Part I: Project Information

GEF ID
10972

Project Type
FSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **No**
NGI **No**

Project Title
Integrated Persistent Organic Pollutants (POPs) Management Project

Countries
Iraq

Agency(ies)
World Bank

Other Executing Partner(s)
Ministry of Environment (MoE); [in close collaboration with the Ministry of Agriculture (MoA) and Ministry of Electricity (MoElc)]

Executing Partner Type
Government

GEF Focal Area
Chemicals and Waste

Sector

Taxonomy

Chemicals and Waste, Focal Areas, Best Available Technology / Best Environmental Practices, Disposal, Industrial Emissions, Pesticides, DDT - Other, DDT - Vector Management, Waste Management, Hazardous Waste Management, Emissions, Persistent Organic Pollutants, New Persistent Organic Pollutants, Uninentional Persistent Organic Pollutants, Polychlorinated Biphenyls, Eco-Efficiency, Sound Management of chemicals and waste, Influencing models, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Demonstrate innovative approache, Stakeholders, Type of Engagement, Information Dissemination, Consultation, Participation, Partnership, Civil Society, Non-Governmental Organization, Academia, Private Sector, SMEs, Local Communities, Beneficiaries, Communications, Behavior change, Education, Public Campaigns, Awareness Raising, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Gender results areas, Capacity Development, Knowledge Generation and Exchange, Participation and leadership, Capacity, Knowledge and Research, Learning, Indicators to measure change, Adaptive management, Theory of change, Targeted Research, Knowledge Generation, Training, Enabling Activities

Rio Markers

Climate Change Mitigation

No Contribution 0

Climate Change Adaptation

No Contribution 0

Biodiversity

No Contribution 0

Land Degradation

No Contribution 0

Submission Date

12/13/2023

Expected Implementation Start

9/15/2024

Expected Completion Date

6/28/2030

Duration

60In Months

Agency Fee($)

1,213,875.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
CW-1-1	Policy reform, policy coherence, and enabling conditions to transition to cleaner chemistry and eliminate existing waste	GET	3,352,497.00	25,860,000.00
CW-1-2	Preventing a future buildup of harmful chemicals and waste in the environment, particularly in supply chains that are major users and emitters of POPs and mercury	GET	2,234,998.00	17,240,000.00
CW-2-3	Eliminating harmful chemicals and waste in current waste streams and that are stockpiled in existing infrastructure and processes	GET	7,900,000.00	50,900,000.00
		Total Project Cost($)	**13,487,495.00**	**94,000,000.00**

B. Project description summary

Project Objective

Improve the management and safe disposal of Persistent Organic Pollutants (POPs) and hazardous chemicals in Iraq

Project Component	Component Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)

Project Component	Component Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
Component 1: Improvement of POPs and hazardous chemicals	Technical Assistance	Outcome 1.1: Validation of national inventories of POPs (OPs, IPOPs, PCBs, UPOPs) by relevant stakeholders Outcome 1.2: Government endorsement and submission of updated NIP to the SC Conference of Parties Outcome 1.3: Strengthening of Policy, regulatory and institutional framework for POPs management	1.1- Inventories of initial 12 POPs updated and validated by stakeholders. 1.2- National inventories, of new POPs conducted and validated by stakeholders. 1.3- Action Plans for all POPs updated and validated, and objectives and priorities for POPs including new POPs are revised, with equitable representation of women (at least 30 percent) 1.4- NIP outreach strategy report includes consultations with key national stakeholders, updated National Implementation Plan for POPs endorsed by the Government Iraq and submitted to the SC, with equitable representation of women (at least 30 percent) 1.5- National regulatory and institutional framework assessed and gaps identified	GET	5,070,000.00	27,500,000.00

Project Component	Component Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
			1.6- Policy/standards /legislation developed based on the identified gaps 1.7- Provision of regional/global training support and encourage information exchange 1.8- Sampling and analytical capacity (technical, infrastructure and equipment) of MoA and MoElec for assessing OPs and PCBs are developed Maintenance workshops (with gender balance among participants) operating under the jurisdiction of MoElec are able to perform the testing of PCBs in both oil, soil samples and other element			

Project Component	Component Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
Component 2: Management and disposal of high-risk priority of POPs in agriculture and power sectors	Investment	Outcome 2.1: Demonstrated and scaled-up Environmentally Sound Management of OPs Outcome 2.2: Establishment of a Harmonized National Framework for PCBs and PCB Wastes, and Effective Management, and Disposal of PCB-Containing Equipment and Waste	2.1-Priority sites containing POPs OPs for the disposal are identified 2.2- Detailed environmental, health, and risk assessment of identified locations for OPs developed; Risk reduction measures to include effects of chemicals on the health of men and women through focused consultations with different groups 2.3- Destruction/disposal strategies are developed and implemented totaling up to 1000 tons of OPs 2.4- Priority sites containing PCBs for the disposal are identified 2.5- Detailed environmental, health, and risk assessment of identified locations for PCBs developed. Risk reduction measures to include effects of chemicals on the health of men and women through focused consultations with different groups	GET	7,900,000.00	50,900,000.00

Project Component	Component Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
			2.6- A system for the collection, transport, and interim storage of PCBs (oils, equipment, and waste) is established. 2.7- 3,000 tons of PCB-containing equipment or PCB-contaminated wastes are disposed of			

Project Component	Component Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
Component 3: Management of chemical pollution hotspots	Investment	Outcome 3.1: Enhanced Capacity of the MoEn in Chemical Contamination Management Outcome 3.2: Establishment of a National Program on Contaminated Sites Management	3.1- Detailed site assessments and investigations of selected priority sites are conducted 3.2- Remediation plans based on risk-based criteria and considering the future use of the assessed sites are developed. 3.3- Government agencies acquired necessary technical skills in developing and implementing remediation plans. 3.4- GIS-based contaminated sites information system is established with a user-friendly platform for data management and accessibility. 3.5- GoI policy on contaminated sites management is strengthened and aligned with international BEP 3.6- Development of NPCSM, ensuring inputs from various stakeholders (ensuring gender balance) and assisting in appropriate budgetary allocation	GET		4,862,000.00

Project Component	Component Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing ($)	Confirmed Co-Financing ($)
			and resource mobilization 3.7- Sampling and analytical capacity (technical, infrastructure and equipment) MoEn for management of contaminated sites are developed			
Monitoring and Evaluation	Technical Assistance	implement a results-based Monitoring and Evaluation (M&E) system	Audited reports, Midterm and Terminal evaluations Verify compliance with the project performance indicators Systematically follow up on project implementation progress, demonstrate results on the ground, and evaluate if a readjustment and changes needed	GET	207,000.00	60,000.00
				Sub Total ($)	**13,177,000.00**	**83,322,000.00**

Project Management Cost (PMC)

GET	310,495.00	10,678,000.00
Sub Total($)	**310,495.00**	**10,678,000.00**
Total Project Cost($)	**13,487,495.00**	**94,000,000.00**

Please provide justification

The government of Iraq, through investment and in-kind co-financing, is planning to support the project management costs in the amount of approximately $10.6 million (~13% of the subtotal of co-financing). Given the high environmental risk rating and the FCV context, it is crucial for the Project Implementation Unit to include environmental specialists to be hired in the PMU with strong theoretical and practical knowledge of E&S, EHS/OHS issues associated with hazardous waste management. Additionally, team will consider the use of a technical auditor to monitor the high risk activities of destruction and disposal of POPs and PCBs, land remediation in case those activities are decided to be done in-country, this will be determined by the feasibility study carried out under component 1 of the project.

