



Jemena Pipelines

NSW Pipeline Infrastructure

- the current picture;
- future needs for future supplies;
- challenges & opportunities for development.

AIE half-day Forum - 24 June 2013
NSW Looming Gas Shortage: Fact or Fiction?



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Jemena's Gas Assets

Eastern Gas Pipeline

- Links Gippsland Basin in Victoria to markets in NSW

Queensland Gas Pipeline

- Links Wallumbilla to Gladstone and Rockhampton

VicHub Interconnect Facility

- Interconnect facility between the EGP and the Victorian gas transmission system

Colongra Gas Transmission & Storage Pipeline

- 9km gas transmission and storage pipeline delivering gas to Delta Electricity's gas turbine facility

Jemena Gas Network

- Since its beginnings in 1837 the Jemena Gas Network¹ in New South Wales has grown to service over 1 million customers across its 23,800 km length





Eastern Gas Pipeline: Asset Overview

Description

- 797km pipeline between Longford & Sydney
- Supplies 50% of NSW & ACT Gas Network with gas from Gippsland Basin
- Services several significant regional centres en route, including Canberra & Wollongong
- Primary demand from industrial customers, power generators and retailers

Key Metrics

- Current capacity: 106 PJ pa
- Constructed in 2000
- Key Shippers/ End Users include:

