



# Blueprint for Queensland's **LNG Industry**

# Foreword



The Queensland Government welcomes the establishment of a new energy industry, which diversifies our State's fuel mix and capitalises on our state's extensive coal seam gas (CSG) reserves to meet the growing global demand for liquefied natural gas (LNG).

The LNG industry provides Queensland with an exciting opportunity to create new jobs in our regional centres, affected by the recent downturn in resource exports, and increases the potential prosperity of all Queenslanders through greater export revenue and royalty payments.

In light of the potential economic benefits to the State, the government is facilitating support to the LNG project proponents as they assess the viability of their proposals. However, the government is acutely aware of the potential environmental impacts the LNG industry may have on the State. Consequently, the government has committed to ensuring that each proposed project undergoes comprehensive environmental assessment to identify and mitigate any likely environmental impacts.

The LNG industry will also provide Queensland the opportunity to pioneer a world-first industry—CSG to LNG—which will contribute to the greenhouse gas abatement measures being undertaken by countries looking for 'green' energy sources to replace coal-fired electricity generation.

The government appreciates that the LNG industry will contribute slightly to the State's greenhouse emission, however the global offset in greenhouse emissions in consumer countries greatly outweighs the increases here in Australia. Nevertheless, the government will be requiring proponents to identify and implement greenhouse gas emission mitigation measures as part of each project's assessment.

This *Blueprint for Queensland's LNG Industry* outlines how the Queensland Government will further work with the industry and local communities to ensure that any development of an LNG industry is progressed in a way that benefits all Queenslanders. This blueprint also outlines the government's achievements so far and how it will manage the industry's development into the future.

We are committed to facilitating development of the LNG industry and ensuring that any government actions are delivered in a timely and well coordinated manner to the benefit of all.

**The Honourable Anna Bligh MP**

Premier of Queensland  
and Minister for the Arts

**The Honourable Andrew Fraser MP**

Treasurer and Minister for Employment  
and Economic Development



Satellite image of Gladstone and Curtis Island



LNG industry - gas fields to Gladstone

## Queensland's LNG industry

There are currently eight liquefied natural gas (LNG) projects proposed in Queensland with a total capital expenditure in excess of \$40 billion. If all of the projects were to proceed, more than 50 million tonnes per annum (Mtpa) of LNG would be produced as a result of extracting CSG from the Surat and Bowen Basins and piping it to the coast to be exported.

The eight proposed LNG projects are:

1. **Santos Ltd/Petronas** proposes to develop a LNG plant on Curtis Island, Gladstone with an initial capacity of 3 to 4 Mtpa and the potential to increase production to 10 Mtpa. The first LNG cargo from this project is expected in 2014. The proposal also includes the further development of Santos gas fields in the Bowen and Surat basins and the construction and operation of a 450 km gas pipeline linking the fields to Gladstone.
2. **QGC Ltd**, a wholly owned subsidiary of BG Group, proposes to develop a LNG plant on Curtis Island, Gladstone with an initial capacity of 7.6 Mtpa and the potential to increase production to 12 Mtpa. The first LNG cargo from this project is scheduled for late 2013. The proposal includes further development of QGC's CSG fields around Miles in the Surat Basin and the construction and operation of a 380 km pipeline linking the fields to Gladstone.
3. **LNG Limited/Arrow** proposes to develop a LNG plant at Fisherman's Landing, Gladstone with an initial capacity of 1.5 Mtpa and potential to increase production to 3 Mtpa. The first LNG cargo from this project is expected in 2012. The proposal includes a 470 km long pipeline and development of Arrow's CSG fields around Dalby in the Surat Basin.

