



New pipeline developments

Linking Australia's gas markets for improved energy security

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About APA Group

APA is Australia’s largest gas infrastructure business

APA is an integrated operating business with direct management and operational control over its assets and investments

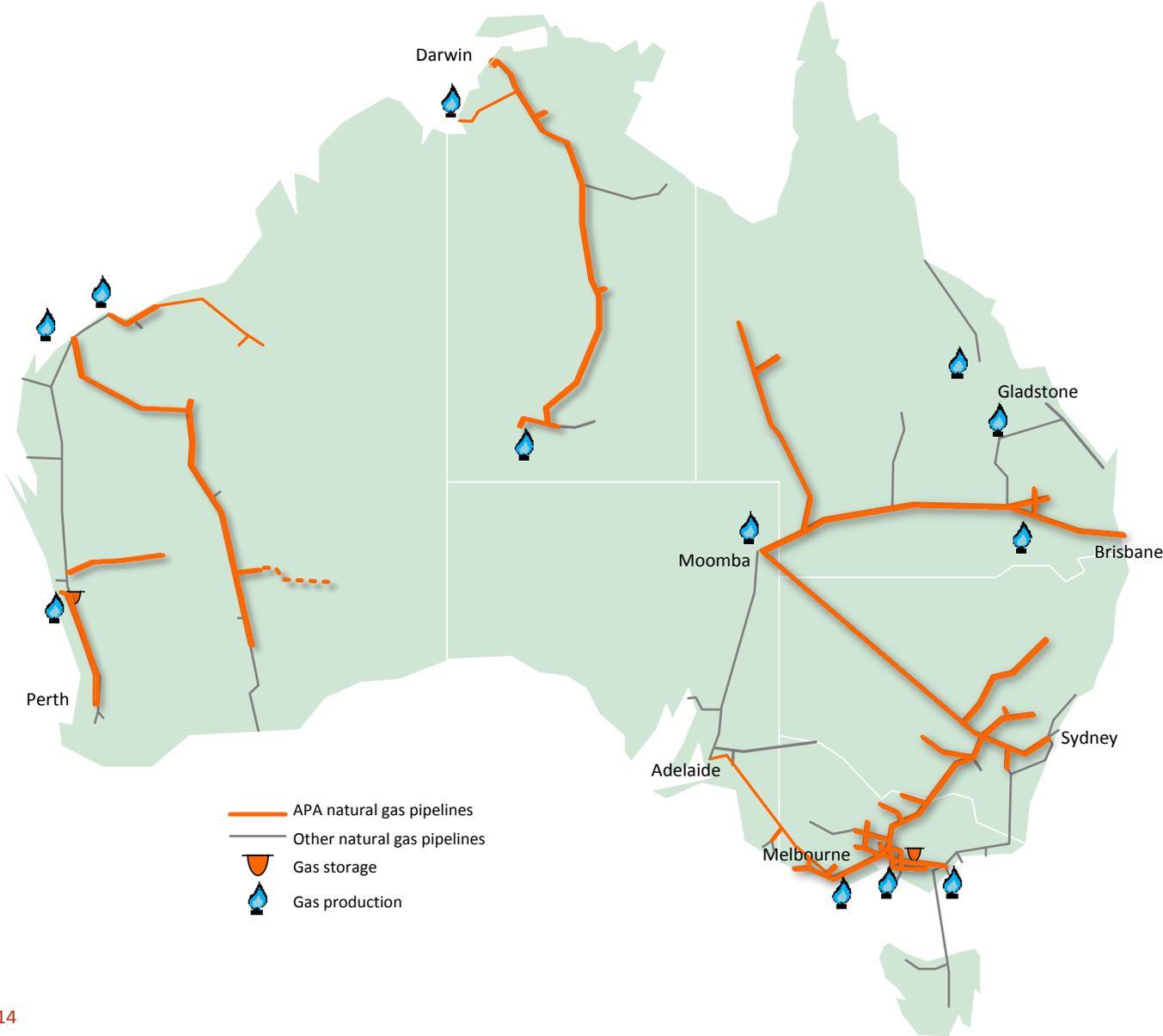
Core business areas

- **Gas transmission pipelines and storage**
 - Owning and operating two thirds of Australia’s onshore pipelines
 - Interconnected pipeline networks
 - Transporting approximately half the gas used domestically
- **Gas distribution networks**
 - Operating approximately a third of the nation’s gas distribution networks
- **Other related energy infrastructure**
 - APA has developed and acquired complementary energy infrastructure, including gas and wind electricity generation, gas processing and electricity transmission

