB removal in Albania, Bosnia and Herzegovina, and Montenegro have been finalized and published.The supervision ToR for PCB removal in the Balkans has also been published.In Tunisia, a field mission in April 2025 led to the assessment of three waste management sites and confirmation of seven transformers for inclusion.A revised site priority list was developed, and the ToR for PCB removal was finalized and published. The tender deadline was extended to 6 May 2025, with contract awards expected in July 2025.Strategic Adjustments: To mitigate potential shortfalls in PCB volumes—an issue experienced in Phase 1—an optional lot of 80 tons has been added in Tunisia, raising the total expected disposal from 326 to 406 tons, contributing toward the 2,000-ton disposal target.Contracting Status:UNOPS has received approval to proceed with removal contracts in Tunisia and Albania. The	

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					supervision contract for Tunisia is expected to be finalized in the coming days.	
1 Chemicals and Waste	1.2 Management and safe storage of 50 tonnes of mercury wastes	2026-03-31	30%	50%	An IPS Agreement between UNEP and UNOPS was signed in January 2025 to support the environmentally sound management and disposal of approximately 390 tons of mercury waste in Tunisia. The initial disposal target under Child Project 1.1 was 50 tons, which was later revised to 389 tons based on inventory data.However, due to higher-than-anticipated disposal costs for mercury waste, the MedPCU now recommends adjusting the disposal target to 50–100 tons to remain within budgetary constraints. The contract for mercury disposal is expected to be awarded in July 2025.	MS
1 Chemicals and Waste	1.3 New POPs reduction and alternatives pilot activities completed	2026-03-31	55%	100%	All activities under Output 1.3 have been successfully completed. During this reporting period, Med Waves has made progress in several countries. • Albania: A national workshop on safer alternatives in firefighting foams was held on 26 March 2025. • Lebanon: An inventory and sampling campaign for PFOS, HBCD, and SCCP was completed; a report was shared. • Libya: Workshop on new POPs was held on 25 June 2025. • Montenegro: Foam sampling contract signed with CETI; Tauw developing e-waste prevention materials. A national NGO led two workshops for	S

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					the Roma community on 3 and 5 June 2025. • Morocco: A report on PFAS/HBCD with regulatory recommendations was finalized in Q1 2025. • Tunisia: A draft decree-law aligned with the Stockholm Convention was finalized. Sample analyses were completed and shared.	
1 Chemicals and Waste	1.4 Mercury reduction through pilot activities on mercury alternatives	2026-03-31	50%	100%	All activities under Output 1.4 have been successfully completed. During this reporting period, MedWaves has made progress in Tunisia: • A consolidated report on mercury-containing medical devices was completed. • Three delivered activities including a regulatory framework update, a national mercury inventory and a report on mercury waste and hotspots.	MS
2 International Waters	2.1: Updated Transboundary Diagnostic Assessment including gender assessment	2026-03-31	90%	90%	Two options are currently being explored for the preparation of the Transboundary Diagnostic Analysis (TDA) Summary Report: the recruitment of a specialized consultant or establishing a collaboration with GRID-Arendal, an organization with recognized expertise in environmental assessment and communication. The decision on the preferred approach is still under review, which has led to some delays in initiating the activity. As a result, the completion of the TDA Summary Report is now projected for the end of 2025.The report will serve as a comprehensive synthesis, drawing on the results of national transboundary diagnostic assessments, and will highlight priority	MS

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					environmental challenges identified across the region. In addition, it will incorporate key findings from the 2023 Mediterranean Quality Status Report (MED QSR) and ensure that gender perspectives and considerations are meaningfully integrated into the analysis. This summary document will play a crucial role in informing the next steps of the Strategic Action Programme and guiding decision-making at the regional level.As of the current reporting period, over 12,000 individuals have benefited from CP 1.1 activities. The gender distribution is approximately equal, with 50% female and 50% male participation, reflecting the project's strong commitment to gender inclusivity and equitable engagement across all interventions.	
2 International Waters	2.2: Report on progress to impacts	2026-03-31	40%	50%	The activity related to the use and further development of MedProgramme knowledge management tools and data is currently underway and progressing as planned. This work focuses on consolidating and leveraging information generated across the Child Projects, ensuring it is accessible, well-structured, and effectively disseminated through established platforms such as the KM portal and MapX. The activity remains on track for completion by the end of 2025.In parallel, the integration of MAP/Mediterranean reporting frameworks with Sustainable Development Goal (SDG) indicators, as well as the preparation of the final consolidated	MS

