DOMESTIC GAS SUPPLY AND AUSTRALIA'S CLIMATE CHANGE FUTURE

4 April 2008

Summary

- Natural gas has a critical role in Australia's transition to a low carbon economy and is the only conventional energy source that can underpin this transition in the timeframes envisaged.

- Availability and pricing of gas is therefore an issue of strategic importance for Australia's climate change future.

- Natural gas produces less than half the greenhouse emissions compared to coal. Combined cycle gas-fired plants and gas-fired cogeneration plants – utilising current available technology - constitute by far the most greenhouse efficient forms of non-renewable power generation.

- Over its life, a new 350 megawatt per hour natural gas combined cycle plant will produce 30 million tonnes of carbon dioxide emissions, compared to 70 million tonnes for an equivalent coal power plant.

- Natural gas and the associated gas transmission infrastructure is also critical to underpin any future expansion of renewable energy in Australia.

- Only natural gas plants can provide the peaking power capacity necessary to support renewable power such as wind and solar, and which makes renewable energy a feasible source of energy for the local market.

- Contrary to claims by oil and gas exporters, Australia does not have abundant reserves of natural gas. Australia holds just 2.4% of the world's natural gas resources – representing little more than one year of world consumption.

- The bulk of Australia's gas resources are located in Western Australia. Only 17% of the State's estimated gas resources relate to developed fields.

- The vast proportion of Australia's undeveloped resources are located offshore and in deep water. Many of the fields have gas quality issues which impact on development economics and environmental acceptability.

- The drive to LNG exports raises significant risks for domestic gas supply and Australia's ability to meet climate change targets.

- Despite having just 2.4% of the world's gas resources, Australia continues to expand exports of natural gas while aspiring to be the world's second largest LNG exporter.

- Producers are aiming to increase WA LNG production to 50 million tonnes per year (2,770 PJ or 2.3 Tcf) by 2015. This represents a five-fold increase in LNG exports in less than a decade.

- If this target is realised, all gas which is accessible to the WA domestic market could be fully committed between 2015 and 2020 – i.e 7 to 12 years from now.

- Where gas resources are allocated to long term LNG contracts, they cannot be used to meet immediate or emerging needs of local industries and households, or to meet Australia's greenhouse reduction targets.

- Western Australia is experiencing a crisis in domestic gas supply. Current and prospective users have been unable to secure long term supplies in substantial quantity.

- WA wholesale gas prices have almost tripled. Prices reported for recent sales are now almost three times Eastern States prices on a delivered basis.

- The sharp rise in WA gas prices has made natural gas uncompetitive with greenhouse-intensive coal for base-load power generation and resource processing.

- Escalating prices and the shortage of gas has already forced a number of WA resource and energy projects to switch to coal-fired energy.

- This shift to greenhouse-intensive coal is occurring at a time when oil and gas companies continue to expand exports of Australia's clean energy reserves as LNG.

- In the absence of policies to secure domestic gas supply, an emissions trading scheme would have limited effect in shifting energy use from carbon-intensive coal.

- The gas shortage and escalating prices will also undermine any State or national plans to increase the proportion of gas fired power generation, such as the Queensland Government's 13% gas fired power target.

- The current domestic gas shortage has national implications. Western Australia is the most energy-intensive economy in Australia, given its resources and minerals processing base.

- Western Australia is also the State with the highest consumption of natural gas. Natural gas supplies half of WA's primary energy and fuels 60% of the State's electricity generation.

- The domestic gas shortage could be the single greatest factor contributing to WA's greenhouse gas growth over next decade. Any fall in the share of natural gas in the State's fuel mix – and its replacement by greenhouse-intensive coal – has long term implications for Australia's carbon footprint.

- Given that Western Australia also holds 80% of Australia's natural gas resources the rapid depletion and contracting out of these resources as LNG exports is undermining Australia's ability to meet greenhouse reduction targets.

- The experience in Western Australia confirms a long term strategy by oil and gas companies to maximise returns by pricing domestic gas against LNG / international oil prices.

- This raises serious concerns for gas supply in the Eastern States with the development of two potential LNG terminals using coal seam methane and efforts by oil and gas companies to withhold supply to the domestic market.

- Given price expectations by oil and gas companies in recent tenders, gas prices in the Eastern States could rise by as much as 600%, making gas uncompetitive with coal.

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

- From a global perspective, the most greenhouse-efficient use of Australia's clean energy reserves is to reduce Australia's carbon footprint.

- The experience in Western Australia confirms the failure of the domestic gas market to ensure supply and to meet Australia's long term greenhouse challenge.