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Government of Iraq	In-kind	Investment mobilized	64,000,000.00
Recipient Country Government	Government of Iraq	In-kind	Recurrent expenditures	25,000,000.00
GEF Agency	World Bank	Grant	Investment mobilized	5,000,000.00
			Total Co-Financing($)	**94,000,000.00**

Describe how any "Investment Mobilized" was identified

The Government of Iraq is contributing a total of 94 million in co-financing for the project. the co-financing will be in form of in-kind recurrent expenditure of $25 million, in-kind investments to the amount of $64 million. The government of Iraq will also allocate $5million from the Iraq Reform Recovery Reconstruction Fund, which was established through a multi-donor trust fund at the World bank in 2018 in collaboration with the Government of Iraq to provide a platform for financing and strategic dialogue for reconstruction and development in Iraq, with a focus on promoting targeted national reform efforts and improving the effectiveness of public and private investments in socio-economic recovery and reconstruction. The investment provided as co-finance by I3RF relates to planned future investments in reducing the amount of contaminated hotspots in the seven conflict affected governorates of Iraq, improving quality of soil, surface water and groundwater, and introducing national systems for management of environmental hotspots and contaminated materials.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
World Bank	GET	Iraq	Chemicals and Waste	POPs	13,487,495	1,213,875	14,701,370.00
			Total Grant Resources($)		**13,487,495.00**	**1,213,875.00**	**14,701,370.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

273,973

PPG Agency Fee ($)

24,657

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
World Bank	GET	Iraq	Chemicals and Waste	POPs	273,973	24,657	**298,630.00**
				Total Project Costs($)	**273,973.00**	**24,657.00**	**298,630.00**

Core Indicators

Indicator 9 Chemicals of global concern and their waste reduced

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
1,000.00	4,000.00	0.00	0.00

Indicator 9.1 Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)

POPs type	Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
Heptachlor		300.00		
DDT	300.00	3,100.00		
Lindane	700.00	600.00		

Indicator 9.2 Quantity of mercury reduced (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.3 Hydrochloroflurocarbons (HCFC) Reduced/Phased out (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.4 Number of countries with legislation and policy implemented to control chemicals and waste (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
	1		

Indicator 9.5 Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing and cities (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 9.6 POPs/Mercury containing materials and products directly avoided

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
3,000.00			

Indicator 9.7 Highly Hazardous Pesticides eliminated

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.8 Avoided residual plastic waste

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 10 Persistent organic pollutants to air reduced

Grams of toxic equivalent gTEQ (Expected at PIF)	Grams of toxic equivalent gTEQ (Expected at CEO Endorsement)	Grams of toxic equivalent gTEQ (Achieved at MTR)	Grams of toxic equivalent gTEQ (Achieved at TE)

Indicator 10.1 Number of countries with legislation and policy implemented to control emissions of POPs to air (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 10.2 Number of emission control technologies/practices implemented (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	9,473,170	3,430,000		
Male	9,859,830	3,570,000		
Total	19333000	7000000	0	0

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 target is to dispose a total of 4000 tons of POPs: For 9.1 ? The amount of pure chemical including DDT (3100 tons), Lindane (600 tons), & Heptachlor (300). For core indicator 11: Based on the initial list of PCB and OP storage sites it is estimated that there are about 51 sites across 10 governorates of Iraq. The direct beneficiaries have been estimated based on the population living in the immediate vicinity of these sites. The total number of beneficiaries if 7,000,000 people, with 3,430,000 female. Please see Annex: Detailed Project Description for additional information on indicators and targets.

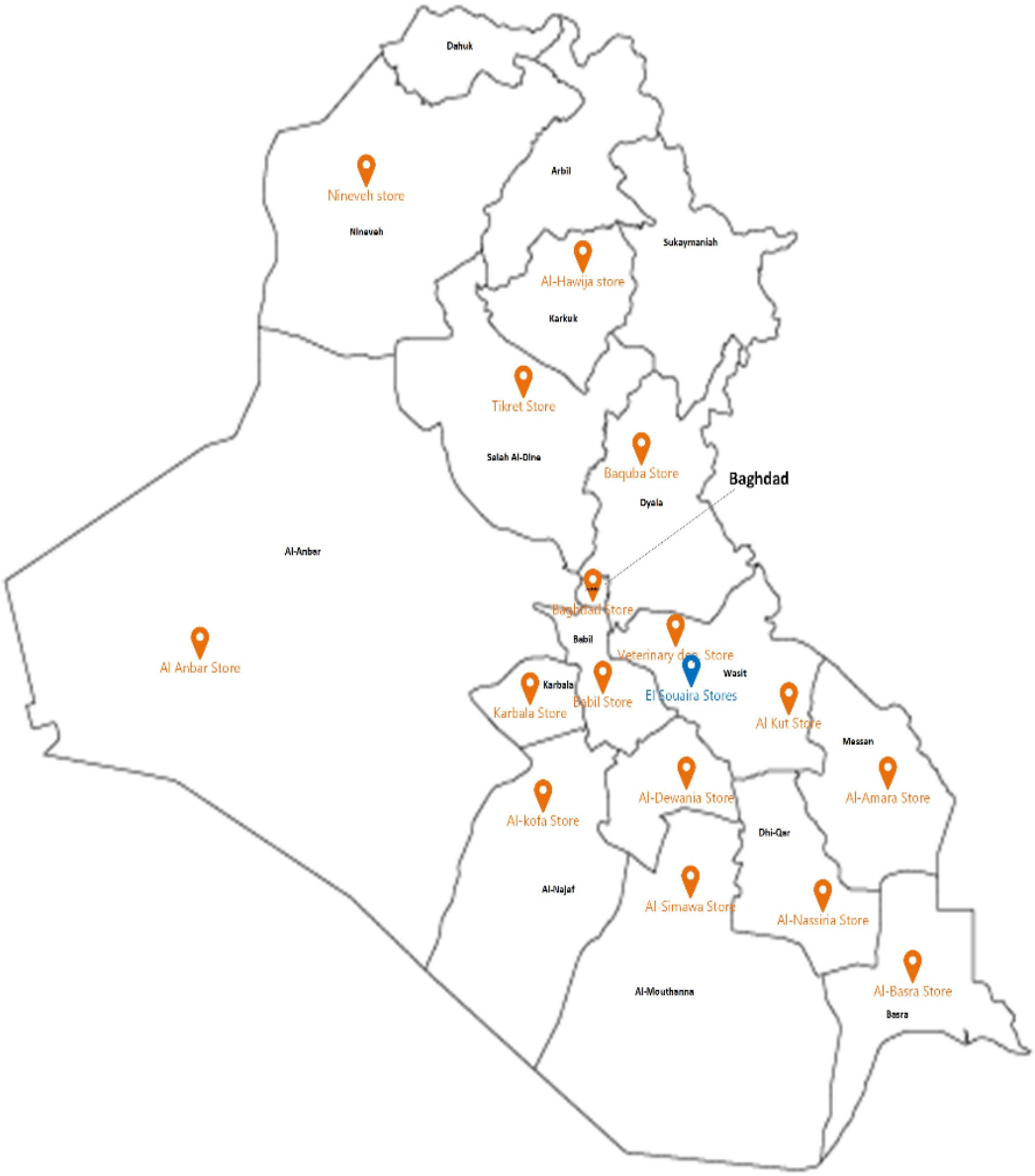
Part II. Project Justification

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

<u>Regarding OPs POPs</u>

The project map is below:



Nineveh

The available geo-referenced information is detailed in the below table:

No	Institution	Province	Store name	Coordinates
1.	Baghdad agricultural Directorate / MoA	Baghdad	AL-Nahda	33?20'52"N 44?24'19"E
2.	Wasit agricultural Directorate / MoA	Wasit	AL-Kut store	
3.	Babil agricultural Directorate / MoA	Babil	Babil store	
4.	Dhi-Qar agricultural Directorate / MoA	Dhi-Qar	Al-Nassiria store	
5.	Basra agricultural Directorate / MoA	Basra	Al-Basra store	
6.	Karkuk agricultural Directorate / MoA	Karkuk	Al-Hawija store	
7.	Dyala agricultural Directorate / MoA	Dyala	Baquba store	
8.	Al-Najaf agricultural Directorate / MoA	Al-Najaf	Al-Kofa store	
9.	Karbala agricultural Directorate / MoA	Karbala	Karbala store	
10.	Al-Mouthana agricultural Directorate / MoA	Al-Mouthana	Al-Simawa store	
11.	Al-Anbar agricultural Directorate / MoA	Al-Anbar	Al-Anbar store	
12.	Salah Al-Dine agricultural Directorate / MoA	Salah Al-Dine	Tikret store	
13.	Al-Dewania agricultural Directorate / MoA	Al-Dewania	Al-Dewania store	
14.	Messan agricultural Directorate / MoA	Messan	Al-Amara store	
15.	Nineveh agricultural Directorate / MoA	Nineveh	Mosel store	
16.	Planting protection Directorate / MoA	Wasit	El Souaira store	33?00'15"N 44?48'09"E
17.	Agricultural extension and training Directorate / MoA	Dhi-Qar, Messan, Dyala, Wasit, Babil, Basra, Najaf, Dewania and Karbala provinces		
18.	General company for agricultural supplies	All provinces		

Regarding PCBs - The project map is below:

The available geo-referenced information is detailed in the below table:

The general company name	**Station name**	**Oil Storage**		**Maintenance Workshops**	
		Store address	**Coordinates**	**Workshop address**	**Coordinates**
General Company for Electricity production					
Central Area	Southern Baghdad Station ? Gas 1	Inside the station ? chemical and oil store	33?17'29"N 44?27'16"E		
	Sadr Station - Gas	Store of the station	33?25'05"N 44?27'56"E		

