

DEPARTMENT OF INFRASTRUCTURE AND PLANNING*State Development and Public Works Organisation Act 1971*

NOTICE

The Governor in Council has approved, under section 125 (1) (f) of the *State Development and Public Works Organisation Act 1971*, the Surat to Gladstone Gas Pipeline as an infrastructure facility that is of significance, particularly economically or socially, to Queensland, the Darling Downs and Gladstone Regions being the regions in which the Surat to Gladstone Gas Pipeline is to be constructed.

STATEMENT GIVING REASONS WHY THE GOVERNOR IN COUNCIL APPROVED
BY GAZETTE NOTICE ON 28 MAY 2010 THE SURAT TO GLADSTONE GAS
PIPELINE AS AN INFRASTRUCTURE FACILITY THAT IS OF SIGNIFICANCE
UNDER THE *STATE DEVELOPMENT AND PUBLIC WORKS ORGANISATION ACT*
1971

1. **Decision**

On 27 May 2010, the Governor in Council approved by gazette notice under Section 125 (1) (f) of the *State Development and Public Works Organisation Act 1971* (SDPWO Act), the Surat to Gladstone Gas Pipeline as an infrastructure facility that is of significance, particularly economically or socially, to Queensland, the Darling Downs and Gladstone Regions being the regions in which the Surat to Gladstone Gas Pipeline is to be constructed. The Governor in Council, in making that decision, considered and adopted the reasons set out below that were prepared by the Coordinator-General, Mr Colin Jensen under section 125 (5) of the SDPWO Act.

2. **Introduction**

By letter dated 10 December 2009, Surat Gladstone Pipeline Pty Ltd ("SGP") made an application to the Coordinator-General requesting that the Surat to Gladstone Gas Pipeline infrastructure facility ("the Surat to Gladstone Gas Pipeline") be approved by the Governor in Council as an infrastructure facility that is of significance under section 125 (1) (f) of the SDPWO Act.

As described in SGP's application (the "Application"), the Surat to Gladstone Gas Pipeline involves the planning, construction and commissioning of 467 kilometres of underground high pressure steel transmission pipeline to transport coal seam gas ("CSG") from a gas processing plant adjacent to Kogan North Central processing facility near Dalby in the Surat Basin gas fields to a proposed liquefied natural gas ("LNG") plant at Gladstone, for export as LNG.

By a letter dated 7 April 2010 ("Addendum"), SGP (which is a wholly owned subsidiary of Arrow Energy Ltd ("Arrow Energy")) advised that:

- On 22 March 2010, Arrow Energy's board unanimously recommended acceptance of an offer for the acquisition of the majority of Arrow Energy's CSG assets by CS CSG (Australia) Pty Ltd (a joint venture between a subsidiary of Royal Dutch Shell PLC ("Royal Dutch Shell") and a subsidiary of Petro China International Investment Company Limited ("Petro China")).

- The proposed transaction will take some time to complete as it will require a demerger of Arrow Energy's Australian CSG assets from its international energy assets, the completion and implementation of an acquisition scheme ("the Scheme") and satisfaction of other regulatory requirements.
- Indicative dates for the Scheme were:
 - Scheme booklets lodged with ASIC – mid-May 2010
 - Despatch of Scheme booklets – early-June 2010
 - Shareholder meetings – mid-July 2010
 - Demerger Scheme offered and implemented – late July 2010
 - Court hearing of Scheme – late July 2010
 - Implementation date for Scheme – August 2010.

Because it cannot yet be determined as to whether the Scheme will proceed to approval and implementation, it was necessary to consider the Application in two ways:

1. on the basis that the Scheme is approved and implemented;
2. on the basis that the Scheme does not proceed to approval and implementation.

Should the Scheme be approved and implemented, the controlling entities of SGP will change, resulting in changes to the customer, volume and timing of CSG to be delivered by the Surat to Gladstone Gas Pipeline.

Section 125 (1) (f) of the SDPWO Act provides that the Coordinator-General may take land for the purpose of an infrastructure facility that is:

- of significance, particularly economically or socially, to Australia, Queensland or the region in which the facility is to be constructed; and
- approved by the Governor in Council, by gazette notice, as having that significance.

Pursuant to section 125 (2) of the SDPWO Act, in considering whether an infrastructure facility would be of economic or social significance, the potential for the facility to contribute to community wellbeing and economic growth or employment levels must be taken into account.

In accordance with section 125(3) of the SDPWO Act, in assessing such potential, the contribution the infrastructure facility makes to agricultural, industrial, resource or technological development in Australia, Queensland or the region in which the infrastructure facility is to be constructed is a relevant consideration.

3. Evidence or Other Material on which Findings of Material Questions of Facts are Based

In considering whether to approve the Surat to Gladstone Gas Pipeline as one that is of significance, particularly economically or socially to Queensland and the regions in which the Surat to Gladstone Gas Pipeline is to be constructed, the Governor in Council had regard to the following materials:

- Letter dated 10 December 2009 from Iain Burgess, Project Manager of SGP, to the Coordinator-General, requesting that the Surat to Gladstone Gas Pipeline be approved by the Governor in Council as an infrastructure facility that is of significance under section 125 (1) (f) of the SDPWO Act ("Application");
- Detailed maps showing the pipeline route (Attachment 1 to the Application);
- The Executive Summary of the Environmental Impact Statement ("EIS"), which has been completed for the Surat to Gladstone Gas Pipeline. The EIS contains the results of a comprehensive Environmental Impact Assessment ("EIA");
- Assessment Report under the *Environmental Protection Act 1994* on the Environmental Impact Statement for the Surat to Gladstone Pipeline Project proposed by Surat Gladstone Pipeline Pty Ltd 15 January 2010 ("Assessment Report");
- Environmental Authority (Petroleum Activities) Permit Number PEN100369209 granted under the *Environmental Protection Act 1994* dated 18 January 2010 ("Environmental Authority");
- Approval, Construction of a high pressure buried gas pipeline, Kogan to Gladstone, Queensland (EPBC Reference: 2009/5029) by the Department of the Environment, Water, Heritage and the Arts dated 30 April 2010 ("Commonwealth Approval");
- Report on Economic Impacts of Surat Gladstone Pipeline Project prepared by ACIL Tasman for SGP and dated 25 November 2009 ("ACIL Tasman Report");
- Report on Surat to Gladstone Gas Pipeline Project - Social Impact Assessment prepared by AEC Group for SGP and dated November 2009;
- Detailed Submission on the Surat to Gladstone Gas Pipeline Project as an Infrastructure Facility of Significance prepared for SGP by CONICS (Brisbane) Pty Ltd and RPS Environment and Planning Pty Ltd and dated 30 November 2009;
- Letter dated 7 April 2010 from Iain Burgess, Project Manager, of SGP, to Mr R Beausang of Department of Infrastructure and Planning providing additional information and attaching Addendum Report by RPS Pty Ltd entitled *Infrastructure Facility of Significance – Surat to Gladstone Pipeline Addendum* dated 7 April 2010 (incorporating Economic Statement Addendum by ACIL Tasman) prepared for SGP;

- SDPWO Act, particularly sections 125 and 174;
- The SDPWO Act *Guidelines for acquisition of land for infrastructure projects by persons other than the State*, September 1999 made under section 174;
- The SDPWO Act *Guidelines for consultation and negotiation with native title interests*, September 1999 made under section 174;
- *Annual Report* for Arrow Energy for the year ending 30 June 2009;
- *Annual Report* for Royal Dutch Shell for the year ending 31 December 2009;
- *Annual Report* for Petro China for the year ending 31 December 2009;
- Public Notices placed in newspapers inviting submissions from persons affected by the Surat to Gladstone Gas Pipeline;
- Letter from the Coordinator-General sent to landowners inviting submissions regarding the proposed Surat to Gladstone Gas Pipeline:
 - (a) Submissions from affected persons in response to the public notices and the Coordinator-General's letter inviting submissions from persons affected by the Surat to Gladstone Gas Pipeline;
- SGP's Response to Public Submissions from affected persons;
- '*Queensland LNG Industry Viability and Economic Impact Study*' Final report to Queensland Department of Infrastructure and Planning, May 2009 by McLennan, Magasanik Associates ("MMA Study");
- *Australian Energy Resource Assessment*, Geosciences Australia dated 1 March 2010;
- *Blueprint for Queensland's LNG Industry*, Department of Employment, Economic Development and Innovation SD5753 08/09;
- *Australian Commodities Report*, Australian Bureau of Agricultural and Resource Economics ("ABARE") June Quarter 2009 ("ABARE Report");
- Surat Basin Future Directions Statement, Department of Employment, Economic Development and Innovation dated February 2010; and
- Consultation Paper - Domestic Gas Market Security of Supply, Department of Employment, Economic Development and Innovation, September 2009.

4. Findings of Material Questions of Fact

From the evidence and material to which regard was had, the following findings of fact were made.

4.1 Type of Infrastructure Facilities Proposed Including Land on Which the Facilities are to be Located

The original Application by SGP identifies the components of the Surat to Gladstone Gas Pipeline as:

- (i) a buried high pressure steel gas transmission pipeline. The pipeline will be 467 kilometres long with a proposed diameter of 660mm and is to be used solely for the transmission of CSG;
- (ii) associated above ground infrastructure including:
 - a. a main line valve (MLV) and scraper station at Kilometre Point 220 (KP220) (ie 220 Km from the start as measured along the route of the pipeline);
 - b. a regulator (pressure reduction facility) and scraper station located at KP449; and
 - c. a gas custody transfer meter station located at Fisherman's Landing (KP446.4).

If the Scheme proceeds, the pipeline diameter may increase to 1050mm and the Surat to Gladstone Gas Pipeline would be upgraded to accommodate a maximum of 8 million tonnes per annum ("Mtpa") of CSG, rather than a maximum of 3 Mtpa in the original Application. The Surat to Gladstone Gas Pipeline is proposed to be constructed along the route shown on the detailed map in Attachment 1 to the Application. SGP has advised the Surat to Gladstone Gas Pipeline will head generally north from the Kogan area through the local government areas of Dalby, Banana, North Point and Gladstone. The route continues to the west of the Barakula State Forest located to the north of Chinchilla and the EIS reports that it avoids environmentally sensitive areas, such as essential habitats, endangered and threatened ecosystems and communities and remnant (native) vegetation to the greatest extent possible.

From a point east of Callide, the route follows the Callide Infrastructure Corridor ("CIC") for 44 km to the Bruce Highway. The final 22 km of the route into Gladstone is within the Gladstone State Development Area ("GSDA") Common Infrastructure Corridor.

The Application states that:

- the pipeline will generally be buried to a depth of between 0.75 metres and 1.5 metres;

- for most of its route it will be located within an easement corridor with a width of 30 metres;
- the EIS reports that the proposed route is the optimum route on the basis of engineering, construction, social and environmental impacts, stakeholder/landholder impacts and proximity to the CSG resources of the Surat Basin; and
- construction of the pipeline is proposed to commence in 2011 with the first CSG to be supplied to a LNG plant at Gladstone in late 2012.