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					knowledge management report, are scheduled to begin in the coming months. Although these components have not yet been initiated, they remain within the overall work plan and are likewise expected to be finalized by the end of 2025. These outputs will support enhanced alignment between regional and global environmental reporting obligations and provide a comprehensive overview of knowledge management achievements under the MedProgramme.	
2 International Waters	2.3: Offshore monitoring strategy and identification of 20 locations for the offshore monitoring stations	2026-03-31	85%	90%	The draft Offshore Monitoring Strategy has undergone a thorough review process and has been aligned with the national Integrated Monitoring and Assessment Programmes (IMAPs) of participating countries, ensuring coherence with national priorities and regional commitments. As part of this process, a preliminary list of more than 20 potential offshore monitoring sites has been proposed, based on a set of clearly defined selection criteria, including ecological relevance, anthropogenic pressure, and geographic representativeness. In addition, five pilot monitoring stations have been designated across five pilot areas to serve as testing grounds for the practical implementation of the Offshore Monitoring Strategy. These stations have been selected to reflect diverse marine conditions and to assess the feasibility of applying IMAP methodologies in offshore contexts. Piloting	MS

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					activities, focusing on selected IMAP indicators—such as those related to biodiversity, pollution, and marine litter—are currently ongoing and involve field data collection, capacity-building, and inter-institutional coordination. The piloting phase is progressing as scheduled and is expected to be completed by the third quarter of 2025. The outcomes will inform the refinement of the Offshore Monitoring Strategy and guide its broader application across the Mediterranean region.	
2 International Waters	2.4: Data sharing policy for the Mediterranean	2026-03-31	20%	30%	During the reporting period, the development of the MedProgramme's data sharing policy advanced significantly, transitioning from preparatory discussions to early implementation. The overarching objective of this activity is to establish a harmonized, efficient framework for linking national databases and IT platforms across participating countries, enabling the creation of a regional model for structured data exchange.A key milestone was achieved with the completion of the review of the structure, functions, and content of national databases and IT platforms used at the Mediterranean stations. This foundational assessment provides the technical basis for the next phase of work, which involves formulating recommendations for the design of a regional IT model that will interconnect national systems. The goal is to enable data interoperability, improve access to environmental information, and	MS

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					enhance reporting and transparency under the Med Programme and GEF frameworks. Development of these recommendations is currently underway and is expected to be finalized in the third quarter of 2025.While full-scale implementation of the data sharing platform remains in progress, strategic groundwork was laid through informal consultations with national authorities, executing partners, and information management experts. These interactions helped align technical expectations and ensure that the future platform builds on existing digital infrastructure. Furthermore, MedPCU initiated planning for the establishment of a regional roadmap, including identifying technical partners, integration points, and capacity-building needs. Parallel to this, the activity on promoting regional cooperation and the exchange of best practices has not yet been launched but remains an integral component of the overall strategy. This component is scheduled for completion within the same timeframe as the IT model development. It will focus on fostering collaboration among countries through targeted engagement and the facilitation of shared learning experiences, once the data-sharing architecture is in place. In summary, the reporting period marked a shift from preparatory work to concrete progress under the MedProgramme's data sharing policy. With the completion of national platform assessments	

