



Pipeline infrastructure meeting export and domestic gas demand



Cheryl Cartwright, Chief Executive, APGA
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The Australian Pipelines and Gas Association



Peak body for Australia's gas transmission industry

Membership covers pipeline owners and operators, constructors, designers, service providers, suppliers and regulators

- **480+ members**
 - Technical issues, Operations and Maintenance
 - Research (Energy Pipelines CRC)
 - Health, Safety, Environment
 - Gas Markets & policy, economic regulation
 - Advocacy
 - Knowledge transfer – Young Peoples Forum; mentoring; scholarships
 - Competency Standards – registration of pipeline engineers

Gas Markets

Transmission pipelines connect supply and demand

- Market has evolved – long-term contracts
- Under this system, \$5 billion has been spent on developing the east coast gas market since 2000 (not including CSG-LNG pipelines in Queensland)
- Transmission pipeline investment is made in response to supply-demand contracts between suppliers and users/shippers
- Financial security required in order to attract sufficient investment in this infrastructure
- Contracts can be flexible, providing a mix of firm and interruptible supply and, sometimes, storage
- Pipeline information available on Bulletin Board
- Small amount of trading – balancing mechanism - STTMs

Gas Markets

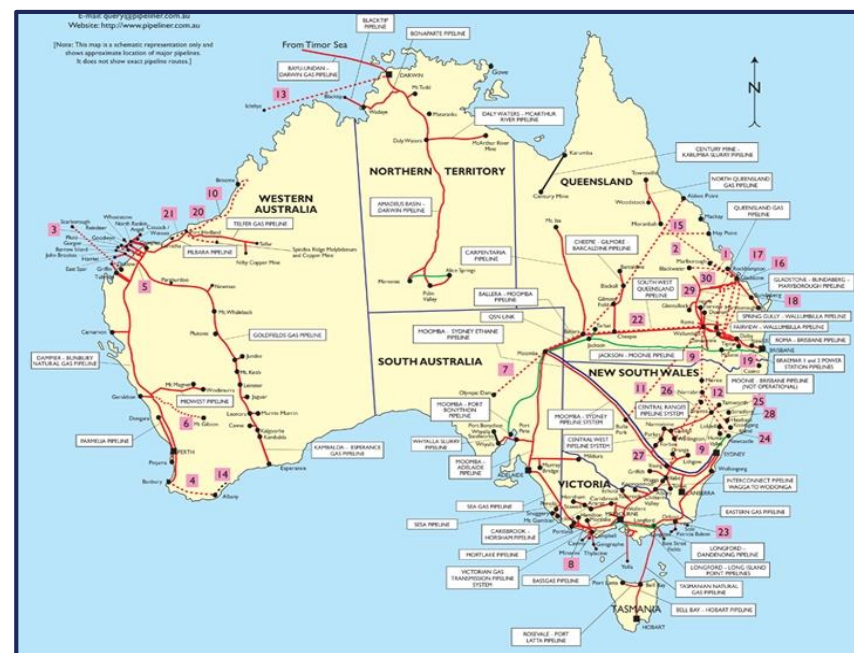
Transmission pipelines increasing efficiency and information

- First and foremost, service providers. Not vertically integrated.
- Respond efficiently to market requirements
- Providing new services
 - Capacity trading platforms, operational capacity transfers
 - Flexible services
 - Expanding business – processing and storage facilities can be more efficient when run by service provider
- Build new pipelines

