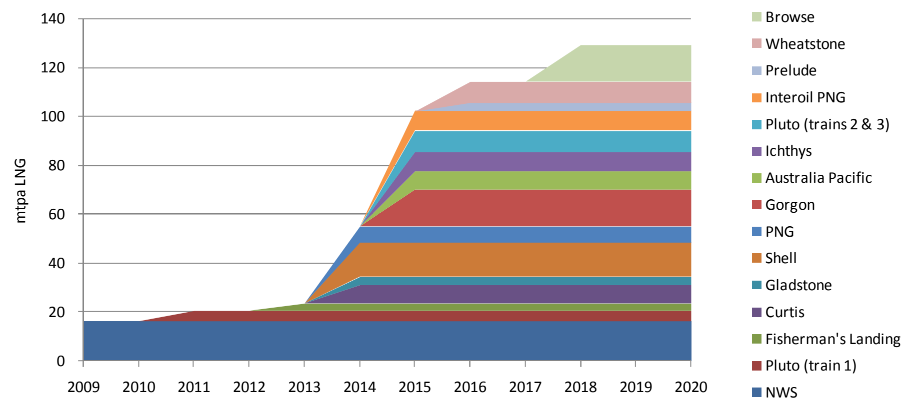
LNG

14 December 2009

Jostling for position

Australia has an excellent opportunity to become a top 3 player in the global LNG market over the next decade. In pursuit of this there are over 15 projects (worth well over $130b) either in construction or on the drawing board.

Figure 1: Proposed Australia/PNG LNG production (indicative, not all inclusive)



Source: ABARE, company data, Argonaut

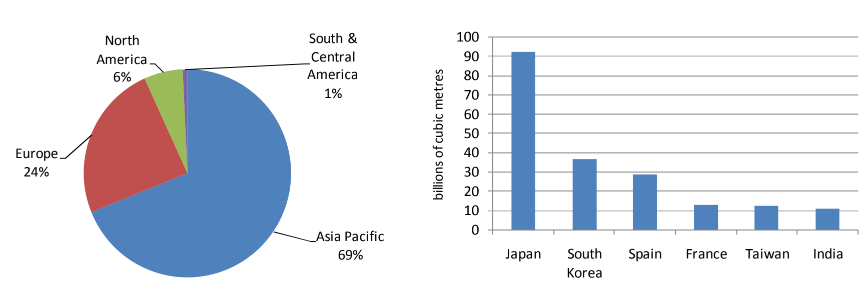
However there is no way that all this can happen concurrently.

As a result **we expect to see intense jostling for position in the LNG queue over the next few years**.

A huge opportunity ……

Natural gas is accounting for a growing proportion of global energy use, a trend likely to continue as the world shifts away from coal towards cleaner energy sources. A significant portion of gas trade is in the form of LNG with the lion's share imported by Asia Pacific countries.

Figure 2: Major LNG importers (by region & by country)



Source: BP Statistical Review of World Energy, 2009

While Japanese demand growth will be relatively benign, there will be sharply growing energy requirements from developing countries like India and China. Forecasts vary, but

Analyst:
Ian Christie, CFA

Global LNG demand is expected to grow significantly …..

by 2020 global LNG demand is likely to have doubled – requiring the production of an extra 200mtpa. Consider:

China:

- Access to resources is a major issue for China – the country has executed 61 offshore deals in 2009 with a value of US$21.8b – 83% was in the resources sector
- Energy is a major issue for the country – coal is the main source of energy presently with gas providing a mere 3% of requirements
- As carbon intensity is reduced, gas will have to replace coal – and a significant proportion of this gas will need to be imported in the form of LNG
- The first LNG regasification facility was built in 2006 and there is an accelerated programme to build more
- CNOOC and PetroChina already have offtake agreements with Australian LNG operators and Sinopec is likely to follow suit

….. particularly in populous developing countries

India:

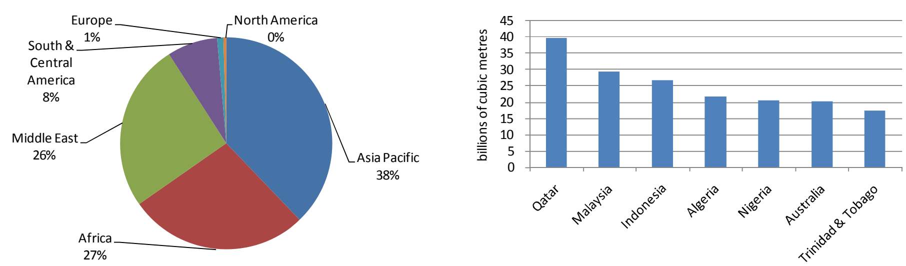
- With 600m people without electricity India needs 300,000MW by 2015
- Meeting these needs will require energy from all sources, including gas
- A comment made at the recent LNG Outlook conference in Perth was that India could take another 50mtpa tomorrow if they had the regasification facilities