	Sad Hemrin Station ? Hydroelectric	Inside the station - Store 5	34?06'38"N 44?58'20"E		
	Sad Haditha Station	Inside the station - Concrete tanks	34?12'34"N 42?21'30"E		
	Al Dora ? Thermal		33?15'26"N 44?22'40"E		
	Al Mansourieh Station	Inside the station	33?18'21"N 44?21'37"E		
	Haditha station - Diesel	Inside the station	34?02'48"N 42?24'10"E		
	Southern Baghdad Station ? Thermal	Oil store in the station	33?17'11"N 44?27'31"E		
Northern Area	Karkuk Station ? Gas	Inside the station	35?19'36"N 44?19'16"E		
	Debs Station ? Gas	Inside the station	35?40'50"N 44?04'08"E		
	Al Kayara Station ? Gas	Oil store	35?47'19"N 43?15'02"E		
	Sad el Mousel Station	Store 27	36?20'22"N 43?04'24"E		
	Sad Samerraa Station	Oil store	34?11'44"N 43?51'13"E		
	Samerra2 station - Diesel	Yard inside the station	34?05'25"N 43?59'04"E		
Central Furat	Al Musib Station ? Thermal	Inside the station ? Babel Governorate	32?50'26"N 44?16'29"E		
	Al Hindiya wal Koufa Station ? Hydroelectric	Inside the station ? Babel Governorate			
	Al Hila Station ? Gas 1	Inside the station ? Babel Governorate	32?28'07"N 44?25'07"E		
	Al Najaf Station ? Gas	Inside the station ? Al-Najaf Governorate	31?58'36"N 44?22'54"E		
	Karbala Station ? Gas	Inside the station ? Karbala Governorate	32?26'14"N 44?07'34"E		
	Al Mousib Station ? Gas	Inside the station ? Babel Governorate			

	Al Khayrat Station ? Gas	Inside the station ? Karbala Governorate	32?25'37"N 44?16'52"E		
Southern Area	Al Nassiriah ? Thermal	Inside the station	31?02'07"N 46?11'49"E		
	Shal Al Basra ? Gas	Inside the station			
	Khor Al Zbir ? Gas	Inside the station			
General Company for Electricity Transmission					
Central Area Northern Area	Diyala Network	Diyala Station 400 Kva ? store	33?44'48"N 44?37'28"E	Diyala Station 400 Kva ? store	33?44'48"N 44?37'28"E
	Nineveh Network	East Mosul Station 400 Kva			
	Salah Al Dine Network	Samerra2 ? Hydroelectric station		Samerra2 ? Hydroelectric station	33?44'48"N 44?37'28"E
	Karkuk Network	Inside the network ? Mezzanine 6		Inside the network	
Central Furat	Directorate of Transmission Network ? Karbala	Store inside the network and east Karbala station			
	Directorate of Transmission Network ? Al Diwaniah	Kadssiah Station			
	Directorate of Transmission Network ? Babel	Babel Station			
	Directorate of Transmission Network ? Al Najaf	No information			
Southern Area	No information				
General Company for Electricity Distribution					
Baghdad Distribution	Al Shmaeih Stores	Central stores / Al Shmaeih	33?22'26"N 44?29'04"E		
	Al Rasafa Stores	Baghdad / Kam Al Arman	33?22'07"N 44?24'01"E	Facing Mostansiriyah University	33?22'07"N 44?24'01"E
	Sader Stores	Returns stores	33?22'26"N 44?29'04"E	Workshop 1 and workshop 2	33?22'27"N 44?29'05"E
	Al Karakh			Hottin workshop Al Shaaleh	33?22'21"N 44?16'43"E
Northern Distribution	Karkuk distribution	Industrial area	35?28'32"N 44?23'27"E	Industrial area	35?28'32"N 44?23'27"E

	Nineveh borders distribution	Strategic stores / Tal afar road	36?22'40"N 43?08'19"E	Al Hamadanieh Workshop	36?20'22"N 43?09'12"E
	Salah Al Dine Distribution	Tekrit / Owaynet	34?38'53"N 43?39'24"E	Tekrit / Owaynet	34?38'53"N 43?39'24"E
	North Distribution	Central stores	35?22'25"N 44?18'21"E	Workshop	
Central Furat Distribution	Al Najaf Distribution	No information	32?00'45"N 44?21'07"E	Al Najaf store	32?00'45"N 44?21'07"E
	Babel Distribution		32?28'07"N 44?25'07"E	Babel stores	32?28'07"N 44?25'07"E
	Karbala Distribution		32?35'51"N 44?01'30"E	Karbala stores	32?35'51"N 44?01'30"E
	Al diwannieh Distribution		31?59'01"N 44?55'25"E	Al diwannieh stores	31?59'01"N 44?55'25"E
South Distribution	Al Basra Distribution	No information		Al Hussein Street	30?59'36"N 47?27'54"E
	North Al Basra distribution	No information	30?33'12"N 47?47'25"E	Al Majidiyeh and Al Zabir	
	Thi Kar Distribution	No information		Near Nile street	
	North Al Nassirieh distribution	No information		Al Shatra / Hawi Abbas	31?24'31"N 46?10'32"E
	Missan Distribution	No information	31?50'31"N 47?09'18"E	Awasha	31?49'58"N 47?09'07"E
	Al Mothanna Distribution	No information		Industrial area	31?18'23"N 45?16'41"E
Central distribution	No information				

2. Stakeholders

Please provide the Stakeholder Engagement Plan or equivalent assessment.

The overall objective of this Stakeholders Engagement Plan (SEP) is to define a program for stakeholder engagement, including public information disclosure and consultation, throughout the entire project cycle. The SEP outlines the ways in which the project team will communicate with stakeholders and includes a mechanism by which people can raise concerns, provide feedback, or make complaints about the project and any activities related to the project. The involvement of the local population is essential to the success of the project in order to ensure smooth collaboration between project staff and local communities and to minimize and mitigate environmental and social risks related to the proposed project activities, particularly for Component 2. Activities under Component 2 of the Project will target specific geographical locations to manage and dispose POPs waste and stockpiles. Accordingly, the stakeholders? identification process will continue during project implementation to ensure including all relevant stakeholders and organizations at the local levels.

The main goal of the Stakeholders consultations and engagements is to ensure stakeholders, and particularly local communities in the targeted geographical areas are aware of the planned project activities, and understand the possible environmental and social implications, impacts, and justifications of such activities. The SEP aims also to improve the design of the project by adding some concrete propositions that are relevant to the project and that help ameliorate its outcome. The

propositions will be taken into account and further consultations will help improve the successful implementation of the project.

A detailed stakeholder Engagement plan for the project is attached.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

1. Brief Summary of Previous Stakeholder Engagement Activities

The stakeholders' consultations have been done so far in the preparation for the project are four as described below.

Two Stakeholder Engagement were conducted as part of the National Implementation Plan of the Stockholm convention.

The first stakeholder engagement session took place in Baghdad in September, 2023. Its participants and objectives can be found in Table 1.

Table 1: First Stakeholder Engagement Session ? Participants and Objectives

Participants	- Ministry of Environment (MoEn)
	- Ministry of Electricity (MoElec)
	- Ministry of Industry and Minerals (MoIM)
	- Ministry of Agriculture (MoAgr)
	- Ministry of Oil (MoO)
	- Ministry of Construction, Housing, Municipalities and Public Works (MoCHMPWs)
	- AmanatBaghdad
Objectives	1- Review the Stockholm Convention and its importance to Iraq
	2- Review the Convention?s chemicals and pesticides
	3- Review the Convention's national plan and project steps as well as the objective of their implementation
	4- Defining the responsibilities of each Ministry, specifying their obligations, and emphasizing the significance of their roles in safeguarding human health and the environment
	5- Organize participants into groups based on the expertise of each ministry, and also create additional teams for administrative and legal evaluation, final report preparation, and awareness and information

	6- Train the teams, under the supervision of national experts on how to fill up the forms of each chemical substance

The second stakeholder engagement session took place in KRG in October, 2023. Its participants and objectives can be found in Table 2.

Table 2: Second Stakeholder Engagement Session ? Participants and Objectives

Participants	- Ministry of Environment (MoEn)
	- Ministry of Electricity (MoElec)
	- Ministry of Industry and Minerals
	- Ministry of Agriculture (MoAgr)
	- Ministry of Oil
Objectives	1- Review the results of the inventories of pesticides, PCBs, and dioxins and furans
	2- Discuss these results with the stakeholder ministries
	3- Agree on action plans that will follow the implementation of the convention?s national plan
	4- Agree on Iraq?s priorities for post-convention plans

As part of overall project and E&S instruments preparation, two additional consultation sessions were conducted to present the overall project design; explain its broader benefits at the national level; and begin to outline some of the anticipated adverse environmental and social impacts expected to result from project activities, and to enable the stakeholders to understand the project and its activities, as well as to ensure that their concerns and issues are considered during all phases of the project, including at the planning phase.

