

PROJECT INFORMATION DOCUMENT (PID) APPRAISAL STAGE

Report No.: PIDA8595

Project Name	LB: PCB Management in the Power Sector Project (P122540)
Region	MIDDLE EAST AND NORTH AFRICA
Country	Lebanon
Sector(s)	General energy sector (100%)
Theme(s)	Pollution management and environmental health (100%)
Lending Instrument	Investment Project Financing
Project ID	P122540
GEF Focal Area	Persistent Organic Pollutants
Borrower(s)	Government of Lebanon
Implementing Agency	Ministry of Environment
Environmental Category	A-Full Assessment
Date PID Prepared/Updated	20-Oct-2014
Date PID Approved/Disclosed	21-Oct-2014
Estimated Date of Appraisal Completion	15-Aug-2014
Estimated Date of Board Approval	21-Nov-2014
Decision	

I. Project Context

Country Context

Lebanon is a small country known for its complex political situation and its talent in banking, education, and engineering. It is an upper middle-income country of 4.4 million people and an average estimated GDP per capita of US\$9,928 in 2013. Lebanon has an open and service-oriented economy, in which services and trade account for 73.3 percent of gross domestic product (GDP) and 73 percent of jobs. Industry contributes 14.8 percent of the GDP. The economy is driven by a dynamic private sector and is supported by remittances and other financial flows including from Arab Gulf countries. Lebanon invests heavily in human capital; worldwide, it ranks the 10th in the overall quality of education and the 4th in science and math.

Lebanon's economy slowed down after 2011, primarily due to regional turmoil, political uncertainty and security incidents. After growing by an average of 9.2 percent in the four years through 2010, real GDP growth decreased to 2 percent in 2011 with estimated subsequent growth rates of 2.2 percent in 2012, 0.9 percent in 2013 and forecasted 1.5 percent in 2014. The slowdown occurred primarily in the sectors of tourism, services, exports and construction. Moreover, the ongoing conflict in Syria resulted in 1.14 million refugees (UNHCR 9 October 2014 total people of concern) or an additional 27 percent of the population in Lebanon prior to the crisis. This situation puts an

additional strain on public services and resources. It also had a negative impact on investor and consumer confidence and disrupted trade routes for imports and exports of goods. In the near future, key risks include the uncertainties linked to the November 2014 parliamentary elections and additional spillovers from the Syrian civil war.

Lebanon made considerable progress in shaping the legal and institutional framework and restoring infrastructure after the wars. However, the country is still at an early stage of transition to environmental sustainability. The country ranks the 91 out of 178 countries according to the 2014 Environmental Performance Index. Its physical and natural assets are declining over time, as shown by a negative trend of Adjusted Net Savings during 2005-2010.

Based on the World Bank Lebanon Country Environmental Analysis, the cost of environmental degradation in Lebanon has been estimated at US\$800 million, or 3.7 percent of the country's GDP in 2005. Water and air pollution are the major environmental problems in the country, and are substantially caused by industrial pollution. In addition, solid waste continues to be a serious issue, with more than 700 open dumps used by the municipalities, where some of the waste is still burned. Though the adverse impacts of industrial pollution are lower than those of other highly industrialized countries in the region (e.g. Egypt), growing industrial activities are putting increasing pressure on Lebanon's environment and human health.

Sectoral and institutional Context

The use of chemicals grew over time in Lebanon, particularly in industry and agriculture. Many of them include Persistent Organic Pollutants (POPs), which are chemical substances that persist in the environment, bio-accumulate through the food web, and can cause adverse effects to human health and the environment. Among the POPs, Polychlorinated Biphenyls (PCBs) are a group of organic compounds used in the manufacture of plastics, as lubricants, dielectric fluids in transformers, protective coating for wood, etc. Exposure to PCBs is believed to cause cancer in humans and animals. In 2001, the Stockholm Convention on POPs was adopted with the aim of eliminating or restricting the production and use of POPs - including PCBs.

Recognizing the importance of the issue, the Government of Lebanon (GOL) signed the Stockholm Convention on POPs on May 22, 2001 and became Party to the Stockholm Convention on January 3, 2003 (Law 432). The country completed its National Implementation Plan (NIP) in accordance with 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. Lebanon also signed and ratified the Basel Convention on the control of Trans-boundary Movement of Hazardous Wastes in 1994.

