



Natural gas shortage threatens Australia's climate change future

4 November 2007

The DomGas Alliance today called on Federal Labor and the Coalition to act on the domestic gas shortage threatening Australia's climate change future.

Alliance spokesperson Mike Shaw said escalating domestic gas prices and supply shortages were forcing industry to switch from natural gas to greenhouse-intensive coal.

"In recent months, a number of resource development projects in Western Australia have been forced to switch to coal-fired energy," Mr Shaw said.

"With domestic gas prices rising sharply, natural gas is no longer competitive with coal. We are facing a future where coal is the only viable energy source for Australia."

Over the past 12-18 months, WA domestic gas prices have almost tripled with producers asking around \$7 per gigajoule. Some oil and gas companies have recently demanded \$15 per gigajoule for gas – which equates to an increase in prices of more than 600 per cent. The price of coal is around \$2 per gigajoule.

Mr Shaw said the domestic gas shortage was happening at a time when oil and gas companies continue to expand exports of Australia's clean energy reserves as LNG.

"Australian industry is competing for clean Australian natural gas with the energy hungry economies of China and Japan. This raises greenhouse risks for Australia."

Mr Shaw said it made greenhouse sense to use Australia's clean energy reserves to reduce Australia's carbon emissions.

“A recent study by Carnegie Mellon University researchers found that over its lifecycle, LNG produces greenhouse gas emissions approaching that of coal.”

“These impacts occur as LNG is extracted, liquefied, shipped overseas in a tanker, then regasified and put into pipelines before it can be used as an energy fuel in the importing country.”

“By contrast, domestic use of natural gas produces significantly lower greenhouse gas emissions.”

Mr Shaw warned that escalating domestic gas prices could undermine any national emissions trading scheme.

“At current domestic gas prices, any scheme would need to impose an \$80 per tonne carbon cost just to make gas competitive with coal,” Mr Shaw said.

“The current domestic gas shortage could be the single greatest factor contributing to greenhouse emission growth in Australia over the next decade.”

“I call on both Labor and the Coalition to outline a long-term vision that recognises the importance of domestic gas supply for Australia’s climate change future.”

Contact: Mike Shaw (0404 800 731)

About the DomGas Alliance

The DomGas Alliance was formed in 2006 in response to serious concerns about the continued availability and competitiveness of gas supply to the WA domestic market. The Alliance includes current and prospective gas users and gas infrastructure operators.

Members include: Alcoa of Australia, Alinta Limited, Synergy, Dampier Bunbury Pipeline, ERM Power/New Gen Power, Newmont Australia, Fortescue Metals Group, Moly Mines and Precious Metals Australia.

Alliance members represent the bulk of the State’s domestic gas consumption and gas transmission capacity, including smaller industrial and household users of gas. The Alliance also represents a significant proportion of prospective demand for additional gas supplies.



WESTERN AUSTRALIA'S GAS SUPPLY CRISIS: THE FACTS

Is WA experiencing a crisis in domestic gas supply?

Western Australia is experiencing a crisis in domestic gas supply. Current and prospective gas users are unable to secure long term gas supplies in substantial quantity. There are currently no firm commitments by producers to bring any new gas production capacity on stream for the domestic market. The price of such short term gas that is available has risen dramatically.

What is the impact of the gas crisis?

The shortage is threatening billions of dollars of project developments which are dependent on gas supply for energy. Projects are at risk of going offshore or interstate because of the shortage of gas. Some projects are looking to coal as their only available option. The DomGas Alliance continues to be approached by new project developers unable to secure gas supplies.

What is the value of projects currently seeking gas?

At least \$23 billion in projects are currently seeking gas for expansion or new developments. These comprise eight iron ore and nine other developments including alumina, nickel, molybdenum, vanadium, gold and ammonia projects. Failure to secure competitive gas supply could see the loss of 17 large projects involving over 15,000 potential construction jobs, 5000 permanent operating jobs and \$9 billion in annual economic output.