On 18th of September 2023, A public stakeholder consultation meeting took place at the MoEn with the objective of discussing the ESF instruments with the relevant stakeholders. This consultation meeting was conducted by engaging 25 different stakeholders, out of which 17 are males and 8 were females. The second Consultation was conducted on 27th of November 2023 at the Environmental Protection and Improvement Board office in KRG, a total of 17 stakeholders, 5 females and 12 males from local government representatives, local NGOs/CSOs, academics, environmental /social experts, community leaders, and local communities including vulnerable groups, and representatives from different line Ministeries particularly those involved in project preparation and management, through in-person meetings and via WebEx to discuss matters related to Project design and preparation.

? MoEn?s Representatives

- o Department of chemical monitoring and contaminated sites assessment
- o Department of international environmental relations
- o Department of citizens? affairs
- o Department of planning and project management
- o Environmental Protection and Improvement Board KRG

? Public Institutions

- o Ministry of Oil
- o Ministry of Science and Technology/department of management and disposal of Hazardous residues
- o Ministry of Agriculture / technical agent's office
- o Ministry of Agriculture / veterinary department
- o Ministry of Agriculture / department of planning and follow-up
- o Ministry of Agriculture / department of agricultural protection
- o Ministry of Agriculture/ KRG
- o Ministry of Industry and Minerals / department of industrial development and regulation
- o Ministry of Construction, Housing, Municipalities and Public Works / general municipalities directorate and environment department
- o Ministry of Electricity / technical department and environment department
- o Ministry of Electricity/ KRG
- o Ministry of Health/KRG

? Private Sector

- o Iraqi Chemists' Union
- o International Committee of the Red Cross
- o Samaa? Al Fayhaa? Company
- o ELARD Consulting group
- o Salaheddin University Hawler
- o Representatives of the World Bank in person and via the online platform
- o Representees from the local communities.

The sessions were introduced by both Mr. Abdulrahman Sadeeq, Head of Environmental Protection and Improvement Board/ KRG and Dr. Loai Sadik Mohammed, director chemical monitoring and contaminated sites assessment department, who explained the project components and the importance of all the parties involved.

Afterwards, a comprehensive presentation exposed by by Dr. Bassam the representative of the environmental and social consultants covered the following:

- o Introduction to the scope of the project: POPs definition and overview, project information, project objectives, project pillars, and project components and sub-components.
- o Environmental and Social Framework (ESMF): possible environmental risks and mitigation measures, possible social risks and mitigation measures, sub-projects environmental and social risk classification & E&S management tools, and institutional arrangements.
- o Stakeholder Engagement Plan (SEP): SEP objectives, main project stakeholders, engagement and information disclosure methods, Grievance Redress Mechanism, types of conflicts/complaints that may arise, and uptake channels to register grievances.
- o Environmental and Social Commitment Plan (ESCP): Main measures and actions to be undertaken, etc.

Many interventions and discussions reflected various views and suggestions as outlined below:

- Possibility of modifying, updating, and linking the project components to the environmental components such as inspecting residual POPs in environmental components, and hazardous waste treatment, disposal, and export.
- Concerns related to the discharge of untreated aromatic compounds and sewage into the rivers, mismanagement of expired materials, and the environmental pollution in the Dora refinery.
- The Ministry of Agriculture is ready to collaborate with MoEn to dispose of all obsolete pesticides.
- Challenges facing the treatment services, primarily for oil-related waste, in terms of landfills lack and the capabilities to deal with hazardous waste.
- Proposal for developing a partnership with the General Authority for Food Safety, for the examination of POPs in food.
- The Ministry of Electricity is ready to cooperate with MoEn through providing all the needed data.
- The representative of the Ministry of Health raised the challenges facing the treatment services, primarily for medical waste, in terms of availability of new technology to deal with hazardous medical waste.
- Representative from Salaheddin University inquiry on the type of activities under each component and their timelines. The agreed implementation arrangement.
- Representative from Environmental Protection and Improvement Board inquiry about their role and the type of arraignment between the federal government and kRG region.

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor; Yes

Co-financier;

Member of project steering committee or equivalent decision-making body; No

Executor or co-executor;

Other (Please explain)

Citizens Engagement activities and engagement with government and private sector stakeholders will be carried out during both project preparation and implementation. Specifically, the Technical Committee to be established under the project will include experts on CE from think tanks, academic institutions, and civil society organizations (CSOs) as appropriate to adopt a truly multi-stakeholder approach to inform policymaking.

Some main entry points for civil society organizations include:
Civil society and nongovernmental organizations can provide important inputs that can help the project design and implementation. They may also be knowledgeable of the project area and the nearby

populations, and can help play a role in identifying risks, potential impacts, and opportunities to consider and to be addressed by the project. Such agencies will be identified during the project preparation phase and will be involved during the consultation process.

Number of international civil society and nongovernmental organizations are actively involved in POPs management. These organizations can provide important inputs that can help the project design and implementation. This will help in identifying risks, potential impacts, and opportunities to consider and to be addressed by the project. Such agencies will be identified during the project preparation phase and will be involved during the consultation process.

Academia is an important resource, who can provide technical inputs and also insights to the project design based on their research and expertise.

Additional details are included in the project SEP.

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

A detailed GAP analysis is attached.

According to Iraq?s gender profile (V. Vilardo, 2018)[1], Iraq has an estimated population that exceeds 39 million. Iraqi women comprise half of the total population and head one in ten Iraqi households, with 80 percent of these being widows. Urban areas are home to 71 percent of Iraq's population, and among these urban households, 13 percent have more than ten residents. Iraq stands out as one of the world's most youthful nations, with nearly 58.71 percent of its populace being under 24 years of age, including 11,736,897 males and 11,217,392 females. Iraq's population also encompasses a range of ethnic and religious minorities, including Christians, Kurds, Turkmens, Assyrians and Yazidis. According to Minority Rights Group International, approximately 96 percent of the country is Muslim.

Over the last few decades, the people of Iraq have suffered the consequences of economic stagnation and reduced access to essential services due to wars, sanctions and conflicts. Iraq?s economy is mostly state-run with more than 90 percent of government revenues and 65 percent of the GDP coming from the oil sector. This sector, however, employs only one percent of the total labor force. Iraqis remain highly dependent on the public sector, which provides around 40 percent of employment (60 percent of the jobs for women who are employed).

UNDP annual gender report in 2020 for the country of Iraq[2], in 2019, Iraq was positioned at 146 out of 162 countries on the Gender Inequality Index (GII). Within Iraq, women held 25.2 percent of parliamentary seats, and only 39.5 percent of adult women had attained at least a secondary level of education, as compared to 56.5 percent of men. Additionally, for every 100,000 live births, 79 women experienced pregnancy-related complications leading to death. Moreover, the adolescent birth rate of 71.7 births per 1,000 women aged 15-19 reflected the prevalence of child marriage and early childbirth among young girls.

Meanwhile, the labor force participation rate for women stands at only 11.6 percent, while it's significantly higher at 74.2 percent for men. Among the youth population, approximately 65 percent of young women were unemployed in 2018, a notable contrast to the 32 percent unemployment rate among young men. Furthermore, according to the 2019 Gender Development Index for Iraq, the Human Development Index (HDI) value for females is 0.566, in sharp contrast to the 0.731 HDI value for males. This places the country in Group 5, which includes nations with significant disparities in HDI achievements between women and men, marked by an absolute deviation from gender parity of over 10 percent.

Gender equality in Iraq largely stagnated in 2020 as the country continued to experience political instability and nationwide public unrest due to lack of economic opportunities, poor economic policies, widespread corruption, breakdown of public institutions, lack of equal access to basic services and continuing security threats from extremist and rogue armed groups.

Iraq ratified the most important international treaty related to gender equality: the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1986, but has yet to ratify the Optional Protocol on violence against women. The Convention on the Rights of the Child (CRC) was ratified by Iraq in 1994 and the International Covenant on Civil and Political Rights (ICCPR) was ratified by Iraq in 1971. Although Iraq is party to numerous international human rights conventions, substantial and long-standing impediments to domestic compliance with Iraq?s treaty obligations remain. Legislative change, coupled with active enforcement mechanisms, remains necessary to bring Iraq into full compliance with antidiscrimination instruments (V. Vilardo, 2018).

