

# Queensland Overview

On the back of booming CSG production, Queensland has become one of Australia's leading petroleum-producing regions, and the development of CSG-to-LNG technology has the state poised to become a major LNG exporter.

The number of CSG wells drilled annually in Queensland increased from a low of 10 in the early 1990s to a record high of approximately 600 in 2007-08; CSG production totalled 4 PJ in 1998, rising to 27 PJ in 2002-03 and 133 PJ in 2008.

In March this year, a \$60 B 20-year deal between Britain's BG Group and the state-owned China National Offshore Oil Corporation for the supply of 3.6 MMt/y LNG sourced from BG's Queensland CSG fields was announced. The gas, to be supplied to China from 2014, will be sourced from the Queensland Curtis LNG Project, with up to \$10 B expected to be spent on construction over the next four years.

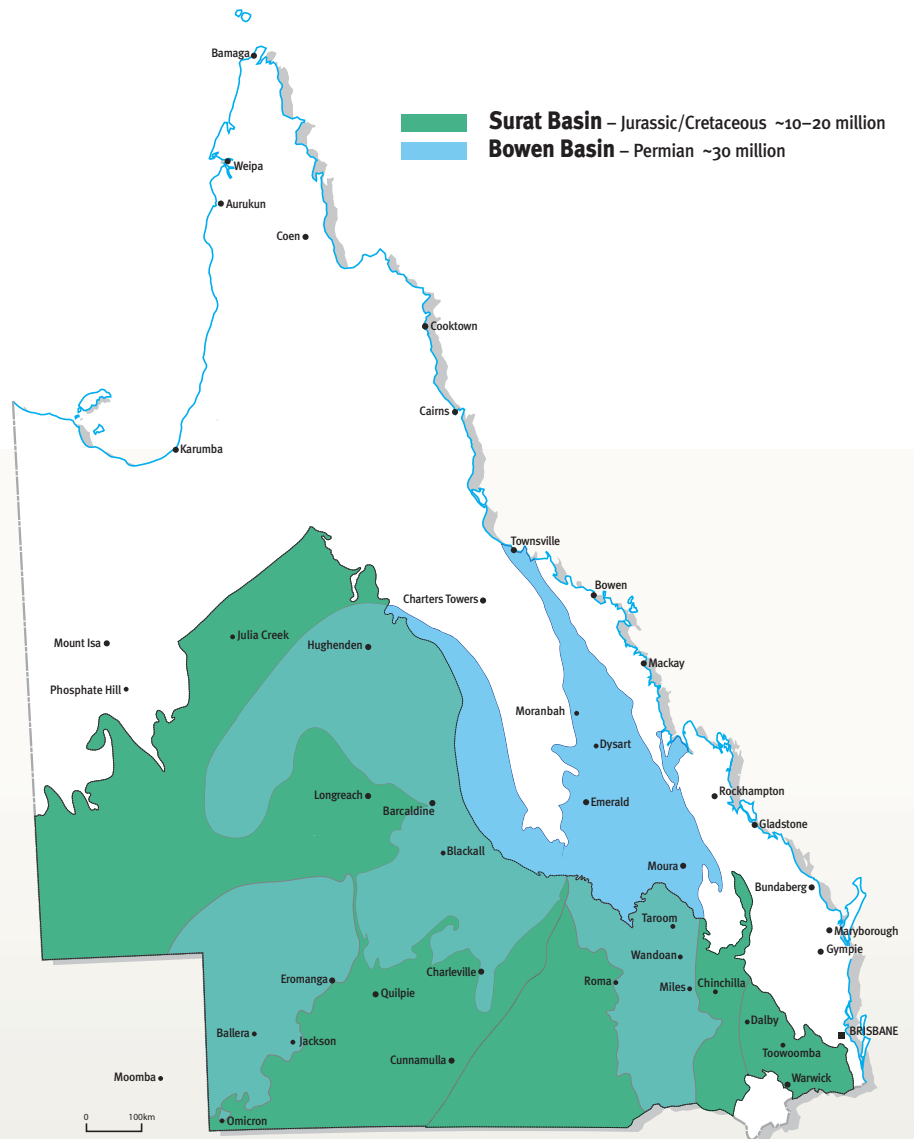
The project will include: a significant CSG development in the Surat Basin; a 540 km pipeline network linking the gas fields near Chinchilla to the LNG plant at Gladstone; and an LNG plant on Curtis Island, near Gladstone, initially comprising two processing units, or 'trains', possibly to be followed by a third unit.