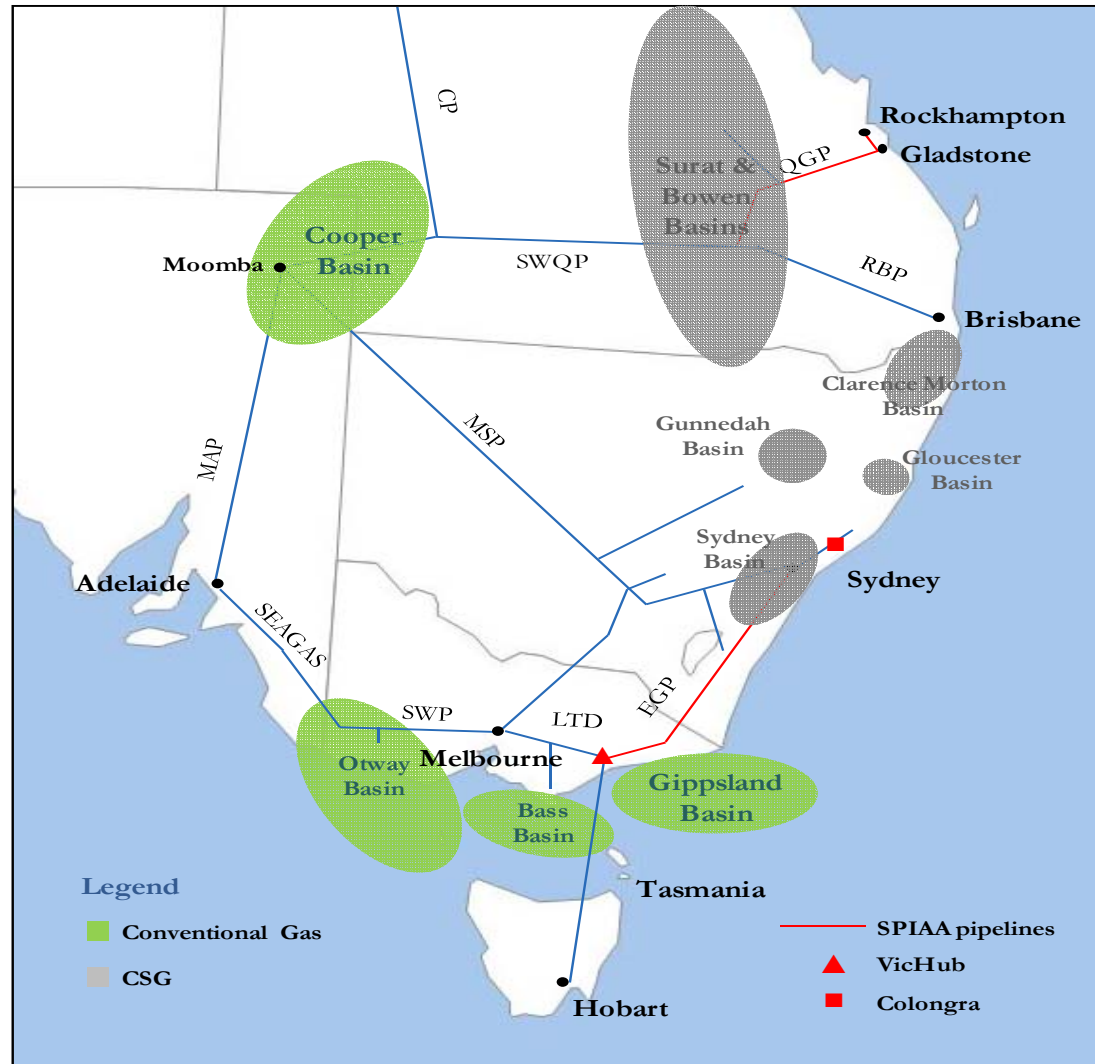
• Asset Location



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East Coast Infrastructure





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Dynamic Change in the Eastern Australian Gas Market

Large Scale LNG Export Projects

c.38,000 PJ and counting

Changing Domestic Market Dynamics

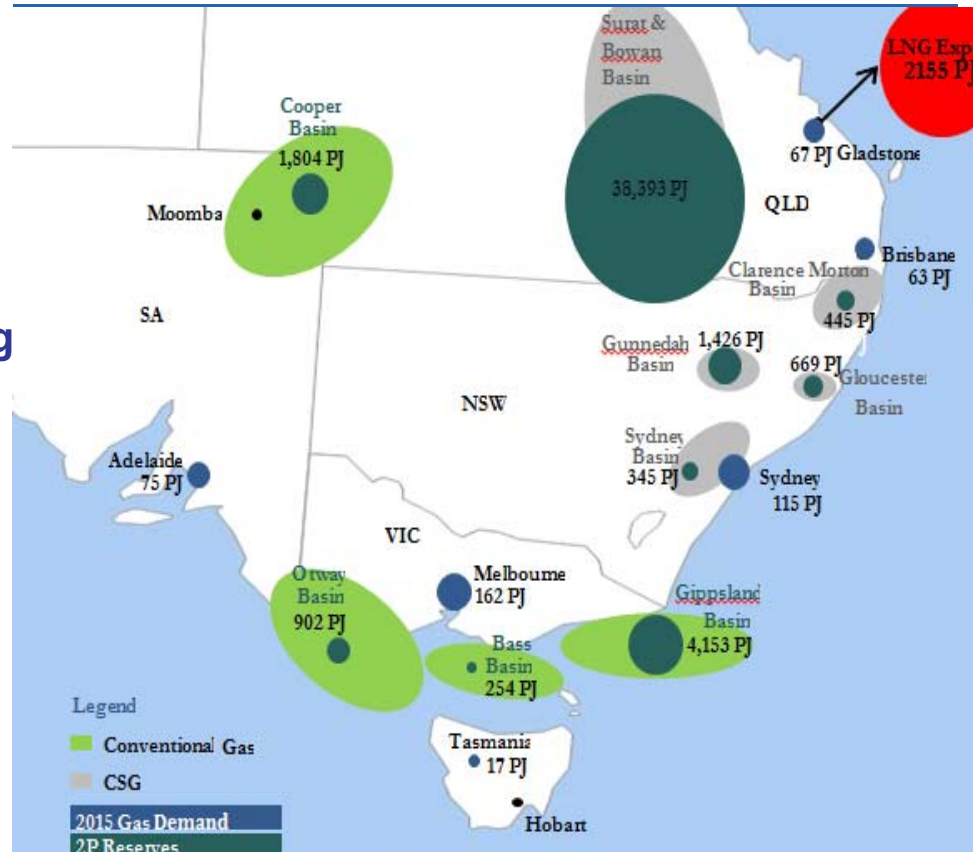
Eastern Australian Gas Flows Changing

- Cooper gas being drawn north
- Unconventional gas increasing

Domestic Demand Impacted

- Forecast of higher prices
- Reduction in GFG
- Shorter term contracts

• Eastern Australian Gas Markets / Reserves





Outlook for NSW?

