

Section 2 Objectives and Benefits



2. Objectives and Benefits

2.1 Introduction

The TTP has identified a number of local, regional and national objectives each with related benefits. These objectives and benefits are presented in this section of the Draft EIS for consideration in conjunction with the broader environmental issues associated with the proposed development. The TTP is committed to demonstrating that these objectives and benefits are both tangible and achievable, whilst maintaining high environmental standards that are acceptable to all major stakeholders.

In 2004, a study was conducted by ACIL Tasman to assess the economic impacts of the TTP on the local, Northern Territory and Australian economies. The study used the Monash Multi Regional Forecasting (MMRF) model to estimate the economic impact of the project on Northern Territory and Australian economies relative to a 'base case' without the project. The following section summarises the key findings from this study.

2.2 Project Objectives

2.2.1 Introduction

The primary objective of the TTP is to transport gas to the Alcan Gove bauxite-alumina refinery and facilitate a more cost effective and environmentally sustainable operation, whilst maintaining best practice EHS standards and community relations.

A second objective of the TTP is to transport gas to additional future customers in the Northern Territory. At the time of writing, additional gas offtake customers have yet to evolve, however capacity allowances have been made in the TTP design to meet future customers' potential requirements.

2.2.2 Project Justification

The energy demand of alumina production requires access to a competitively priced and secure energy source. At present, alumina production at Gove is powered using imported fuel oil. Fuel is a significant operating cost. Natural gas as a fuel source improves the long term competitiveness of the Gove operations and enhances the economic contribution to the Northern Territory and Australian economies.

Conversion of Alcan Gove to natural gas also substantially improves greenhouse gas (GHG) emissions per tonne of product produced and eliminates sulphur dioxide and particulate emissions associated with fuel oil combustion and improves the environmental performance of the Gove refinery, in line with Alcan's objective of sustainable use of resources.

2.2.3 Meeting Market Demand

The existence of gas supply infrastructure, such as the TTP, backed by additional potential reserves in the Bonaparte Basin is likely to stimulate new gas customers in the Northern Territory.

Currently, mining and industrial operations utilise expensive liquid fuels for power generation. While limited in number, potential future gas customers could be mining and mineral processing operations, gas processing, and agricultural industries. Provision for two off-takes will be constructed along the pipeline route to potentially provide (**Section 5.4.2**):

- connection to the Northern Territory Gas Pipeline and supply to Darwin;
- gas supply to Nhulunbuy.

Main line valve and scraper facilities are to be designed so that minor offtake points are possible with minimum on-stream modification. The MLV at KP419 has been identified as a future supply point to the Beswick Community.

2.2.4 Environment, Health and Safety Policy Objectives

The project sponsors are responsible for the EIS process and submission, as the initial developers of the project (**Section 1.3**), and intend that the builder, owner and operator (BOO) consortium will be assigned the obligations of the EIS and hence develop the subsequent Environmental Management Plans (EMPs).

The EHS policy and standards of Alcan will be applied as a minimum to the design, construction and operation of the facilities associated with the TTP, the objectives of which are outlined in this section.

Alcan's environmental management is governed by an overriding global focus on sustainability. Alcan is committed to excellence in environment, health and safety through continual improvement of awareness, understanding and performance. Alcan has a corporate environmental health and safety policy that provides a public statement of the corporate commitment to protecting the environment. Alcan has developed a number of guiding principles to support the overriding policy. The following principles are taken directly from Alcan's Environment Health and Safety (EHS) Policy:

- Integrate EHS as an essential part of management and decision-making process.
- Co-operate with customers to understand their needs and support their use of best EHS practices in the design and manufacture of safe and reliable products.
- Demonstrate leadership in EHS to reflect superior and life-enhancing characteristics of products for the benefit of society.
- Ensure a working environment that motivates and supports all employees in their efforts to achieve zero work-related injuries and illnesses.
- Minimise any adverse environmental impacts from operation and business practices, and use natural resources and energy more efficiently through the effective use of management systems that continually improve EHS performance.
- Consider and establish appropriate EHS requirements when selecting business partners and contractors.

- Audit operations and business practices at regular intervals to assist EHS performance and compliance, and comply with legal requirements and internal standards.
- Engage in open and transparent communication with stakeholders to achieve greater environmental, health and safety understanding and to improve performance.

In addition to the company EHS policy, Alcan introduced EHS FIRST in 2003 to provide a framework for achieving excellence in environment, health and safety management through continuous improvement. This framework is based on ISO 14001 and OSHAS 18001 and includes EHS management systems and standards, training and development programmes.