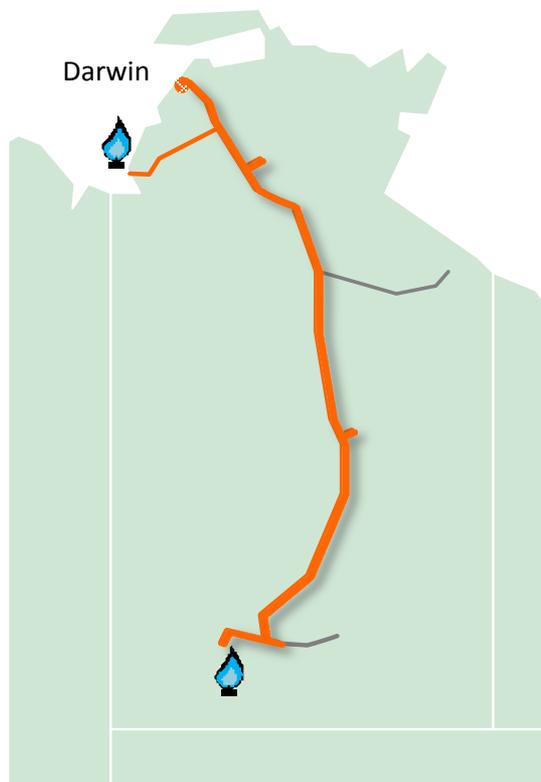
APA (October 2014)

Market capitalisation	A\$6.2 billion S&P/ASX 50 MSCI All World Index; FTSE All World Index
Assets owned/operated	Over \$12 billion Gas transmission 14,100 km transmission pipelines Underground and LNG gas storage Gas distribution 27,100 km gas network pipelines 1.3 million gas consumers Other energy infrastructure 430 MW power generation ⁽¹⁾ 239 km HV electricity transmission Gas processing plants
Employees	More than 1,600
Operator	Operator of APA’s assets and investments

APA – Australia’s largest gas pipeline owner



APA in the Northern Territory and east coast

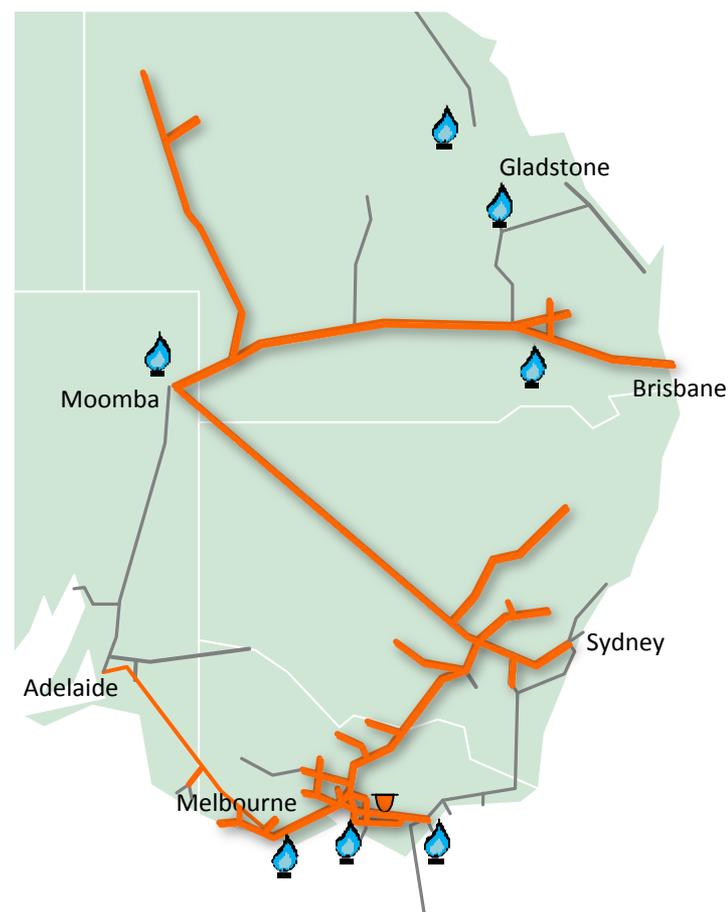


Northern Territory

- 2,000 km gas pipelines
- Long term presence in the Northern Territory – since 1980’s with NT Gas until 2011

East coast grid

- > 7,000 km across 5 states and territories
- Configuring pipelines to operate as single network system



