# Implementation Status & Results Report

## LB: PCB Management in the Power Sector Project (P122540)

MIDDLE EAST AND NORTH AFRICA | Lebanon | Environment & Natural Resources Global Practice  |

Implementing Agencies: Government of Lebanon, Ministry of Environmenta

## Key Dates

**Key Project Dates**

<table>
<thead>
<tr>
<th>Date Type</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Approval Date</td>
<td>21-Nov-2014</td>
</tr>
<tr>
<td>Effectiveness Date</td>
<td>30-Mar-2015</td>
</tr>
<tr>
<td>Planned Mid Term Review Date</td>
<td>10-Oct-2018</td>
</tr>
<tr>
<td>Actual Mid-Term Review Date</td>
<td>--</td>
</tr>
<tr>
<td>Original Closing Date</td>
<td>30-Jun-2020</td>
</tr>
<tr>
<td>Revised Closing Date</td>
<td>30-Jun-2020</td>
</tr>
</tbody>
</table>

## Global Development Objectives

Global Environmental Objective (from Project Appraisal Document)

The objective of the Project is to dispose of high risk PCBs and improve the inventory management of transformers in the power sector in an environmentally sound manner.

Has the Global Environmental Objective been changed since Board Approval of the Project Objective?

No

## Components

<table>
<thead>
<tr>
<th>Name</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component 1: Inventory of PCB contaminated transformers</td>
<td>(Cost $0.79 M)</td>
</tr>
<tr>
<td>Component 2: Disposal of high content PCB equipment and contaminated oil</td>
<td>(Cost $1.10 M)</td>
</tr>
<tr>
<td>Component 3: Capacity building and project management</td>
<td>(Cost $0.65 M)</td>
</tr>
</tbody>
</table>

## Overall Ratings

<table>
<thead>
<tr>
<th>Name</th>
<th>Previous Rating</th>
<th>Current Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress towards achievement of PDO</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Overall Implementation Progress (IP)</td>
<td>Satisfactory</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>Overall Risk Rating</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

## Implementation Status and Key Decisions
PHISO

Risks

Systematic Operations Risk-rating Tool

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Rating at Approval</th>
<th>Previous Rating</th>
<th>Current Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political and Governance</td>
<td>--</td>
<td>● High</td>
<td>● High</td>
</tr>
<tr>
<td>Macroeconomic</td>
<td>--</td>
<td>● Moderate</td>
<td>● Moderate</td>
</tr>
<tr>
<td>Sector Strategies and Policies</td>
<td>--</td>
<td>● Low</td>
<td>● Low</td>
</tr>
<tr>
<td>Technical Design of Project or Program</td>
<td>--</td>
<td>● Substantial</td>
<td>● Substantial</td>
</tr>
<tr>
<td>Institutional Capacity for Implementation and Sustainability</td>
<td>--</td>
<td>● Substantial</td>
<td>● Substantial</td>
</tr>
<tr>
<td>Fiduciary</td>
<td>--</td>
<td>● Substantial</td>
<td>● Substantial</td>
</tr>
<tr>
<td>Environment and Social</td>
<td>--</td>
<td>● Substantial</td>
<td>● High</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>--</td>
<td>● Moderate</td>
<td>● Moderate</td>
</tr>
<tr>
<td>Other</td>
<td>--</td>
<td>● Substantial</td>
<td>● Substantial</td>
</tr>
<tr>
<td>Overall</td>
<td>--</td>
<td>● Substantial</td>
<td>● Substantial</td>
</tr>
</tbody>
</table>

Results

Global Environmental Objective Indicators

- Direct project beneficiaries (Number, Custom)

<table>
<thead>
<tr>
<th>Value</th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>26-Jun-2014</td>
<td>12-Jun-2017</td>
<td>31-May-2018</td>
<td>01-Jan-2020</td>
</tr>
</tbody>
</table>

Comments
Achieved. The PMU has provided a table with details on locations of disposed PCB contaminated equipment and waste (91 tons) and the number of EDL workers and residents as the project beneficiaries. This number will be increased further when the second shipment of the PCB waste for disposal (about 230 tons) is completed. The end target was under estimated at appraisal and has been surpassed. The percentage for female beneficiaries is estimated at 50%.
### Female beneficiaries (Percentage, Custom Supplement)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>31.00</td>
<td>50.00</td>
<td>50.00</td>
</tr>
</tbody>
</table>

### POPs&pops waste destroyed, disposed or contained in environmentally sound manner (Metric ton, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>91.00</td>
<td>91.00</td>
<td>300.00</td>
</tr>
<tr>
<td>Date</td>
<td>01-Jan-2015</td>
<td>12-Jun-2017</td>
<td>31-May-2018</td>
<td>01-Jan-2020</td>
</tr>
</tbody>
</table>

**Comments**
- 30% Achieved. For the first 91 tons which were repackaged, transported, exported and brought to the incineration facility in France, all disposal certificates have been received. The second and remaining tender for destruction of PCB waste will be initiated in July 2018 based on the completed PCB inventory.
- The results video of the first repackaging and export is below.
- The second batch of PCB waste of about 230 tons has been identified and the PMU is now revising the bidding document for it.