4. **Australia Pacific LNG** (a CSG to LNG joint venture between Origin and ConocoPhillips) proposes to develop an LNG plant on Curtis Island, Gladstone. The plant will have an initial capacity of 3.5 to 4 Mtpa and the potential to increase production to 16 Mtpa. The first LNG cargo from this project is scheduled for 2014. The proposal includes the further development of APLNG's CSG fields and the construction and operation of a 470 km pipeline lining the fields to Gladstone.
5. **Shell Australia/Arrow** proposes to develop a LNG plant on Curtis Island, capable of producing 16 Mtpa. Shell has signed an agreement with Gladstone Ports Corporation for an exclusive right to investigate a site on Curtis Island for a LNG plant.
6. **Sojitz Corporation** proposes to establish a mid-scale LNG plant at Fisherman's Landing, Gladstone to produce 0.5 Mtpa of LNG. The first cargo from this project is planned for the first quarter of 2012. In the second stage production will increase to 1 Mtpa.
7. **Impel (Southern Cross LNG)** proposes to construct an open-access LNG terminal on Curtis Island, Gladstone. The LNG plant would have a capacity of 0.7 to 1.3 Mtpa and would be built in stages. Impel also proposes to build an open access, 400 km long pipeline (the Southern Cross Gas Pipeline) to Gladstone. Production is expected to start in 2013.
8. **Energy World Corporation** proposes to establish a mid-scale LNG plant at Abbot Point near Bowen producing 0.5 Mtpa of LNG. The proposal includes the development of Energy World's tenures in the Cooper Basin near Eromanga and the construction/operation of a pipeline linking the fields to Abbot Point. Production is expected to start in 2012. In the second stage production would increase to 2 Mtpa.

Collectively, should all eight proposals reach full capacity; it would represent an approximate consumption of 3250 petajoules<sup>2</sup> (PJ) of CSG per year. That is, 59 million tonnes of LNG.

A number of these LNG proponents are approaching final investment decisions on their projects and have requested certainty from the government on its position in relation to the industry.

To satisfy the proponents' financial investment decision needs, the government is addressing various policy issues and preparing a Master Plan for the Port of Gladstone Western Basin, which will coordinate hard and soft infrastructure development, land use and industry development in Gladstone over the period 2009–2039.

<sup>1</sup> A train is a term used to describe a processing plant that converts CSG to LNG  
<sup>2</sup> One petajoule equals 31.60 million m<sup>3</sup> of natural gas

## Encouraging industry development

The assessment procedure for the LNG industry requires information and approvals from a wide range of state government agencies and departments.

To provide industry with a 'one stop shop' for inquiries and to coordinate government's activities, the government has established the LNG Industry Unit. This unit, within the Department of Employment, Economic Development and Innovation, is responsible for policy development, industry assistance and commercial negotiations (including development agreements) on LNG projects. The government's response involves:

- ensuring coordination of the government's response to industry issues
- development and implementation of the government's CSG/LNG policies
- facilitation of the LNG industry including planning, land tenure, pipeline corridors and common user infrastructure
- developing a strategic 30 year Master Plan for the Western Basin of the Port of Gladstone
- assisting individual LNG projects with approvals, land tenure and infrastructure negotiations
- providing a forum for the identification and resolution of issues between industry and government
- programming key government activities across agencies to assist the development of the industry and meet industry decision making timelines
- reporting regularly to government on the status of the CSG/LNG industry and the status of the various policy and industry facilitation activities.

Other activities undertaken by government to facilitate the LNG industry are:

- extension of the Gladstone State Development Area to include part of Curtis Island as an LNG precinct
- planning a dedicated pipeline corridor between Gladstone and the Callide Range.



*Coal seam gas will be extracted from the Surat and Bowen basins and piped to the coast*

## Supporting new jobs

The creation of the LNG industry will provide the State with a welcomed boost in construction and operational jobs. To ensure the greatest benefits from this opportunity occurs, industry and Energy Skills Queensland (a specialised resource sector employment company) have formed the CSG/LNG Training Steering Committee.

The single purpose of this steering committee is to provide the government with a set of recommendations and outcomes regarding workforce planning and development for the CSG/LNG industry.

A detailed workforce planning proposal which advises the government of the skill requirements, numbers of workers required to be trained and locations where the training needs are likely to occur, will be considered by the Queensland Government by the end of 2009.

Depending on the outcomes of this assessment, the LNG industry and Energy Skills Queensland are expected to develop a dedicated CSG/LNG workforce development facility in Queensland.

Government will also require that each proponent demonstrate in its environmental impact statement (EIS) the measures taken to provide employment and training opportunities to the local community.

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).

## Informing our communities

The Queensland Government is committed to ensuring that Queensland communities are well informed and have the opportunity to provide comment about the LNG industry.