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					and ongoing work to design a regional IT model, the groundwork is well underway to deliver a fully functional and collaborative data-sharing ecosystem by the third quarter of 2025. These efforts are expected to significantly strengthen transparency, regional alignment, and evidence-based environmental decision-making across the Mediterranean.	
3 Monitoring and Evaluation and information dissemination (IW and CW)	3.1 Knowledge Management strategy shares knowledge from Child Project 1.1	2026-03-31	65%	70%	During the reporting period, the MedPCU made considerable advancements in the implementation of the Knowledge Management (KM), Communications and Outreach Strategy under the MedProgramme. Key efforts focused on revising the KM Strategy and Action Plan, enhancing inter-project exchange, launching and populating the KM platform, and promoting structured knowledge dissemination at the regional and global levels through telling project success stories and data visualization. The KM/Comms Strategy and corresponding Action Plan were updated in close collaboration with a newly established Community of Practice, composed of the GEF KM Lead, the University of Geneva, Info/RAC, in addition to extensive collaboration with the GEF Communications and Media Unit. The revised strategy reflects a sharpened focus on actionable results and integration across Child Projects and telling the stories behind the data for wider dissemination and enhanced uptake. It includes clearly defined	MS

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					deliverables, timelines, and responsibilities aligned with the feedback from Executing Partners (EPs) and country representatives, Implementing Agencies, and the Mid-Term Review process. The revised KM/Comms Strategy was formally presented and endorsed during the 2025 Annual Stocktaking Meeting (ASM) and the Steering Committee Meeting (SCM) of Child Project 4.1.A key milestone during the period was the public launch of the MedProgramme KM platform, designed as the central knowledge repository and exchange interface for all Child Projects. The platform's structure and functionality were revised in accordance with UX/UI best practices and feedback mechanisms, incorporating tools such as a user feedback section, a rating mechanism, a monitoring dashboard and new events page were introduced. Missing data sets were added to the platform and refreshment trainings were provided during June 2025 to all programme partners and country representatives. Lastly, the Knowledge Management Task Force was reactivated and celebrated its first session on 30 June 2025.The results of the KM activities during this period have significantly advanced MedProgramme integration and visibility. Through its strengthened design and enhanced content, the KM platform is equipped to play a pivotal role in bridging technical project outputs with policy-level decision-making, notably contributing to the	

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					Science-Policy Interface (SPI). The Med Programme's KM approach has also attracted positive attention and endorsement from the GEF Secretariat, with the MedPCU invited to contribute to the development of a blueprint for the broader GEF KM/Comms Strategy. The period was also marked by strong engagement from Child Projects and EPs, with many stakeholders expressing interest in continuing KM-related exchanges, field missions and workshops, including a Science Communications and Constructive Journalism training delivered during LME24 and ASM 2025. These initiatives have laid a strong foundation for the next phase of implementation, ensuring that knowledge generated within the MedProgramme is meaningfully captured, shared, and applied to promote environmental outcomes across the Mediterranean region.	
3 Monitoring and Evaluation and information dissemination (IW and CW)	3.2 Regular monitoring and evaluation of project progress and results	2026-03-31	70%	75%	During the reporting period, quarterly progress and expenditure reports were submitted in a timely manner for each respective quarter. The Mid-Term Evaluation of Child Project 1.1 (2020–2024) was successfully completed in the third quarter of 2024. Good progress is being made in addressing all nine recommendations outlined in the Mid-Term Review (MTR), with concrete actions underway to incorporate these recommendations into ongoing implementation and planning	MS

Component	Output/Activity	Expected completion date	Implementation status as of previous reporting period (%)	Implementation status as of current reporting period (%)	Progress rating justification, description of challenges faced and explanations for any delay	Progress Rating
					processes.	

The Task Manager will decide on the relevant level of disaggregation (i.e. either at the output or activity level).

4 Risks

4.1 Table A. Project management Risk

Please refer to the Risk Help Sheet for more details on rating

Risk Factor	EA Rating	TM Rating
1 Management structure - Roles and responsibilities	Moderate	Moderate
2 Governance structure - Oversight	Low	Low
3 Implementation schedule	Moderate	Moderate
4 Budget	Substantial	Substantial
5 Financial Management	Low	Low
6 Reporting	Low	Low
7 Capacity to deliver	Low	Low

If any of the risk factors is rated a Moderate or higher, please include it in Table B below

4.2 Table B. Risk-log

Implementation Status (Current PIR)

Insert ALL the risks identified either at CEO endorsement (inc. safeguards screening), previous/current PIRs, and MTRs. Use the last line to propose a suggested consolidated rating.

