A global gas revolution: Implications for Australian Energy Policy

25 June 2014
Key themes

• By 2017-18 Australia could be the world’s biggest gas exporter, generating more than $53 billion a year in export earnings.

• Unconventional gas (coal seam gas in Australia and shale gas in the US) is creating a global energy revolution.

• Strong Asian demand and high prices means local consumers will face export parity prices for Australian homes and businesses.

• Non-trivial policy implications:
  • Pressure for protection (domestic gas reservation)
  • Unexpected climate change outcome
  • Un-burnable carbon
  • A gas “death spiral”? 
In the US, the market is working and shale gas is delivering

All forecasts are wrong, some are useful

Source: EIA, US Geological Survey
Global prices have separated but maybe not be for long

Source: World Bank
The Australian market is responding.
NSW households have already seen gas price increases

Victorian average gas bill: $800-900 per year

Averages are dangerous!

For some businesses the increase will be a very big deal
And has been in balance

Daily gas flows on a winter’s day in 2011

- Cooper Basin
- Bowen-Surat Basins
- Qld 516
- Pipeline
- Gippsland Basin
- Vic Storage
- Vic 1160
- Camden CSG
- NSW 610
- Tas 53
- Otway-Bass Basins
- SA 366
- 585
- 69
- 69
- 157
- 209
- 375
- 22
- 771
- 15
- 330
- 7
- 257
- 53

[Graph showing gas flows between different basins and storage centers]
And gas could be very tight within 3-5 years unless commercial solutions are reached.

Daily gas flows on a winter’s day in 2016
Things had been looking for good for gas

But, then along came the market
And, that’s not all
Electricity consumption has been falling - unprecedented

Source: AEMO (2012, 2013)

And, that's without the Renewable Energy Target
So, the outlook for gas generation is very uncertain

So, is this the beginning of a gas “death spiral”? 

Source: AEMO (2012)
A climate conundrum

• There is no shortage of gas
  • Global resources are more than 200 years of supply – great news for energy users, possibly very bad long-term news for climate change.
  • A fuel of transition looks more like a destination

• To meet the two degrees warming constraint requires the world to stop burning fossil fuels by around the middle of the century (without CCS).

• So we already have four times the gas we can ever burn.

• Financial markets:
  • Don’t believe in the political commitment
  • Are assuming they can all get out first
  • Have got something very wrong
Conclusions

• More than $160 billion investment is good for the economy. Governments should resist self-interested calls to cap prices or reserve gas for the domestic market.

• Governments must:
  • End the coal seam gas impasse in New South Wales.
  • Create a more transparent and efficient gas market including new trading hubs, a published gas price index pipeline capacity trading and elimination of joint marketing.
  • Find a way to bipartisan, long-term carbon pricing credibility

• Industry must:
  • Get the gas to market and commercial deals should get done.
  • Resolve the full life-cycle emissions challenge
  • Address its credibility problem with communities

For Australia, getting gas right presents very big challenges
A global gas revolution:
Implications for Australian Energy Policy

25 June 2014