Information on the LNG industry can be found on the following websites:

[www.dip.qld.gov.au/lng](http://www.dip.qld.gov.au/lng)

[www.lng.industry.qld.gov.au](http://www.lng.industry.qld.gov.au)

These websites include information on:

- the government's initiatives to facilitate the LNG industry
- various issues (including CSG water)
- various studies that have been undertaken
- links to EIS for LNG projects and other related projects
- fact sheets and media statements.

There are many opportunities for the community to be involved in the LNG projects and industry.

As part of the EIS process for each LNG project, opportunities are provided for public comment at two stages, that is, on completion of the draft terms of reference for the EIS and also at the completion of the EIS. These opportunities are advertised in local, state and national media and displayed on each proponent's website as well as the Department of Infrastructure and Planning website.

The LNG Industry Unit has concluded consultations about the draft Port of Gladstone Western Basin Master Plan. A final Master Plan is expected to be released in November 2009.

## Working with industry

The Queensland Government has already taken steps to provide the LNG industry with formal consultation mechanisms through the following forums:

- **Premier's LNG Forum**, meets quarterly and allows LNG industry leaders to discuss issues with senior government ministers.
- **LNG Executive Group**, chaired by the Associate Director-General, Employment, Industry Development and Innovation, meets approximately every two months and provides direct access to senior departmental officers for issues of a strategic policy nature.
- **Common Issues Forum**, chaired by the General Manager, LNG Industry Unit, meets fortnightly to provide access to senior departmental officers. This group provides a forum for industry and government agencies to raise operational issues and to work collaboratively to resolve those issues. Specific issue groups will then be formed as required to progress items, such as infrastructure, water and dredging.
- **LNG Steering Committee**, chaired by the Department of Employment, Economic Development and Innovation, guides the development of cross-government responses to the LNG industry. This group is also accountable for ensuring the actions of agencies individually and collectively are well planned, appropriately managed and delivered in a timely manner.
- **LNG Industry Unit** will arrange for separate meetings with individual proponents in instances where commercial confidentiality is required, such as for negotiating development agreements. These meetings can occur as required to meet industry needs.
- **EIS facilitation** is provided through the Department of Infrastructure and Planning by the appointment of a dedicated government project manager to each project to ensure that industry is provided with prompt advice on any issues raised.

## Managing produced water

Coal seam gas (CSG) is primarily methane, which is absorbed and maintained in the coal seam. To produce CSG, the water contained in the coal seam must be removed to create a pressure void into which the gas migrates. As a result, a significant amount of saline water is produced. The quantity and quality of CSG water can vary considerably between wells and regions.

In 2007–08, approximately 13.5 gigalitres (GL) of CSG water was produced in Queensland.

It is estimated that production of gas for domestic consumption in the Surat Basin will produce an annual average of 25 GL of CSG water for the next 25 years. With the potential growth of the CSG/LNG industry, it is possible that the CSG water production may be in the order of:

- 126 GL/year for a 10 Mtpa industry
- 196 GL/year for a 28 Mtpa industry
- 281 GL/year for a 40 Mtpa industry.

In addition to CSG water containing concentrations of salts, it may also contain other contaminants that have the potential to cause environmental harm if released to land or water through inappropriate management. There are also ecological risks associated with the disposal of CSG water and, without proper treatment, the use for CSG water is limited.

To address the potential risks of CSG water the government has decided that:

- CSG producers are responsible for the treatment and disposal of the CSG water they create.
- CSG producers must treat CSG water to a standard defined by the Department of Environment and Resource Management before disposal or supply to other users.
- Evaporation ponds are to be discontinued as the primary means of disposal and transitional arrangements are to be developed in consultation with industry.
- Remediation action for existing ponds is to occur within three years.
- Ponds, necessary for aggregation or brine storage, are to be lined to a standard defined by the Department of Environment and Resource Management.
- At the approval stage, CSG producers will need to advise how they intend to manage water on their operations through the preparation of a CSG Water Management Plan.
- Water which is in excess to that which can be directly injected or beneficially used is to be aggregated for disposal.

The government will introduce an adaptive environmental approval regime, by appropriate conditioning of new environmental authorities, supported by changes to the Environment Protection (Water) Policy [EPP (Water)] to allow existing environmental authorities to be altered should significant unintended environmental outcomes occur.

