

## Reduction of UPOPs through Waste Management in a Circular Economy

### Part I: Project Information

**GEF ID**  
10803

**Project Type**  
FSP

**Type of Trust Fund**  
GET

**CBIT/NGI**  
CBIT No  
NGI No

**Project Title**  
Reduction of UPOPs through Waste Management in a Circular Economy

**Countries**  
Lebanon

**Agency(ies)**  
World Bank

**Other Executing Partner(s)**  
Ministry of Environment in Lebanon

**Executing Partner Type**  
Government

**GEF Focal Area**

Chemicals and Waste

**Taxonomy**

Chemicals and Waste, Focal Areas, Disposal, Industrial Emissions, Waste Management, Hazardous Waste Management, Open Burning, Plastics, Emissions, Best Available Technology / Best Environmental Practices, Green Chemistry, Influencing models, Strengthen institutional capacity and decision-making, Demonstrate innovative approach, Transform policy and regulatory environments, Stakeholders, Communications, Awareness Raising, Strategic Communications, Education, Behavior change, Public Campaigns, Private Sector, SMEs, Beneficiaries, Consultation, Type of Engagement, Information Dissemination, Participation, Partnership, Local Communities, Gender Mainstreaming, Gender Equality, Gender-sensitive indicators, Gender results areas, Participation and leadership, Capacity Development, Access to benefits and services, Capacity, Knowledge and Research, Learning, Adaptive management, Indicators to measure change, Theory of change, Enabling Activities, Targeted Research, Innovation

**Rio Markers****Climate Change Mitigation**

Climate Change Mitigation 1

**Climate Change Adaptation**

Climate Change Adaptation 1

**Duration**

72 In Months

**Agency Fee(\$)**

841,552.00

**Submission Date**

3/24/2021

A. Indicative Focal/Non-Focal Area Elements

Programming Directions	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CW-1-1	GET	8,858,447.00	62,000,000.00
	<b>Total Project Cost (\$)</b>	<b>8,858,447.00</b>	<b>62,000,000.00</b>

## **B. Indicative Project description summary**

### **Project Objective**

Project Objective: to assist Lebanon in avoiding and reducing unintentionally produced persistent organic pollutants through promoting circular economy and improving open dumpsites in the waste sector.

### **Project Outcomes**

Component 1: Strengthen Regulatory Framework and Capacities for Sustainable Waste Management in the Circular Economy

1.1 Key regulatory and economic instruments (green chemistry, EPR and green public procurement) and product standards supporting circular economy transition developed or adopted by MOE

1.2 2017 National Implementation Plan updated in compliance with Article 7 of the Stockholm Convention

1.3 A 3R Implementation Framework (IF) for circular consumption developed

1.4 A Technical Committee (including members from both governments and the private sectors) for leading initiatives on application of circular economy in waste management established

1.5 Government officials, stakeholders, waste management practitioners trained on circular economy in waste management and laboratory staff on UPOPs monitoring trained

1.6 Green financing options for chemical waste management and disposal identified

1.7 A complete inventory of UPOPs produced

1.8 A national unified database (GIS compatible) for POPs, hazardous chemicals, waste, and contaminated sites established

1.9 National action plans for UPOPs reduction and management and remediation of hazardous chemical and waste hotspots including GHG emission reduction potential developed

Component 2: Demonstrations on 3R Practices and Open Dumpsite Improvement in Selected Governorate Areas

2.1 UPOPs emission avoided and reduced (estimated 20 g TEQ/a UPOPs emission to air, about 50% over the 2014 level).

2.2 3R practices demonstrated at two or three selected areas

2.3 Best available techniques and best environmental practices (BATs/BEPs) demonstrated at two or three selected open dumpsites

Component 3: Project Monitoring and Evaluation

The project regularly monitored and results evaluated

Component 4: Project Management

The project successfully implemented in a timely manner and on budget and the PDO achieved