Risks	Risk affecting: Outcome / outputs	CEO ED	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current PIR	Δ	Justification
PCB contaminated equipment identified in inventories is no longer available for removal during project implementation phase	Output 1.1	M	M	L	L	L	M	M	↑	Lessons from Algeria and Lebanon show ongoing shortfalls in disposal operations, with the overall budget surpassing initial estimates

Risks	Risk affecting: Outcome / outputs	CEO ED	PIR 1	PIR 2	PIR 3	PIR 4	PIR 5	Current PIR	Δ	Justification
Basel permits take too long to process, exceeding project work plan	Outputs 1.1 and 1.2	M	M	M	M	L	M	M	↑	Basel permits taking long to affect project delivery in Lebanon
Lack of sustained political commitment of beneficiary countries	All outputs	L	L	L	L	L	L	L	=	As previous PIR
Data gaps continue to affect the quality and applicability of assessments, the ability to track progress, and formulate adequate responses	Output 2.1	M	M	M	L	L	L	L	=	As previous PIR
Lack of monitoring and reporting capacities; reluctance with provision/ sharing of data	Outputs 2.3 and 2.4	L	L	L	L	L	L	L	=	As previous PIR
Due to rising oil prices. estimations for procurement tenders have increased-	Output 1.1	N/A	N/A	L	L	L	L	L	=	As previous PIR
Prevention of new POPs is not measurable in tonnes	Output 1.3	M	M	M	H	H	H	H	=	The prevention of new POPs work hasconfirmed this risk has materialized
Accident or spill during field disposal operations	Component 1	L	L	L	M	M	M	M	=	Since repackaging operations start the risk is present
In addition to PCB stocks, risk of copper materials being stolen from transformers	Component 1	N/A				S	S	L	↓	This risk has currently been managed through implementing awareness creation and tight security measures
Inflation in disposal rates may render minor budget reallocations	Outputs 1.1, 1.2	N/A			M	M	S	S	↑	Risk materialized due to the inflation in disposal rates
Implementation schedule	Outputs 1.1. 1.2, 2.1, 2.2	N/A					M	M		N/A
		M	M	L	L	M	M	M	=	

4.3 Table C. Outstanding Moderate, Significant, and High risks

Additional mitigation measures for the next periods

Risk	Actions decided during the previous reporting instance (PIRt-1, MTR, etc.)	Actions effectively undertaken this reporting period	What	When	By Whom
PCB contaminated equipment identified in inventories is no longer available for removal during project implementation phase	Follow up with thecountries and stakeholdersthrough officialcorrespondence andcontinuous meetings	Same	Field visits to the countries	During the implementation phase	PMC. contractor. MoE andMoEW
Basel permits take too long to process, exceeding project work plan	None	For the Phase 2 countries, information exchanges were established with the Phase 1 countries in order to familiarize countries with the process in advance of the planned export timings	Requesting early the Basel notification disposal permits in advance of the planned export timings	During the implementation phase	PMC. contractor. MoE andMoEW
Prevention of new POPsis not measurable in tones	MTR reviewed preventionwork and recommendationspending	MTR recommendation in effect	Funds will be diverted to disposal if prevention is deemed not feasible, to meet the GEB targets	March 2026	EA/ IA/ Medwaves
Accident or spill duringfield disposal operations	HSE plans developed forLebanon & Algeria.	HSE plans developed for other participating countries in the project	Monitor proper implementation of HSE plans	During project implementation	Executing Agency
Copper material intransformers is stolen dueto its high value resulting insoil contamination on site	Awareness is raised aboutissue with government forbetter security measures.Contractor is informed. andactions taken for safetyconcerns	Same	Strengthening the security measures being implemented, and the awareness creation activities	During project implementation	Contractors. governments.EA
Inflation in disposal rates	Support import of	Increase the amount of	Supervision of	March 2026	Executing Agency

