



## LB-Environmental Pollution Abatement Project (P143594)

MIDDLE EAST AND NORTH AFRICA | Lebanon | Environment, Natural Resources & the Blue Economy Global Practice | IBRD/IDA | Investment Project Financing | FY 2015 | Seq No: 11 | ARCHIVED on 05-Sep-2019 | ISR38176 |

Implementing Agencies: Ministry of Finance, Ministry of Environment, Central Bank

### 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

Name

A.

Technical Assistance (parallel financing):(Cost \$3.00 M)

B.

Investment Sub-projects (IBRD):(Cost \$15.00 M)

### Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	● Moderately Satisfactory	● Moderately Satisfactory
Overall Implementation Progress (IP)	● Moderately Satisfactory	● Moderately Satisfactory
Overall Risk Rating	● Substantial	● Substantial

### 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

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	● Moderate	● Moderate
Macroeconomic	--	● Moderate	● Moderate
Sector Strategies and Policies	--	● Moderate	● Moderate
Technical Design of Project or Program	--	● Substantial	● Substantial
Institutional Capacity for Implementation and Sustainability	--	● High	● High
Fiduciary	--	● Moderate	● Moderate
Environment and Social	--	● Moderate	● Moderate
Stakeholders	--	● High	● High
Other	--	--	--
Overall	--	● Substantial	● Substantial

## Results

### PDO Indicators by Objectives / Outcomes



Reducing industrial pollution in targeted Industrial Enterprises				
▶Industrial waste reduced under the project in the targeted enterprises (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	50.00
Date	01-Aug-2014	17-Dec-2018	02-Aug-2019	31-Mar-2021
Comments:	<p>From the disbursed projects as of the 24 May 2019, one project - Wilco Rendering Facility has been constructed and will treat 100% of the waste from the facility. Since there is only one project in the current pipeline dealing with this type of waste, the percentage is 100%.                      Moved from intermediate level to PDO level to measure industrial waste reduction outcomes and wording modified to remove 'municipal'. Since the pipeline is not defined at this time, a 50% overall pollution reduction is proposed for the target instead of absolute number of tons.</p>			
▶Particulate Matter reduction achieved under the project in the targeted enterprises (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	30.00	80.00	50.00
Date	01-Aug-2014	06-Dec-2018	02-Aug-2019	31-Mar-2021
Comments:	<p>The sub-projects of Ciment de Sibline and Cimenterie Nationale are not operational yet. This indicator takes into account the operational sub-projects of Zinaline, Sicomo and Cimenterie Nationale (Kiln no.4) only. The total dust emissions resulting from Zinaline, Sicomo and Cimenterie Nationale (Kilns No. 4) before the implementation of the sub-projects was around 287.09 t/y. The total dust emissions resulting from the mentioned sub-projects after their implementation are around 57.06 t/y. The total emissions reduction is equivalent to 230.03 t/y (~ 80.1%).                      This indicator was refined to make it outcome oriented to measure pollution reduction impact. Since the pipeline was not defined at that time, a 50% overall pollution reduction was proposed for the target instead of absolute number of tons.</p>			
▶BOD/COD reduction achieved under the project in the targeted enterprises (Percentage, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	50.00
Date	01-Aug-2014	06-Dec-2018	02-Aug-2019	31-Mar-2021
Comments:	<p>WWTPs of Kassatly Chtaura and Liban Lait are not operational yet; However, the following should be noted : (1) The total BO D levels currently generated by the mentioned industries is 13,629 kg/d and the total load reduced is estimated at 13,599 kg/d. This would result in a reduction of 99.7% once the WWTPs are operational. (2) The total COD levels generated by both companies is 20,837 kg/d and the total load reduced is estimated at 20,687 kg/d. This would result in a 99.2% reduction once the WWTPs are operational.</p>			

Strengthening the monitoring and enforcement capabilities of the MOE				
▶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)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	50.00
Date	01-Aug-2014	06-Dec-2018	02-Aug-2019	31-Mar-2021
Comments:				

Value	0.00	55.00	88.00	50.00
Date	01-Aug-2014	06-Dec-2018	02-Aug-2019	31-Mar-2021
Comments:	<p>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.</p>			
<b>►Enterprises financed through the project aiming towards the environmental compliance Decree no. 8471-2012 (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	5.00	7.00	10.00
Date	01-Aug-2014	06-Dec-2018	02-Aug-2019	31-Mar-2021
Comments:	<p>Based on the current disbursement, there are 7 enterprises that are signed and either completed or under implementation. Namely, Wilco, Cimenterie Nationale, Sicomo, Kassatly Chtaura, Zinaline, Liban Lait and Cimenterie de Sibline have sub-loans agreement signed and disbursed from the WB accounts The indicator indicates that these are enterprises that are working towards complying with the decree and may not necessarily receive the Environmental Compliance Certificate (ECC). Target is also revised to a more realistic number.</p>			