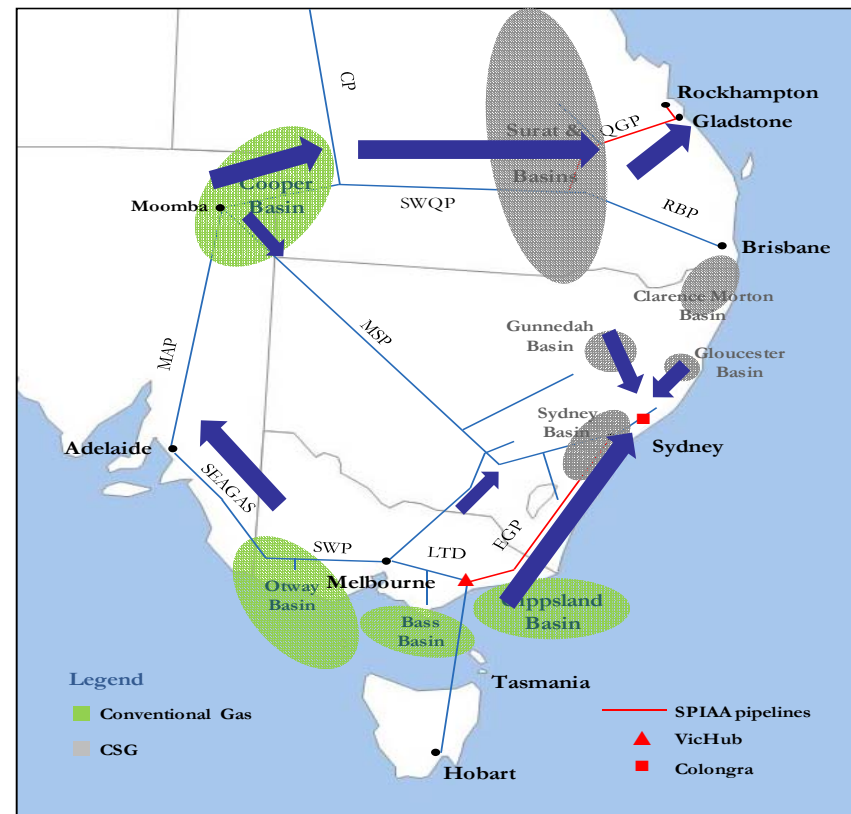
LNG Projects will have a Profound Impact on Pipeline flows:

- Domestic demand is competing with LNG exports at a time when domestic contracts are up for renewal.
- Significant reductions in gas flowing from Cooper Basin to NSW
- Community concern to CSG is impacting development of new sources of supply
- 95% of NSW gas is imported

Is NSW CSG the Silver Bullet?

- NSW CSG was expected to replace some Cooper volume once infrastructure constructed
- Technical, environment & regulatory issues mean timing and volume coming online is uncertain

Expected Gas Flows in Eastern Australia





EGP Capacity Expansion Opportunities

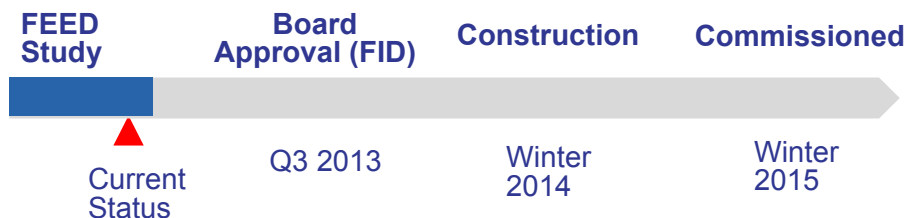
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EGP is planning expansion from a capacity of 106PJ p.a. to 130PJ p.a. :

- To secure gas supply to NSW that has historically been sourced from Cooper Basin
- Two additional compressor station on EGP at Orbost & Michelago
- The FEED study is being reviewed and finalised

When??

- Time is running out to get additional capacity for Winter 2015
- A clear picture of demand is difficult as participants adjust to the new market
- Discussions under way to finalise customer requirements



★ • Expansion case midline compressors sites

What about NSW native natural gas?