Risk	Actions decided during the previous reporting instance (PIRt-1, MTR, etc.)	Actions effectively undertaken this reporting period	What	When	By Whom
	disposalequipment & PPE	PCBs disposed of where the cost per disposal rate is lower to meet GEBs	disposalcontractors & support by national consultants		
Implementation schedule	N/A	Project is under no-cost extension, close coordination with EA, countries and UNON procurement to ensure timely delivery of disposal activities	UNEP to work with stakeholders involved to ensure fast tracking of disposal activities within the approved budget	During the remaining project implementation period	Executing Agency, UNON, contractors, project countries

High Risk (H): There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks. Significant Risk (S): There is a probability of between 51% and 75% that assumptions may fail to hold and/or the project may face substantial risks. Moderate Risk (M): There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only modest risks. Low Risk (L): There is a probability of up to 25% that assumptions may fail to hold or materialize, and/or the project may face only modest risks.

5 Amendment - GeoSpatial

Project Minor Amendments

Minor amendments are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5% as described in Annex 9 of the Project and Program Cycle Policy Guidelines.Please tick each category for which a change occurred in the fiscal year of reporting and provide a description of the change that occurred in the textbox. You may attach supporting document as appropriate

5.1 Table A: Listing of all Minor Amendment (TM)

Minor Amendments	Changes
Results Framework:	No
Components and Cost:	No
Institutional and implementation arrangements:	No
Financial Management:	No
Implementation Schedule:	
Executing Entity:	No
Executing Entity Category:	No
Minor project objective change:	No
Safeguards:	No
Risk analysis:	No
Increase of GEF financing up to 5%:	No
Location of project activity:	No
Other:	No

Minor amendments

5.2 Table B: History of project revisions and/or extensions (TM)

Version	Type	Signed/Approved by UNEP	Entry Into Force (last signature Date)	Agreement Expiry Date	Main changes introduced in this revision

Version	Type	Signed/Approved by UNEP	Entry Into Force (last signature Date)	Agreement Expiry Date	Main changes introduced in this revision
Original Legal Instrument MAP		2020-04-27	2020-04-27	2025-09-30	Internal Agreement with UNEP MAP
Amendment 1 MAP for MedWaves	Revision	2022-09-21	2022-09-21	2025-09-20	Budget revision: Re-allocate funds within budget lines under the Chemicals and Waste portion of the budget for additional requirements for a SSFA with BiH under Component 1
Amendment 2 MAP	Extension	2024-07-08	2024-07-12	2026-09-30	Extension of the project by 1 year. Reallocation of budget within components, including repurposing of PMC to accommodate budget and administrative support, and reallocating funds between Outputs within Component 1 on mercury and PCB disposal.
	Extension				

GEO Location Information:

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description

fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as OpenStreetMap or GeoNames use this format. Consider using a conversion tool as needed, such as: https://coordinates-converter.com Please see the Geocoding User Guide by clicking here

Location Name	Latitude	Longitude	GEO Name ID	Location Description	Activity Description
Tuzla	44.538333333333334	18.666944444444447		Bosnia and Herzegovina	Tuzla HAK 1 mercury site assessment
Bosnia and Herzegovina	43.8456898	18.3255782		Bosnia and Herzegovina	Location of PCB-equipment for Phase 2 (https://app.mapx.org/?language=en&project=MX-ON9-MA9-O1D-KKO-BER&viewsListFlatMode=true&views=MX-XN6PC-G2KZE-UOM50%2CMX-7G6NY-IDN3L-N063O&viewsListFilterActivated=true&p=0&b=0&z=6.894&lat=44.073&lng=16.374&t3d=false&sat=false&theme=water_light)
Vrapce	44.1188949	18.1143306		Bosnia and Herzegovina	Location of PCB-equipment for Phase 2
Modrica	42.934681	17.831044		Bosnia and Herzegovina	Location of PCB-equipment for Phase 2
Capljina	42.436388888888885	18.695833333333333		Montenegro	Location of assessment study
Tivat Bay	42.4415238	19.2621081		Montenegro	Location of PCB-equipment for Phase 2
Podgorica	36.737583	3.976569		ENIEM	The PCBs storage location in Algeria
Algeria	36.739692	3.976636		ETATIT	The PCBs storage location in Algeria
Algeria	36.706714	3.105167		CABEL	The PCBs storage location in Algeria
Algeria	36.736089	3.309608		SNVI	The PCBs storage location in Algeria
Algeria	36.742458	2.991903		EDIEL	The PCBs storage location in Algeria
Algeria	36.733117	3.159489		SAFEX	The PCBs storage location in Algeria
Algeria	36.700539	3.213956		ENNA AIRPORT	The PCBs storage location in Algeria
Algeria	36.760414	3.065114		Sonelgaz spa Algiers Port power plant	The PCBs storage location in Algeria
Algeria	36.656631	3.082481		ENNA spa	The PCBs storage location in Algeria