Among the other major LNG projects in the pipeline for Queensland are:

## Gladstone Liquefied Natural Gas (GLNG) project (Santos and Petronas)

The proposed GLNG project entails a 3-4 MMt/y LNG processing train, associated infrastructure, and an export facility to be constructed on Curtis Island. CSG will be supplied via a 450 km pipeline from Santos' CSG fields in the Surat and Bowen basins. It is anticipated the project will create 5,000 jobs during construction and sustain 1,000 jobs during its operation.

Santos holds a 60% interest in the project and is operator; Petronas holds the remaining 40%.



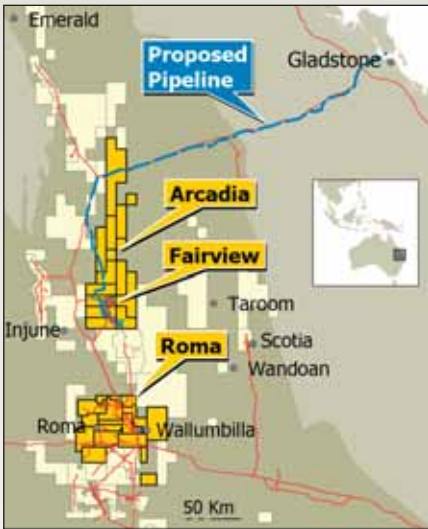
The Bowen and Surat basins. (Image provided by Queensland Mines and Energy, Department of Employment, Economic Development and Innovation.)

FID is expected in the first half of 2010, with first cargoes targeted for 2014.

## Australia Pacific LNG (APLNG) project (ConocoPhillips and Origin Energy)

APLNG is a 50/50 joint venture between ConocoPhillips and Origin Energy, encompassing: development of existing CSG

fields in the Surat and Bowen basins; the construction of an approximately 450 km pipeline to Gladstone; and the development of an LNG plant at Laird Point, Gladstone, with a processing capability of up to 18 MMt/y. APLNG states the project will create up to 5,000 direct jobs during peak construction, with 1,000 jobs to be sustained throughout its lifespan.



Map of the GLNG project area.

FID is expected late this year, with APLNG aiming to sell first LNG to international markets by 2014.

**Gladstone LNG Project (LNG Ltd and Arrow Energy)**

Arrow Energy's board of directors has recommended an offer from CS CSG (Australia), a company jointly owned by a subsidiary of Royal Dutch Shell and a subsidiary of PetroChina, to acquire all of the post-demerger issued capital of Arrow Energy. Arrow will demerge certain Australian assets and the international business into a new company called Dart Energy.

On completion of the acquisition, the joint venture will own Arrow's Queensland CSG assets and domestic power business, as well as Shell's Queensland CSG assets and its site for a proposed LNG plant on Curtis Island.

Arrow is expected to hold a shareholder meeting mid-July to allow shareholders to vote on the offer.

**Shell Australia LNG (SALNG) project (Shell CSG Australia)**

In December last year, Shell announced the signing an agreement with the Gladstone Ports Corporation to acquire land on Curtis Island for the development of the SALNG project. The proposed project, which will utilise CSG from the Surat and Bowen basins, involves the construction of an LNG plant capable of producing up to 16 MMt/y, and the phased construction of up to four LNG trains.

**Abbot Point LNG Project (Energy World Corporation)**

Energy World Corporation has proposed the development of harbour port, power station, LNG production and load-out facilities at Abbot Point, with production slated to commence in three years.

The initial phase of development will involve the construction of an LNG facility with four modular 500,000 MMt/y trains, an LNG storage tank, export facilities, and a 350 km pipeline to connect the facilities with the Surat and Bowen basins. In the later phase, a 550 km pipeline has been proposed, connecting the Gilmore and Eromanga gas fields to the initial phase pipeline.

