

#### Introduction

This submission focuses on providing an overview of the Gladstone (Central Queensland) Region's industry, its capability as a major export hub, its current growth, and opportunities for future development. It highlights the importance of transport infrastructure in this context. Gladstone Area Promotion and Development Limited (GAPDL) urges the Standing Committee on Transport and Regional Services to consider this submission as important regional information for the Inquiry.

### **Organisational Background**

GAPDL is the key Economic Development Agency and Regional Tourism Organisation for the local government areas of Gladstone City, Calliope Shire, Banana Shire and Miriam Vale Shire in Central Queensland.

As a membership based organisation, GAPDL represents the interests of some 350 businesses, industries, local authorities and community based bodies.

## **Overview of Region**

The Gladstone Region is a proven strategic location for future growth and is a key area of national and state economic development. Its natural resources, availability of efficient infrastructure services, and proximity to markets place it in a strongly competitive position for major industry investment. It is a major export centre. Strategies are actively being pursued to develop opportunities in processing and value adding of minerals and chemicals, and associated support industries.

The Gladstone State Development Area is a 21,000 hectare area of land set aside by the Queensland Government to provide land with port access for large scale industrial development. A Materials Transport and Services Corridor links the Gladstone State Development area with the Port of Gladstone. A brochure outlining the role of the Gladstone State Development Area is provided at attachment 1.

Tourism is a growing industry in the Gladstone Region. Some 70,000 visitors a year access GAPDL's network of 4 Visitor Information Centres. They travel to the region by road (via the Bruce and Dawson Highways), rail (via the north coast rail line), and air. A rapidly growing tourism destination in the region, Agnes Water, is now more accessible with the completion of the sealing of road access to the town from the Dawson Highway.

The Gladstone region encompasses some of Queensland's key industry and infrastructure facilities. Further details of these are provided at attachment 2: *Industry Profile*.

## NRG Gladstone Power Station

Queensland's largest power station, NRG Gladstone powers Boyne Smelters Limited and supplies electricity to Queensland's Electricity Grid.

More than four million tonnes of coal each year are railed to the station from coalfields in Central Queensland.

#### Boyne Smelters Limited

Boyne Smelters Limited is Australia's largest aluminium smelter, with an annual production of 530,000 tonnes per year of primary aluminium. Alumina, the raw material for aluminium production, is transported from Queensland Alumina Limited along a ten kilometre conveyor system. Boyne Smelters employs approximately 1350 staff.

Currently upgrading its anode rods for use in the smelting process, Boyne Smelters will increase its production by 11,000 per year.

## Cement Australia Gladstone

Including the largest cement kiln in Australia, Cement Australia Gladstone processes cement clinker as well as cement in bulk or bags. With an annual production capacity of 1.6 million tonnes, the plant supplies cement and clinker to domestic markets and for export to the USA East Coast, Hawaii, Nicaragua and Costa Rica..

# Comalco Alumina Refinery

The Comalco Alumina Refinery was commissioned during the later half of 2004 and is currently operational, moving toward full production rates.

The Refinery processes bauxite mined at its Weipa mine on Cape York Peninsula in Queensland to produce alumina for Comalco aluminium smelters at Bell Bay in Tasmania, Tiwai Point in New Zealand and for world markets.

Three million tonnes of Weipa Bauxite a year is utilized to produce 1.4 million tonne per annum of alumina.

### **Queensland Alumina Limited**

Queensland Alumina Limited (QAL) is recognised as the world's largest alumina refinery, supplying approximately 10% of the Western world's alumina. Current production is 3.7 million tones per annum.

The refinery transports alumina product to smelters primarily in Australia, New Zealand, and the West Coast of the United States and Canada.

### Orica Australia

Since commencing operations in the Gladstone Region, Orica has undergone several expansions. Orica principally produces sodium cyanide, ammonium nitrate and chlorine for use in the mining and light metals processing industries. Orica is currently expanding its Ammonium Nitrate production by 300,000 tonnes per annum through the expansion of its Ammonium Nitrate plant.

## CS Energy

CS Energy owns and operates the Callide Power Station in Biloela. The Callide Power Station generates 1720 megawatts (MW) of electricity and contributes to 27% of Queensland's energy needs. The Callide Power Station generates electricity using black coal fired, steam driven turbines; using approximately 6 million tonnes of coal and 24,000 mega litres of water per year.