SGP states in its Application that the proposed pipeline route runs through 266 parcels of land excluding road and watercourse crossings with most of those parcels being privately owned under either freehold title (193) leasehold title (30) or State land (3).

The Surat to Gladstone Gas Pipeline constitutes one element of a broader CSG to LNG project development encompassing:

- gas field development and operations in Arrow Energy's CSG tenements located in the Darling Downs Regional Council area in the Surat Basin;
- the Surat to Gladstone Gas Pipeline which will transport the CSG from Arrow Energy's gas fields to the proposed Gladstone LNG plant to be located at Fisherman's Island, Gladstone; and
- the LNG facility which will liquefy the CSG and load the LNG onto tankers for transport and sale.

The Application notes that each of the three elements are being undertaken by different interrelated companies but the success of the overall project is fundamentally dependent on each element proceeding.

If the Scheme, as outlined in the Addendum, is approved and implemented, then the following changes will be made to the Surat to Gladstone Gas Pipeline:

- the CSG will be transported to Shell's LNG facility on Curtis Island rather than the Arrow LNG facility at Fisherman's Island;
- construction will commence in 2012, with the first LNG expected to be produced in 2015 rather than 2013; and
- the diameter of the pipeline may increase to accommodate increased volume of CSG transmitted to the LNG facility at Curtis Island.

4.2 Demand Projections for the Services Associated with the infrastructure

The Surat to Gladstone Gas Pipeline provides linkage between CSG fields in the Surat Basin and the proposed LNG liquefaction and export facility at Gladstone. Consequently, it is a critical piece of enabling infrastructure providing CSG transmission services which cannot be provided by other transport options in sufficient volume to supply the Gladstone liquefaction and LNG export facilities.

As detailed in the EIA lodged by SGP, the Surat to Gladstone Gas Pipeline will transport CSG to satisfy gas supply demands of the integrated CSG to LNG project which will deliver an increase in Queensland's real economic output (or real GSP) of \$1.7 billion per year over the Surat to Gladstone Gas Pipeline's production period (2010 – 2034). The discounted present value (using a 7% discount rate) is projected to be \$16.2 billion, which is equivalent to 3.25% of Queensland's GSP for 2007/08.

The MMA Study, prepared for the Queensland Department of Infrastructure and Planning, found that the LNG market is growing rapidly and is projected to increase at between 5% and 10% per annum. The MMA Study notes that from a base in 2007 of 165 Mtpa (approximately 9075 Petajoules ("PJ")), forecasts are for global LNG demand to reach between 245 and 340 Mtpa by 2015. Demand in the Asian market is forecast to grow from 108 Mtpa to between 140 Mtpa and 180 Mtpa.

The MMA Study also notes that:

- LNG demand growth has been stimulated by the increase in oil prices since 2003, which has made LNG a lower cost option and by declining domestic gas supply in some mature gas regions (such as Europe and North America);
- existing LNG capacity plus capacity under construction will meet projected demand until about 2015; and
- demand projections have expanded in all markets and while commitments have been made to progress a large number of LNG projects, actual supply has struggled to match the pace of anticipated demand growth.

The MMA Study found that at the end of 2007 world LNG supply capacity was 197Mtpa and will increase to approximately 297 Mtpa by 2012, as capacity currently under construction is completed. Beyond 2012 capacity will be determined by commitment to proceed with LNG projects currently under consideration.

The Australian Energy Resource Assessment generally supports the findings of the MMA Study in relation to significant and continuing growth in world demand for LNG.

LNG is currently one of Australia's major exports worth around \$10 billion annually in export income to the country.

The international energy market is increasingly seeking Australian LNG because this country is regarded as a secure source of energy supply resulting from its stable economic and political environment. The Surat to Gladstone Gas Pipeline is necessary to meet demand for gas transport services from the Surat Basin to the Gladstone LNG facilities.

SGP has advised that a customer agreement for the provision of LNG has been successfully negotiated with Toyota Tsucho Corporation. The initial export contracts of 1.5 Mtpa cannot be satisfied unless the Surat to Gladstone Gas Pipeline is constructed to provide gas transport services to the LNG facility at Gladstone.

SGP states in its Application that:

- global demand for LNG is forecast to more than double from 150 Mtpa to 400 Mtpa by 2015 led by huge growth in demand from China and India;
- in 2007, a total of 226.41 billion cubic metres ("Bcm") (or 164 Mtpa) of LNG was transported globally to 18 countries. Australia supplied a total of 20.24 Bcm of LNG to China, Japan, South Korea and Taiwan. In the same year, LNG consumption grew by 3.1%. China's consumption grew by 19.9% and accounted for the second largest increase in global gas demand.

The LNG demand projections set out in the MMA Study and SGP's Application are supported by the ABARE Report.

4.3 Needs Which the Facility Would Meet and How the Infrastructure Would Satisfy the Identified Need

The entire CSG to LNG project, of which the Surat to Gladstone Gas Pipeline is an integral part, requires a practical means of transporting CSG from the Surat Basin to Gladstone in volumes sufficient to supply the proposed LNG facility at Gladstone. The Application states that a pipeline of the nature of the Surat to Gladstone Gas Pipeline is the only practical means of doing so. There is no existing pipeline infrastructure which can transport the necessary volume of CSG from the Surat Basin to meet the supply needs of the proposed Gladstone LNG facility.

