

Project Description	Ichthys Gas Field Development Project
Sponsors	INPEX Corporation. and Total SA, Tokyo Gas Co., Ltd, Osaka Gas Co., Ltd, Chubu Electric Power Co., Incorporated and TohoGas Co, Ltd.
Country	Australia
Project Category	A
Canadian Exporter	Shawcor Ltd.
Description of capital goods and/or service	Sale of various Canadian goods and services
EDC Product	Financing
Date of publication on EDC's website	23/07/12
Date of Signing (dd/mm/yy)	18/12/12

Project Categorization

The project involves the upstream and downstream development of a fully integrated Liquefied Natural Gas, Liquefied Petroleum Gas (LPG), and Petroleum Condensate project. The Ichthys gas/condensate field is located in the Browse Basin, off the coast of Australia's Northern Territory. Most of the condensate will be separated from the gas in offshore facilities and exported by tanker. Most of the gas (natural gas and LPG) will be delivered via a 900-kilometre pipeline to a two-train onshore processing facility to be located at Blaydin Point, near Darwin. 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 its 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 impact statement and environmental management plans which were reviewed for appropriate mitigation measures against the project's potential environmental and social effects. The documentation was benchmarked against host-country (i.e. Australia) environmental and social standards which are considered to meet or exceed international standards. EDC's review also included an assessment of the project's stakeholder engagement activities.

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

Greenhouse gases (GHGs): Emissions of carbon dioxide from field development, including offshore and LNG facility operations.

Mitigation measures include: Energy-efficient technologies such as the selection of CO₂ removal solvents; energy-efficient turbines for compressor drives; waste-heat recovery units incorporated to minimize the need for supplemental fired heating; and technical improvements including use of a combined cycle power plant onshore, a power sharing cable between offshore facilities, and offshore flash-gas recovery. GHG emissions have been calculated in accordance with international protocols.

Marine and coastal environments: Impacts associated with the dredging and disposal of the dredge spoil.

Mitigation measures include: Offshore dredge spoil disposal site was selected in consultation with various stakeholders; a predictive hydrodynamic and sediment transport model was used; and dredge spoil management plans were put in place.

Emergency preparedness and response: Potential environmental, health and safety risks due to accidental spills of hydrocarbons from offshore wells, processing facilities, pipeline, and ships.

Mitigation measures include: Components have been designed to meet oceanic, climate and seismic conditions of the area; industry-standard drilling practices and equipment will be used; blow-out preventers for each well will be used; the entire gas export pipeline will be stabilized and protected using concrete coating; the pipeline section within Darwin Harbour will be trenched and certain sections covered by rock armour; and oil spill contingency plans will be put in place.

Stakeholder engagement: Impacts to local communities from construction and operation of the project.

Mitigation measures include: Identifying and engaging with key stakeholders during the development of the project, including local communities, non-governmental organizations, and governmental authorities; development of community engagement plans for construction and operations; development of an external communications plan and a community grievance procedure.

Documentation Reviewed:

- Draft, and Supplemental, Environmental Impact Statements
- Onshore LNG Facility Construction Environmental Management Plan
- Coastal Offset Strategy
- Final Report of the Independent Environmental and Social Consultant
- Northern Territory Government's Assessment Report 65, Ichthys Gas Field Development Project, Blaydin Point
- Ichthys LNG Plant Development Permit, Northern Territory of Australia
- Australian Government Department of Sustainability, Environment, Water, Population, and
- Communities Approval for the Project