### Callide Mine

The Callide Mine is Anglo Coal's largest Australian coal operation. Adjacent to the town of Biloela, the mine uses open cut processes to produce thermal coal for domestic power generation markets.

### Teys Bros Biloela

Teys Bros Biloela is one of Central Queensland's main beef processing plants. Employing 300 people, the plant processes some 700 prime beef cattle per day. Teys Bros beef products are distributed to domestic and export markets in some 40 countries worldwide.

#### Queensland Nitrates Pty Ltd (QNP)

Queensland Nitrates Pty Ltd commenced operations in January 2001, developing a fully integrated ammonium nitrate plant near Moura. It produces 185,000 tonnes of explosive grade ammonium nitrate per year, for use in the production of explosives for the mining industry. Queensland Nitrates Plant are currently investigating opportunities for further growth and expansion with their current operation.

#### Moura Coal Mine

Established in 1961 the Moura Coal Mine is one of the longest established mines in Central Queensland. It is located in the south-eastern part of the Bowen Basin and produces Permian-age reserves with an estimated coal reserve of 771 Mt of coking coal and 234 Mt of non-coking coal.

The Moura Coal Mine has been jointly owned by Mitsui and Anglo Coal since 2002 and currently produces 5.5 Mega Tonnes (Mt) of soft coking coal and power-station fuel annually.

#### **Xstrata**

Xstrata's Oaky Creek Project in the Bowen Basin includes two large scale modern underground longwall mining operations and one open cut operation. These rich reserves produce over 10 million tonnes of high quality coking coal per year.

#### Cracow Gold Mine

The Cracow Mining Joint Venture (CMJV) is a joint venture between Newcrest Mining Ltd and Sedimentary Holdings. The Cracow Gold Mine was commissioned in late 2004 and plans to recover 675,000 ounces of gold over a 7 year period. The CMJV continues to invest in further exploration and has found further evidence of mineralised shoots.

The Gladstone Region is rich in natural resources, providing a wealth of existing and future opportunities for processing and value adding ventures.

#### Natural Resources

#### Coal

Coal provides Queensland's largest export industry, most of which is mined in the Bowen Basin. Central Queensland coal returns over \$4 billion annually in exports. Bowen Basin coal is transported by rail to Gladstone, and Hay Point/Dalrymple Bay. Coal in the Gladstone Region is mined in the Dawson and Callide Valleys.

#### Oil Shale

The Stuart shale oil deposit near Gladstone contains some 3 billion barrels of oil. Options for commercial processing of this resource are under investigation.

#### Salt

Over 300,000 tonnes of salt is produced annually in Queensland, principally at Bowen and Port Alma, just north of Gladstone. Up 20,000 tonnes of salt is used annually by the Orica chemical plant in Gladstone.

### Limestone

Central Queensland limestone mines include Taragoola, East End, Bajool, and South Ulam. Cement Australia is the main consumer of this limestone. Cement Australia's East End open-cut quarry (24 km from Gladstone) is Queensland's largest limestone operation.

At Taragoola, 140,000 tonnes per annum of a total yield of 250,000 tonnes is railed to Queensland Alumina Limited for use in its processing.

Central Queensland also boasts the largest deposit of its type in the world of cryptocrystalline magnesite, in the Kunwarara area north of Rockhampton, as well as deposits of silica sands and mineral sands.

# The role of transport infrastructure in the Gladstone Region

Efficient, cost effective transport options are essential to the economy of the Gladstone region. These must be coordinated with industry needs, maintaining and growing the region's competitiveness as a significant export hub.

### Central Queensland Port Authority - Port of Gladstone

The Port of Gladstone is Central Queensland's largest multi-commodity port, handling more than 59 million tonnes of cargo per year.

The Port is strategically positioned to efficiently handle a range exports, its major export commodity being coal from the region's rich hinterland.

The Port of Gladstone is one of the largest ports on the Eastern seaboard. Its main international destination is the Asia-Pacific area. The Port moves over 30% of Queensland's exports and close to 10% of the nation's exports. Over 980 vessels use the port annually.