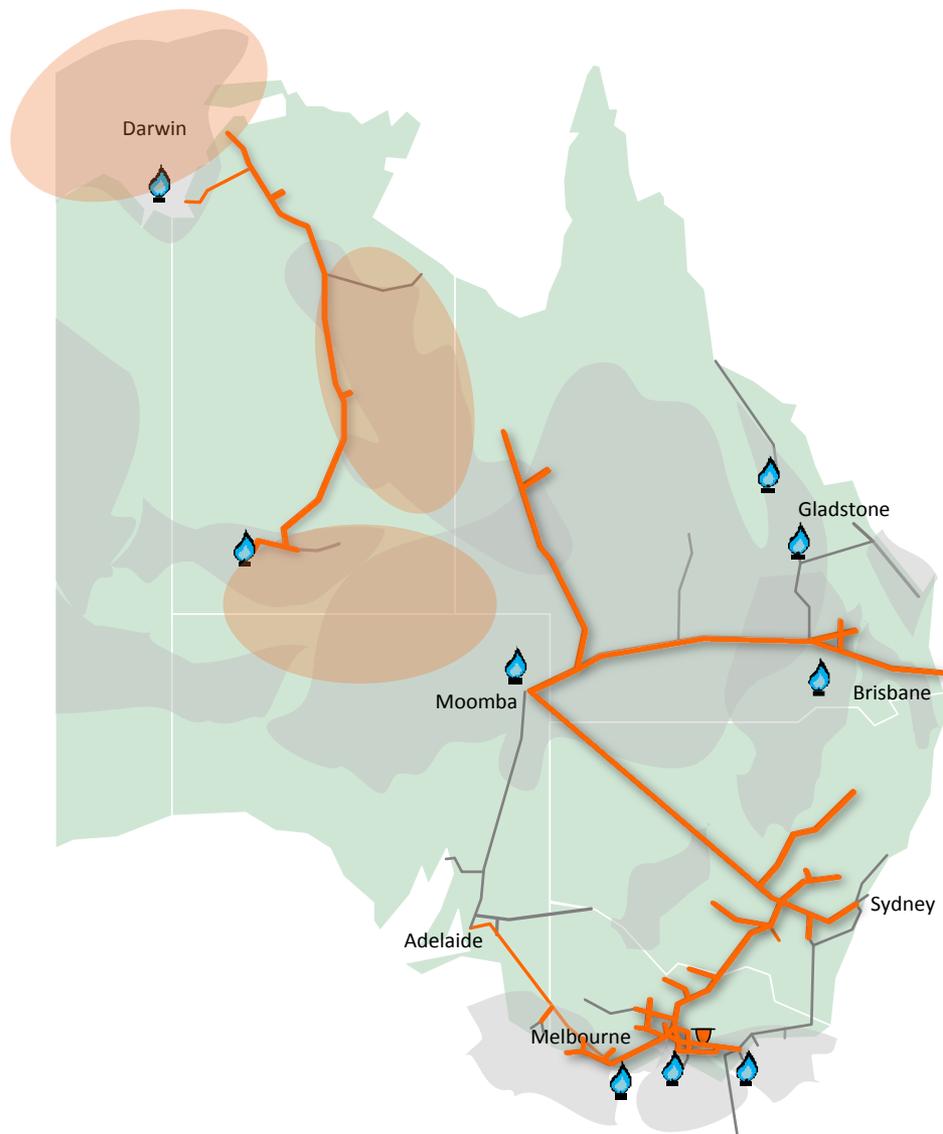
NT link background



- Strategic initiative to connect NT to the East Coast Gas Grid
 - Flexible energy supply across the system, regardless of input/exit points

- Announced feasibility study for NT Link project and commitment of \$2 million (Feb 2014)
 - Assessing various connection options, including environmental considerations and cost estimates, to determine the most efficient and commercially viable link
 - 3 key focus areas:
 - Gas resource in the NT
 - Demand in the East coast
 - Pipeline construction and enhancement requirements on existing infrastructure

Northern Territory gas resource



- >200 TCF⁽¹⁾ of gas resources
- 3 primary potential supply zones:

Offshore NT

- Producing assets and staged developments in place
- ~60 TCF of identified reserves