According to the Stockholm convention, exposure to Persistent Organic Pollutants can lead to serious health effects including certain cancers, birth defects, dysfunctional immune and reproductive systems, greater susceptibility to disease and damage to the central and peripheral nervous systems.

Both men and women can be affected by these chemicals. The impact of POPs depends on various factors, including the specific pollutant, the level of exposure, individual susceptibility, and the health status of the person. Some POPs may have different effects on men and women due to hormonal differences and biological factors.

A study was undertaken in 2012[1] to examine the background levels of a broad range of POPs in human plasma samples among elderly men and women from Sweden and to assess the influence of gender. Significant gender differences in levels of specific POPs were observed and a number of POP concentrations were found to differ between men and women. More specifically, levels of HCB, OCDD, and PCB congeners #74, #105, and #118 were found to be higher in women, while the rest of the majority of POPs were higher in men.

However, in this project, the activity relating to the removal of toxic chemicals from stockpiles in warehouses, is anticipated to have a more significant effect on men due to the limited female labor participation.

In terms of male reproductive health, studies[2] of exposure to POPs and PCBs during adulthood indicate some association between these chemicals and lower sperm motility and to some extent, decreased sperm DNA chromatin integrity and lower levels of free testosterone.

[1] Circulating levels of POPs among elderly men and women from Sweden, S Salihovic, 2012

[2] POPs and male reproductive health, A Vested, 2014

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes
Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

Does the project?s results framework or logical framework include gender-sensitive indicators?

Yes
4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

This project will involve the collection and recycling industries of different waste streams and upstream production industries to improve resource/material efficiency and make sure reuse and recycling the intended destination at the end of life. Substantial and target managerial and technical training will be provided under the project Component 1. The project will also support a very pro-active and inclusive citizen engagement process and develop an inclusive communications and stakeholder engagement plan aiming to maintain close consultation with the different public and private stakeholders and civil society in preparation and implementation of the demonstrations and the ESMPs.

Inclusive ongoing stakeholder consultation and engagement on an ongoing basis, is essential for successful post-rehabilitation initiatives. Considering the importance of stakeholder involvement and commitment including local government along the value chain of the waste sector, Component 2 of the project proposes to involve the local authorities, NGOs, and private sector stakeholders in the selection of technology transfer/production change in the addressed solid waste service zones.

Citizens Engagement activities and engagement with government and private sector stakeholders will be carried out during both project preparation and implementation. Specifically, the Technical Committee to be established under the project will include experts on CE from think tanks, academic institutions, and civil society organizations (CSOs) as appropriate to adopt a truly multi-stakeholder approach to inform policymaking. The Project Management Unit (PMU) will help the Ministry of Environment (MoE) to coordinate proactive and inclusive consultations on draft policies and regulations to be developed and inputs provided by community members, waste pickers and CSOs will be considered before their finalization. Outreach programs and options such as a waste-focused behavior change program, RecyleBank, establishment and collaboration with community advisory groups will be considered and applied as appropriate. To promote green chemistry, EPR, GPP and 3R practices under the circular economy, the Technical Committee may provide scientists, engineers, and other professionals to review and explain information to communities. This assistance will support community efforts to get more involved and work productively with MoE to address waste management issues. The project will also explore setting up an online feedback channel through which citizens without any technical know-how can document/report on open dumping sites by sharing photos and geo-tagged locations.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
High or Substantial	High or Substantial		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

The Environment Risk Rating is considered High. The overall outcome of the project will be positive, as the PDO of the Project, aims to Improve the management of POPs containing OPs and PCBs in Iraq

through policy, regulatory and institutional actions and safe disposal of targeted stockpiles. However, POPs are highly toxic and exposure to these substances can happen through food, environment or accidents. These substances can negatively affect humans, plant and animal species, and natural ecosystems both in close proximity and also at significant distance from the original source of the discharge. In case of humans, the exposure to POPs can cause several negative health effects including death, cancers, allergies, hypersensitivity, developmental changes, damage to the central and peripheral nervous systems, disruption of the endocrine, reproductive, and immune systems. Some or many of the impacts highlighted above, will possibly cause significant, long-term, irreversible EHS risks and adverse impacts on the population and environment,. The exposure could happen during the implementation of project activities such as handling (collection, packaging, storage) and disposal of PoPs, leading to EHS/ OHS risks to the people involved in the operations and also to the neighboring communities.

Some of the impacts cannot be mitigated or can be addressed with special interventions requiring complex and/or unproven mitigation and/or compensation measures or techniques. In addition, the project activities could also lead to contamination of soil from spills of OPs/ PCBs and hazardous chemicals during sampling, temporary storage and treatment/ disposal stage. Other factors considered in this risk rating is that POPs can be transported by wind and water, most POPs generated in one country can and do affect people and wildlife far from where they are used and released. The other criteria are the fragility of Iraqi environment which already suffered from high level of contamination at all fields, in addition, this is the first High risk ESF project for MOE which will pose a challenge to manage. Therefore, according to the Technical Note on Screening and Risk Classification under the ESF, the risk rating has been rated as High at this stage. Further to above, the FCV context of Iraq poses many uncertainties and challenges against applying the ESF plans. In terms of specific locations, the project targets to support management and disposal of 1000 tons of OPs and 3000 tons of PCBs.

This standard is relevant as the project through activities will (i) identify stockpiles of OPs/ POPs, (ii) assess health and environmental risks at each of these locations, and (iii) identify priority locations for the disposal/destruction of OPs and POPs and appropriate rehabilitation/ remediation of the site(s). Disposal/destruction of about 1000 tons of OPs and 3000 tons of PCBs is envisaged by the project. POPs are highly toxic and exposure can take place through diet, environmental exposure, or accidents. They negatively affect humans, plant and animal species, and natural ecosystems. The key project risks are anticipated during the collection, transport, handling, and disposal of the POPs and PCBs. Some health risks associated with the project activities are highlighted under the ESRC section. The Republic of Iraq on March 8, 2016, signed the Stockholm Convention on Persistent Organic Pollutants (POPs) and it came into force on May 6, 2016, after completing the country?s constitutional procedures. To comply with the Convention?s requirements, the country initiated the preparation of the National Implementation Plan (NIP) in 2017 through a US$800,000 GEF Grant (ID9690) with United Nations Environment Program (UNEP) as implementing agency. The NIP focused on initial POPs and doesn?t include industrial POPs such as SCCP, PFOS, HBCD, etc. In addition, Iraq has also signed many international conventions, developed many environmental policies and regulations to control the usage, storing, handling, and management of pesticides such as Law No. 47, 2012, Hazardous Waste

Management Instructions No. (3) of 2015, Cabinet Resolution No. (3) of 2019 on the Solid Waste Management System, Safety instructions for storing and handling chemicals, No.4, 1989, Instructions No. 6, 1986 on how to handle escarole PCBs., etc. These legislations/ laws stipulate management and monitoring systems for using POPs. The project through Components 3 and 4 proposes to identify additional measures for strengthening and improvement of these regulations. Based on current understanding, the capacity of the country to adequately handle POPs is weak. During the project preparation, further analysis will be carried out to ensure that the project activities through component 4 (Project Management and Project Monitoring and Evaluation) can contribute to enhancing this capacity with due consideration to the key priorities that the Project resources can cover, where this component will support the capacity building of the PMU. The project will not be able to identify any specific site (s), for the disposal of OPs or PCBs during the preparation or by appraisal phase. This is due to the fact that identification of any specific site (s) will involve (i) identification of stockpiles of OPs/ POPs through the national inventory proposed to be carried out through component 1 of the project, (ii) assessment of health and environmental risks at each of the identified locations and (iii) identifying priority locations (based on specific analysis of risks, sensitivity, cost and implementation time) for the disposal/destruction of OPs and rehabilitation/ remediation of the site(s). This would require expertise, infrastructure and international experience. Hence this will be carried out during the first year of the project implementation and sites with OP stockpiles totaling up to 1000 tons and PCBs of 3000 tons will be identified. One of the potential sites (El Soueira warehouse) referred earlier will also go through this assessment process and be chosen for remediation, if prioritized. The actual disposal of OPs/ PCBs, thus is expected to be carried out in the second year of the project.

Considering the above, it is proposed to prepare an ESMF (mainly because the project consists of series of subprojects and the risks and impacts cannot be determined until the subproject details have been identified), for the project activities by appraisal and site-specific ESIAs/ESMPs will be prepared during implementation . The ESMF will include the selection criteria for the sites and the management of the E&S risks and impacts, including (i) a methodology for the identification/ prioritization of sites for hazardous chemicals disposal, (ii) a methodology for the integrated field assessments; (iii) adequate disposal and/ or remedial plans to reduce, mitigate and/or offset adverse risks and impacts, (iv) provisions for estimating and budgeting the cost of such measures, (v) OHS safety issues, vi) any mitigation measures regarding community health and safety, and vii) an assessment of the responsible agencies for addressing project risks and impacts, including their capacity to manage environmental and social risks and impacts.