Coal represents over 70% of Gladstone's total cargo; the port is the fifth largest capacity coal export port in the world. The port and associated road and rail infrastructure provide the means by which the coal mining operations of the Bowen Basin, Dawson and Callide valleys reach their markets.

A range of other commodities are also exported through the Port of Gladstone, including containerised freight.

The Port of Gladstone is about to undergo a significant expansion to increase the capacity at the RG Tanna Coal Terminal from 40 to 54 million tones per annum. This includes the construction of a third rail unloading station, a fourth berth, and a third shiploader. Two additional coal stockpiles will be created. Further expansions over the next two years will further increase this capacity to 72 million tones per annum.

The Port of Gladstone includes a world class marina, utilised by private vessels and charter operators. A daily launch service operates to and from Heron Island, a major regional tourist attraction.

## Road Networks

The region's major road routes are provided primarily by the Bruce and Dawson Highways. There are 3 access points between the Bruce Highway and Gladstone, linking to the resource rich areas of the region's hinterland.

A dedicated Port Access Road has recently been completed, diverting heavy vehicles away from the Gladstone CBD area and, adjacent to the railway, providing an efficient transport corridor from the main highway access into Gladstone to the port.

### Queensland Rail

The Gladstone Region includes 2 of Queensland Rail's major coal transport systems:

The Blackwater Rail System, comprising a network of lines connecting the coal mines in the southern Bowen Basin to Central Queensland Port Authority coal terminals in Gladstone, and to domestic coal users.

The Moura Rail System connecting the Moura, Callide and Boundary Hill coal mines to Central Queensland Port Authority coal terminals in Gladstone and to domestic coal users.

Electrified rail links Gladstone to Brisbane, Rockhampton and the coal mines of the Bowen Basin. Non electrified rail extends the network further. In Gladstone, Queensland Rail has established a dangerous cargo spur line and direct access links to the Port of Gladstone.

Rail is also an important part of the Region's developing tourism industry. The Tilt Train passenger service provides a daily service between Brisbane and Rockhampton.

Queensland Rail is currently undertaking the design and construction of a 110km spur from the Kinrola spur line to the new Rolleston Coal Mine in the Bowen Basin, plus up to 30km of duplicate track to Gladstone (the Bauhinia Regional Rail Project).

### Air Services

Gladstone Airport provides daily air services between Gladstone and Rockhampton, Mackay, Townsville, Cairns and Brisbane.

Efficient transport infrastructure logistics and integration are vital to the economic strength of this region. An efficient road, rail and port transport network is crucial in linking the wealth of raw materials within and surrounding this region, with existing and future value adding through minerals and light metals processing and associated activities, and on to markets both domestically and overseas.

With the development of major industry in Gladstone, the establishment of road and railway connectivity to the port has been necessary and has largely been achieved. However, the expansions outlined above, increased export demand for coal, and major expansions of coal mining operations in the region will require strong consideration to the strength of these networks and their ability to handle this demand effectively.

# **Transport Infrastructure – Future Considerations**

Fundamentally Gladstone Area Promotion and Development considers the Port of Gladstone to already act in a commercial environment and works with all its customers on a commercial basis, therefore we believe there is no commercial advantage for regulation. This belief is shared by both the Central Queensland Ports Authority and its customers.

We have outlined below however several areas GAPDL considers important in reviewing regional transport infrastructure needs for the Gladstone region.

### Central Queensland Growth Management Framework

The Central Queensland Growth Management Framework, prepared in 2002 by the Central Queensland Regional Planning Advisory Committee in consultation with a full range of community stakeholders, and endorsed by the State Government includes policy framework strategies to support infrastructure development. In summary these are:

• Plan and develop a strategic transport network that meets current and projected community and industry needs and uses best practices approaches and technology

This includes planning network studies to develop integrated transport responses to future development, and implementation of Integrated Regional Transport Plans such the Gladstone and Capricornia Integrated Regional Transport Plan. Examples of considerations relevant to this submission include:

- Allowing the Bruce Highway and/or north coast rail line to accommodate major demand
- o Potential growth between Gladstone and Rockhampton associated with major industrial developments in each area
- o Developing strategic transport opportunities between Stanwell, Biloela and Gladstone

• Maintain and improve (as required) the region's rail network to ensure the safe, efficient movement of people and products

Including the identification of current rail infrastructure and its capacity to meet future demands, and investigation of opportunities to increase freight and passenger volumes, such as strategic rail linkages (eg that within the Melbourne-Darwin inland rail proposal).