NSW has abundant unconventional gas reserves

Pipelines should not be seen as the constraint

Jemena has historically delivered pipeline solutions to meet customer demand

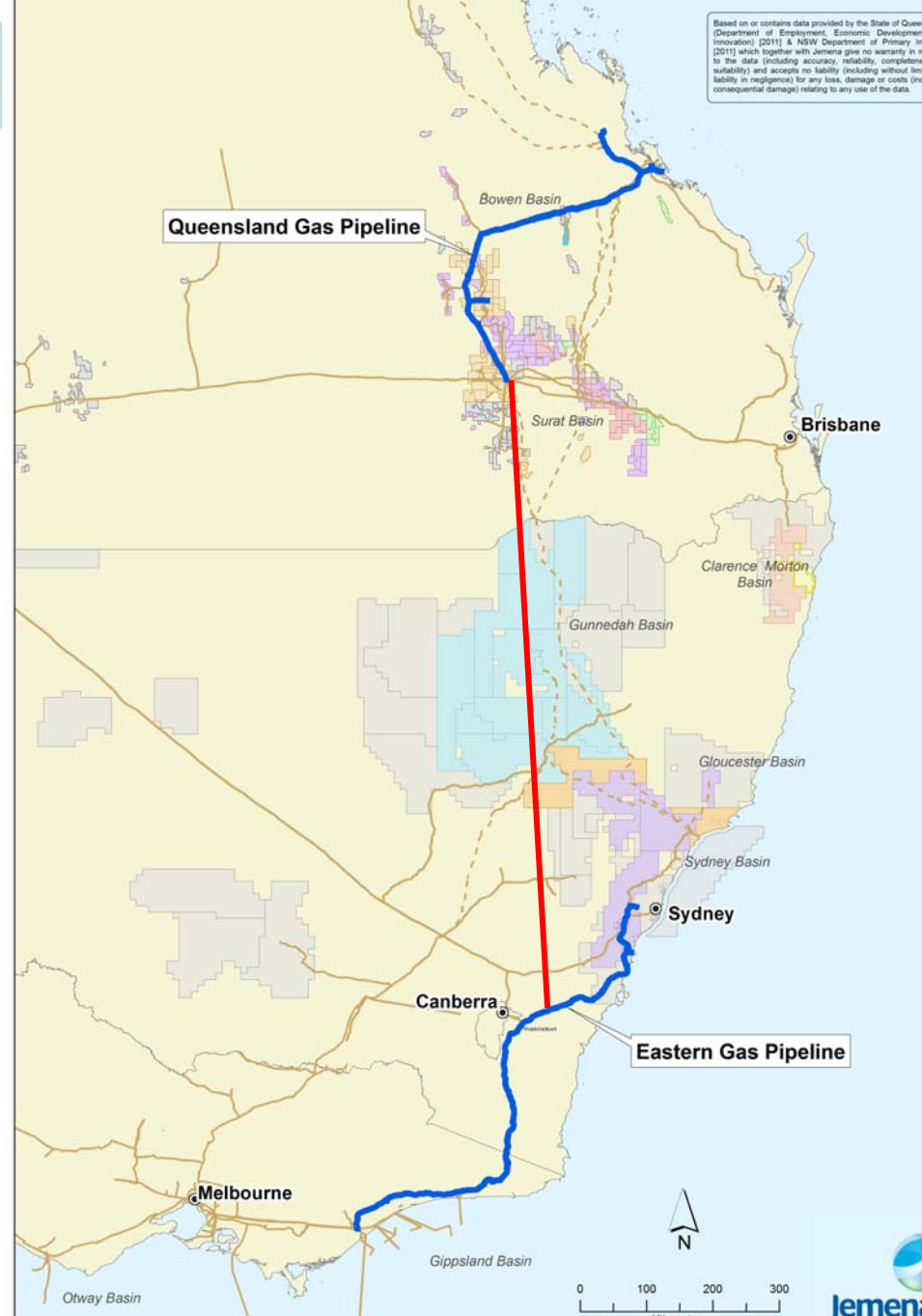
Jemena is in position to build pipelines to facilitate flow of gas to demand centres

- But significant infrastructure like this requires contracts not just STTMs

The limitation will be the approvals process on the gas developments

There is an opportunity to introduce greater competition to the transmission market on the East Coast

An interconnected East Coast to provide supply solutions that to help manage current and future market changes





Thoughts on the Grattan report...

- The EGP is expected to be expanded as a key part of the solution to the NSW shortfall
- We agree general protectionism isn't the answer although policy to manage transition impacts could be considered
- In our experience capacity is traded between existing pipeline shippers – supported by our contracts
- Jemena believes that any new measures to improve market transparency and competitiveness should be subject to rigorous cost benefit analysis
 - All regulation imposes a cost burden
 - Expect limited actual gas trading
 - STTM price signals will not drive investment in new capacity





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In Conclusion

- The gas market is changing and new infrastructure is required to meet the new demands
- Pipeline capacity will be built to meet customer need
- There is sufficient time to build pipelines
 - But short term markets won't deliver long term outcomes

