LB-Environmental Pollution Abatement Project (P143594)

Key Dates

**Key Project Dates**

- Bank Approval Date: 01-Aug-2014
- Effectiveness Date: 28-Jan-2016
- Planned Mid Term Review Date: 30-Mar-2017
- Actual Mid-Term Review Date: 11-Apr-2018
- Original Closing Date: 31-Mar-2021
- Revised Closing Date: 31-Mar-2021

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The development objectives of the project are to assist the Borrower in: (a) reducing industrial pollution in targeted Industrial Enterprises; and (b) strengthening the monitoring and enforcement capabilities of the MOE.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

Components

<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Technical Assistance (parallel financing):(Cost $3.00 M)</td>
</tr>
<tr>
<td>B.</td>
<td>Investment Sub-projects (IBRD):(Cost $15.00 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>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
</tr>
<tr>
<td>Overall Implementation Progress (IP)</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
</tr>
<tr>
<td>Overall Risk Rating</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

Implementation Status and Key Decisions

The project was ratified by Parliament on November 13, 2015 and became effective on January 28th, 2016. In spite of delays in the early stages of implementation since effectiveness in 2016, the project has been able to build a strong pipeline of sub-projects during the course of the 2018 and 2019 calendar years. To date eight sub-projects are signed and in various stages of implementation. Total disbursements amount to US$10.6 million (71% of project amount). The pipeline includes six more potential sub-projects totaling approximately US$7.0 million—which actually exceeds the current project amount.
## 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>● Moderate</td>
<td>● Moderate</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>● Moderate</td>
<td>● Moderate</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>● High</td>
<td>● High</td>
</tr>
<tr>
<td>Fiduciary</td>
<td>--</td>
<td>● Moderate</td>
<td>● Moderate</td>
</tr>
<tr>
<td>Environment and Social</td>
<td>--</td>
<td>● Moderate</td>
<td>● Moderate</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>--</td>
<td>● High</td>
<td>● High</td>
</tr>
<tr>
<td>Other</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Overall</td>
<td>--</td>
<td>● Substantial</td>
<td>● Substantial</td>
</tr>
</tbody>
</table>

## Results

**PDO Indicators by Objectives / Outcomes**
### Reducing industrial pollution in targeted Industrial Enterprises

<table>
<thead>
<tr>
<th>▶ Industrial waste reduced under the project in the targeted enterprises (Percentage, Custom)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td>0.00</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Comments:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>▶ Particulate Matter reduction achieved under the project in the targeted enterprises (Percentage, Custom)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td>0.00</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Comments:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>▶ BOD/COD reduction achieved under the project in the targeted enterprises (Percentage, Custom)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td>0.00</td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Comments:</td>
</tr>
</tbody>
</table>

### Strengthening the monitoring and enforcement capabilities of the MOE

<table>
<thead>
<tr>
<th>▶ Increase in number of non-compliant operational enterprises addressed in letters from MOE to MOI/ Ministry of interior and municipalities, governors-municipalities and environmental prosecutors (Percentage, Custom)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline</strong></td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Comments:</td>
</tr>
</tbody>
</table>
Based on the number of enforcement letters sent to non-compliant industries has seen an increase in such correspondence being communicated, due to strengthened capacity of the Ministry of Environment in their monitoring and enforcement. Baseline 2017: 62 letters Total letters issued from January 2018 till 15 May 2019: 117 letters This measures the increase in the number of non-compliant operational enterprises addressed in letters from MOE to MOI/ Ministry of interior and municipalities, governors-municipalities, environmental prosecutors to measure strengthened capacity for enforcement. These letters have specific recommendations on actions and deadlines to bring enterprises into compliance with EMP, permitting or compliance decree. Since MOE actually does not impose penalties, fines, closure etc. they can only make recommendations to the environmental prosecutors, Governor, or MOI. A baseline will be taken now of the number of action letters sent in a year.

**Intermediate Results Indicators by Components**

**Component A – Technical Assistance**

**Guidelines and tools for environmental monitoring/compliance for specific industrial sectors developed (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>0.00</td>
<td>8.00</td>
<td>8.00</td>
<td>9.00</td>
<td></td>
</tr>
<tr>
<td>01-Aug-2014</td>
<td>17-Dec-2018</td>
<td>02-Aug-2019</td>
<td>31-Mar-2021</td>
<td></td>
</tr>
</tbody>
</table>

**Comments:** Guidelines for the following sectors have been completed: Slaughterhouse, Meat processing, Dairy Industry, Cattle Farm, Cement Mixing, Asphalt Mixing, Cutting Stone, Cement Blocks

**People trained on environmental compliance/ monitoring/ enforcement and awareness (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>0.00</td>
<td>55.00</td>
<td>156.00</td>
<td>100.00</td>
<td></td>
</tr>
<tr>
<td>01-Aug-2014</td>
<td>17-Dec-2018</td>
<td>02-Aug-2019</td>
<td>31-Mar-2021</td>
<td></td>
</tr>
</tbody>
</table>
Industrial database including monitoring, permitting, and enforcement data operational (Yes/No, 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>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Date</td>
<td>01-Aug-2014</td>
<td>17-Dec-2018</td>
<td>02-Aug-2019</td>
<td>31-Mar-2021</td>
</tr>
<tr>
<td>Comments:</td>
<td>Initiated but not yet complete</td>
<td></td>
<td></td>
<td></td>
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</table>

Component B – Investments (Sub-projects)

Participating banks lending to enterprises (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>3.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Date</td>
<td>01-Aug-2014</td>
<td>17-Dec-2018</td>
<td>02-Aug-2019</td>
<td>31-Mar-2021</td>
</tr>
<tr>
<td>Comments:</td>
<td>Audi, Fransabank, Byblos, Bank Med</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Enterprises that benefit from LEPAP environmental services (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>48.00</td>
<td>55.00</td>
<td>40.00</td>
</tr>
<tr>
<td>Date</td>
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<td>17-Dec-2018</td>
<td>02-Aug-2019</td>
<td>31-Mar-2021</td>
</tr>
</tbody>
</table>

Sub-loans issued to enterprises for pollution reduction (Amount(USD), Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
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</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>6.48</td>
<td>10.60</td>
<td>14.96</td>
</tr>
<tr>
<td>Date</td>
<td>01-Aug-2014</td>
<td>17-Dec-2018</td>
<td>02-Aug-2019</td>
<td>31-Mar-2021</td>
</tr>
</tbody>
</table>

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>P143594</td>
<td>IBRD-84100</td>
<td>Effective</td>
<td>USD</td>
<td>15.00</td>
<td>15.00</td>
<td>0.00</td>
<td>10.67</td>
<td>4.33</td>
<td>71%</td>
</tr>
</tbody>
</table>

Key Dates (by loan)
### Project Details

<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

![Cumulative Disbursements Graph]

### Restructuring History

Level 2 Approved on 29-Jun-2018

### Related Project(s)

P172032-Lebanon Environmental Pollution Abatement Project Additional Financing