The Queensland Government has recognised the need to diversify and strengthen Queensland's regional economy to attract investment and create new jobs, skills and training opportunities. By linking the Surat Basin CSG fields to the Gladstone LNG precinct, the Surat to Gladstone Pipeline provides Queensland with an opportunity for economic growth and job creation in the Darling Downs and Gladstone regions but also more broadly across

the State in downstream industries. The Surat to Gladstone Gas Pipeline will assist in the establishment of the LNG industry in Queensland and allow Queensland sourced LNG to be sold into the global LNG market.

The ACIL Tasman Report concludes that there will be significant demand for pipeline capacity that the Surat to Gladstone Gas Pipeline will provide for the CSG to LNG project based at Gladstone to fulfil contracted LNG export commitments.

4.4 Timing of Project or Service Delivery

SGP has advised in its original Application that construction is scheduled to begin in 2011 and expected to take approximately 12 months to complete. The first delivery of LNG to the export facility in Gladstone is scheduled in 2013. The Surat to Gladstone Gas Pipeline will have a minimum technical design life of 40 years but its operational life is expected to exceed that period.

If the Scheme outlined in the Addendum is approved and implemented, then the Surat to Gladstone Gas Pipeline will supply CSG to Shell's Curtis Island LNG facility with construction to commence in 2012 with first delivery of LNG scheduled for 2015.

If the construction of the Surat to Gladstone Gas Pipeline is not reasonably progressed to allow for LNG production in 2013 or, if the Scheme outlined in the Addendum is approved, to allow for production by 2015, then it may be necessary for the Governor in Council to amend or repeal its approval of the Surat to Gladstone Gas Pipeline as an infrastructure facility that is of significance.

4.5 Special Assistance Required from Government other than Land Acquisition

The Application states SGP is in the process of negotiating agreements with all landholders and native title parties to secure interests in land required for the Surat to Gladstone Gas Pipeline. Should agreement not be reached within the required timeframes it may be necessary to request the Coordinator-General to compulsorily acquire the interests. The Application does not identify any additional requests for special assistance from the Queensland Government.

4.6 Financial Analysis Including Project Risk/Return

The Queensland Government has undertaken and engaged in extensive independent studies and research into the current status, revenues and growth predictions for global and local LNG production and consumption.

The original Application by SGP including the ACIL Tasman Report attached to the Application makes the following points: The total capital cost of the proposed Surat to Gladstone Gas Pipeline, which forms part of that CSG to LNG project, is estimated at approximately \$684 million (in real 2008 dollars). This estimate is consistent with the MMA Study's replacement cost analysis of the Roma to Brisbane gas pipeline.

The total capital expenditure of the CSG to LNG project, of which the Surat to Gladstone Gas Pipeline forms an integral part, is estimated to be almost \$5.1 billion (in real 2008 dollars), the majority of which is expected to occur in the upstream field operations and which, on base case production rates, is estimated to total approximately \$3.5 billion (in real 2008 dollars) over the life of the project.

At full production the Surat to Gladstone Gas Pipeline annual operating expenditure is expected to be \$16 million per year. Total gas field, Surat to Gladstone Gas Pipeline and LNG facility operational expenditures over the project production period are estimated to be approximately equal to the total capital expenditure – i.e. \$5.1 billion, of which \$0.33 billion will be for the Surat to Gladstone Gas Pipeline operating expenditure.

At full capacity the whole project (including the Surat to Gladstone Gas Pipeline) will produce and export just under 160 PJ of LNG per year, which under a base case export price assumption, equates to annual export revenues of around \$1.6 billion per year. Over the production period the project is estimated to produce total export revenues of \$32.7 billion (in real 2008 terms) well in excess of capital expenditure and operating costs for the Surat to Gladstone Gas Pipeline.

The ACIL Tasman Report states that "based on our analysis of the Surat to Gladstone Gas Pipeline, the financial viability of the proposed foundation transport agreements should ensure that SGP will be able to charge sufficient access fees to ensure that they receive a fair and reasonable return on the pipeline assets".

The Addendum sets out in tabular form (reproduced in part below) the anticipated capital expenditure and operating expenditure, both:

- on the basis that the Scheme will be approved and implemented; and
- on the basis that the Scheme will not be approved and implemented.

Summary of Changes to Key Modelling Assumptions for the 8Mtpa Scenario

	3 Mtpa scenario (original Application)	8 Mtpa scenario (if the Scheme proceeds)
Annual CSG transported	180 PJ/year from 2017	480 PJ/year from 2018
First gas	2013	2015
Total CSG transported 2011-2034	3,296 PJ	8,476 PJ
LNG production	3.11 Mtpa from 2017	8.31 Mtpa from 2018
Total capital expenditure (real 2008\$A)	\$5.1 billion	\$9.5 billion
Total operating expenditure (real 2008A\$)	\$5.1 billion	\$13.0 billion
Foreign ownership (average of total Project)	31%	100%

Data Source: ACIL Tasman

4.7 Possible Environmental Effects

An EIS for the Surat to Gladstone Gas Pipeline has been prepared by SGP under the *Environmental Protection Act 1994* and a supplementary EIS subsequently lodged with the Department of Environment and Resource Management in November 2009. An Assessment Report and an Environmental Authority were also issued by the Department. The EIS, Assessment Report and Environmental Authority together include a comprehensive analysis of the possible environmental impacts of the Surat to Gladstone Gas Pipeline together with mitigation or avoidance strategies.