How important is domestic gas supply for the WA economy?

Western Australia is the most energy and gas-dependent economy in Australia. Natural gas supplies half of WA's primary energy requirements. Natural gas also fuels 60% of the State's electricity generation. Access to natural gas is critical for the State's manufacturing, processing and mining industries, which support thousands of jobs.

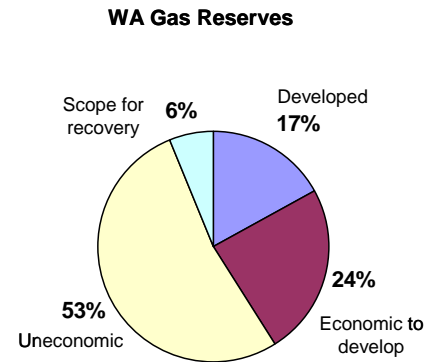
Is demand for gas expected to grow?

WA's demand for gas continues to grow rapidly. Western Australia will require around 900 TJ/day of gas in the next 6 years to meet new and replacement demand. This is equivalent to the total size of the existing market for gas.

Does WA have massive reserves of gas?

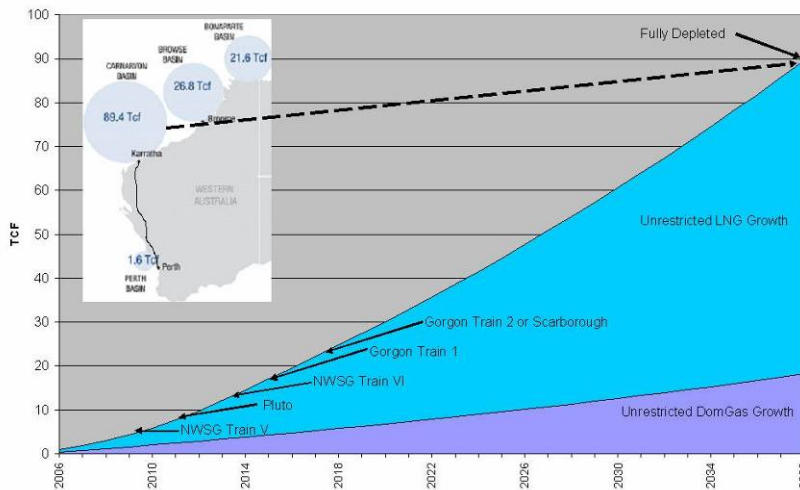
Claims that WA has over 100 years of gas are incorrect. WA only has around 120 Tcf of natural gas reserves – based on a 50% probability of recovery.

Only 17% of WA’s reserves relates to developed fields. The bulk of reserves are located offshore and in deep water. Many of the fields have gas quality issues which impact on development economics. There is no certainty that it will be economic to develop all of these gas reserves. WA holds less than 2% of the world’s gas reserves.



When are reserves likely to be exhausted?

Western Australia’s natural gas reserves could be fully depleted within 30 years if government and producer targets of 50-60 million tones of LNG production per year are met. In addition, the bulk of gas in the Carnarvon Basin will be fully committed between 2015 and 2020 – less than 9 years away.



Have gas prices risen significantly?

WA domestic gas prices have almost tripled over the past 12-18 months. Major gas producers recently demanded prices equating to a 600 per cent increase to historical prices.

How do gas prices compare with the rest of Australia?

Prices reported for recent gas sales in WA are now 2 – 3 times delivered prices in the Eastern States.

Shouldn't domestic prices reflect international LNG prices?

There is no international price for gas. Gas prices vary significantly between different countries and reflect local conditions such as resource endowments. In fact, domestic gas prices in major gas exporting countries are around \$US1 / GJ, compared to around \$8 / GJ for LNG export. At present, some WA users are paying more for gas than overseas customers of WA gas. There is no basis for WA domestic gas prices reflecting prices in energy-deficient countries such as Japan and China.