### Intermediate Results Indicators by Components

<b>Component A – Technical Assistance</b>				
<b>►Guidelines and tools for environmental monitoring/compliance for specific industrial sectors developed (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	8.00	8.00	9.00
Date	01-Aug-2014	17-Dec-2018	02-Aug-2019	31-Mar-2021
Comments:	<p>Guidelines for the following sectors have been completed: Slaughterhouse, Meat processing, Dairy Industry, Cattle Farm, Cement Mixing, Asphalt Mixing, Cutting Stone, Cement Blocks</p>			
<b>►People trained on environmental compliance/ monitoring/ enforcement and awareness (Number, Custom)</b>				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	55.00	156.00	100.00
Date	01-Aug-2014	17-Dec-2018	02-Aug-2019	31-Mar-2021



► Industrial database including monitoring, permitting, and enforcement data operational (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	01-Aug-2014	17-Dec-2018	02-Aug-2019	31-Mar-2021
Comments:	Initiated but nit yet complete			

Component B – Investments (Sub-projects)				
► Participating banks lending to enterprises (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	3.00	4.00	4.00
Date	01-Aug-2014	17-Dec-2018	02-Aug-2019	31-Mar-2021
Comments:	Audi, Fransabank, Byblos, Bank Med			
► Enterprises that benefit from LEPAP environmental services (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	48.00	55.00	40.00
Date	01-Aug-2014	17-Dec-2018	02-Aug-2019	31-Mar-2021
► Sub-loans issued to enterprises for pollution reduction (Amount(USD), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	6.48	10.60	14.96
Date	01-Aug-2014	17-Dec-2018	02-Aug-2019	31-Mar-2021

## Data on Financial Performance

### Disbursements (by loan)

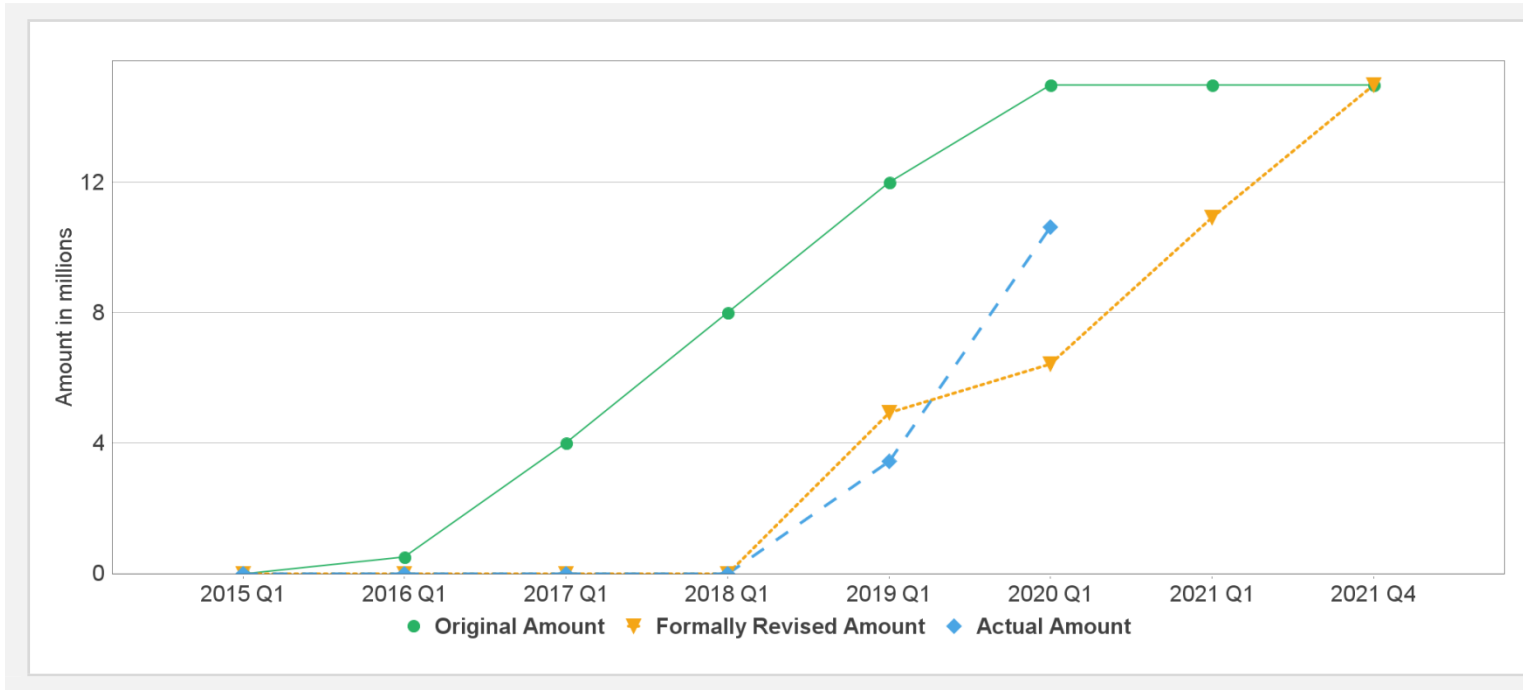
Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P143594	IBRD-84100	Effective	USD	15.00	15.00	0.00	10.67	4.33	71%

### Key Dates (by loan)



Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P143594	IBRD-84100	Effective	01-Aug-2014	24-Oct-2014	28-Jan-2016	31-Mar-2021	31-Mar-2021

### Cumulative Disbursements



### Restructuring History

Level 2 Approved on 29-Jun-2018

### Related Project(s)

P172032-Lebanon Environmental Pollution Abatement Project Additional Financing