The ESIA/ESMPswill also include adequate information on the area in which sub-projects are expected including potential environmental and social vulnerabilities of the area and the relevant E&S impacts and mitigation measures. In addition, the ESMF will clearly define the procedures for carrying out sub-project specific ESIAs/ ESMPs, their review, clearance, implementation, monitoring and reporting, institutional mechanisms for managing E&S issues in at contractor?s and sub-contractor?s level, Grievance Mechanisms, OHS and community health and safety issues, and the necessary budgetary allocations. Also, the project aims at establishing an enabling environment for safe POPs management in Iraq. As part of this, the project will assess policy, institutional and regulatory gaps for the implementation of NIP and other requirements of implementing the Stockholm convention. The project will provide a technical assistance for the establishment of policies and regulations on OPs, POPs , and

PCBs, and hazardous chemicals pollution prevention and management; storage; handling and usage; and remediation of contaminated sites.

In addition, the ESCP will also include provisions to ensure that the TA activities are undertaken in compliance with the terms of references in a manner that is satisfactory to the Bank, and consistent with the requirements of the relevant ESSs and the Borrower?s laws relating to the environmental and social aspects.

During the preparation of these documents, the borrower will conduct meaningful consultations with stakeholders and will prepare a robust grievance mechanisms to handle complaints and concerns.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
A-ESRS	**CEO Endorsement ESS**	
Concept ESRS	**Project PIF ESS**	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

PDO Indicators by PDO Outcomes

Baseline	Closing Period
Improve the management and safe disposal of POPs and Hazardous Chemicals in Iraq	
OPs and PCBs waste destroyed or disposed or contained (Metric ton)	
Dec/2023	Jun/2030
0	4000
Policies and regulations for the management of PoPs, Hazardous Chemicals and pollution hotspots developed (Number)	
Dec/2023	Jun/2030
0	4
Share of POPs monitored through the management information system estagblished through the project (Percentage)	
Dec/2023	Jun/2030
0	50
Direct Project Beneficiaries (Number)	
Dec/2023	Jun/2030
0	7000000 (3,430,000 female)

Intermediate Indicators by Components

Baseline	Closing Period
Improve the management of POPs and hazardous chemicals	
Updated National Implementation Plan for POPs prepared (Yes/No)	
Dec/2023	Jun/2030
No	Yes
Capacity of participating agencies in sampling and laboratory analys of chemicals including OPs, PCBs (Number)	
Dec/2023	Jun/2030
0	15
?Analytical capacity of Ministry of Environment in sampling and analyis of hazardous chemicals (Number)	
0	6
National Inventory of POPs (OPs and PCBs) completed and system for their tracking and management operational (Yes/No)	
Dec/2023	Jun/2030
No	Yes
Staff trained in the inventory, assessment and management of pollution hotspots and POPs (Number)	
Dec/2023	Jun/2030
0	240
?Staff trainined in detailed assessment, management and remediatin of hazardous chemical contaminated sites (Number)	
0	60
Management and disposal of high-risk priority stockpiles of POPs in agriculture and power sectors	
OPs contained and/ or dispsosed (Metric ton)	
Dec/2023	Jun/2030
0	1000
PCB contaminated equipment and waste managed and / or destroyed (Metric ton)	
Dec/2023	Jun/2030
0	3000
Management of chemical pollution hotspots	
Detailed asessments and remeidation plans prepared for high risk priority hotpspots (Number)	
Dec/2023	Dec/2025

0	3
Project management and Monitoring and Evaluation	

Monitoring & Evaluation Plan: PDO Indicators by PDO Outcomes

Improve the management and safe disposal of POPs and hazardous chemicals in Iraq	
OPs and PCB waste destroyed or disposed or contained (Metric ton)	
Description	This indicator measures the inventory of POPs, demonstration activities implemented by the project through components 1 and 2 aimed to improve their management through disposal of high risk stockpiles of POPs (1000 tons of Obsolete Pesticides and 3000 tons of PCBs).
Frequency	Half-yearly
Data source	Project Managmeent Agency (UNDP)
Methodology for Data Collection	Data will be collected and analysed through (i) inventory of OPs and PCBs developed under component 1, (ii) detailed assssment and treatmet/destruction/ disposal plan developed under component 1 and (ii) actual treatment/destruction/ disposal of 1000 tons of OPs and 3000 tons of PCBs carried out under component 2 of the project.
Responsibility for Data Collection	Implementing Agency (MoEn) with support from Project Management Agency (UNDP)
Policies and regulations for the management of POPs, hazardus chemicals and pollution hotspots developed (Yes/ No)	
Description	This indicator measures the policy and regulatory strengthening support provided by the proejct through sub-components 1.2 and component 3 for the management of POPs, hazardous chemicals and chencial pollution hotspots. This will include preparation of policies and regulations for appvoal by the government.
Frequency	Half-yearly
Data source	Project Management Agency (UNDP)
Methodology for Data Collection	Data will be collected and analysed through (i) various assessments, policy, regulations and standards developed by the consultants (ii) review and approval process of MoEn and other GoI institutions under components 1.2, 1.3 and 3 of the project.
Responsibility for Data Collection	Implementing Agency (MoEn) with support from Project Management Agency (UNDP)
Share of POPs monitored through the management information system established through the project	
Description	This indicator measures the establishment of management information to be established through the project and its performance in monitoring the usage, management and disposal of POPs in Iraq.
Frequency	Half-yearlly till the system is established and monthly after system is operational
Data source	MoEn, MoA and MoElec

Methodology for Data Collection	Progress of developing the management information system will be monitored based on the progress of work being done by the relevant consultants. Subsequently, establishment of the systems and its usage will be monitored based on the monthly updates shared by the MoEn, MoA and MoElec.
Responsibility for Data Collection	MoEn, MoA and MoElec
Direct Project Beneficiaries (Number)	
Description	**This indicator measures the number of people directly benefitted due to the treatment and disposal of OPs and PCBs through the project, disaggregated by gender; this will comprise about 49 percent of women beneficiaries (3.430,000).**
Frequency	After completion of treatment and disposal activities at respective locations.
Data source	Project Managmeent Agency (UNDP) and its technical consultants
Methodology for Data Collection	Details of people working and living around the OPs and PCB storage sites that will be treated with project financing, will be collected from the site owning and managing authorities and local administration. Necessary beneficiary surveys will be carried out, if appropriate and adequate information is not available.
Responsibility for Data Collection	Implementing Agency (MoEn) with support from Project Management Agency (UNDP) and its consultants

Monitoring & Evaluation Plan: Intermediate Results Indicators by Components

Improve the management of POPs and hazardous chemicals	
Updated National Implementation Plan for POPs prepared (Yes/No)	
Description	This indicator measures the completion of inventories and assessments of all POPs, preparation of national plan as per the requirements of Stockholm convention.
Frequency	Half Yearly
Data source	Project Managmeent Agency (UNDP) and its technical consultants
Methodology for Data Collection	Progress reports by the implementing agency and deliverables by the PMA and its consultants.
Responsibility for Data Collection	Implementing Agency (MoEn) with support from Project Management Agency (UNDP) and its consultants
Capacity of participating agencies in sampling and laboratory analysis of hazardous chemicals including OPs, PCBs (Number)	
Description	This indicator measures the improvemet in the laboratiory analytical capacity of MoEn, MoA, MoElec in analysing hazardous chemicals including OPs and PCBs.
Frequency	Half yearly
Data source	MoEn, MoA, MoElec
Methodology for Data Collection	Progress reports from MoEn and laboratory analysis reports
Responsibility for Data Collection	Implementing Agency (MoEn)
National Inventory of POPs (OPs and PCBs) completed and system for their tracking and management operational (Yes/No)	
Description	This indicator supports carrying out inventory and assessment of OPs and PCB and establishment of a tracking system for their monitoring/ management.
Frequency	Half Yearly
Data source	Project Management Agency (on the design) and MoEn, MoA and MoElec on the operation of tracking system
Methodology for Data Collection	Outputs and progress reports from PMA on the tracking systm and monthly reports from MoEn, MoA and MoElec on the tracking system