The Commonwealth Minister for Environment Protection, Heritage and the Arts has declared the Surat to Gladstone Gas Pipeline to be a “controlled action” under the *Environmental Protection and Biodiversity Conservation Act 1999* due to the removal and translocation of approximately 100 of the EPBC listed endangered species *Cycas mega carpa* from the Callide Range. The Department of the Environment, Water, Heritage and the Arts has issued the Commonwealth Approval in relation to the Surat to Gladstone Gas Pipeline.

The EIS, the Assessment Report, the Environmental Authority and the Commonwealth Approval indicate that the Surat to Gladstone Gas Pipeline can be completed in a manner that manages environmental impacts.

4.8 Technical and Financial Capacity of the Proponent to Implement the Proposed Facilities

SGP is a wholly owned subsidiary of Arrow Energy, incorporated in Queensland specifically to undertake the Surat to Gladstone Gas Pipeline project.

The Annual Report for Arrow Energy for the year ending 30 June 2009 showed that:

- (i) Arrow Energy made a net after tax profit for the year of \$366 million; and
- (ii) Arrow Energy had net assets of \$1.161 billion.

The MMA Study cites the Arrow Energy group as an active and successful CSG explorer and developer since 2002.

In the original Application SGP has advised:

- Arrow Energy currently possesses cash reserves of nearly \$400 million with substantial capacity to borrow. Estimated revenues over the next 15 to 20 years from Arrow Energy’s LNG joint venture (with LNG Limited) at Fisherman’s Landing, Gladstone, a joint project with Royal Dutch Shell involving an LNG plant at Curtis Island, Gladstone and international energy projects, amount to \$40 billion;

- Royal Dutch Shell has recently agreed to purchase the full initial LNG output from the Curtis Island project. Toyota Tsusho Corporation has already agreed to purchase the 1.5 Mtpa output of LNG from the first train of the LNG plant at Fisherman's Bend;
- Arrow Energy's aim is to produce approximately 220 PJ of CSG per year within 5 years, compared to the 20 PJ it produced in 2008/09;
- In relation to Arrow Energy/SGP's technical capacity, Arrow Energy already operates 5 coal bed methane developments and has interests in 3 gas-fired power stations. Arrow Energy has successfully operated its existing North Queensland gas pipeline and, in addition to the Surat to Gladstone Gas Pipeline, has a planned Central Queensland Pipeline;
- Arrow Energy's technical capability in coal bed methane projects and CSG to LNG projects extends internationally. Arrow Energy's international arm has begun exploration drilling programs in China, India, Vietnam and Indonesia. In China, Arrow Energy is partnering projects with Binchang Mining Group and is currently negotiating a production sharing contract with Petro China in relation to other gas projects.

If the Scheme proceeds the controlling entity of SGP will be Royal Dutch Shell and Petro China. From the most recent annual returns of those parties, it is noted that:

- Royal Dutch Shell is:
 - the world's largest company in 2009 as ranked by Fortune 500;
 - incorporated in England and Wales and is listed on the London, Amsterdam and New York stock exchanges;
 - responsible for over 100,000 employees and Royal Dutch Shell companies have operations in more than 100 countries; and
 - responsible for the supply of a quarter of Australia's petroleum requirements and is the world's largest producer of LNG.
- Petro China is:
 - China's largest oil and gas producer and distributor; and
 - established as a joint stock company with limited liability by China National petroleum Corporation and at year end 2008 had total equity of USD\$124 billion.

Royal Dutch Shell's annual report for 31 December 2009 records that the consolidated entity's total assets are US\$292 billion, total liabilities are US\$154 billion and net income after depreciation, interest, amortisation, depletion and taxation is US\$12.7 billion.

Petro China's annual return for 31 December 2009 shows that total assets are RMB 1,450 billion and profit after taxation is RMB 106 billion.

Whether or not the Scheme proceeds, SGP either as a wholly owned subsidiary of Arrow Energy or as a subsidiary of the joint venture between Royal Dutch Shell and Petro China, has the apparent technical and financial capacity to implement the Surat to Gladstone Pipeline.

4.9 Negotiations to Acquire Land by Agreement

SGP reports that it has undertaken preliminary stakeholder consultation with affected landholders, governmental agencies and local government along the pipeline route. The EIS reports that during initial selection of the Surat to Gladstone Gas Pipeline route, SGP visited the majority of affected landholders to receive their views on route alignment.

SGP has stated in its Application its preference is to acquire land or easement rights by consultation and agreement with relevant landholders and native title parties. If SGP is unable to obtain the relevant interests in the Surat to Gladstone Gas Pipeline route by agreement, and the Surat to Gladstone Gas Pipeline receives section 125 (1) (f) SDPWO Act approval by the Governor-in-Council, SGP may request the Coordinator-General to acquire those interests to the extent the Coordinator-General is lawfully able to do so.

In relation to State owned or controlled land, SGP is negotiating easements, interests or permissions sufficient to lay and operate the Surat to Gladstone Gas Pipeline. Agreement for these rights and interests has already been secured or are expected to be secured shortly.

SGP is negotiating easements with private landholders and it is expected agreement will be reached in the great majority of cases.

Native title rights may exist in relation to some parcels, generally State owned or controlled land. The EIS reports that there have been no native title determinations for any part of the Surat to Gladstone Gas Pipeline route. SGP has reported in its Application it is seeking to negotiate consent of all native title parties for all pipeline related acts under Indigenous Land Use Agreements.

4.10 Investigations on the Required Land

The Surat to Gladstone Gas Pipeline route runs through 266 parcels of land excluding road and watercourse crossings. Most parcels are privately owned under freehold or leasehold title. The breakdown of tenures is: freehold (193), leasehold (30), State land (3). SGP's pipeline route analysis is consistent with the investigations reported in the MMA Study.