- A national strategy is needed to ensure the long term supply of natural gas to the domestic economy, and that natural gas is competitive with coal.

- Governments around the world are acting to ensure competitive gas supply in an increasingly energy and carbon-constrained world.

- There is a need for a 2020 Vision and Strategy that recognises the economic, social and environmental importance of domestic gas supply.

- This must look to a long-term time-frame of 50-100 years and reflect Australia's climate change policy objectives.

The DomGas Alliance

The DomGas Alliance comprises current and prospective natural gas users and gas infrastructure investors in Western Australia. Members include:

- AlintaAGL
- Alcoa of Australia
- Synergy Energy
- Dampier Bunbury Pipeline
- ERM Power/New Gen Power
- Newmont Asia Pacific
- Fortescue Metals Group
- Windimurra Vanadium
- Horizon Power

Alliance members represent the bulk of Western Australia'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.

The Alliance was formed in July 2006 in response to a severe shortage of available gas for the WA domestic market and an associated dramatic escalation of prices.

The Alliance welcomes the opportunity to provide a submission on the importance of domestic gas supply for Australia's climate change future. In particular, the Alliance notes the Review's Terms of Reference include the costs and benefits of Australian policy interventions on Australian economic activity, and recommendations for medium to long-term policy options for Australia.

Natural gas underpins Australia's transition to a low carbon economy

The Alliance believes that natural gas has a critical role in Australia's transition to a low carbon economy. In fact, natural gas is the only conventional energy source that can underpin this transition in the timeframes which are now envisaged. Availability and pricing of gas is, therefore, an issue of great strategic importance for Australia's climate change future.

Natural gas produces less than half the greenhouse emissions compared to coal. Combined cycle gas-fired plants and gas-fired cogeneration plants – utilising current available technology - constitute by far the most greenhouse efficient forms of non-renewable power generation.

Over its life, a new 350 megawatt per hour natural gas combined cycle plant will produce 30 million tonnes of carbon dioxide emissions, compared to 70 million tonnes for an equivalent coal power plant.[1] In terms of annual greenhouse gas emissions avoided, the difference is equivalent to removing 325,000 cars off the road.

Natural gas also underpins the development of greenhouse-friendly gas fired cogeneration plants. Cogeneration plants at alumina refineries in Western Australia for example generate steam which is used in the alumina refining process, as well as electricity for supply into the grid. Cogeneration plants can achieve at least 75% energy efficiency, compared with 30-50% for comparable coal fired generation.

For example, every tonne of alumina produced in Western Australia uses around half the energy and produces half the greenhouse gas emissions than if it was made in China - delivering significant global greenhouse benefits in addition to the greenhouse efficient power for domestic consumption.

Transformation of Australia's generation infrastructure to achieve the new greenhouse targets will require a massive commitment of capital and equipment. This could ultimately be the limiting factor in achieving these objectives.

Given that natural gas generation uses readily available technology, maximising new gas fired generation will limit the pressures on available resources of capital and equipment. Clearly this is dependent on the availability of reasonably priced gas to underpin such investment.

Natural gas and the associated gas transmission infrastructure is also critical to underpin any future expansion of renewable energy in Australia. Only natural gas plants can provide the peaking power capacity necessary to support renewable power such as wind and solar, and which makes renewable energy a feasible source of energy for the local market.

Australia has only limited reserves of natural gas

It is commonly claimed by oil and gas companies engaged in LNG exports that Australia has "abundant" or "over a hundred years" of gas. The Garnaut Review's Interim Report also takes the view that Australia has "exceptionally large resources per capita among developed countries".[2]

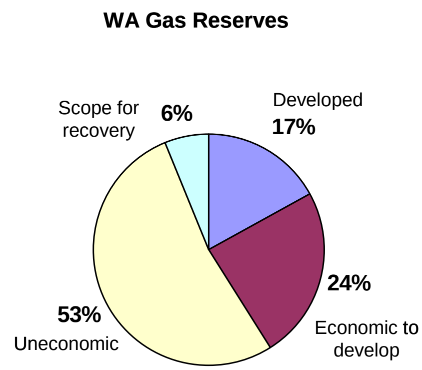
[1] Simshauser, P. and Wild, P. (2007) 'The WA Power Dilemma', p.23; www.bbpower.com/media/299790/25907%20wa%20energy%20summit.pdf.
[2] Garnaut Review Interim Report, p.57.

The DomGas Alliance believes that this is a simplistic and short-sighted view and one promoted by oil and gas companies to justify the large-scale export of LNG.