…… for Australia to grasp

This provides a huge opportunity for Australia

The Asia Pacific region produces the most LNG (from Malaysia, Indonesia and Australia), followed by Africa and the Middle East. By country, Qatar is by far the biggest producer of LNG – currently more than double that produced in Australia.

Figure 3: Major LNG exporters (by region & by country)



Source: BP Statistical Review of World Energy, 2009

In our view Australia has a huge opportunity to leapfrog the countries to the left on the chart above to become the world's number 2 producer. Australia:

- Has large gas resources (as well as still being highly prospective)
- Is in close proximity to Asia
- Has reliability, political stability and low sovereign risk
- Has LNG experience and skills

No wonder that operators in Australian are competing fiercely to get the next LNG project up and running and capture a slice of the extra 200mtpa required over the next decade.

Challenges

It will not be plain sailing though and major challenges include .....

However there are a number of challenges that need to be overcome in order to fully grasp the opportunity and it will require a major concerted effort by companies, as well as the Commonwealth and State Governments, to overcome them.

Skilled labour critical

..... a severe potential shortage of skilled labour .....

This issue was probably the hottest topic at Perth LNG conference last week, with many presenters and industry participants highlighting the issue:

- Over the 10 years to 2008, 250,000 new jobs were created in WA taking unemployment to a record low of 2.7%. In the next 10 years it is expected that at least another 350,000 new employees will be required. To make it worse WA starts from a lower unemployment rate (5.7%) than the last time (6.5%).
- A lot of the demand will come from the oil & gas sector, with LNG projects alone expected to require more than 80,000 new jobs during construction.
- It's also worth pointing out that LNG projects are only part of a picture that includes other resources expansion (such as in the iron ore sector) and infrastructure (ports, road and rail).
- In recent months a number of comments from the majors like BHP and Woodside have bemoaned the shortage of labour as a major constraint on expansion.

Costs

..... and increasing development costs .....

Hand in hand with tighter markets are higher costs. As development costs escalate project economics come under threat. For multinationals with a choice of projects in various jurisdictions, they will need to weigh up the attractiveness of doing a project in Australia with the extra costs of doing so.

Having said that, it's not always solely about economics:

- Increasingly, large projects are being driven more by reserve replacement than an IRR
- National oil companies are becoming highly acquisitive simply in order to build up a strategic reserve

Competition

..... in the face of both local and international competition

Recently the LNG market shifted from being a sellers market to a buyers market. Buyers now have more choice and greater bargaining power. With each new offtake agreement signed, the remaining projects lose ground. Chevron's recent record 4.1mtpa signing with Tepco for the proposed Wheatstone project is a good case in point.

Those companies that cannot lock in offtake partners will likely see their projects stall in the face of unacceptable risk and/or a lack of financing.

In addition to the competition amongst local projects, we note that Australia is not the only country with LNG potential. During the last week alone PNG gave approval for two LNG projects – one the long awaited ExxonMobil PNG LNG project, and the other Interoil's LNG proposal following the very successful drilling campaign at the Elk/Antelope field (Antelope 4 flowed at 705mmcfd!).

Not only do international projects compete for LNG buyers, but also for skilled labour.

Implications

Development Timeline

Timelines are certain to slip .....

Proposed timelines are certain to slip:

- With the best will in the world there is simply not enough human resources available to implement all projects concurrently
- There is likely to be significant inflation in development costs, hurting project economics
- Those that do not lock in offtake partners early will be forced to delay implementation

Alternatives

..... forcing project owners to examine alternatives

For a number of companies this is likely to result in the consideration of alternatives:

- We expect to see increased collaboration between parties in attempts to secure larger gas reserves and reduce development costs
- Other options, such as floating LNG (quicker and cheaper, although as yet untested) will increasingly be considered
- Commonwealth and State governments will become more actively involved in the sector, such as the WA Government's push for the James Price Point LNG hub

Economic impact

But despite this the Australian economy, and WA in particular, is expected to receive a major boost that could last a decade