SGP has advised in its Application:

- substantial investigations of the land required for the Surat to Gladstone Gas Pipeline have been undertaken. The pipeline route outside the Callide Infrastructure Corridor will

require a 30 metre wide easement with rights of way for access purposes in some locations;

- the Surat to Gladstone Gas Pipeline route passes almost entirely through rural land, much of which has been cleared for agricultural purposes, particularly grazing and cropping. Some of the land along the route is described as good quality agricultural land, with 15.2% regarded as highly suitable for cropping. Wherever possible, the route has been designed to follow fence and other boundary lines to minimise disturbance to agriculture (and other land uses) during construction. After construction farmers will generally be able to resume agricultural uses, such as cropping and grazing, across the easement;
- the Surat to Gladstone Gas Pipeline route is located relatively close to (but does not enter) a few State forests including the Barakula State Forest and conservation parks. The pipeline will also pass, but avoid wherever possible, stands of trees, remnant vegetation and single mature trees; and
- the Surat to Gladstone Gas Pipeline route passes several industrial sites, including meatworks, quarries, mines and power stations but it will not have any effect on their operations. It also passes through the Callide Dam water catchment area which is used for the collection of potable water but again will have no impact on the land use.

However, SGP have advised the final route and land affected by the Surat to Gladstone Gas Pipeline will be influenced by a number of factors including:

- engineering requirements such as constructability;
- cost of construction;
- environmental factors, including vegetation surveys;
- cultural heritage factors;
- consultation with stakeholders, including negotiations with registered landholders and Native Title parties;
- the requirements of Government approvals related to the Infrastructure Facilities; and
- hydrostatic modelling of the pipeline system.

Native title

The EIS reports that the Surat to Gladstone Gas Pipeline route traverses five registered Native Title claim areas. SGP has reported that it is consulting with relevant Aboriginal groups to obtain necessary consents in accordance with the Native Title requirements. The EIS also reports that SGP's searches have identified 36 cultural heritage items or areas which are being managed in accordance with cultural heritage legislative requirements.

4.11 Economic Significance of the Infrastructure Facilities

SGP, in its Application, has summarised the following key *economic* benefits and significance of the CSG to LNG project enabled by the Surat to Gladstone Gas Pipeline:

- The total capital expenditure by SGP on the pipeline alone will be \$684 million. The overall project capital expenditure enabled by the pipeline is estimated at almost \$5.1 billion (in real 2008 dollars). Significant capital expenditure for the Surat to Gladstone Gas Pipeline will be sourced from Australia and the Darling Downs and Gladstone regions.
- The ACIL Tasman Report predicts an increase in Queensland's real economic output (or real GSP) of \$1.7 billion per year is estimated over the whole project's projection period (2010 – 34). The discounted present value of the project equates to 3.25% of Queensland's GSP in 2007/08 or \$16.2 billion as the projected increase in GSP. Australian real GDP is expected to rise by \$43.6 billion over the life of the CSG to LNG project.
- The ACIL Tasman Report predicts an increase in the real income of Queensland residents is estimated at around \$1.5 billion per year during the peak production phase. Cumulatively, the real income of Queensland residents is projected to increase by \$30 billion as a result of the project, with a large share of this additional income potentially remaining with the residents of the Darling Downs region and the Gladstone region. The ACIL Tasman Report states that the Queensland Government is projected to enjoy higher tax revenues of around \$3.7 billion as a result of the CSG to LNG project enabled by the Surat to Gladstone Gas Pipeline.
- An increase in total Queensland full-time equivalent employment of almost 2000 jobs per year is projected to result from the project, with employment during the peak capital LNG production phase (2017-27) averaging almost 2300 jobs per year. A significant proportion of these jobs will be located in regional Queensland with around half of all additional jobs to be created in the Darling Downs region and Gladstone region. The Department of Employment, Economic Development & Innovation has reported that associated jobs will be created in sectors such as electricity, water, finance, transport, storage, manufacturing and construction.
- The project will make a vital contribution to *resource development* in Queensland (particularly the Darling Downs region). The Surat to Gladstone Gas Pipeline is essential to opening up the State's CSG resources in the Surat Basin under tenements held by Arrow Energy. That CSG resource is of such size as to be of economic significance to the entire State and sufficient to satisfy long term LNG sales contracts with Asian LNG customers necessary to underwrite development of the Queensland LNG industry.

- The project will also involve *technological development*. The Surat to Gladstone Gas Pipeline will be the sole transmitter of CSG to the LNG plant at Fisherman's Bend, Gladstone. The LNG plant will utilise a membrane LNG storage tank – the first time this new technology has been used in Australia.
- Cumulatively, the Queensland Government is projected to receive higher tax revenues of around \$3.7 billion as a result of the entire CSG to LNG project (discounted current value of \$1.5 billion), from total royalties derived from the entire CSG to LNG project, direct payroll tax and indirect taxes. Total additional Government revenues to Australia as a whole are projected to increase as a result of the CSG to LNG project by \$16.3 billion (discounted current value of \$6 billion).

Balance of trade benefits

Currently, Australia exports around half of its natural gas production with all of the outputs from the proposed CSG to LNG project to be exported.

The MMA Study indicates that economic modelling based on the standard LNG scenario (8x3.5 Mtpa LNG trains) will increase real GDP over the life of the industry by 0.10% which is equivalent to just over \$1 billion of real annual GDP. This would mean a higher real national income than would otherwise be the case. Additionally, the proposed LNG projects in Gladstone will directly contribute to output in indirectly upstream to the oil and gas sector including construction and property and business. The purchase of goods and services from industries upstream to the oil and gas sector will also stimulate additional production in these industries.