<b>Project Component</b>	<b>Financing Type</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
Component 1: Strengthen Regulatory Framework and Capacities for Sustainable Waste Management in the Circular Economy	Technical Assistance	GET	2,936,617.00	2,200,000.00
Component 2: Demonstrations on 3R Practices and Open Dumpsite Improvement in Selected Governorate Areas	Investment	GET	5,000,000.00	56,000,000.00
Component 3: Project Monitoring and Evaluation	Technical Assistance	GET	500,000.00	1,000,000.00
		<b>Sub Total (\$)</b>	<b>8,436,617.00</b>	<b>59,200,000.00</b>
<b>Project Management Cost (PMC)</b>				
		GET	421,830.00	2,800,000.00
		<b>Sub Total(\$)</b>	<b>421,830.00</b>	<b>2,800,000.00</b>
		<b>Total Project Cost(\$)</b>	<b>8,858,447.00</b>	<b>62,000,000.00</b>

**C. Indicative 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(\$)
Private Sector	The waste sector	Equity	Investment mobilized	2,000,000.00
Recipient Country Government	Ministry of Environment	In-kind	Recurrent expenditures	2,000,000.00
GEF Agency	The World Bank	Loans	Investment mobilized	56,000,000.00
Other	Lebanon Financing Facility	Grant	Investment mobilized	1,500,000.00
GEF Agency	The World Bank ProClean Trust Fund Program	Grant	Investment mobilized	500,000.00
			<b>Total Project Cost(\$)</b>	<b>62,000,000.00</b>

**Describe how any "Investment Mobilized" was identified**

The dialogue with the private sector is ongoing, and will be further deepened during project preparation for the Component 2. The Bank loan project is "The National Comprehensive Environmental Management Program – Phase I Litani River Basin (LRB)P167818". Its objective is to reduce pollution and improve natural resource management in the Litani River Basin (LRB) for enhanced livelihoods. It is at US\$ 200 million (expected Board approval in September 2021) and will consist of five components: Enhancing governance of the LRB, Scaling-up pollution management in the LRB, Enhancing environment and natural resources management, Communication, awareness raising and technical assistance, and Project management, monitoring and evaluation. The Lebanon Financing Facility interventions include activities inside the port for securing the explosion site and the management of critical hazardous materials as well as activities outside the

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D. Indicative 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	Lebanon	Chemicals and Waste	POPs	8,858,447	841,552	9,699,999.00
<b>Total GEF Resources(\$)</b>					<b>8,858,447.00</b>	<b>841,552.00</b>	<b>9,699,999.00</b>

E. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount (\$)

273,973

PPG Agency Fee (\$)

26,027

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
World Bank	GET	Lebanon	Chemicals and Waste	POPs	273,973	26,027	300,000.00
<b>Total Project Costs(\$)</b>					<b>273,973.00</b>	<b>26,027.00</b>	<b>300,000.00</b>

Please provide justification

We would like to seek your approval for the PPG grant for Lebanon proposal 10803 to be increased to \$300,000 (instead of US\$ 200k limit imposed by the GEF portal during initial submission), considering that substantial efforts and resources will be required for the preparation of the proposed project, especially on the identification of the participating governorates and waste disposal sites and selection of circular economy/3R practices for waste reduction and BAT/BEPs for waste disposal site management for demonstrations under the project component 2. A higher PPG of US\$ 300k is necessary to support preparation of the proposed project due to specific project situation: i) large number of stakeholder meetings and studies needed for consultation and determination of the proposed Component 1 and 2 activities, ii) selection of candidate demonstration areas and dumpsites (from a large pool of 600 unauthorized dump sites) for Component 2 to be confirmed during project implementation, iii) Design of 3R practices and BAT/BEP for reducing UPOPs emission. Which are being developed first time in Lebanon, iv) 'High Risk' categorization of the project as per ESF requirements of the Bank, requiring preparation of detailed environmental and social documents, and v) associated support needed incremental operating cost of the Project Management Unit (PMU) for project preparation.