The implementation of the proposed EPP (Water) provisions would be supported by improving guidance provided to industry, including:

- preparation of revised guidelines for Environmental Management Plans for the petroleum industry
- developing guidelines for performance standards to be met by beneficial uses of produced water.



*Processing plants, called trains, at Gladstone and Curtis Island will convert coal seam gas to LNG \**

## Protecting groundwater resources

The extraction of CSG to support an LNG industry may also have impacts on the State's groundwater resources. Much of the area currently under development for CSG lies within the Great Artesian Basin. The aquifers of the basin are an important groundwater supply for Queensland, with approximately 2 700 artesian bores and 15,000 sub-artesian bores providing vital water to overlying regions for stock and domestic, urban, industrial and agricultural use, often in areas where there is no alternate water supply source.

The Great Artesian Basin supports numerous springs and natural ecosystems which host a diverse range of unique flora and fauna. As well as its environmental importance, there are areas of spiritual and cultural significance to Indigenous people.

A key concern in relation to the development of CSG is the regional impact on the groundwater resources due to the cumulative effects of all the projects which may be difficult to attribute to individual projects.

To address the possible impact of CSG developments on groundwater, the government will:

- fully implement groundwater monitoring, assessment and reporting in accordance with the requirements of the *Petroleum and Gas (Production and Safety) Act 2004* (P&G Act)
- simplify the process for setting trigger thresholds for obligations to make good impacts on water bores
- expand the application of make good requirements, to include impacts on bores built after the LNG proponents have received their environmental authority, and impacts on springs

- expand the application of make good requirements to include cumulative impacts
- develop a regional groundwater monitoring regime, to be funded via an industry levy on coal seam gas producers and oversighted by an independent monitoring body.

## Maintaining Queensland's domestic gas supply

There are a range of estimates of gas within the Eastern Australian coal fields, and total recoverable reserves could be in the order 250,000 PJ. A gas resource of this size would, in all likelihood, be sufficient to meet both domestic supply needs and the needs of a LNG export industry for many decades.

However, there is a real problem that the availability of gas in the ground may not translate into gas supplied to the domestic market.

Right now we can observe that despite the known availability of gas resources, it is difficult for domestic gas-fired electricity generators to secure long term gas contracts.

The unavailability of gas on the domestic market, or uncertainty about future supply, may hinder the development of new (gas using) projects which require certainty of supply before investment decisions are made.

Potential supply constraints are particularly problematic because gas is the most likely interim fuel for electricity generation as the economy transitions to low emission power generation.

It is clear that the Queensland Government must be sure there will be enough gas available to meet future electricity generation needs.

At this stage no decision has been made on how this is to be achieved. However, two options are being considered.

The first option is a Gas Reservation Policy whereby gas producers will be required to sell or make available to the domestic market the equivalent of between 10 per cent and 20 per cent of gas production.

A second option is a Prospective Gas Production Land Reserve, which would involve:

- a. holding back from the market certain prospective gas production areas in order to amalgamate/secure areas for orderly future use
- b. stricter application of the requirements that applicants demonstrate, during the assessment of applications for a petroleum lease or a potential commercial area (both of which halt automatic relinquishment), the appropriateness of the area sought for the proposed activities
- c. where more active management of relinquishment results in an area being handed back, the State considering if it should then be put back out to the market with a condition that it is to be used only to supply the domestic market
- d. basing decisions to condition such leases for domestic use only on regular estimation of gas supply and demand, combined with market soundings of the availability of gas.

Each of these options will be detailed in a Regulatory Impact Statement which will be released during September 2009 for public comment. Interested parties will have one month to respond with a final Government decision to follow as soon as possible thereafter.

## Establishing a fair royalty regime

The State owns all petroleum and CSG resources, and royalties are the means of ensuring that the people of Queensland receive a fair return for allowing producers of LNG to sell CSG products for commercial gain.

The Queensland Government has conducted a review of the petroleum royalty regime in light of the emergence of the LNG industry.

Following consultation with industry, the Government has decided to retain the current flat petroleum royalty rate of 10 per cent of the wellhead value. This decision provides a stable royalty regime which will support the investment of gas producers in LNG plants.