East NT

- Unconventional gas under exploration
- >3 years for full development

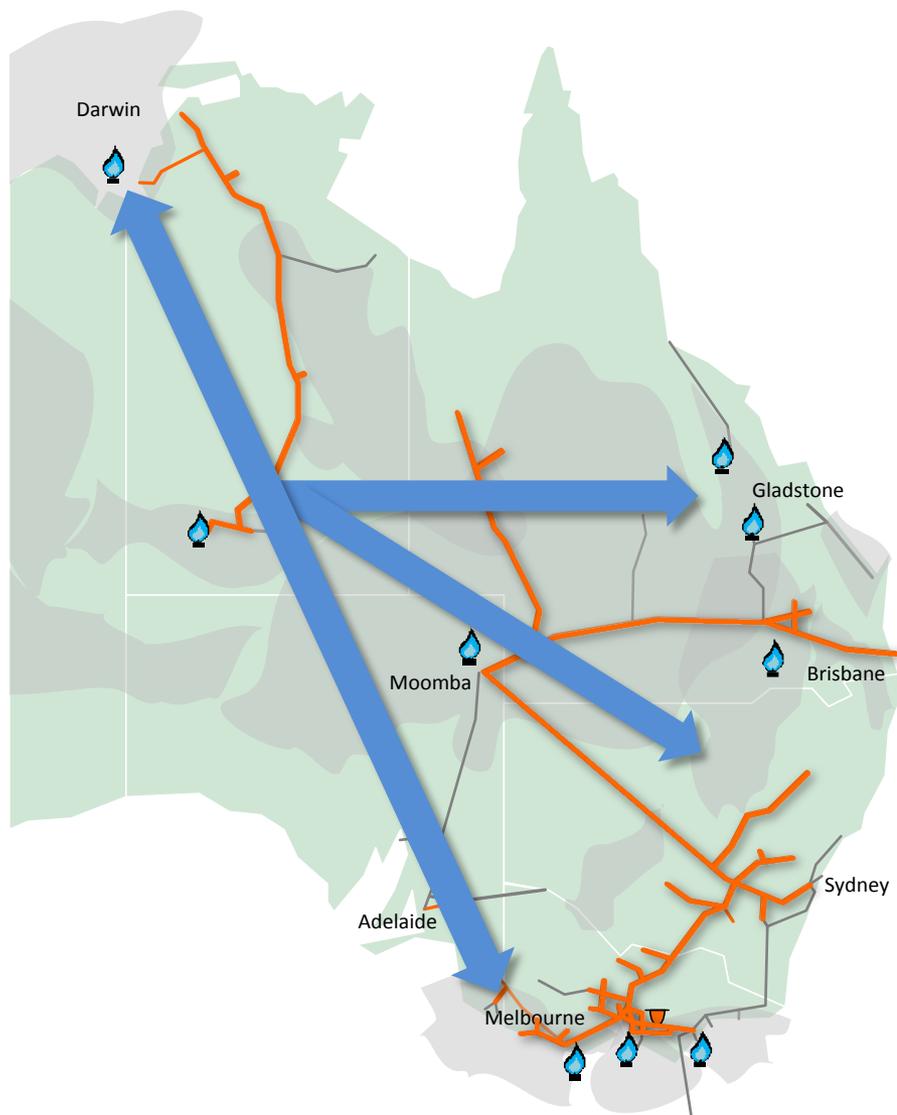
South NT

- Small volumes of producing assets and unconventional gas
- >3 years for full development

(1) NT Government media release 19 February 2014. Potential reserves of approximately 240 TCF across 6 basins

1 TCF \cong 1,000 PJ

NT Link – A Nation Building Project



- Encourages exploration & production to meet growing demand
- Opens new markets & supply competition
- Seamless transport between Timor Sea, Bass Strait, Sydney and Gladstone
 - Use of APA's existing infrastructure means that a complete delivery solution can be offered by APA to meet customer requirements to deliver gas to the demand centres
- Significant additional security of supply
 - Existing east coast gas market and growth opportunities (eg. LNG exports)
 - APA is committed to support the development of the East coast gas markets which is likely to require gas from new sources as well as existing production areas

Feasibility study update

Infrastructure

- Preliminary assessment of several possible pipeline routes
 - evaluating environmental considerations
 - determining whole of project construction cost estimates
 - route flyovers undertaken
- Detailed engineering
 - 3 pipeline routes modelled, others being evaluated
 - infrastructure requirements in process of being defined