## Core Indicators

Indicator 10 Reduction, avoidance of emissions of POP to air from point and non-point sources (grams of toxic equivalent gTEQ)

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)
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20.00
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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)
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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)
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Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	1,500			
Male	3,500			
<b>Total</b>	5000	0	0	0

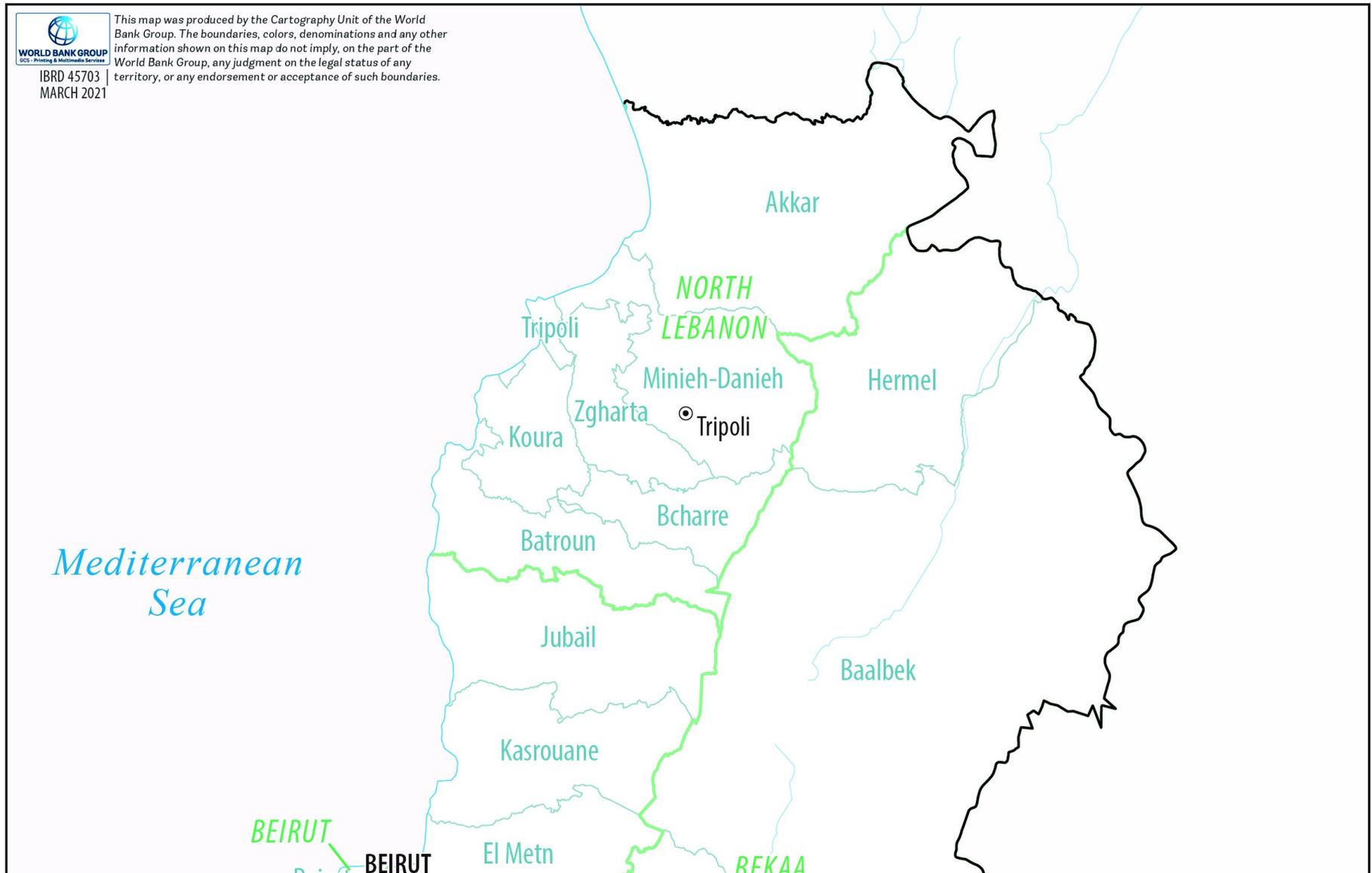
Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