In addition, the GOL made significant efforts to regulate the hazardous waste sector. In 2009, the Ministry of Environment (MOE) prepared a draft decree related to the management of hazardous waste. The decree has yet to be finalized and enacted by the Council of Ministers. In addition, the country banned imports and exports of PCBs (Decree 4461/2000) and enacted laws to preserve the environment against pollution from hazardous waste and PCBs (Law 64/1988), and to increase the safety conditions of workers while using chemical products (Decree 11802/2004). The GOL prepared also the Solid Waste Law, endorsed by the Council of Ministers on January 10, 2012, which defines the institutional and legal framework to organize the management of solid waste.

While basic legislation to regulate hazardous chemicals is in place, legal gaps include: no explicit regulation for PCB management and the phase-out of PCB-containing equipment; lack of classification and adequate packaging and labeling requirements for PCB and PCB-containing equipment; no formal protocols in place between government bodies to ban PCB imports and the movement of PCB material in-country; gaps on basic aspects of waste management, such as the absence of key definitions and principles on PCB and other hazardous waste management, and licensing for environmentally sound disposal/destruction of PCB-containing equipment (COWI, 2011). Strengthening the legal and regulatory framework with respect to PCBs is important.

The Ministry of Environment is in charge of environmental management and protection and has the specific mandate of regulating hazardous substances, including POPs. Established in 1993, the MOE has experience in handling public awareness, monitoring, environmental legislation, emissions regulation, biodiversity conservation and environmental impact assessment (EIA). It also has substantial capacity in planning and executing international projects. However, the MOE has almost no experience in PCB management. Its ability to monitor compliance with relevant laws and regulations is also limited, due to understaffing. Thus, it is important to strengthen MOE's technical capacity, particularly related to PCB management.

The Electricité du Liban (EDL) owns most PCB equipment in Lebanon. EDL is an autonomous state-owned entity under the jurisdiction of the Ministry of Energy and Water (MOEW). It has exclusive authority to produce, transport and distribute electricity in Lebanon. A survey of the PCB equipment and contaminated sites carried out in 2010 reveals that EDL possesses high-content PCB equipment (29 Askarel transformers and 495 PCB capacitors) and contaminated transformers (2,800). In addition, the Bauchrieh storage site and well are widely contaminated with PCB. The private sector appears to hold a relatively small amount of PCB-containing equipment, i.e. about 5 tons of PCB capacitors.

Risks of environmental contamination from PCBs come from three major sources: PCBs containing equipment; equipment containing contaminated oil; and sites contaminated from leaking oil contaminated with PCBs. The GOL has recognized the urgent need of implementing environmentally sound management of PCBs according to international best practices. The proposed project will support achieving the objectives and targets laid out in the NIP. It will conduct an inventory of PCB contaminated equipment found in the electricity sector and will dispose of high content PCB equipment and contaminated oil in an environmentally sound manner.

II. Proposed Development Objectives

The proposed GEO/PDO is to dispose of high risk PCBs and improve the inventory management of transformers in the power sector in an environmentally sound manner.

III. Project Description

Component Name

Component 1: Inventory of PCB contaminated transformers

Comments (optional)

Component Name

Component 2: Disposal of high content PCB equipment and contaminated oil

Comments (optional)

Component Name

Component 3: Capacity building and project management

Comments (optional)**IV. Financing (in USD Million)**

Total Project Cost:	2.54	Total Bank Financing:	0.00
Financing Gap:	0.00		
For Loans/Credits/Others			Amount
Borrower			0.00
Global Environment Facility (GEF)			2.54
Total			2.54

V. Implementation**VI. Safeguard Policies (including public consultation)**

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	x	
Natural Habitats OP/BP 4.04		x
Forests OP/BP 4.36		x
Pest Management OP 4.09		x
Physical Cultural Resources OP/BP 4.11		x
Indigenous Peoples OP/BP 4.10		x
Involuntary Resettlement OP/BP 4.12		x
Safety of Dams OP/BP 4.37		x
Projects on International Waterways OP/BP 7.50		x
Projects in Disputed Areas OP/BP 7.60		x

Comments (optional)**VII. Contact point****World Bank**

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