

EDC PROJECT REVIEW SUMMARY: Alba – Line 6 Expansion Project

Project Description	Alba - Line 6 Expansion Project
Sponsors	Aluminium Bahrain B.S.C.
Country	Bahrain
Project Category	A
Canadian Exporter(s)	Various Canadian Exporters
Description of capital goods and/or services	Sale of Various Canadian Goods and Services
EDC Product	Guarantee
Date of publication on EDC's website (dd/mm/yy)	07/03/2018
Date of Signing (dd/mm/yy)	17/10/2018

Project Categorization

The Project consists of the construction, commissioning and operation of an expanded aluminum smelter owned by Aluminium Bahrain B.S.C. (Alba) together with a new 1,792 MW gas fired combined cycle power plant and the expansion of a dedicated port facility. When fully operational in 2019, Alba will become the largest single-site aluminum smelter in the world; increasing Alba's aluminum production by 53% (from 981,016 tonnes of aluminum per annum to a forecast output of 1,500,000 metric tonnes upon the full ramp-up). The Project is being implemented by three separate engineering, procurement and construction (EPC) contractors under the overall supervision of Alba as follows: the new aluminum refining facility ("Potline 6") by International Bechtel Company Ltd; the Power Station 5 ("PS 5") by General Electric Global Parts & Products and Gama Power Systems Engineering and Contracting Inc ("GE-Gama" consortium); and the Power Distribution System by Siemens LLC.

The Project was classified as Category A. (Category definitions can be found [here](#).)

Summary of EDC's Review

EDC reviewed the Project in accordance with our *Environmental and Social Review Directive* and has determined that the Project has been designed in compliance with applicable host country environmental requirements. The project is expected to be designed and operated in accordance with the objects of the relevant IFC Performance Standards over a reasonable period of time through implementation of time-bound commitments made in the Environmental and Social Action Plan (ESAP). To reach this conclusion, EDC reviewed the Project's Environmental and Social Impact Assessment, an Independent Environmental and Social Consultant report, and various independent due diligence reports and project management plans.

Key environmental and social issues associated with the project, and related mitigation measures reviewed by EDC include, but are not limited to, the following:

Labour and Working Conditions: Alba estimates that 12,000 (direct and contractors) workers will be deployed for construction of the expansion at its peak, 80% of which will be considered foreign workers or Third-Party Nationals (TPNs). Working conditions and accommodations of TPNs are considered key risks for this project. The Project's contractors are responsible for the recruitment of the workforce for their specific project component and can use services of recruitment agencies for the recruitment of TPNs.

Mitigation Measures Include: Controls are in place to ensure that labour standards are enforced. Contractors must only use accredited local recruitment companies to recruit TPN workers; forbid the use of recruitment and other fees; and TPNs are to retain access to their passport. Monthly payroll audits are conducted to ensure that (sub) contractors pay workers' wages in full and no illegal fees are deducted from salaries. Workers accommodation facilities are inspected monthly by contractors and on a quarterly basis by Alba to confirm on-going compliance with Bahraini law and IFC/EBRD Guidelines on Workers Accommodation. In the event of non-compliance related to workers accommodations, contractors must act in accordance with corrective action mechanisms within specific timeframe. Alba's Human Resources Policy applies to all its employees and contractors (including TPNs). Through its Code of Business, Alba states its approach to complying with non-discrimination and equal opportunity and eliminating child labour. Alba has developed a workers' grievance mechanism to consolidate the different measures for managing and addressing worker grievances and provides access to all workers, including TPN workers.

Air Emissions: Dust emissions during construction and operational air emissions from gas-fired power plant and smelter are considered key potential impacts of this Project. It is estimated that once in operation, the Project will contribute an additional Greenhouse Gas (GHG) footprint in the order of 3.8 million tons of CO₂e per year, bringing Alba's total operating activities (including Project and current activities) to 12.8 million tons of CO₂e per year.

Mitigation Measures Include: The Project has implemented a series of mitigation measures to reduce the dust levels in consideration of ambient conditions and will monitor to determine the actual emissions and exceedance against standards on a regular basis during construction and operations. To manage its carbon intensity, the Project is committed to use Best Available Technology (BAT), including the use of Heat Recovery Steam Generators to maximize the efficiency in the operation. Alba also plans to retire older technologies in its existing operations as part of their lifecycle replacement plan.

Occupational Health & Safety (OHS): The Project OHS risks are at their highest during the construction period.

Mitigation Measures Include: For construction, each contractor has its own health and safety management plans which must be in alignment with the Project's requirements. Contractors report on their performance monthly and are audited on a quarterly basis.

Documentation Reviewed:

The following is an illustrative list of key documentation that was reviewed as part of the current confirmation of the ERD.

- Environmental and Social Impact Assessments (Tebodin, 2014)
- Addendum to ESIA Report (Tebodin, 2014)
- Supplementary ESIA Report (Environment Arabia, 2017)
- Various Environmental and Social Management Plans and reports (Alba)
- Various Independent Environmental and Social Consultant Reports (ERM, Citrus)

Applicable International Finance Corporation (IFC) Environmental and Social Standards used by EDC (in addition to host country requirements):

- Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts
- Performance Standard 2: Labor and Working Conditions
- Performance Standard 3: Resource Efficiency and Pollution Prevention
- Performance Standard 4: Community Health, Safety, and Security