The Future for Australia’s Gas Exports

Wayne Calder
Deputy Executive Director
Bureau of Resources and Energy Economics (BREE)
Australia - the world leader in gas exports by 2018

Australia is investing $200 billion in the current expansion of LNG exports.

• comparable to the iconic Snowy Mountains Scheme.

• a possibility to increase capacity by a further 50%.

The key question –

• will growth continue?

Source: Snowy Hydro
A sea change in Australia’s gas markets

LNG export capacity will expand from **24 Mtpa** to **85 Mtpa** and exceed Qatari exports by 2018

- additional potential for **35 Mtpa** of export projects under consideration
- international linkage creates challenges for the domestic market.

Source: BREE
Domestic challenges

The impact on domestic prices and demand is highly uncertain.

- in the West, IMO projects a loss of potential demand of 5% by 2018.
- in the East, AEMO forecasts a substantial reduction in gas use for power generation (GPG). The impact on the industrial sector is still unclear.

Source: AEMO GSOO 2013
Australia has large un-tapped gas resources:

- large conventional gas reserves in offshore WA and NT
- significant CSG reserves in Queensland and NSW
- a huge potential shale gas resource across Australia, with current exploration focusing on the Cooper basin

Source: Geosciences; BREE
Export growth prospects – international demand

A surge in demand from 2013 to 2019 will see the Asia Pacific maintain its dominance.

- within the Asia Pacific we expect a shift from Japan/Korea to new growth markets in China, SE Asia and India.
- European LNG will also grow as domestic production declines and Russian pipeline imports stagnate.

Source: Nexant; BREE
But supply competition is increasing

Supply is very tight following the recent Qatari expansion

• Australia has taken *first mover* advantage to capture pent-up demand.

But new competitors are emerging:

• US shale gas ‘revolution’
• Russian ‘pivot east’

We expect a softer market post 2017

Source: Nexant; BREE
Further expansion of Australian LNG exports must compete with a plethora of international proposals.
Uncertain demand growth beyond 2020

China has many options beyond 2020:
• coal/renewables/nuclear
• pipeline imports
• indigenous production

There are many potential opportunities – and roadblocks – to further growth in LNG

Australian LNG can compete by being cost competitive.

Source: Nexant; IEA; BREE
Uncertain demand growth beyond 2020

European LNG demand grows to 2020 as:

• indigenous production falls
• Russian pipeline imports stagnate
• US LNG becomes competitive

Beyond 2020, growth is less certain:

• growing African pipeline imports
• shale gas.

Source: Nexant; IEA; BREE
Prices are expected to fall

- current high spot prices to fall as new supply enters the market.
- oil-linked contract prices are also expected to fall as oil prices soften.

These trends will add to the pressure on new Australian projects.

Source: IEA WEO 2013
However, costs are rising

LNG project costs have exceeded initial expectations

- Australian costs are 20-30% higher than North American and East African prospects (McKinsey 2013).

Cost management is the key issue.

Source: IES 2013; Jacobs SKM 2013
Can Australia expand LNG production?

Australia has the gas resources, is well located, is politically stable, and has the experience in LNG production.

Potential customers have many cost effective options:
- coal/renewables/nuclear
- pipeline imports
- shale gas
- LNG from emerging low cost exporters

...but, costs are escalating.

Australia’s advantages are:
- it can learn from experience
- Government regulatory reforms
- brownfields developments
- many FLNG prospects
Contact details

Wayne Calder
Deputy Executive Director
Bureau of Resources and Energy Economics (BREE)
Level 2, 51 Allara St. Canberra
Wayne.Calder@BREE.gov.au