Will electricity prices rise for households and businesses?

Natural gas fuels 60% of the State's electricity generation. At historical prices, the cost of domestic gas accounts for almost half of base load power generation costs. Any rise in the price of domestic gas will lead to significantly higher gas prices for WA households and businesses.

What is the cause of the current gas crisis?

The gas shortage is caused by fundamental structural failure in the market. There are only two major suppliers with one - the North West Shelf Joint Venture – supplying two-thirds of the total market. This results in a lack of competition and a concentration in supply. Gas producers have focused on maximizing LNG exports at the expense of the domestic market.

What is the Ownership of the North West Shelf Joint Venture?

The North West Shelf Joint Venture comprises six companies, - Shell, BP, Chevron, Woodside, BHPB and Mitsui/Mitsubishi – and includes some of the world's largest oil and gas companies.

How does the North West Shelf Joint Venture sell to WA customers?

The six joint venturers market gas to WA customers through a joint selling arrangement. Under the arrangement, customers have to deal with a single entity and cannot negotiate with individual producers. The arrangement reduces competition by reducing the number of sellers in the domestic market.

How important is natural gas for the State's response to climate change?

Natural gas produces around 45% less CO₂ compared to coal. Gas-fired cogeneration and combined cycle gas turbines are the most greenhouse efficient forms of non-renewable power generation. Natural gas will play a key role in Western Australia's transition to a low carbon economy and will enable the State to meet greenhouse reduction targets while maintaining growth and employment.

Is the gas shortage forcing industry to switch to coal?

The inability to secure gas is forcing industry and electricity generation to switch to coal. In the past twelve months, a number of resource development projects have been forced to switch to coal-fired energy. The State's recent 400 MW electricity generation tender is also likely to result in the selection of a coal-fired station over gas firing. At current prices, natural gas is uncompetitive with coal for power generation.

What are the long term greenhouse risks?

At the same time that local industry is switching to coal, gas producers continue to expand exports of WA's clean energy reserves as LNG – a process which is also energy (and therefore greenhouse) intensive. This has long term implications for the State's carbon footprint.

Is government action justified?

Urgent government action is needed promote gas supply and a more competitive supply market. In particular, the Alliance supports:

- reforming the retention lease system
- facilitating third party participation in upstream gas supply
- removing anti-competitive joint selling arrangements
- resolving gas quality issues
- supporting domestic gas exploration and development
- facilitating and expediting approvals
- eliminating unnecessary government imposts

Why shouldn't the market be allowed to correct itself?

There is an absence of a competitive market for gas as a result of the joint selling arrangements of the North West Shelf JV and a concentration in supply. The companies involved in the North West Shelf - either individually or through other joint venture arrangements – control the bulk of the undeveloped reserves in the Carnarvon Basin. Until joint selling is addressed, a competitive gas supply market is unlikely to arise.

Don't recent announcements of studies for new gas developments indicate the market is working?

While the recent announcements are welcome they do not represent potential new production which could come anywhere near meeting Western Australia's requirement for almost 900 TJ/day in new and replacement gas in the next 6 years. Of this, around 650 TJ/day will be required for expansion in electricity generation and new resource development projects.

Who are the DomGas Alliance?

The DomGas Alliance was formed in 2006 in response to serious concerns about the continued availability and competitiveness of gas supply to the WA domestic market. The Alliance includes current and prospective gas users and gas infrastructure operators.

Members include: Alcoa of Australia, AlintaAGL, Synergy, Dampier Bunbury Pipeline, ERM Power/New Gen Power, Newmont Australia, Fortescue Metals Group, Moly Mines and Precious Metals Australia.

Alliance members represent the bulk of the State's domestic gas consumption and gas transmission capacity, including smaller industrial and household users of gas. The Alliance also represents a significant proportion of prospective demand for additional gas supplies.