The MMA Study reported trade impacts of the CSG to LNG project have been assessed under the steady State export capacity for two LNG trains producing approximately 8 Mtpa. Under these assumptions, annual exports from the CSG to LNG project (of which the Surat to Gladstone Gas Pipeline is an integral part) are estimated to be approximately \$4 billion and make a substantial contribution to the balance of trade for Queensland and Australia.

Government Revenue

The Surat to Gladstone Gas Pipeline, as enabling infrastructure for the CSG to LNG project, is expected to have a positive impact on Australian Government revenues during both the construction and operating phases. It is anticipated additional personal income taxes, company taxes and goods and services taxes would be the main contributors to the increased revenues. While the issue is complex, the net impact of the development on the revenue of the Australian Government would be expected to be positive.

The ACIL Tasman Report states that the Surat to Gladstone Gas Pipeline, as enabling infrastructure for the CSG to LNG project, will result in increased revenue flows to each of the affected local government areas ("LGAs") (Darling Downs, Gladstone and Roma). Increased revenues would be expected to include additional fees and charges levied on

permanent and temporary residents as they use services provided by the LGA, principally waste, wastewater and waste management.

The Surat to Gladstone Gas Pipeline is expected to have a positive impact on the revenue of the Queensland Government. The direct sources of additional State revenues include transfer (stamp) duty; land tax; payroll tax; rents and royalties.

Local businesses will also benefit by providing the goods and services to support the Surat to Gladstone Gas Pipeline's needs as well as the additional consumption spending of those employed in the construction and operation of the Surat to Gladstone Gas Pipeline.

The ACIL Report has predicted that the CSG to LNG project enabled by the Surat to Gladstone Gas Pipeline will increase Queensland's real GSP by \$42-45 billion and Australia's GDP by \$43-44 billion for the period to 2034. The ACIL Report states that in net present value terms, the CSG to LNG project enabled by the Surat to Gladstone Gas Pipeline is estimated to increase Queensland and Australia's real economic output by around \$24 billion.

At the regional level, the ACIL Report projects that the Darling Downs region will have the largest increase in real economic output being three times than that projected in the Gladstone region and the rest of Queensland. This is because the largest capital, operational expenditures and gross revenues are expended in the Surat Basin field operations.

The ACIL Report reports the Darling Downs' economic output is projected to increase between \$25.5 and \$28.8 billion over the period until 2034. The real economic output of the Gladstone region is projected to increase by between \$7.1-7.2 billion over the same period.

The ACIL Report states that the Australian Government will enjoy higher collections of company tax. ACIL Tasman calculates that average company tax revenues will be in the order of \$300-400 million per year from 2020 if LNG export prices are AUD9.25 per gigajoule.

If the Scheme is approved and implemented, then the Addendum reports that:

- the cumulative benefit to Australia's real GDP is projected to increase from \$43.6 billion to \$101 billion;
- the total forecast capital expenditure will increase from \$5.1 billion to \$9.5 billion;
- the total forecast operating expenditure will increase from \$5.1 billion to \$13 billion; and
- the cumulative benefit to the real income of Australians is projected to increase from \$42.8 billion to \$55 billion.

A comparison of the forecast capital expenditure of the total project and the transported CSG for both the original Application proposal and if the Scheme were to proceed is reflected in the diagram below.

4.12 Social Significance of the Infrastructure Facilities

The Surat to Gladstone Gas Pipeline, by enabling the CSG to LNG project, will help diversify the regions' economies and reduce their dependence on mining and agriculture, and support regional growth through sustainable, long-term stimulus to local and regional economies.

The Department of Employment, Economic Development & Innovation has estimated in the "Blueprint for Queensland's LNG Industry" that a mid range 28 Mtpa LNG industry is expected to provide over 18,000 direct and indirect jobs in Queensland. This includes over 4,300 jobs in the Darling Downs-South West Region (including Surat Basin).

The EIS reports the following positive changes are expected from the CSG to LNG project:

- increased employment security in areas where resource sector employment is being lost;
- decreased unemployment, including for indigenous people and young people, throughout the affected regions;
- increased workforce capacity and skill levels in specialised construction and operational occupational;
- population growth and stability in the project area;
- enhanced community cohesion due to population stability and investment in social services and infrastructure;
- flow on employment in non-energy sectors; and
- jobs and skills training as part of management measures under the Surat Basin Future Directions Statement.

SGP have summarised the following *social* benefits of the Surat to Gladstone Gas Pipeline. The Coordinator-General is satisfied with respect to the adequacy of SGP's summaries:-

- LNG is generally estimated to generate up to 50% less greenhouse gas emissions than coal. The Submission notes that "*LNG is considered to be an important "transition fuel" in a carbon constrained future, providing relatively low GHG (greenhouse gas) intensive energy*". In fact, LNG has the lowest carbon dioxide emissions per unit of energy of any fossil fuel and can be used in high-efficiency gas turbine power stations.
- The Surat to Gladstone Gas Pipeline will provide significant benefits to the Surat Basin gasfields region (Darling Downs) and LNG facility region (Gladstone) through the additional employment opportunities provided. Jobs generated will provide improved job satisfaction, assist in developing the overall skills base and capacity of the regions, skills transfer and additional career paths for young job seekers.