- Improve co-ordination and integration of infrastructure for the transportation of people and freight within and out of the region (eg clustering, demand aggregation, performance monitoring)
- Improve transport network coverage by developing well co-ordinated, multimodal passenger and freight transport systems to support a hierarchy of urban centres and access to key destinations
- Support benchmark sequencing in the planning of transport infrastructure to align with planning processes at both state and local level.
- Maintain and improve (as required) a safe, efficient, regional road network in Central Queensland that supports economic, residential and industrial development and facilitates community access to social infrastructure and services.

Queensland Transport was identified as a lead agency for all these strategies, in collaboration with local economic development bodies and other stakeholders. GAPDL therefore sees Queensland Transport as vital contributors to the Standing Committee process.

#### **Future Regional Growth**

GAPDL's publication, the Project Status Report, outlines some \$16 billion worth of industrial, commercial and residential development in progress or under investigation for the Gladstone Region. (see attachment 3). These projects are likely to have a significant impact on the economy of Central Queensland, and of the State.

A number of major industry projects are proposed for the Gladstone region. These projects will increase the demand on railway, road and port infrastructure to, from and within the region.

In addition, the potential capacity of the Gladstone State Development Area should be considered – the attraction of significantly more major industry in the future will lead to far greater infrastructure demand in the longer term. Transport infrastructure is vital to

the Gladstone Region in order to maintain its competitiveness as a significant driver in Queensland's economy.

### Queensland Coke and Energy

Queensland Coke and Energy Pty Ltd is a subsidiary of Macarthur Coal Ltd and Stanwell Corporation Ltd. It is proposed that a Coke Processing Plant will be situated adjacent to Stanwell Power Station, near Rockhampton, taking advantage of existing infrastructure including rail, water and power facilities. The site is close to The Bowen Basin, one of the world's richest sources of coking coal. Coke will be transported to the Port of Gladstone for world export.

Approximately 1200 employment positions will be created in the construction phase of the project and over 300 long-term employment positions when completed, including the coke and power plant and associated coal, transport and shipping operations.

This project will include modifications, including the construction of a new wharf, at Port of Gladstone's Fisherman's Landing Precinct.

# Gladstone Nickel Project

A significant project in the feasibility study stage for the Gladstone State Development Area, the Gladstone Nickel Project will result in a plant processing 30,000 tpa of nickel and 1,400 tpa of cobalt metal, from ore mined at Marlborough.

Coal mine expansions.

The Banana Shire, in the Gladstone hinterland, is experiencing rapid growth in the mining industry.

Anglo Coal and Mitsui have announced a major expansion of the Moura Coal Mine. This will increase production from 7 million to 12.7 million tones of coal per annum.

Anglo Coal are investigating the development of a new coal mine in the Theodore area, and X-strata the development of a mine at Wondoan.

An open cut coal mine at Baralaba is under investigation.

#### **Identified Gaps**

There are three key areas of need in the Gladstone Region for consideration by the Standing Committee:

Australian Transport and Energy Corridor

GAPDL and other stakeholders with an interest in the Economic Development of the Gladstone Region are strongly supportive of the completion of a "missing link" in the inland rail route from the Southern states.

Part of the proposed Australian Transport and Energy Corridor's proposed Australian Inland Rail Expressway, this section would link Toowoomba with Moura, thus providing improved rail access for the Darling Downs, Maranoa and Surat Coal Basins to the Port of Gladstone.

#### Coal

The submission from X-strata coal to the Standing Committee on Transport and Regional Services refers to concerns from the coal industry in the Gladstone/Moura/Blackwater areas on rail providers' ability to match rapidly growing port capacity and demand. Coal is a major and growing export from the Gladstone Region, and GAPDL considers that it is important that rail infrastructure is sufficient so as not to impede this growth.

### Dawson Highway

The Dawson Highway runs between Gladstone and Biloela, a significant connector between two major highway systems from New South Wales and the Bruce Highway and Port of Gladstone. The Highway has recently received funding for significant upgrades, but further work is required to bring it to a national standard.