Responsibility for Data Collection	Implementing Agency (MoEn) with support from Project Management Agency (UNDP)
Staff trained in the inventory, assessment and management of pollution hotspots and POPs (Number)	
Description	This indicator supports training the staff of participating ministries in conducting inventories, testing, assessment, management and monitoring of pollution hoptspots and all POPs.
Frequency	Half yearly
Data source	Implementing Agency (MoEn)
Methodology for Data Collection	Progress reports from MoEn and laboratory analysis reports
Responsibility for Data Collection	Implementing Agency (MoEn) with support from Project Management Agency (UNDP)
Management and disposal of high-risk priority stockpiles of POPs in agriculture and power sectors	
OPs contained and/ or dispsosed (Metric ton)	
Description	This indicator measures the quantity of OPs disposed through the project.
Frequency	Monthly progress review after the commencement of the activity and final estimate after the completion of treatment and disposal activities at respective locations.
Data source	Component 2 Proect Management Agency (UNDP) and Contractor/ Agency performing the treatment and disposal operations,
Methodology for Data Collection	Progress reports from MoEn through UNDP and Contractor/ Agency performing the treatment and disposal operations. Disposal Certificates and Transboundary Shipment Documents.
Responsibility for Data Collection	Implementing Agency (MoEn) with support from Project Management Agency (UNDP) and Contractor/ Agency performing the treatment and disposal operations.
PCB contaminated equipment and waste managed and / or destroyed (Metric ton)	
Description	This indicator supports the environmentally sound disposal of PCB contaminated materials
Frequency	Monthly progress review after the commencement of the activity and final estimate after the completion of treament and disposal activities at respective locations.
Data source	Component 2 Project Management Agency (UNDP) and Contractor/ Agency performing the disposal operations

Methodology for Data Collection	Progress reports from MoEn through UNDP and Contractor/ Agency performing the disposal operations. Destruction Certificates and Transboundary Shipment Documents.
Responsibility for Data Collection	Implementing Agency (MoEn) with support from Project Management Agency (UNDP) and Contractor/ Agency performing the treatment and disposal operations.
Management of chemical pollution hotspots	
Detailed Assessments and Remediation Plans prepared for High Risk Priority Sites (Number)	
Description	This indicator supports carrying out detailed assessment of chemical pollution hotspots in conflict affected governorates of Iraq.
Frequency	Half Yearly
Data source	Component 3 Project Management Agency (UNDP)
Methodology for Data Collection	Outputs and progress reports from Contractors and MoEn
Responsibility for Data Collection	Implementing Agency (MoEn) with support from Project Management Agency (UNDP)

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).

STAP comments	Project Team Response

The project proponent is also encouraged to elaborate on how the project will ensure scale-up and sustainability, especially from the finance dimension. How will the project help ensure that adequate resources will be available beyond GEF resources to address the hazardous chemicals not disposed of through this project?	The project encompasses several capacity-building and training activities to ensure that the national competent authorities can continue the activities properly beyond the project timeline. In addition to the learning-by-doing approach adopted by the project, sub-components 1.3 and component 3 prioritize the enhancement of governmental laboratory's capabilities. This approach is chosen to create a lasting framework for effective monitoring and analysis of Persistent Organic Pollutants (POPs). Considering the constraints such as limited budgetary resources and the absence of national infrastructure, this sustainable approach aims to achieve the following: - Focused Capacity Development: Instead of spreading resources thinly across multiple laboratories, the project concentrates efforts and resources on strengthening the capabilities of a single designated governmental laboratory. This laboratory becomes a center of excellence for POPs testing and analysis. - Long-Term Sustainability: The assisted laboratory can continue to perform POPs monitoring and analysis effectively even after the project's conclusion. - Resource Optimization: By centralizing capacity-building efforts, the project optimizes the use of limited resources, making it more cost-effective and feasible within budget constraints. - Continuity of Operations: The sustainability of the laboratory's capabilities ensures the continuity of POPs monitoring activities even in the face of changing circumstances or budgetary challenges.
It is also unclear how the 3000 tons of PCB-containing equipment was estimated, given that the inventory of PCBs in Iraq is not yet available as indicated in the proposal. Further clarification on this would be helpful	Detailed data collection, analysis, assessment and consultations were carried out during project preparation to identify the total quantity of POPs and PCBs in Iraq. As elaborated in the detailed project description, the identified quantities OPs and PCBs contaminated oil and equipment during the initial NIP and the PPG phase have exceeded initial estimates for disposal. However, due to budget constraints, the disposal plan has been limited to 3000 tons of PCBs and 1000 tons of OPs.

A climate risk screening was carried out for the project, which is commendable. The screening identified high risk due to the exposure of the project location to climate and geophysical hazards. Given the toxic and hazardous nature of the targeted chemicals, it is essential that adequate mitigation measures are designed and incorporated into the project implementation plan.	In addition to climate risk screening, the project was assessed for Climate Change (mitigation and adaptation) and Paris Alignment requirement of The World Bank. Accordingly, specific measures are identified and described in the respective section of the Project Appraisal Document. Thus the implementation of this project, incorporating climate change mitigation measures, are expected to contribute to both environmental protection and global efforts to combat climate change, aligning with the goals of Paris Agreement such as: - Energy-Efficient Technologies: Integrate the disposal of POPs within an already established energy-based facility such as cement kilns will be assessed during the project implementation to minimize energy consumption and reduce greenhouse gas emissions. - Recycling and Resource Recovery: Instead of disposing of PCB containing oil, the project is to assess their dichlorination and reuse. The same concept applies for the in-service PCB transformers that can undergo a dichlorination process and be returned to the grid. This can reduce the need for new resource extraction and energy-intensive manufacturing. - Sustainable Transportation: During the collection of waste for disposal, the project will be adopting a strategy of reducing the frequency of transportation and the distance travelled as possible. This reduces the project's carbon footprint in logistics. - Public Awareness and Education: Engage with the competent authorities, local community and relevant stakeholders to raise awareness about the climate benefits of the project. Encourage responsible chemicals and hazardous waste disposal practices among the public.
Council Comments	**Project Team Response**
Switzerland Comments ? Important information regarding the project components, activities, outputs, and outcomes are missing. E.g. no information on the technologies used to dispose the hazardous chemicals and the contaminated equipment is provided. Also, information about the baseline scenario is lacking. When does the Secretariat intend to present this information? Will the PIF be presented again at the 63rd Council Meeting in December or will a revised version be circulated to Council members in-between meetings?	Information on technologies proposed to be evaluated and/or used is presented in the project description and sustainability section of the PAD. More information is also provided in a separate note on project description.

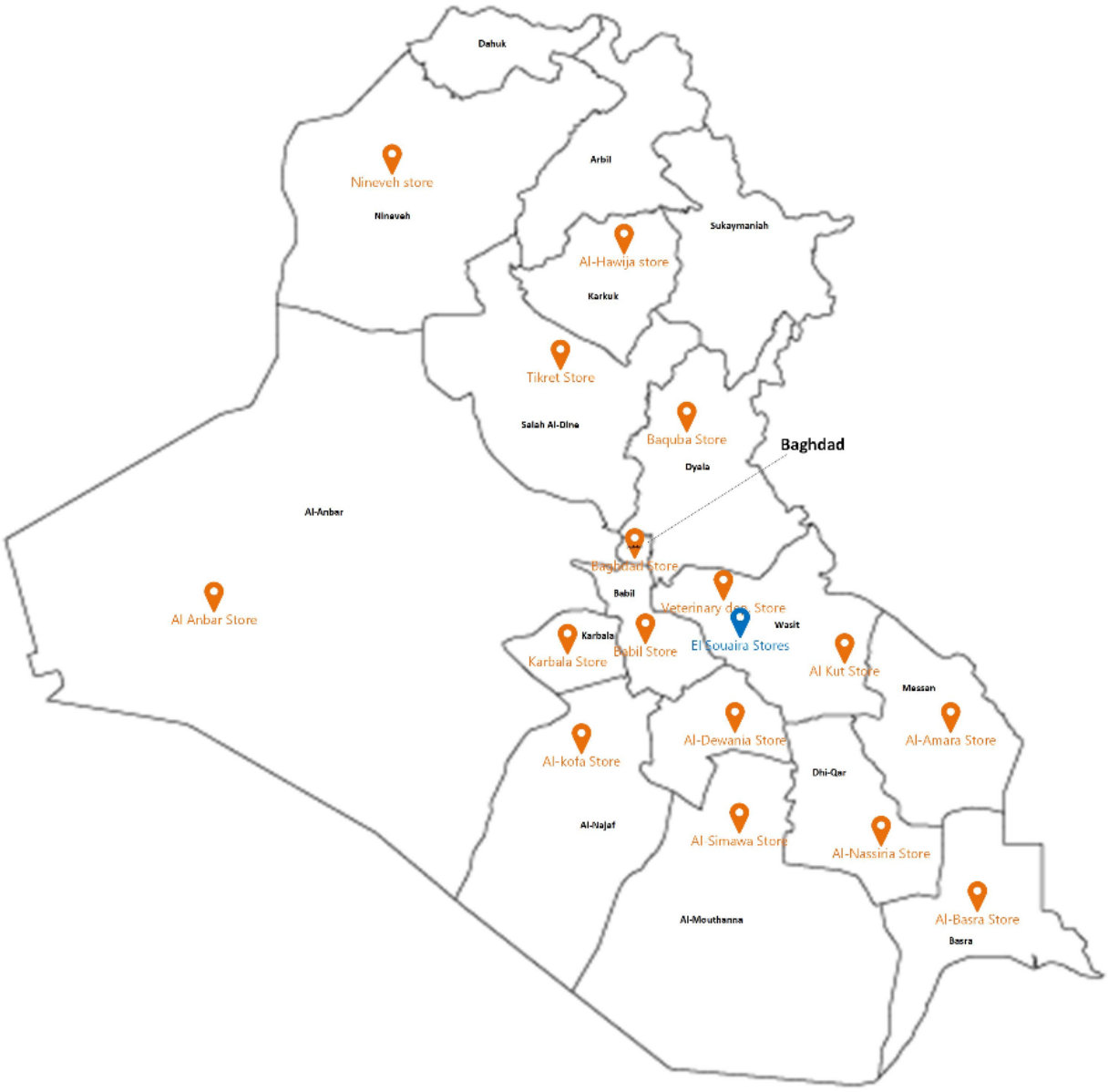
Canada Comments Canada supports this project as it is in line with the Stockholm Convention. PCBs are a priority as the deadlines to remove from use (2025) and destroy/irreversibly transform them (2028) are fast approaching. Additionally, updating National Implementation plans is a Convention obligation.	Thank you for Canada?s support to the project. The project aims to address the critical issue of PCBs in Iraq and updating NIP withing SC?s obligations.