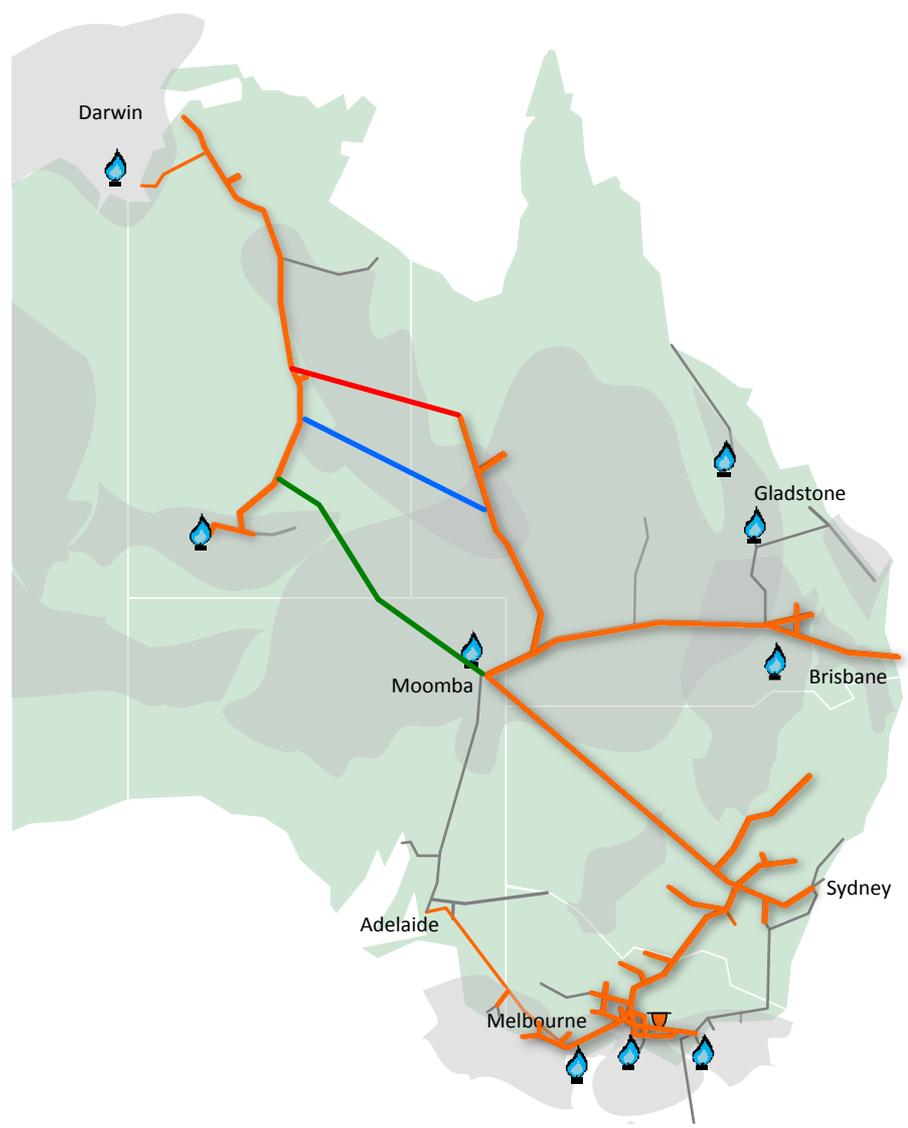
Commercial

- Determining minimum volume required for project to be viable
- Discussions with large downstream users on East Coast
- Discussions with major upstream producers & juniors/explorers

Government

- Ongoing dialogue with government (Fed, State and Territory) & other stakeholders
- NT Government process has been announced – details expected in the next month