The large volumes of gas that are involved mean that royalty revenue will increase markedly with the emergence of this new industry. The 10 per cent royalty rate provides a fair return to the people of Queensland for the use of our valuable petroleum resources.

Modelling indicates that, should a 28 Mtpa LNG industry emerge, the State could receive over \$850 million in royalties from gas sold as LNG. The actual amount will depend on the

price received for the gas. However, this is indicative of the significant contribution to the State economy the LNG industry can make.

A further outcome of the royalty review is that the *Petroleum and Gas (Production and Safety) Regulation 2004* will be amended to provide a power for the Minister to determine prospectively, where necessary, certain components of the wellhead valuation of petroleum commodities for royalty purposes. This will assist in ensuring that royalties are calculated correctly where petroleum commodities are sold to related corporate entities such as joint venture partners.

## Managing cumulative impacts on communities

While resource sector development can create more jobs and create a stronger economy, these developments can equally place significant pressure on local infrastructure, such as housing and community services and also create quality of life issues, such as limited availability of education and health services.

Developments such as LNG and CSG projects can produce impacts that are both direct and indirect—those that become evident later and are not readily observed when the project is in development. Consequently, the emergence of multiple and overlapping proposals for LNG and other resource sector developments may result in significant cumulative impacts for communities and regions. These include:

- demands on infrastructure—roads, energy, urban water supply
- demands for government services—health, school, police, emergency services
- changes in housing availability and affordability
- impacts on rural landholders
- conflicts over groundwater and the impacts of produced water
- community services and social fabric
- safety issues relating to wells, pipelines, processing plants and shipping.

There are also cumulative impacts at the construction, processing and shipping stages of an LNG project which will affect the community of Gladstone.

To help manage these effects, the Queensland Government has released the Sustainable Resource Communities Policy. The key themes of this policy include:

- strengthening the government's coordination role
- improving linkages between social impact assessment and regional planning
- fostering partnerships with local government, industry and community
- enhancing the regulatory environment for social impact assessment.





*Port of Gladstone with Curtis Island off the coast \*\**

The government is also committed to the development of statutory regional plans to assist in the coordination of infrastructure development and in the delivery of services and programs to communities that result from the cumulative impacts of development.

These regional plans manage change and shape future prospects of communities by:

- addressing key economic, social and environmental issues
- prioritising infrastructure and service needs
- maximising benefits and managing the impacts of projects
- driving innovation and productivity
- mobilising the public, private and community sectors
- aligning efforts across all agencies and levels of government.

The potential for conflict between industrial and agricultural land usage was identified as a key issue during the recent mining summits in the Surat Basin. The Queensland Government recognises that the potential impacts of this industry on agricultural land need to be well managed and has put in place a Land Access Working Group to address the concerns landholders and the resource industry have over land use and viability of their respective industries.

Other initiatives undertaken by government include:

- preparing a housing policy for resource communities, like those in the Surat and Bowen basins, that defines the possible extent of housing issues and develops practical solutions to resolve them

- establishing a Social Impact Assessment Unit within the Department of Infrastructure and Planning to develop community services initiatives to form part of future social impact assessment plans
- requiring cumulative social impact assessment to be part of the terms of reference for new environmental impact statements to predict impacts over the lifecycle of the project
- initiating a social infrastructure assessment study of the Gladstone area to determine possible future needs.

To further address the cumulative impact of CSG developments, government will:

- finalise, in the near future, a Surat Basin Regional Development Strategy, with objectives to maximise economic and employment benefits and minimise unintended consequences of rapid growth in the Surat Region
- establish the Surat Basin Cumulative Impacts Working Group (SBCIWG), chaired by the Department of Employment, Economic Development and Innovation. The SBCIWG will include the Department of the Premier and Cabinet; Queensland Treasury; Department of Infrastructure and Planning; Department of Environment and Resource Management; Department of Education and Training; Queensland Health; Department of Communities; and Department of Transport and Main Roads

- develop, in consultation with local government, a framework for Cumulative Growth Management Plans. This framework will be aligned with the Sustainable Resource Communities Policy
- coordinate the development of the cumulative growth management framework in line with other state government policies
- identify, in partnership with industry, the potential future economic and social uses of treated CSG water
- review matters associated with the impact on prime agricultural land and to examine the issues relating to its preservation.