Location Name	Latitude	Longitude	GEO Name ID	Location Description	Activity Description
				Antennas/ Baraki Algiers	
Algeria	36.872408	6.975228		Stockage spécial SONATRACH Unité 1 et 2	The PCBs storage location in Algeria
Algeria	36.86335	6.955136		Stockage spécial SONATRACH Unité 1 et 3	The PCBs storage location in Algeria
Algeria	34.476219	35.929017		Bauchrieh storage	The PCBs storage location in Lebanon
Lebanon	34.498406	36.004847		Behsas Depot	The PCBs storage location in Lebanon
Lebanon	34.637644	36.267767		Hraiche Depot	The PCBs storage location in Lebanon
Lebanon	34.610881	36.492636		Qadisha-Arjess	The PCBs storage location in Lebanon
Lebanon	34.421056	36.558897		Qadisha-Abou Ali plant	The PCBs storage location in Lebanon
Lebanon	34.441231	36.527125		Qadisha-Bcharre	The PCBs storage location in Lebanon
Lebanon	34.609306	36.441372		Qadisha-Zgharta	The PCBs storage location in Lebanon
Lebanon	34.368114	36.477908		Zahleh	The PCBs storage location in Lebanon
Lebanon	34.226194	36.091583		Jbeil	The PCBs storage location in Lebanon
Lebanon	34.334808	35.991522		Aley	The PCBs storage location in Lebanon
Lebanon	33.959214	35.863831		Awali plant	The PCBs storage location in Lebanon
Lebanon	33.841128	35.559419		Zahrani refinery	The PCBs storage location in Lebanon
Lebanon	33.448439	35.869514		Taybeh	The PCBs storage location in Lebanon
Lebanon	34.489517	36.11885		Selaata	The PCBs storage location in Lebanon
Lebanon	34.186489	36.450939		Qartaba depot	The PCBs storage location in Lebanon

Location Name	Latitude	Longitude	GEO Name ID	Location Description	Activity Description
Albania	40.7	19.55222222		Near Drize village. Fier	PCBs storage location
Albania	41.09	20.06277778		KING FIELD ELBASAN	PCBs storage location
Albania	42.21166667	19.45583333		KOPLIK. BAJZA.SHKODRA	PCBs storage location
Albania	41.28111111	19.625		Tirana-Durrës Highway. KM 9. Kashar	PCBs storage location
Algeria	36.701312	4.14789		ENIEM	PCBs storage location
Algeria	36.739732	3.976566		EATIT	PCBs storage location
Algeria	36.733282	3.158291		SAFEX	PCBs storage location
Algeria	36.656716	3.082552		ENNA BARAKI	PCBs storage location
Algeria	36.700453	3.21399		ENNA AIRPORT	PCBs storage location
Algeria	36.742442	2.992296		EDIEL	PCBs storage location
Algeria	36.692337	3.083425		CABEL	PCBs storage location
Algeria	36.876602	6.97423		SONATRACH	PCBs storage location
Algeria	35.414432	8.099216		ELATEX	PCBs storage location
Algeria	36.70665	3.1044		SONELGAZ DISTRIBUTION	PCBs storage location
Algeria	36.735126	3.306924		SNVI	PCBs storage location
Algeria	36.760453	3.065372		SPE SONELGAZ	PCBs storage location
Bosnia and Herzegovina	43.8456898	18.3255782		JP "Elektrodistribucija" BiH	PCBs storage location