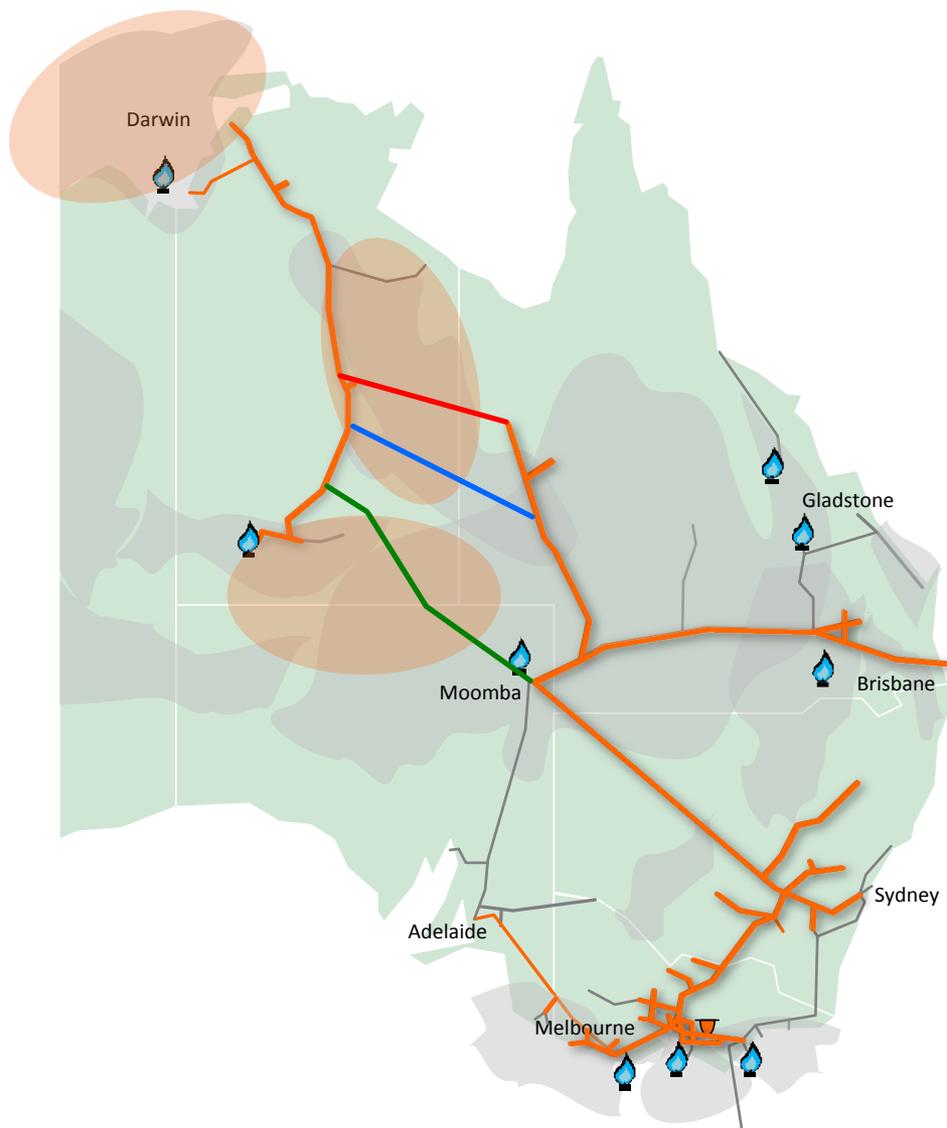
Pipeline route options



- A number of viable pipeline options ... each with its own challenges and opportunities
- Each option uses APA’s existing gas transmission infrastructure in different ways to deliver gas to ultimate end market – depending on where the gas resource is located

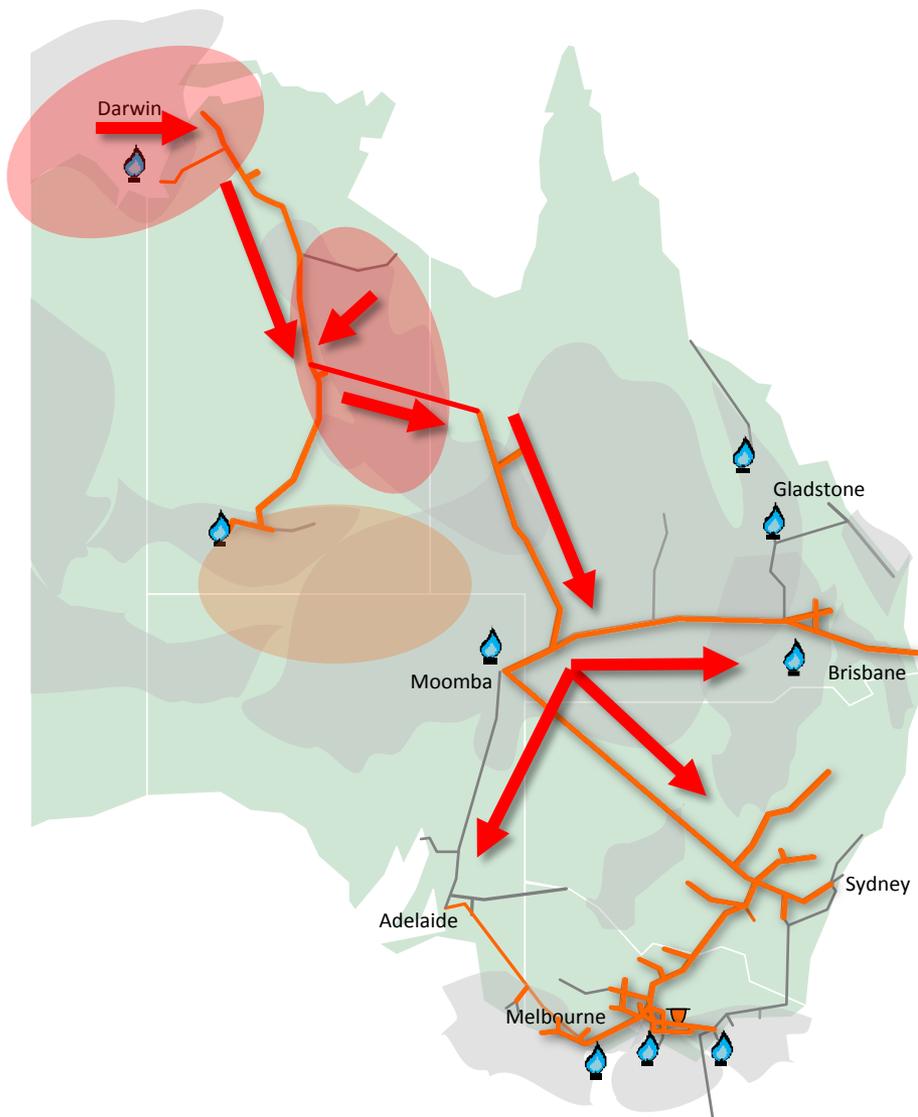
	Option A	Option B	Option C
Location	To Mt Isa	To Moomba	To CGP
Length	620 km	1,100 km	700 km
Water crossings	6	11	9
Flood ⁽¹⁾	25,000	352,000	117,000
Rock/ outcrops	35-45km	25-35km	50-60km

