PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE

Report No.: PIDC103

Project Name	LB: PCB Management in the Power Sector Project (P122540)
Region	MIDDLE EAST AND NORTH AFRICA
Country	Lebanon
Sector(s)	General industry and trade sector (100%)
Theme(s)	Pollution management and environmental health (100%)
Lending Instrument	Specific Investment Loan
Project ID	P122540
GEF Focal Area	Persistent Organic Pollutants
Borrower(s)	Ministry of Environment
Implementing Agency	Government of Lebanon
Environmental Category	A-Full Assessment
Date PID Prepared/ Updated	31-Jan-2014
Date PID Approved/ Disclosed	31-Jan-2014
Estimated Date of Appraisal Completion	
Estimated Date of Board Approval	20-Nov-2014
Concept Review Decision	

I. Introduction and Context

Country Context

Lebanon is an upper middle-income country, with a per capita gross domestic product (GDP) of US $9,705 in 2012 and a real GDP growth of 4 percent during 1997-2010 . The country is highly urbanized, with more than 85 percent of its 4.4 million people living in cities . It has an open economy, in which services and trade account for 60 percent of GDP and 73 percent of jobs . Though agriculture plays an important role in rural areas, it has a relatively minor role in the economy, contributing only 6 percent of GDP in 2012 .

The economy is driven by a dynamic private sector and is dependent on financial flows from Arab Gulf countries. Despite the significant financial resources, growth and job creation performance are under potential because of several factors, such as the country's macro-economic volatility, distorted product and labor markets, and poor governance. In 2012, the unemployment rate was 11 percent, and was particularly high among women (18 percent) and youth (34 percent) .

More than two years of conflict in Syria has resulted in a very large influx of refugees into Lebanon. According to UNHCR data, as of December 31, 2013, the total number of Syrian refugees reached about 860,000. Most refugees are concentrated in already impoverished area of the Bekaa and North Lebanon. This situation puts an additional strain on public services and resources, such as clean water and sanitation. It also exacerbate an already fragile political and security situation in the county.

Sectoral and Institutional Context

Persistent Organic Pollutants (POPs) are chemical substances that persist in the environment, bio-accumulate through the food web, and pose a risk of causing adverse effects to human health and the environment. They are considered highly toxic, causing birth defects, potential damage to the immune and respiratory systems, and the reproductive system, with women and children being especially vulnerable. The twelve original POPs (known as the "dirty dozen") include nine pesticides (DDT being the best known), polychlorinated biphenyls (PCBs) , and by-products of combustion and other processes, such as dioxins and furans. The Stockholm Convention is the United Nations treaty negotiated to eliminate POPs. Under the Convention, countries commit to reduce and/or eliminate the production, use, and/or release of the 12 POPs . The Republic of Lebanon ratified the Stockholm Convention in 2002 (Law 432) and completed its National Implementation Plan (NIP), with support from UNEP, in accordance with the provisions of the Convention in 2006. At this time, Lebanon was one of the most active countries under the Convention.

According to the NIP, Lebanon's top priorities in POPs management are : i) awareness raising; ii) institutional and regulatory strengthening; iii) PCB management; and iv) management of emissions of dioxins and furans. The Government of Lebanon (GOL) has requested the Bank to execute a GEF-financed project that would deal with the first three priorities (sources of dioxins and furans are not well understood and potentially very expensive to regulate). Accordingly, the Bank prepared a Project Identification Form (PIF), which was approved by the GEF Council in June 2010 and included in GEF's work program. However, it appeared that the work on inventories in the NIP was not adequate for project design and that additional inventory work was needed.

Using funds from the Canadian International Development Agency (CIDA) POPs Trust Fund, the Bank engaged consultants (COWI consortium, Denmark), to undertake a project preparation study with the following main elements: updating and expansion of earlier work on inventories of PCBs and PCB-contaminated equipment and sites; technical studies on cost-effective management and disposal options; and, definition of capacity building needs. This study was completed in May 2011.

In Lebanon, responsibility for environmental management and protection rests with the Ministry of Environment (MOE), which was established in 1993. While basic legislation is in place to regulate hazardous chemicals and emissions of toxic substances into the environment, detailed rules and regulations for POPs in general and PCBs in particular have not yet been drawn up. Importation of PCBs has been banned since 1997 but there is no specific prohibition on the use or disposal of PCBs in the country. Strengthening the regulatory framework with respect to PCBs (and other POPs) is therefore important.

MOE is a relatively young organization with limited funding and staff. While it can handle some basic functions related to public awareness, monitoring, environmental legislation, regulation of

emissions, biodiversity conservation and environmental impact assessment (EIA) – its capacity in the regulation of hazardous chemicals, PCBs in particular, is still quite limited. MOE's experience in the execution of investment projects, especially for hazardous wastes, is also limited.