Gas Markets

Delivering future supplies

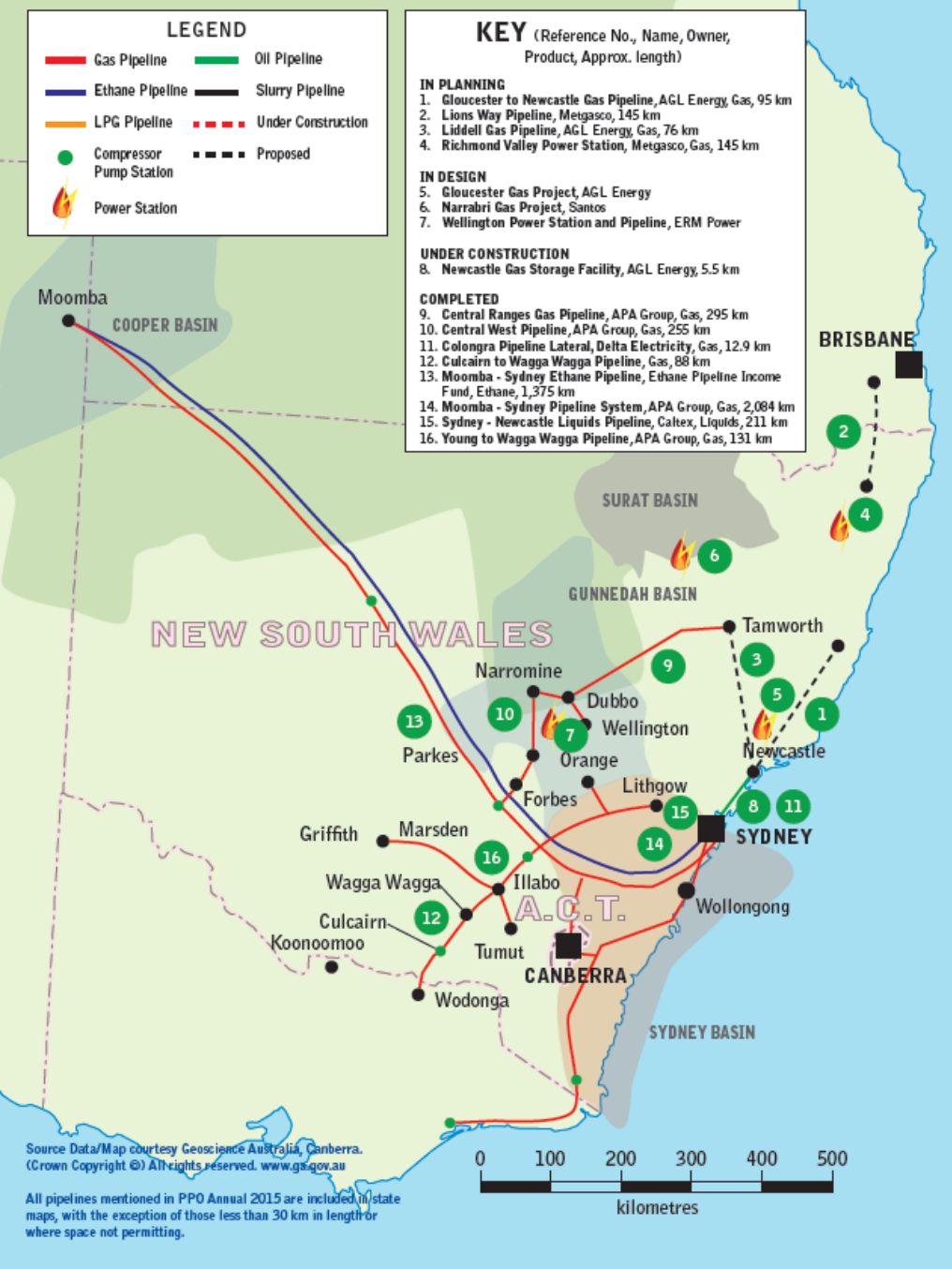
- QSN link built to link east coast market
- Possible link to NT system
- One step closer to a national market



Transmission Pipelines in NSW

New South Wales has a distinct challenge

- NSW produces less than 5% of the gas it uses
- NSW “imports” most of its gas
- Reduction in availability of that “imported” gas



NSW (& ACT) Gas Supply and Demand – increase in supply required



Annual gas demand approx 160 PJ

- Average of 438TJ/day, average winter peak approx 600TJ/day
- Forecast growth is not strong, anticipated that some large industrial customers will exit

Annual gas production approx 5 PJ

- Projects on the horizon but challenges remain
- Vast majority of gas used in NSW is delivered through interstate pipelines

Pipeline delivery capability

Capacity can support demand

- Pipelines 'importing' gas into NSW have combined capacity of 845TJ/day
- AEMO peak winter forecast of 640PJ/day

Enhancements underway

- MSP developing bi-directional capability
- NSW/Vic Interconnect expanding
- EGP expanding and connecting to MSP
- Projects to support gas field development under active consideration

Queensland to Hunter Valley Gas Pipeline

If it does proceed, which way will the gas flow?.....