Development considerations



- Focused on identifying the most efficient and commercially viable link with the east coast grid
- Working with upstream and downstream parties to determine the most likely gas flow path
- Gas delivered to the east coast grid can be seamlessly delivered to any major delivery point
- Potential for additional LNG trains in the Northern Territory is an alternate market for gas resources developed

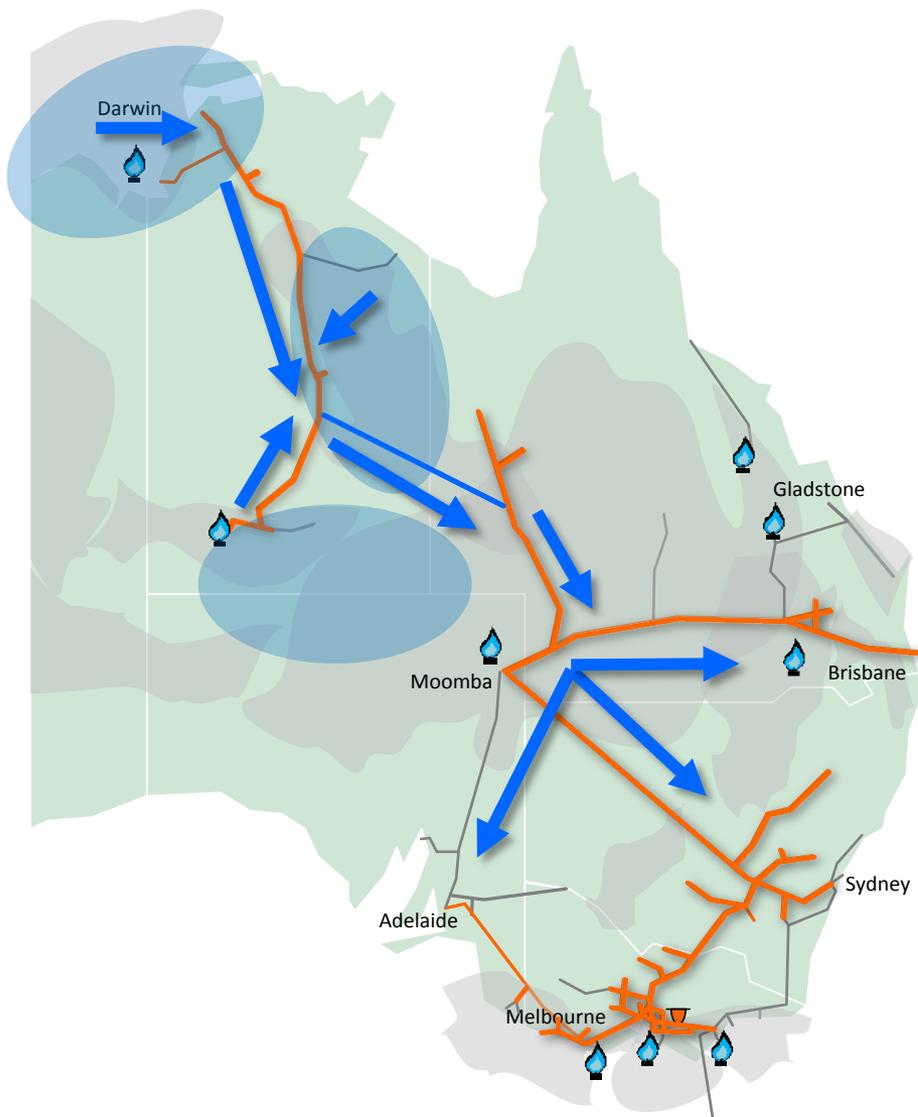
Development considerations



Potential pipeline option – RED

- Key gas sources – offshore and eastern NT

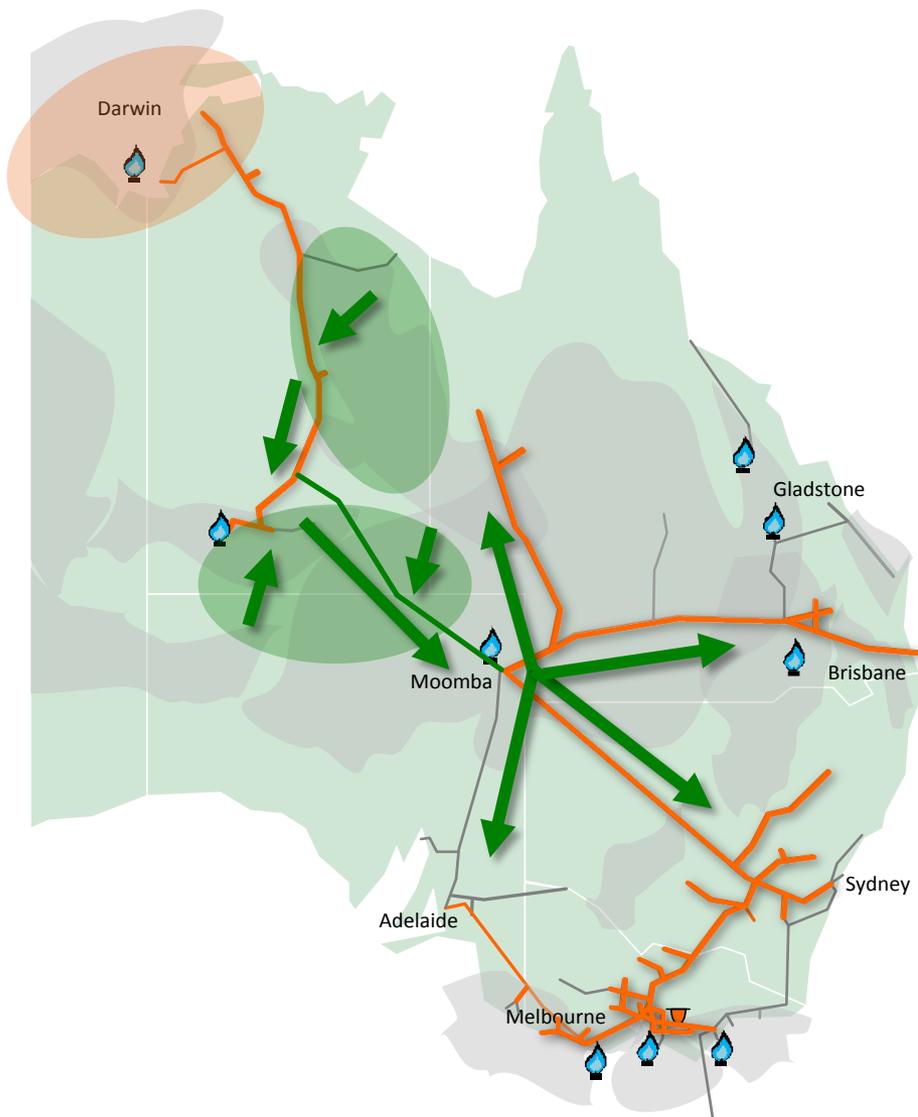
Development considerations



Potential pipeline option – BLUE

- Gas sourced from all three locations (offshore, eastern NT and southern NT)

Development considerations



Potential pipeline option – GREEN

- Key gas sources – eastern NT and southern NT
- Pipeline travels through existing producing fields

Conclusion

- Strategic initiative providing flexible energy supply between Timor Sea, Bass Strait, Sydney and Gladstone
- Feasibility study well underway – expected to be completed in 2015. Timing accelerated, pending the NT Government process
- Focus is to identify the most efficient and commercially viable link with the east coast grid that meets the requirements imposed by siting of the gas resources that would be committed to the project
- Infrastructure sized to meet demand
- Working with upstream and downstream parties to best understand the likely gas path

APA's unique offering

- APA can deliver a whole of system approach, leveraging the network capability of the east coast. APA's existing gas transmission infrastructure will form an integral part of the solution to get gas to the demand centres in the East Coast
- APA has appropriate capability, expertise and resources to fully develop this project in conjunction with NT Government



Questions



Delivering Australia's Energy

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