Location Name	Latitude	Longitude	GEO Name ID	Location Description	Activity Description
Bosnia and Herzegovina	44.1188949	18.1143306		Cementara Kakanj	PCBs storage location
Bosnia and Herzegovina	44.4193351	19.1120143		Alumina Zvornik	PCBs storage location
Bosnia and Herzegovina	44.959434	18.3128418		Rafinerija Modriča	PCBs storage location
Bosnia and Herzegovina	42.934681	17.831044		Pumped Storage HPP Čapljina (Čapljina Hydroelectric Power Station)	PCBs storage location
Montenegro	42.3900687	19.2280906		Aluminum Plant Podgorica	PCBs storage location

Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate. *

None

[Annex any linked geospatial file]

Additional Supporting Documents:

Filename	File Uploaded By	File Uploaded At	
9684_Med Child 1.1 Annex H Knowledge Management Strategy.pdf	CW TM	2025-07-29 13:40:14	**Download**
Environmental Management Plan - Montenegro.pdf	CW TM	2025-07-29 13:15:44	**Download**
Environmental Management Plan - Bosnia and Herzegovina.pdf	CW TM	2025-07-29 13:15:23	**Download**
Environmental Management Plan - Algeria.pdf	CW TM	2025-07-29 13:14:58	**Download**
Environmental Management Plan - Albania.pdf	CW TM	2025-07-29 13:14:34	**Download**
9684 CP1-1_Jul24-Jun25_Co-fin report_rkmk.pdf	CW TM	2025-07-27 13:34:51	**Download**
9684_Med Child 1.1 Annex I Gender Mainstreaming and Action Plan.pdf	CW TM	2025-07-27 13:18:37	**Download**
9684_Annex J Environmental Management Plan Phase 1.pdf	CW TM	2025-07-27 13:16:36	**Download**
HSE Plan Lebanon.pdf	CW TM	2025-07-24 09:21:19	**Download**
HSE Plan Algeria.pdf	CW TM	2025-07-24 09:20:30	**Download**
9684_PIR_UNEP_2024-GEF-CW.pdf	CW TM	2025-07-24 09:14:05	**Download**

Criterion (h): Benefits to groups in vulnerable situations

Please describe the extent to which projects funded by the financial mechanism have benefited groups in vulnerable situations, including women, children, indigenous peoples and local communities, and workers exposed to mercury.

Under the MedProgramme Gender Mainstreaming Strategy, CP 1.1 has a specific gender action plan. The implementation of plan was delayed due to the absence of a gender specialist for a period of time. With the involvement of the new gender specialist, as of January 2025, the outstanding actions in the implementation have been identified, and follow-up activities have been initiated.

Gender mainstreaming is implemented in the field along two main axes. One of these is the capacity-building and communication activities conducted by MedWaves targeting community members. These efforts focus on the Roma population living in Montenegro. The other axis involves ensuring that women, children, local communities, and workers exposed to mercury are protected in the health and safety plans related to the disposal activities being carried out. Gender mainstreaming in this area will be accelerated with field visits scheduled for May 2026.

At the project implementation level, the gender specialist has begun organizing capacity-building activities and "communities of practice" sessions for project staff twice a year.

Regarding the development and dissemination of best practices, below activities were conducted:

- Training materials on gender sensitive awareness on new PoPs, Montenegro in June 2025.
- Two interviews with Roma woman and a young person, Montenegro in June 2025.
- Visual documentation, Montenegro in June 2025.
- One story in UNEP GEF Website https://www.unep.org/gef/news-and-stories/story/turning-awareness-protection-hazardous-chemicals-montenegros-informal

The project integrates gender and vulnerability considerations:

- *Gender parity achieved in most trainings and meetings*.