- Associated with the additional jobs generated, there will be an increase in overall incomes of approximately \$65.9 million in the Darling Downs region and \$18.9 million in the Gladstone region. The Social Impact Assessment prepared by AEC notes that *“this represents a significant increase in the consumptive capacity of residents in those regions and their wellbeing derived from their increased capacity to consume goods and services and their command over the overall project will contribute to a detectable improvement in overall community participation in, and access to, recreational, cultural and leisure facilities and services in the regions by assisting communities reach a critical mass (in terms of population and demand primarily associated with flow-on employment and migration) for some recreational pursuits and by encouraging additional private investment in recreational, cultural and leisure activities to meet demand.”*
- While the overall project is assessed in the Social Impact Assessment prepared by AEC to *“provide an overwhelmingly positive impact on community wellbeing”*, the negative impact through potential increases in cost of living etc is assessed as *“small”*.

If the Scheme is approved and implemented, then the Addendum reports that on average, total Queensland full time equivalent employment is projected to increase by around 3,600 jobs per year.

A comparison of the average change in employment under the original Application proposal and if the Scheme were to proceed is contained in the table and diagram below.

Average Change in Employment, Relative to the Reference Area

	3Mtpa scenario	8Mtpa scenario
	Average FTE jobs (2010-2034)	Average FTE jobs (2012-2034)
Darling Downs	752	1,327
Gladstone RC	261	640
Rest of Queensland	961	1,626
Rest of Australia	4	-120
Total Queensland	1,974	3,593
Total Australia	1,978	3,473

Data Source: ACIL Tasman

4.13 Summary of the Public Submissions

When assessing the Application, the Coordinator-General invited submissions on the relevant issues from affected persons. A total of 19 submissions were received all of which were from landowners (two of the submissions received were from land owners located outside the Surat to Gladstone Gas Pipeline proposed easement).

The issue that must be assessed is whether the Surat to Gladstone Gas Pipeline is of significance, particularly economically or socially, to Queensland or the region in which the facility is to be constructed.

Three of the submissions raised whether the Surat to Gladstone Gas Pipeline would be of actual economic benefit to the region, Queensland and Australia and whether the Surat to Gladstone Gas Pipeline would positively impact on the community wellbeing. However, on balance, the material considered establishes that the Surat to Gladstone Gas Pipeline will contribute an economic and social benefit of significance including improvement in community wellbeing and employment levels.

The remainder of the submissions raised issues that will be dealt with by the EIS process and through SGP's ongoing negotiations with landowners. A number of submissions raised concern with respect to the manner in which SGP had conducted itself in discussions and negotiations with them about access to their land. If SGP asks the Coordinator-General to acquire the land, the Coordinator-General must be satisfied that reasonable steps have been taken to acquire the land by agreement. The Coordinator-General will prepare a statement giving details of the negotiations between SGP and the owners of the land to be acquired.

5. The Reasons for the Decision

The Surat to Gladstone Gas Pipeline was approved as an infrastructure facility that is of significance, particularly economically or socially, to Queensland and to the Darling Downs and Gladstone regions, being regions in which that infrastructure facility is to be constructed for the following reasons:

- a) Section 125 (16) (e) of the SDPWO Act defines infrastructure facility to include a gas distribution or transmission facility. The proposed Surat to Gladstone Gas Pipeline is an infrastructure facility of that kind whether or not the Scheme is approved and implemented.
- b) the Application from SGP is supported by independent research in the MMA Study prepared for the Queensland Government and the ABARE Report which demonstrates that there is a significant and increasing global need for LNG, particularly in Asia. The tenements held by Arrow Energy will assist in meeting such LNG demand, but only if the Surat to Gladstone Gas Pipeline is constructed to transport CSG from the Surat Basin to Gladstone.
- c) SGP, in its capacity as a wholly owned subsidiary of Arrow Energy appears to have substantial financial and technical capacity necessary to deliver the Surat to Gladstone Gas Pipeline. If the Scheme were to proceed, there appears to be no material detriment to SGP's technical and financial capacity to implement the Surat to Gladstone Gas Pipeline.

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- d) SGP has put forward a timetable for the delivery of the Surat to Gladstone Gas Pipeline which appears to be achievable in the circumstances. If the Scheme were to proceed, the revised timetable for delivery of the Surat to Gladstone Gas Pipeline and production of LNG remains achievable and justified given the increased capacity of the pipeline.
 - e) The SGP Application and the Addendum, including its supporting documentation and the various expert reports, shows that there are both social benefits and significant direct and indirect economic benefits to Queensland and the Darling Downs and Gladstone regions associated with delivery of the Surat to Gladstone Gas Pipeline regardless of whether the Scheme is implemented or not.
 - f) The Application, on its face, does not disclose anything contrary to State Government policy in the Blueprint for Queensland's LNG Industry, Department of Employment, Economic Development and Innovation SD5753 08/09.
 - g) SGP is not seeking any special assistance from Government other than land acquisition.
 - h) The Application shows that SGP has conducted investigations (including through the completion of an EIS) in relation to identification of the route and the landholdings involved for the Surat to Gladstone Gas Pipeline. There is a process in place under the EIS, the Assessment Report, the Environmental Authority and the Commonwealth Approval to manage the environmental effects associated with the Surat to Gladstone Gas Pipeline.
 - i) SGP's Application and Addendum addresses the requirements of Section 125 (1) (f) of the SDPWO Act and the requirements of Appendix A of the SDPWO Act *Guidelines for acquisition of land for infrastructure projects by persons other than the State*, September 1999 and adequately demonstrates that the Surat to Gladstone Gas Pipeline should be approved as an infrastructure facility that is of significance.
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