PCBs in Lebanon are mainly encountered in the electric power sector. Prior to the mid-1990s, they were widely used in power transformers and capacitors at various levels – power stations, sub-stations and distribution transformers. Most of this equipment is owned by Electricité du Liban (EDL), the state-owned power utility, but some are owned by some smaller private distribution utilities and by major power consumers, such as industries or hospitals. The recently completed inventory covers all these sources but is less complete with respect to private industry.

Risks of environmental contamination from PCBs come from thre e major sources: a) equipment manufactured with PCBs as dialectics; b) equipment containing oil that is contaminated with PCBs; and c) sites contaminated from leaking oil containing PCBs. Each source requires a different set of management and disposal methods.

Public awareness of the risks of PCB exposure is generally low, even among power sector employees.

Relationship to CAS

The Country Partnership Strategy (CPS) for FY11 to FY14 is dated July 28, 2010. The main objective of the CPS is to support the GOL in putting the Lebanese economy on a path to sustained, high and broad-based economic growth which is critical for Lebanon to continue to improve its fiscal and debt sustainability; create employment; provide adequate infrastructure and social services and support social inclusion. The CPS notes that GOL's 2009 Economic and Social Development Plan aims, inter alia, to modernize public administration and improve infrastructure, while safeguarding the environment. Electric power – the focus for the proposed project - is a priority sector.

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II. Proposed Development Objective(s)

Proposed Global Environmental Objective(s) (From PCN)

The global environmental objective (GEO) is to strengthen Lebanon's technical and managerial capacity for minimizing human and environmental exposure to polychlorinated biphenyls (PCBs).

Key Results (From PCN)

It is proposed that project performance be measured through the following key indicators:

a) The capacity of MOE, EDL and any involved other parties has been strengthened to the point where they can monitor, regulate, manage, and dispose of PCBs and PCB-contaminated equipment and sites in a sustainable manner and without further external assistance.

b) A legal and regulatory framework is in place that is fully adequate to prevent the import, manufacture and sale of PCBs and PCB-contaminated equipment and ensures that known sources of PCBs and PCB contamination (including those held by the private sector) are managed and disposed of in a safe and environmentally sound manner.

c) A complete and up-to-date inventory and database of PCBs in Lebanon is available, allowing any remaining stocks to be tracked. The project preparation study already provides a reasonably

complete inventory of PCBs stocks and contaminated sites; this database would be completed, especially with respect to private sector sources and any unknown stocks, in the course of the project, in a user-friendly electronic form.

d) The implementing agencies have demonstrated competence in the sustainable management and disposal of PCB stocks and PCB-contaminated equipment, ensuring that all known sources which pose a high risk to human health and the environment have been safely disposed of and that methods for the management and disposal of all other (medium and low risk) sources have been successfully demonstrated.

e) Site remediation has been completed at both sites posing high risks to human health and the environment and methods have been demonstrated that can be applied to other PCB-contaminated sites.

III. Preliminary Description

Concept Description

The proposed project is likely to have the following components:

Component 1: Institutional and Regulatory Strengthening and Project Management
This component is likely to include: draft a POPs Management Decree, with implementing guidelines for PCB management; strengthen the capacity of MOE for managing the disposal of PCBs; and training for MOE and EDL staff.

Component 2: Management and Disposal of PCBs and PCB-Contaminated Equipment
This component is likely to include: the identification, safeguarding and disposal of high-content PCB out-of-service equipment. [High-content PCB transformers have been identified at three sites and high-content PCB capacitors at nine sites. Under the project, this equipment would be transported to the Bauchrieh site for repacking in UN-approved containers, storage and export to a certified disposal facility]. The expected volume is 49 tons of equipment, containing about 12 tons of PCB and is classified as High Risk.

Component 3: Management of PCB-Contaminated Sites
It is suggested to also explore the feasibility of remediating one site (either the Bauchrieh workshop or the Well); but this task will need to be further analyzed during the project appraisal.

IV. Safeguard Policies that might apply

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01	×		
Natural Habitats OP/BP 4.04		×	
Forests OP/BP 4.36		×	
Pest Management OP 4.09		×	
Physical Cultural Resources OP/BP 4.11		×	
Indigenous Peoples OP/BP 4.10		×	
Involuntary Resettlement OP/BP 4.12			×
Safety of Dams OP/BP 4.37		×	

Projects on International Waterways OP/BP 7.50		x	
Projects in Disputed Areas OP/BP 7.60		x	

V. Financing (in USD Million)

Total Project Cost:	7.54	Total Bank Financing:	0.00
Financing Gap:	0.00		

Financing Source	Amount
Borrower	5.00
Global Environment Facility (GEF)	2.54
Total	7.54

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