However, even with delays, the expected activity in the LNG sector alone is likely to provide a major boost for the Australian economy over the next decade:

- The main impact will be felt in WA – this resources based economy will be in an elevated state of activity for years to come as some of the 70mtpa in proposed LNG production is built and comes on stream
- The impact will be immediately positive for companies directly linked to the construction and operation of offshore oil & gas projects, but will ultimately trickle down to the benefit of all companies in the WA economy
- There is likely to be serious shortages of skilled labour, equipment and accommodation in WA from 2011/12 which will only be partially overcome by a concerted effort from companies and governments
- Queensland should also be positively impacted, but probably from a later date as the CSM LNG concept gains acceptance – the first cab off the rank here is likely to be the 1.5mtpa Fisherman's Landing project

To become a top 3 LNG producer is an exceptional opportunity for Australia

The effects of increased LNG activity will start being felt in 2010, although the full impact will be evident in later years. The likely stresses and strains that will be felt in the WA economy will be a good problem to have, but the challenges will need to be addressed if this exceptional opportunity is not to be wasted.

Contact Details

Research:

Ian Christie
Director Research
+61 8 9224 6872

Troy Irvin
Associate Director, Resources
+61 8 9224 6871

Tim Serjeant
Analyst
+61 8 9224 6806

Institutional Sales:

Paul Carter
Executive Director
+61 8 9224 6864

Chris Wippl
Senior Institutional Dealer
+61 8 9224 6875

John Santul
Consultant, Sales & Research
+61 8 9224 6859

Damian Rooney
Senior Institutional Dealer
+61 8 9224 6862

Ben Willoughby
Institutional Dealer
+61 8 9224 6876

Corporate and Retail Sales:

Kevin Johnson
Executive Director
+61 8 9224 6880

Glen Colgan
Executive Director
+61 8 9224 6874

Geoff Barnesby-Johnson
Senior Dealer
+61 8 9224 6854

James McGlew
Senior Dealer
+61 8 9224 6866

Andrew Venn
Dealer
+61 8 9224 6865

Rob Hamilton
Dealer
+61 8 9224 6830

Melaney Brans
Dealer
+61 8 9224 6873

General Disclosure and Disclaimer

This research has been prepared by Argonaut Securities Pty Limited (ABN 72 108 330 650) ("ASPL") for the use of the clients of ASPL and its related bodies corporate (the "Argonaut Group") and must not be copied, either in whole or in part, or distributed to any other person. If you are not the intended recipient you must not use or disclose the information in this report in any way. ASPL is a holder of an Australian Financial Services Licence No. 274099 and is a Market Participant of the Australian Stock Exchange Limited.

Nothing in this report should be construed as personal financial product advice for the purposes of Section 766B of the Corporations Act. This report does not consider any of your objectives, financial situation or needs. The report may contain general financial product advice and you should therefore consider the appropriateness of the advice having regard to your situation. We recommend you obtain financial, legal and taxation advice before making any financial investment decision.

This research is based on information obtained from sources believed to be reliable and ASPL has made every effort to ensure the information in this report is accurate, but we do not make any representation or warranty that it is accurate, reliable, complete or up to date. The Argonaut Group accepts no obligation to correct or update the information or the opinions in it. Opinions expressed are subject to change without notice and accurately reflect the analyst(s)' personal views at the time of writing. No member of the Argonaut Group or its respective employees, agents or consultants accepts any liability whatsoever for any direct, indirect, consequential or other loss arising from any use of this research and/or further communication in relation to this research.

Nothing in this research shall be construed as a solicitation to buy or sell any financial product, or to engage in or refrain from engaging in any transaction. The Argonaut Group and/or its associates, including ASPL, officers or employees may have interests in the financial products or a relationship with the issuer of the financial products referred to in this report by acting in various roles including as investment banker, underwriter or dealer, holder of principal positions, broker, director or adviser. Further, they may buy or sell those securities as principal or agent, and as such may effect transactions which are not consistent with the recommendations (if any) in this research. The Argonaut Group and/or its associates, including ASPL, may receive fees, brokerage or commissions for acting in those capacities and the reader should assume that this is the case.

There are risks involved in securities trading. The price of securities can and does fluctuate, and an individual security may even become valueless. International investors are reminded of the additional risks inherent in international investments, such as currency fluctuations and international stock market or economic conditions, which may adversely affect the value of the investment.

The analyst(s) principally responsible for the preparation of this research may receive compensation based on ASPL's overall revenues.