Regulatory challenges

Efficient pipeline policies

- 15-year regulatory holiday – not an efficient mechanism
 - QSN link is example
 - CSG-LNG pipelines have used mechanism
- Policy focus on gas market operation without acknowledging supply is the issue

Environmental approvals

- Different requirements in the States
- Cumbersome/over-reach
 - Expansion/looping an example – often not allowed to remove trees planted by the company that planted them

Challenge of short-term focus

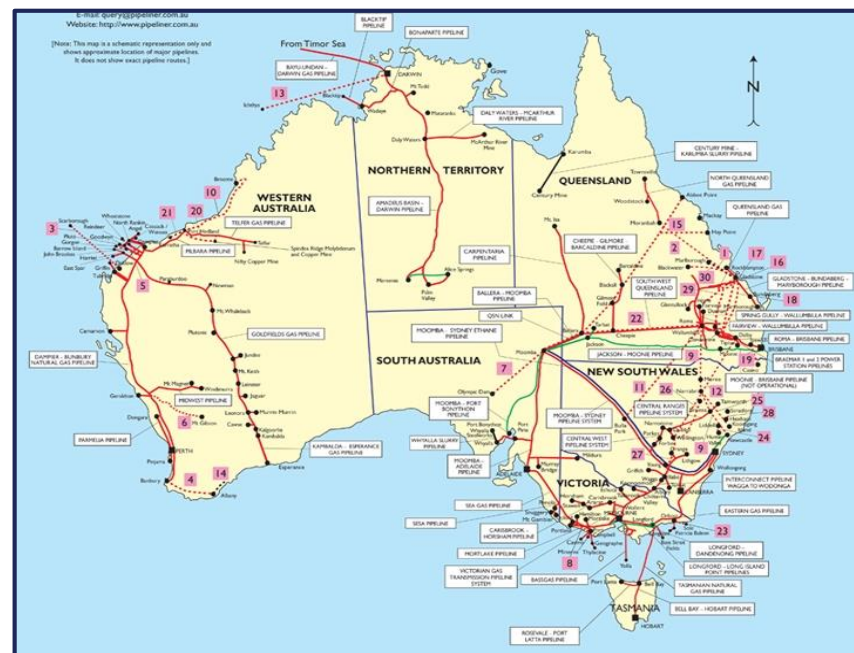
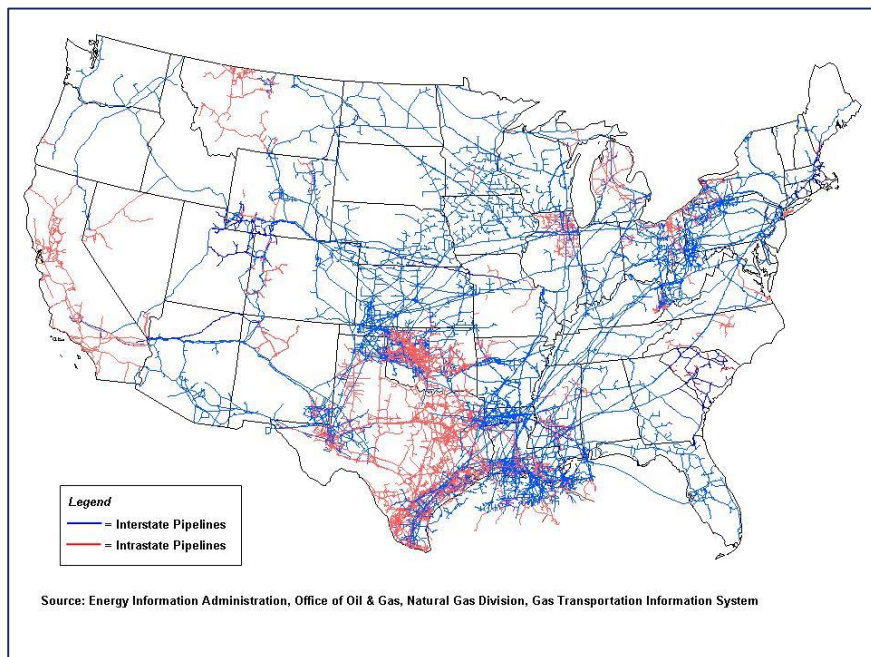
Gas market reviews

- AEMC Review of Wholesale Markets and Pipeline Frameworks
- ACCC Inquiry into East Coast Gas Market Competition
- 12 other reviews in last 3 years

Increased supply will lead to more efficient market

- Liquid market
- Requirement for NSW

Compare systems:



NSW needs new supplies of gas

Possible sources

- Northern Territory – NEGI
- South Australia – SA Minister not enthusiastic
- NSW – Coal Seam Gas
- Import LNG (!)

Development of CSG

- Government commitment
- Industry encouragement

In Summary

Pipeline capacity will meet future gas needs; industry responsive to demand

Pipeline capacity is not a substitute for supply

Capacity trading can increase utilisation – if there is a corresponding increase in supply and demand

Tariff information about gas transportation publicly available

Gas supply tightness is an East Coast problem

NSW could be first to face real shortages

NSW can address the supply issue – coal seam gas



Thank you