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

The Project Preparation grant was not utilized by the project and will be returned to the GEF.

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.


Dahuk
Nineveh store
Nineveh
Arbil
Sukaymaniah
Al-Hawija store
Karkuk
Tikret Store
Salah Al-Dine
Baquba Store
Diyala
Baghdad
Al-Anbar
Baghdad Store
Babil
Veterinary dep Store
Al Anbar Store
Karbala
Wasit
Karbala Store
Babil Store
El Souaira Stores
Al Kut Store
Messan
Al-Dewania Store
Al-Amara Store
Al-kofa Store
Dhi-Qar
Al-Najaf
Al-Simawa Store
Al-Nassiria Store
Al-Basra Store
Al-Mouthanna
Basra

Nineveh

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. These IDs are available on the GeoNames? geographical database containing millions of placenames and allowing to freely record new ones. 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 & Activity Description
Baghdad Governorate	33.32601	44.39140		
Wasit Governorate	32.61213	45.81283		
Babil Governorate	32.47880	44.41218		
Dhi Qar Governorate	31.18843	46.31357		
Basra Governorate	30.52372	47.77869		
Kirkuk Governorate	35.47263	44.37909		
Diyala Governorate	33.71691	44.63528		
Najaf Governorate	32.01694	44.32261		
Karbala Governorate	32.60914	44.00740		
Al Muthanna Governorate	31.56923	45.17134		
Al Anbar Governorate	33.44399	43.73716		
Saladin Governorate	34.68732	43.67646		

Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description
Al Diwaniyah	31.97971	44.89451		
Maysan Governorate	32.03817	47.03632		
Nineveh Governorate	36.46509	43.17124		

ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (USDeq.)						Total (USDeq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency) [1]
		Component 1	*Component 2*	*Component 3*	*Sub*	*M*	*P*		

		Outcome 1.1: Validation of national inventories of POPs (OPs, IPOPs, PCBs, UPOPs) by relevant stakeholders	***Outcome 1.2: Government endorsement and submission of updated NIP to the SC Conference of Parties***	***Outcome 1.3: Strengthening of Policy, regulatory and institutional framework for POPs management***	***Outcome 2.1: Demonstrated and scaled-up Environmentally Sound Management of OPs***	***Outcome 2.2: Establishment of a Harmonized National Framework for PCBs and PCB Wastes, and effective Management and Disposal of PCB-Containing Equipment and Waste***	***Outcome 3.1: Enhanced Capacity of the MoEn in Chemical Contamination Management***	***Outcome 3.2: Establishment of a National Program on Contaminated Sites Management***	***- Total***	***& E***	***MC***		
Works	Provision of support through management and disposal of PCBs from power sector	0	0	0	0	5,300,000	0	0	5,300,000	0	0	5,300,000	Ministry of Environment

	Provision of support through management and disposal of OPs POPs from agriculture sector	0	0	0	2,600,000	0	0	0	2,600,000	0	0	2,600,000	Ministry of Environment
Goods	Provision of laboratory equipment to local laboratories to test for POPs parameters	0	0	1,800,000	0	0	0	0	1,800,000	0	0	1,800,000	Ministry of Environment
Contractual Services ? Company	Company engaged under temporary contract to review and update NIP for POPs	0	140,000	0	0	0	0	0	140,000	0	0	140,000	Ministry of Environment
	Company engaged under temporary contract to conduct national inventories and assessments of all POPs	2,500,000	0	0	0	0	0	0	2,500,000	0	0	2,500,000	Ministry of Environment

	Company engaged under temporary contract to support in the establishment of a national unified database tracking and monitoring system for POPs	0	0	200,000	0	0	0	0	200,000	0	0	200,000	Ministry of Environment
	Independent Financial Auditor engaged to conduct financial auditing for every project fiscal year	0	0	0	0	0	0	0	0	0	100,000	100,000	Ministry of Environment
International Consultants	Technical/specialized consultants will be hired to conduct cost effectiveness study and assessment of safe disposal options of OPs in country	0	50,000	0	0	0	0	0	50,000	0	0	50,000	Ministry of Environment

	Technical/specialized consultants will be hired to develop technical guidelines, manuals, protocols, and awareness materials for sound management of POPs throughout its value chain	0	0	160,000	0	0	0	0	160,000	0	0	160,000	Ministry of Environment
	Specialized consultants to support M&E system, conduct independent Mid-Term and Final evaluation of the project	0	0	0	0	0	0	0	0	50,000	0	50,000	Ministry of Environment
Local Consultants	Technical/specialized local consultant will be hired to conduct assessment of socio-economic impacts of POPs	0	10,000	0	0	0	0	0	10,000	0	0	10,000	Ministry of Environment

	Technical/specialized local consultant will be hired to assess local laboratories capacities and needs for POPs measurement and analysis	0	0	50,000	0	0	0	0	50,000	0	0	50,000	Ministry of Environment
	Technical/specialized local consultants will be hired to asses regulatory and institutional framework and develop policies and regulatory texts and new framework for the chemicals management	0	0	60,000	0	0	0	0	60,000	0	0	60,000	Ministry of Environment

	Technical/specialized local consultants will be hired to develop and provide customized trainings for civil servants on POPs management throughout its value chain	0	0	100,000	0	0	0	0	100,000	0	0	100,000	Ministry of Environment
	Technical/specialized local consultants will be hired to monitor and evaluate the implementation of the project components, ensuring its compliance	0	0	0	0	0	0	0	0	57,000	0	57,000	Ministry of Environment

Salary and benefits / Staff costs	Project Coordinator (Technical): A dedicated technical coordinator will be hired to oversee implementation of the overall new GEF financed activities. Technical experts (for example, chemicals management, POPs management, hazardous waste management)	0	0	0	0	0	0	0	0	0	232,000	232,000	Ministry of Environment
	Finance and procurement specialized staff (non-technical)	0	0	0	0	0	0	0	0	0	20,000	20,000	Ministry of Environment

Travel	International and Domestic travel and transportation (air, terrestrial, and fluvial), as needed, directly related to the major activities.	0	0	0	0	0	0	0	0	0	11,300	11,300	Ministry of Environment
Office Supplies	Consumables and office equipment/supplies to be used in the performance of the project.	0	0	0	0	0	0	0	0	0	18,530	18,530	Ministry of Environment

Other Operating Costs	Operating costs associated with project operation on a day-to-day basis related to technical and administrative management, as bank charges, office costs (rents, utilities, communications, insurance), among others.	0	0	0	0	0	0	0	0	0	28,665	28,665	Ministry of Environment
Grand Total		**2,500,000**	**200,000**	**2,370,000**	**2,600,000**	**5,300,000**	**0**	**0**	**12,970,000**	**107,000**	**410,495**	**13,487,495**	

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).