2.3 Project Benefits

2.3.1 Environmental Benefits

The main environmental benefit of the TTP will be the substitution of fuel oil for natural gas at the existing Gove Alumina Refinery. Key environmental benefits from using natural gas include:

- Natural gas is smokeless when burned and emits negligible sulphur dioxide (SO₂) and particulate emissions.
- Emissions of nitrogen oxides (NO_x) from natural gas are lower compared with other fossil fuels.
- Greater efficiency in GHG emissions per tonne of product produced.

Conversion to natural gas will therefore result in cleaner production and reduced impact on local air quality (Alcan 2003).

2.3.2 Economic Benefits

The project will bring a range of economic benefits to the local area, the Northern Territory and Australia. Capital costs associated with construction of the TTP are estimated to be around \$550 million with 20% of this having a Northern Territory content, 75% rest of Australia content and a 5% imported content. The key economic benefits associated with the TTP include:

- the creation of training, employment and business opportunities;
- increased revenue to Northern Territory Government and Commonwealth Government;
- increased export revenue and reliability of long-term contracted supply by enhancing the economics of the expanded Alcan Gove Refinery;
- flow-on economic activity (for example services and social infrastructure).

The potential economic impacts will be greatest during the construction phase. The location of the project in one of the more remote and least economically developed areas of the Northern Territory will potentially bring opportunities for local communities through:

- employment and economic development opportunities;
- the provision of social and economic infrastructure.

During the operational life span of the project (more than 20 years), the TTP is expected to add an average of around \$29 million per annum on average to the real GSP of the Northern Territory. The net present value (NPV) of these benefits over the life of the project is estimated to be \$319 million (ACIL Tasman 2004) and illustrates the economic impact of the TTP during the operational phase of the project on the Northern Territory Gross State product (GSP) and Australian Gross Domestic Product (GDP).

2.3.3 Benefits to the Local Economy

Local Labour Market: The number of jobs likely to be made available to the local workforce is not known at present and will be confirmed following selection of the BOO. The intent of the TTP project is to maximise the 'local' content, as far as practicable, and there are likely to be direct employment opportunities for Indigenous communities, local contractors and service companies during the pre-construction and construction phases.

Local Business Development: The TTP will be suited to substantial local business and workforce participation. The capabilities that are likely to be required primarily as part of construction activities include:

- civil works (for example road maintenance/upgrades and campsite construction, pipeline route clearing);
- building works (camp construction);
- transport services for workers, supplies and specialised materials (principally pipe sections);
- pipeline joint coating;
- trenching for the pipeline and backfilling;
- post-construction rehabilitation;
- camp services.

Northern Territory based firms are likely to have substantial roles in construction of the TTP, subject to the demands of other projects and competitive pricing of tenders. Similarly, opportunities exist for local businesses during the operation and maintenance of the pipeline.

The TTP project is fully committed to implementing a local participation policy, which will include liaising closely with the Northern Territory Industry Capability Network (NTICN).

2.3.4 Benefits to the Australian and Northern Territory Economies

National Labour Market: While an emphasis will be placed on employing the local labour force as far as practicable (**Section 2.3.3**), many of the construction workforce will necessarily be drawn from across Australia, for the following reasons:

- The Northern Territory does not have a sufficiently large workforce to fill all the positions.
- A number of the specialist skills required for pipeline construction, for example welders are not generally available in the Northern Territory.

National Economy: The construction of the TTP is likely to result in \$96 million being spent in the Northern Territory and the rest of Australia. This expenditure will be in the form of materials, equipment and labour and includes \$11 million for support services. During the operation phase of the project, the impact on the Northern Territory economy will be less.

Government Revenues: The TTP will make a significant contribution to government, particularly Commonwealth, revenues. The most important source of taxation revenue will be from company income tax. The net present value of the Commonwealth Government and Territory Government revenues from the TTP is estimated to be around \$75 million. In an average year over the life of the project, governments can be expected to derive around \$4.5 million a year (in current dollar terms) in taxation revenues from shareholders and employees (ACIL Tasman 2004).

Taxes from the TTP will enable future governments to reduce taxation on other segments of the Australian economy, thereby stimulating economic activity and job creation.

Other benefits to Australia will include:

- provision of new opportunities for gas powered developments in the Northern Territory and Australia;
- opportunity for gas competition;
- diversification of the country's energy supply;
- the reduction of fuel imports;
- the use of domestically sourced and processed gas;
- a stimulus to gas exploration activity in an attempt to identify additional gas reserves for development;
- the potential for further economic development in the minerals and other industries near the pipeline.

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