EDC PROJECT REVIEW SUMMARY: SOCAR Refinery Project

Project Description	Development & operation of a greenfield oil refinery
Sponsors	State Oil Company of Azerbaijan Republic, Ministry of Economy and Industry of the Republic of Azerbaijan
Country	Turkey
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	Financing
Date of publication on EDC's website (dd/mm/yy)	06/09/13
Date of Signing (dd/mm/yy)	29/05/14

Project Categorization

The Socar Turkey Aegean Refinery (STAR) Project involves the development and operation of a greenfield complex crude oil refinery and associated facilities in Turkey. The Project, located five kilometers from Aliaga, Izmir Province, will have the capacity to process 10 million tons of crude oil per year. The Project also includes the construction and operation of a marine terminal comprised of three jetties, and a new stand-alone wastewater treatment plant. The Project was classified as Category A (Category definitions can be found here, see D3 Environmental & Social Reporting).

Summary of EDC's Review

EDC reviewed the Project in accordance with the requirements of our Environmental and Social Review Directive and the Equator Principles, and concluded that the Project is designed to meet or exceed internationally recognized good practices, guidelines or standards.

In reaching this conclusion, EDC reviewed a project environmental and social impact assessment, which was benchmarked against relevant international environmental and social standards, and reviewed for appropriate mitigation measures against the Project's potential environmental and social effects. EDC's review also included an assessment of the Project's stakeholder engagement activities.

As public sector lenders to the project, six export credit agencies were contacted prior to finalizing the financing by a coalition of international non-governmental organizations (NGOs) to express concerns about the Project notably; potential linkages between the Project and a planned coal-fired project to be located nearby, the impact of the Project's excavation works on a potential geothermal project, and legal disputes arising from claims made by the sponsors of the potential geothermal project. These issues were examined and the Project was determined to be designed to international standards and operating within the parameters of its license.

Following detailed consultations, the parties mutually agreed not to proceed with financing from International Financial Institutions due to differences in the intercreditor policies of the various lenders involved in the Project, which could not be resolved to the satisfaction of all the parties within the timeline of the project.





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

Air quality and greenhouse gas (GHG) emissions: The Project poses potential adverse impacts to air quality during construction, commissioning, operations and decommissioning of the Project.

Mitigation measures include: Use of best available technology in all major process units to mitigate potential air emissions impacts to the extent practicable. Further, Project design has eliminated the need for a fluid catalytic cracking unit in the refinery, which significantly reduces energy consumption, and therefore, GHG emissions.

Biodiversity: Potential impacts to *Posidonia oceanica*, a sea grass listed in Annex II of the Barcelona Convention, due to the construction and operation of jetty number 3.

Mitigation measures include: Implementation of a comprehensive Biodiversity Management Plan, which includes mitigation and monitoring, as well as biodiversity offset measures for *Posidonia oceanica*.

Occupational Health and Safety (OHS): The Project will involve a large workforce during construction and operations, resulting in OHS risks.

Mitigation measures include: The development of project-specific job hazard analyses for each position, and the subsequent drafting of OHS procedures based on identified risks. The Project will also establish an OHS incident tracking system to monitor performance, and conduct routine training sessions to address nearmiss and incident trends.

Emergency preparedness and response: Fire hazard has been identified in the ESIA as an operational risk for the Project.

Mitigation measures include: The implementation of strict management procedures consistent with good international industry practice to control fire hazards. Prior to operations the Project will establish an Emergency Response Plan in collaboration with surrounding emergency service providers.

Documentation Reviewed:

- Environmental and Social Impact Study for Aegean Refinery (STAR) Project (March 2013); and
- Report of the Independent Environmental & Social Consultant, SOCAR Turkey Aegean Refinery (May 2013).

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 1;
- Performance Standard 4: Community Health, Safety and Security; and
- Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.

¹ Performance Standard 3 references the sector-specific IFC Environmental, Health and Safety (EHS) Guidelines and EDC has considered these guidelines in conducting its review. EDC has considered the relevant aspects of the IFC EHS Guidelines for Petroleum Refining (April 30, 2007), Ports, Harbors and Terminals (April 30, 2007) and the General EHS Guidelines (April 30, 2007).