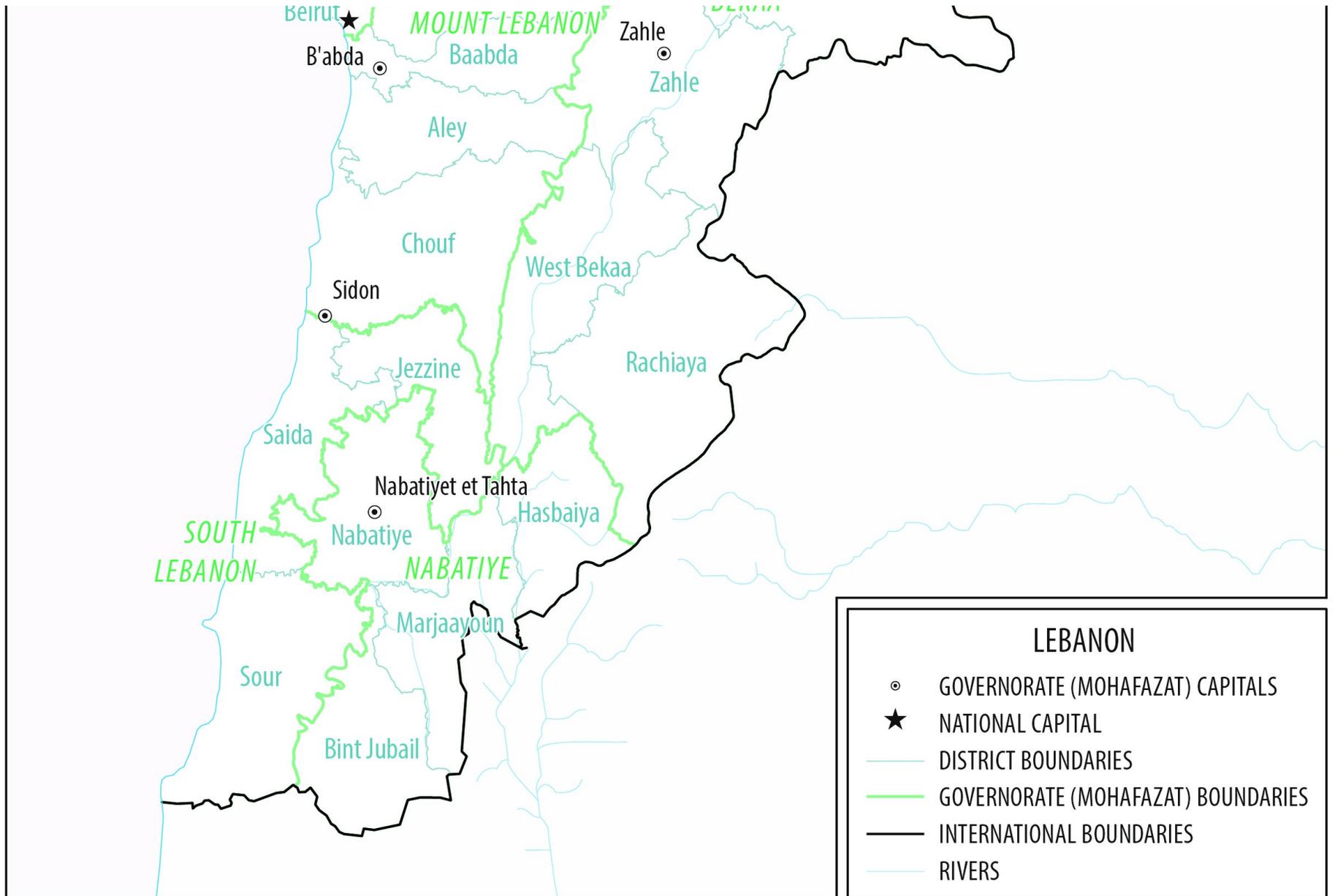
**Indicator 10: The UPOPs emission is estimated as follows:  $(40 \mu\text{g TEQ/ ton of waste} - \text{UPOPs emission factor to air}) * 500,000 \text{ tons of wastes} = 20,000,000 \mu\text{g TEQ}/1,000,000 = 20 \text{ g TEQ}$ . The 500,000 tons of waste is expected to be reduced by 3R/circular economy practices and/or managed by BAT/BEPs at waste disposal sites/open dumpsites. During project preparation, once the project participating governorates and dumpsites are identified, the amount of UPOPs reduction will be re-estimated.**