## Promoting local business benefits

The government is ensuring that local industry and small business are provided the greatest opportunity to benefit from the creation of the LNG industry by:

- requiring that the proponent's EIS demonstrate the measures the proponent has taken to source materials/supplies from the local business community
- encouraging each proponent to contact the Industry Capability Network to investigate whether Australian manufacturers have the capacity and skill to provide project components, before the proponent imports these components
- applying Queensland's Local Industry Policy to the project which requires that full, fair and reasonable opportunity be given to competitive local suppliers to participate in major publicly-funded infrastructure and resource projects
- ensuring projects prepare local industry participation plans which identify work packages and competitive local suppliers to be invited to tender, the level of local industry participation expected in projects and the benefits to flow on to Queensland.

The Queensland Government is determined to ensure that competitive local industry is given every opportunity to participate in major projects being undertaken in this State, in both the public and private sectors.

This will be achieved through a proactive approach with all stakeholders. The government's approach is two-fold:

- to encourage project proponents to seek out capable local industry while also working with local companies to help them develop relevant capabilities
- to assist industry to position itself to take advantage of the opportunities available from participating in major project supply chains.

## Planning for the future

The government has undertaken a range of studies that will assist and guide the development of an LNG industry. These studies relate to land use planning, master planning for the port, the economics of the LNG industry and various environmental issues. The Department of Infrastructure and Planning website has details of these studies.

In addition, studies are underway or planned for:

- Callide to Gladstone Gas Pipeline Corridor
- Surat to Callide Pipeline Location Study
- detailed infrastructure corridor studies within the Gladstone State Development Area
- environmental management plan for Curtis Island.
- outer harbour channel duplication—Gladstone Port.

## Assessing environmental impacts

Each project proponent must complete an EIS process in accordance with either *State Development and Public Works Organisation Act 1971* (SDPWO Act) (administered by the Department of Infrastructure and Planning) or the *Environmental Protection Act 1994* (administered by the Department of Environment and Resource Management).

In addition, proponents need to also consider referring the project to the Australian Government for 'controlled action' consideration under the *Environment Protection and Biodiversity Conservation Act 1999*.

Each EIS will be a comprehensive and scientifically rigorous process to enable potentially adverse impacts to be addressed before approval decisions are made and to ensure plans to mitigate environmental impacts associated with the construction, commissioning, operation and decommissioning of the project are put in place.

The Department of Infrastructure and Planning and the Department of Environment and Resource Management, in assessing EIS, will endeavour to meet proponents' timelines for final investment decisions and will provide facilitation assistance to the proponent, where appropriate. This is, however, not a fast-track or streamlining mechanism. The time required to appropriately assess an EIS is principally driven by the proponent's fulfilment of the terms of reference and the quality of the material provided.

Further, declaring a project to be a 'significant project' under SDPWO Act does not indicate any particular commitment to, or support for, the project proposal by the Coordinator-General or the Queensland Government. Nor does the declaration itself exempt the project from the need to obtain all necessary development approvals under relevant Queensland legislation and to otherwise comply with relevant planning and environmental laws and planning instruments.



*Ships designed especially for storing liquefied gas safely will transport LNG to export markets \**

Government agencies will work with proponents to develop programs to assist in the preparation of the EIS and will collaboratively manage these programs with industry.

Until recently, an EIS focused on assessing social, economic and environmental impacts of the project in isolation to its impacts on surrounding industries or communities. As such, there was limited assessment of the cumulative impacts. This has since changed with proponents required to undertake a social impact assessment as part of an EIS, in accordance with the Sustainable Resource Communities Policy.

The government will allocate dedicated resources to facilitating each EIS and will ensure that all parties involved use their best endeavours to meet project timelines.

## Managing our environment

While the industrial development and economic prosperity of the State is important, the government recognises that it has an equable responsibility to protecting the State's natural environment. To this end, in 2008, as part of the expansion of the Gladstone State Development Area, the government included the southern half of Curtis Island and set aside 75 per cent of the expansion as an environmental precinct.

The government will also, through the Master Plan for the Port of Gladstone Western Basin, investigate opportunities to establish and protect environmental areas to mitigate the potential damage caused by future development in the Port of Gladstone.