**Southern Cross LNG (SCLNG)**

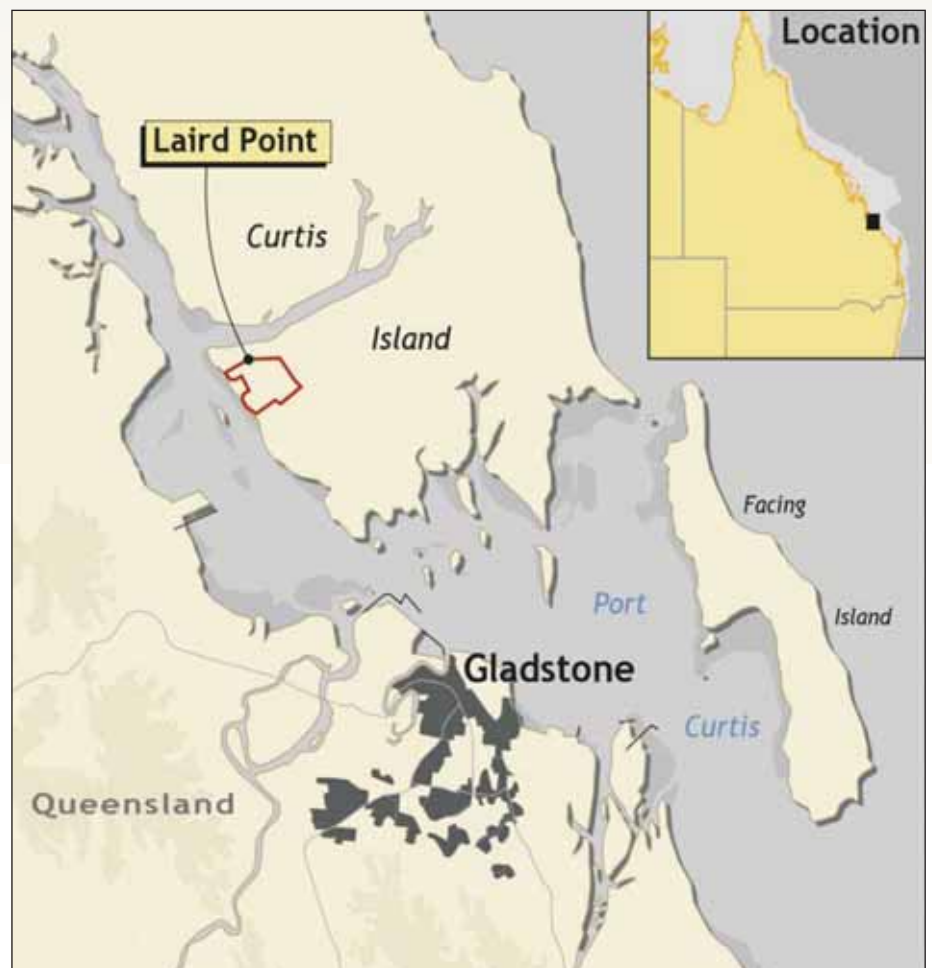
SCLNG proposes to develop Australia's first open access liquefaction facility, and an associated

open access pipeline, to be located on Curtis Island. The proposed pipeline will be open to any commercial or industrial user, not just those wishing to access LNG.

The project will be designed to accommodate up to three LNG trains, each producing between 0.7–1.7 MMt/y, with total LNG production in the order of 5 MMt/y, or up to 277 PJ/y. The Southern Cross LNG Pipeline, running approximately 400 km through the Surat and Bowen basins, will be the major part of the feeder system bringing gas to the facility.

**Sojitz Corporation**

Japanese company Sojitz proposes to establish a medium-scale LNG plant at Fisherman's Landing, Gladstone. The plant will initially produce 0.5 MMt/y, increasing to 1 MMt/y in the second stage of the project, with the first cargo planned for 2012. ■



APLNG's Laird Point site.