During the 2021–2025 period, efforts were made to increase women's participation in activities organized under CP 1.1 as much as possible; however, women's participation remained at an average of 30%. The list of events and gender disaggregated data between the period 2021-2024 are in below:

Year	*EP*	*Country*	*Date*	*Name of the event*	*N of men*	*N of women*	*Unspecified*
2021	*MEDPCU*	*Online*	*3 March 2021*	*1st Steering Committee Meeting*	*18*	*10*	*NA*

2022	*MEDPCU*	*Online*	*16 March 2022*	*2nd Steering Committee Meeting*	*12*	*3*	*NA*
2022	*MedWaves*	*Tunisia*	*September 2022*	*Country mission*	*30*	*9*	*29*
2022	*MedWaves*	*Lebanon*	*16-17 November 2022*	*Meetings/roundtables with relevant stakeholders*	*12*	*9*	*21*
2022	*MEDPCU*		*12 December 2022*	*Second Steering Committee Meeting*	*9*	*10*	*NA*
2022	*MEDPCU*	*Bosnia and Herzegovina*	*14-15 March 2023*	*3rd Steering Committee Meeting*	*6*	*5*	*NA*
2022	*MedWaves*	*Lebanon*	*March 2023*	*Awareness raising on the management of POPs and mercury-containing devices and mercury waste*	*10*	*5*	*1*
2023		*Italy*	*25-26 April 2023*	*Training for the use of PCB-screening equipment*	*4*	*2*	*NA*
2023	*MedWaves*	*Morocco*	*NA*	*Country mission Morocco*	*NA*	*NA*	*21*
2023	*MedWaves*	*Morocco*	*NA*	*Workshop in Morocco*	*8*	*7*	*1*
2023		*Tunisia*	*June 13-14, 2023*	*Awareness raising workshop about new POPs and mercury-containing products*	*35*	*15*	*NA*
2023		*Montenegro*	*June 28- July 1, 2023*	*Meeting for PCB assessment, and coordination meeting with CETI*	*5*	*3*	*NA*
2023	*MEDPCU*	*Greece*	*19-20 September 2023*	*PCB disposal, Its prioritization, and capacity-building for mercury*	*3*	*10*	*NA*
2024	*MEDPCU*	*Greece*	*05 March 2023*	*4th Steering Committee Meeting*	*6*	*6*	*NA*

As of 2025, the MedProgramme Coordination Unit is conducting complementary work in this regard. Such as:

- A gender presentation was delivered during the Steering Committee Meeting, Athens in May 2025.
- Gender sensitive training on chemicals and waste / Stakeholder level, Tunisia in October 2025 (4.1).
- Gender sensitive training on chemicals and waste / Community level, Lebanon in December 2025 (4.1).

***Gender mainstreaming panel discussions held during Annual Stocktaking Meetings*.**

At the Annual Stocktaking Meeting held in Istanbul in April 2025, a specific C&W session was conducted, and this session incorporated a gender perspective. At the same event, the concept of the circular economy was defined to include gender-related elements.

- *Reduced exposure for workers and communities near PCB and mercury hotspots*.

Reduced exposure for workers and communities were handled under health and safety plans produced under CP 1.1. However, the relevant actions are not applicable in the completed plans in below:

- Health, safety and environmental plans – Lebanon (1.1.1)
- Health, safety and environmental plans / Phase 1 – Algeria (1.1.1)

- Health, safety and environmental plans / Phase 2 – Algeria (1.1.2)
- Health, safety and environmental plan (1.1.3)
- Final socio-economic study – Tunisia (1.2.1)
- Health, safety and environmental plan – Tunisia (1.2.2)

- *Improved environmental and health conditions in coastal areas. Approximately **4,000 direct beneficiaries** are expected, with balanced gender representation.*

Work is ongoing to identify project beneficiaries who will be directly or indirectly affected by the settlement and agricultural areas designated in the health and safety plans, and this work will be completed by May 2026. An experience note regarding the methodology and content will be prepared.

Senem Elçin BERBER, PhD
Gender Specialist