## Reporting our performance

The Queensland Government is committed to working closely with LNG proponents to develop a world class industry for the State. To ensure that the government performs at an appropriate level, a delivery program will be developed that identifies all major government activities outlined in this document and regularly measures the government's performance.

Responsibility for this program will lie with the LNG Industry Unit. This approach will ensure that government agencies perform in a manner which provides the best possible service to LNG proponents within the limits of available resources.

Proponents are encouraged to raise any specific timelines or issues with the LNG Industry Unit for consideration as a part of the LNG industry program.

## Blueprint for Queensland's LNG industry

This *Blueprint for Queensland's LNG Industry* provides a clear indication of the government's support for the future CSG and LNG industry.

Further, this Blueprint sets out the government's key initiatives for policy development, industry facilitation and individual project assistance, all of which are designed to facilitate the establishment of a viable LNG industry.

## References to LNG industry information

### Queensland Government

- LNG Industry Unit
- Managing coal seam gas water

Visit: [www.lng.industry.qld.gov.au](http://www.lng.industry.qld.gov.au)

- Land access information

Visit: [www.dme.qld.gov.au](http://www.dme.qld.gov.au) and search land owner occupier information

### LNG projects progressing environmental impact studies

- Australia Pacific LNG Project (ConocoPhillips/Origin Energy)
- Fisherman's Landing Port Expansion, Port of Gladstone
- Gladstone Liquefied Natural Gas Project (Santos Ltd/Petronas)
- Queensland Curtis LNG Project (BG Group/QGC Ltd)
- Shell Australia LNG (Shell CSG Australia Pty Ltd)
- Port of Gladstone Strategic Dredging and Disposal Project

Visit: [www.dip.qld.gov.au/projects.html](http://www.dip.qld.gov.au/projects.html) and select project name

### Fact sheets about LNG and CSG industries

- Coal seam gas
- Liquefied natural gas
- LNG safety
- Liquefied natural gas reserves and resources
- Demand for coal seam gas in Queensland
- Management of coal seam gas water
- Impacts of coal seam gas on groundwater aquifers
- Land access and impacts.

Visit: [www.dip.qld.gov.au/lng](http://www.dip.qld.gov.au/lng) and select fact sheets

### LNG industry studies

- Liquefied Natural Gas Whole of State Environmental Impact Study, December 2007
- Queensland LNG Industry Viability and Economic Impact Study, February 2008
- Site Selection Study LNG Production and Export Precinct – March 2008
- Environmental Assessment LNG Production and Export Facility Site Selection Study – March 2008
- Queensland LNG Industry Viability and Economic Impact Study – May 2009

Visit: [www.dip.qld.gov.au/lng](http://www.dip.qld.gov.au/lng) and select Studies

### Proposed LNG industry proponent web sites

- BG Group/QGC Ltd: [www.qgc.com.au](http://www.qgc.com.au)
- ConocoPhillips/Origin Energy: [www.originenergy.com.au](http://www.originenergy.com.au)
- Energy World Corporation: [www.investsmart.com.au](http://www.investsmart.com.au) and select Energy World Corp
- Impel (Southern Cross LNG): [www.lngimpel.com](http://www.lngimpel.com)
- LNG Limited/Arrow [www.arrowenergy.com.au](http://www.arrowenergy.com.au)
- Santos Ltd/Petronas: [www.santos.com](http://www.santos.com)
- Shell Australia/Arrow: [www.shell.com](http://www.shell.com)
- Sojitz Corporation: [www.sojitz.com](http://www.sojitz.com)

## Further information

### Additional information on Queensland's LNG industry is available from:

LNG Industry Unit, Department of Employment,  
Economic Development and Innovation

PO Box 15168 City East Qld 4002 Australia

**Telephone:** +61 7 3898 0441

**Facsimile:** +61 7 3898 0488

[LNG.team@deedi.qld.gov.au](mailto:LNG.team@deedi.qld.gov.au)

[www.lng.industry.qld.gov.au](http://www.lng.industry.qld.gov.au)

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\* Woodside Energy Ltd (Ship on cover, Pg 5, Pg 9)

\*\* Santos Ltd (Pg 7)