## Part II. Project Justification

### 1b. Project Map and Coordinates

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





## 2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

**Indigenous Peoples and Local Communities**

**Civil Society Organizations** Yes

**Private Sector Entities** Yes

If none of the above, please explain why:

**In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement**

Consultations with key stakeholders, beneficiaries, and affected people would be further carried out by the client during preparation, with guidance provided by the Bank team, on design of proposed project activities. These consultations would take advantage of the channels already established, which convenes representatives of national and city governments, nongovernmental organizations, academia and other donors relevant to the project. These consultations would also address the findings of the environmental and social assessment and evaluate the identification of impacts and benefits derived from project activities as well as the proposed measures to avoid, minimize, and/or mitigate adverse impacts.

Citizens Engagement (CE) 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 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 PMU will help 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, RecycleBank, establishment and collaboration with community advisory groups (CAGs) will be considered and applied as appropriate. Citizens will be engaged as part of the efforts for the national inventory of hazardous chemical and waste hotspots with sampling and testing (e.g. qualified citizen science monitors to be deployed). 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. In addition, a grievance redressal mechanism (GRM) will also be designed during the preparation phase and established during the implementation phase of the project.

### 3. Gender Equality and Women's Empowerment

**Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).**

While the share of women in Lebanon's labor force exceeds the MENA average of 22%, it is still much lower than the share of men in Lebanon (26 vs. 76%, respectively). Unemployment rates are also twice as high for women (10%) compared to men (5%). Further, only 17% of women are self-employed compared to 43% of men, and only 4% of companies in Lebanon has a woman as top manager. A combination of barriers contributes to the low levels of labor force participation and entrepreneurship. Constraints around access to safe transportation, affordable and quality child care, and finance or collateral, as well as concerns around harassment in the workplace and norms surrounding gender roles at home, keep women out of, or hold them back in, the workplace and from starting their own business. Lebanese women also cite flexible hours, work security and long-term career prospects as important factors they consider when deciding to work.

During project preparation, a gender assessment will be carried out as part of the social assessment to identify project-relevant gender gaps and actions needed to address these gaps. The assessment will build on existing data from Lebanon and may also draw on documented evidence from other countries as relevant to inform the identification of gender gaps related to specific outcomes on issues such as employment in the waste sector and related topics (gender norms and roles, skills, etc.). The assessment will further identify any gender-differentiated needs and concerns related to project activities. Based on the assessment, the project document will incorporate specific actions and indicators, and a Gender Action Plan will be developed to further guide the implementation of these actions, also referring to women's participation and engagement, as well as any specific health and safety rules for female employees - pregnant and/or lactating women, in the waste collection and recycling industries.

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

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

**improving women's participation and decision-making; and/or Yes**

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

**Will the project's results framework or logical framework include gender-sensitive indicators?**

Yes

#### 4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

The project will support investment activities for UPOPs avoidance and reduction. Private sector stakeholders will be involved and selectively supported with technology transfer/production change, technical trainings, and networking to improve their overall material flows, profitability, viability and reduce their impacts on the environment and people. During project preparation, the potential public and private investments to be mobilized for this component will be assessed, and the linkages to other Global Practices in the World Bank including FCI and Urban will be considered. Experiences learned from these demonstrations are expected to be replicated and scaled up under the Litani River lending project and throughout the country after the project life.

#### 5. 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

#### Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

## Environmental Risk Rating

The main Environmental Risks/impacts that could be associated with the project are linked to the activities to be funded under components 2 during sampling and demonstration activities described above. The facilities to be constructed under the LRB lending project are considered as associated facilities to the present project.

Occupational Health and Safety Risks/impacts will be present during environmental sampling process, laboratory analysis and waste disposal of contaminated materials in samples collected. Indeed, the laboratory workers will be exposed to chemical contamination if they are not protected by adequate equipment and if they are not trained correctly to handle this kind of Hazardous materials and wastes. The specialized personnel who is going to implement the demonstration activities of UPOPs samples collection, transport, treatment and disposal of POPs, Mercury and other Hazardous wastes is also exposed to health and safety risks/impacts if these demonstrations are not done according to adequate health and safety procedures.