### EDL transformers recorded in the inventory (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>2,215.00</td>
<td>22,455.00</td>
<td>21,000.00</td>
</tr>
<tr>
<td>Date</td>
<td>01-Jan-2015</td>
<td>12-Jun-2017</td>
<td>31-May-2018</td>
<td>01-Jan-2020</td>
</tr>
</tbody>
</table>

**Comments**
- 107% Achieved. The PMU completed the field work on 19 May 2018 (which is the collection of samples from transformers and putting white labels) and surveyed a total of 22,455 transformer (the end target is 21,000). The PMU is now finalizing the laboratory testing of the samples.
## Overall Comments

### Intermediate Results Indicators

#### Contract for Inventory signed (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>--</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Date</td>
<td>01-Jan-2015</td>
<td>--</td>
<td>30-Nov-2016</td>
<td>01-Jan-2016</td>
</tr>
</tbody>
</table>

**Comments**
Achieved. The contract for inventory of PCB transformers was signed in Oct. 2016 and will be completed in late 2018.

#### Contract for First Shipment and Disposal of PCB signed (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>0.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Date</td>
<td>01-Jan-2015</td>
<td>11-Feb-2015</td>
<td>13-Sep-2016</td>
<td>01-Jun-2016</td>
</tr>
</tbody>
</table>

**Comments**
Achieved. The contract for First Shipment and Disposal of PCB waste was signed in March 2016 and completed in 2017.

#### Client days of training provided (number) (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>--</td>
<td>587.00</td>
<td>700.00</td>
</tr>
<tr>
<td>Date</td>
<td>01-Jan-2015</td>
<td>--</td>
<td>31-May-2018</td>
<td>01-Jan-2020</td>
</tr>
</tbody>
</table>

**Comments**
According to the Core Sector Indicator, the definition of this indicator is "This indicator measures the number of client days of training provided i.e. the number of clients who completed training multiplied by the duration of training expressed in days". So the end target had been wrongly determined and entered before due to a possible misunderstanding of this indicator (for the number of days only).
Based on PMU data on the number of days of each training and the number of participants provided recently, the amount of training days is a total of 33 days with a total of 391 participants (among which 164 are female). And this indicator is recalculated as 587 client days by May 31, 2018. The end target is revised as 700 (290 for female) with the PMU's best estimation. The final actual numbers will be provided in the ICR. This change will be reflected in the MTR, and it does not warrant a project restructuring.

Trainings and workshops have been provided/organized to the PMU, MOE, EDL, Concessions, Academic sectors, Government institutions, consultancy firms, technical officers and laboratories on PCB inventory and management, hazardous waste management in the light of the experience of the Lebanese and Arab countries, environmental safeguard activities related to disposal of PCB equipment and waste, which are very useful for technical and management capacity building.

| Client days of training provided - Female (number) (Number, Custom Breakdown) |
|---------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------|
| Baseline                        | Actual (Previous)            | Actual (Current)              | End Target                   |
| Value                           | 0.00                          | 31.00                         | 253.00                       | 290.00            |
| Date                            | 01-Jan-2015                   | 13-Sep-2016                   | 31-May-2018                  | 01-Jan-2020       |

Overall Comments

Data on Financial Performance

Disbursements (by loan)

<table>
<thead>
<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Currency</th>
<th>Original</th>
<th>Revised</th>
<th>Cancelled</th>
<th>Disbursed</th>
<th>Undisbursed</th>
<th>Disbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td>P122540</td>
<td>TF-18030</td>
<td>Effective</td>
<td>USD</td>
<td>2.54</td>
<td>2.54</td>
<td>0.00</td>
<td>1.47</td>
<td>1.07</td>
<td>58%</td>
</tr>
</tbody>
</table>

Key Dates (by loan)

<table>
<thead>
<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Approval Date</th>
<th>Signing Date</th>
<th>Effectiveness Date</th>
<th>Orig. Closing Date</th>
<th>Rev. Closing Date</th>
</tr>
</thead>
</table>

Cumulative Disbursements
Restructuring History

There has been no restructuring to date.

Related Project(s)

There are no related projects.