Community Health and Safety Risks/impacts are also foreseen during transport, disposal of samples and during demonstration activities of samples collection, transport, treatment and disposal of wastes. The community can be exposed to chemicals and/or hazardous emissions, solid or liquid wastes if these materials are not handled, transported and disposed correctly. In addition, a large number of industries in Lebanon are situated in urban centers and villages hence demonstration activities taking place in such areas could be a source of pollution. Therefore, there are potential risks/impacts linked to Environmental pollution (air, soil, water) during sampling, transport, laboratories analysis, disposal and demonstration activities if the chemicals/Hazardous wastes are not managed correctly or following accidental spills of these materials or fire events. Finally, other risks/impacts are related to resource efficiency and GHG emissions if demonstration activities do not take in account Good International Industry Practices (GIIP).

The major Environmental Risks/impacts of The TA activities under component 1, which is aiming to develop regulations and technical guidelines and strengthen institutional capacity of the Government of Lebanon for chemical and waste management, especially for UPOPs if its implementation is not considering Good International Industry Practices (GIIP) especially related to Environmental pollution management (that may be caused by accidental release/spill of UPOPs in air, water and soil), resource efficiency (use of EHSs) and GHG emissions.

Given the nature of project activities and potential risks and impacts described above the environmental risk rating is proposed as "Substantial" at this stage of project preparation. However, these risks/impacts could be avoided with substantial investment on available and reliable mitigatory measures.

## Social Risk Rating      Moderate

As the project aims to assist the country in reducing UPOPs emission through promoting circular economy and improving open dumpsites in the waste sector, the project will overall has positive social impacts on citizens due to the reduction of serious human health impacts associated with these materials including cancer, neurological damage, birth defects, and immune system defects. It is also to be noted that the project activities do not include any land acquisition or expropriation.

However, the project implementation will have some social risks and impacts. Enforcement of waste management improvement measures may require some business to change their current business practices.

The main potential social risks could include the following: i) Local people's resistance. If local people are not well informed, there are potential misperceptions that citizens may have regarding the health and safety concerns associated with the sampling and demonstration activities; ii) community health and safety. As previously mentioned and in general, a large number of industries in Lebanon are situated in urban centers and villages hence demonstration activities taking place in such areas could be a source of alarm and concern for citizens; iii) Potential risks related to labor-induced sexual abuse and exploitation. The sampling and demonstration activities of the project will be associated with the influx of skilled laborers and this number is expected to be low. These skilled laborers will be temporarily housed in rental apartments and there will therefore be no labor camps. However, there is potential for labor-induced sexual abuse and exploitation to occur especially if the extraction activities are taking place in remote areas of the country where there is minimal or limited oversight. This needs to be mitigated and managed at a minimum through the signing of codes of conduct by all project workers. Based on the above, the social risk rating is therefore rated as moderate.

To manage these potential social risks, the inventory of UPOPs, under component 1 of this project will identify their precise locations and where demonstration activities as per component 2 of the project will be carried out. Accordingly, the implementing agency is recommended to conduct active, inclusive and meaningful stakeholder engagement activities throughout project implementation with a robust grievance redress mechanism in place for the project and dedicated PMU staff following up on these aspects. Due to the ongoing COVID19 pandemic, the MoE's PMU will need to ensure implementation of COVID19 preventive measures such as wearing of masks and social distancing and as per the WHO and national guidelines in this regard. In the event of national general mobility restrictions, the PMU can adopt virtual means of consultations following the guidelines of the World Bank's technical note on conducting consultations during times of constraints.

#### Supporting Documents

Upload available ESS supporting documents.

**Title**

**Submitted**

P172770 Concept ESRS

**Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).**

<b>Name</b>	<b>Position</b>	<b>Ministry</b>	<b>Date</b>
Mr. Dimyanos Kattar		MINISTRY OF ENVIRONMENT	3/19/2021

## ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