The truth is that Australia holds just 2.4% of the world's natural gas resources - representing little more than one year of world gas consumption. Yet Australia aspires to be the second largest exporter on LNG in the world.

Approximately 80% of Australia's gas resources are located in Western Australia. WA is estimated to have between 120-140 trillion cubic feet (Tcf) of gas resources. However this estimate refers to "P50" resources with only a minimum 50% or higher probability of economic recovery.

Only 17% of Western Australia's estimated gas resources relates to developed fields.



The bulk of Australia's undeveloped resources are located offshore and in deep water. Many of the fields have gas quality issues which impact on development economics and environmental acceptability.

As recognised by the Commonwealth – States Joint Working Group Report on Natural Gas Supply, there are significant barriers to easily accessing and commercializing a significant proportion of Australia's reserves.[3]

There are significant greenhouse risks for Australia

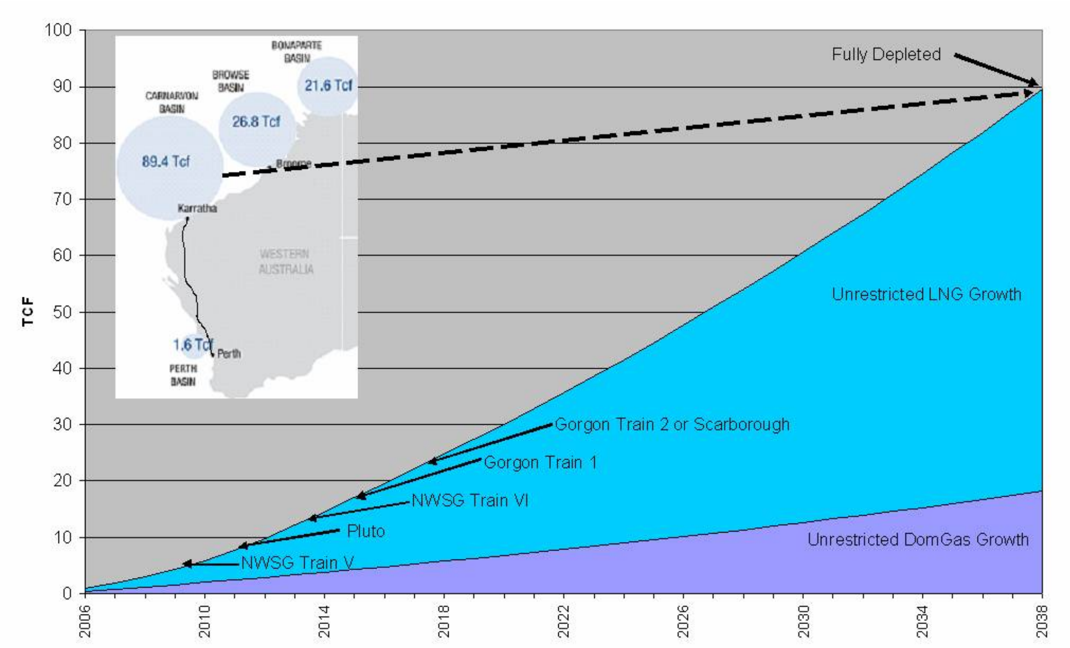
The drive to LNG exports raises significant risks for domestic gas supply and Australia's ability to meet climate change targets. As indicated above, despite having just 2.4% of the world's gas resources, Australia continues to expand exports of natural gas while aspiring to be the world's second largest LNG exporter.

Producers are aiming to increase WA LNG production to 50 million tonnes per year (2,770 PJ or 2.3 Tcf) by 2015. This represents a five-fold increase in LNG exports in less than a decade. If this target is realized, all gas which is accessible to the WA domestic market could be fully committed between 2015 and 2020 – i.e 7 to 12 years from now. LNG already accounts for around 70% of current WA gas sales; this percentage is expected to increase over time.[4]

[3] Joint Working Group Report on Natural Gas Supply, p.7.
[4] Synergies Economic Consulting, *WA Gas Supply & Demand: The Need for Policy Intervention*, July 2007, p.38.

Where gas resources are allocated to long term LNG contracts, they cannot be used to meet immediate or emerging needs of local industries and households, or to meet Australia's greenhouse reduction targets.

Depletion of Western Australia's LNG resources



The above chart shows that on the basis of projected new LNG developments, the bulk of gas in the Carnarvon Basin, which supplies the WA domestic market, will be fully committed between 2015-2020. The Joint Working Group Report also noted that 20% of Australia's total gas reserves have already been contracted.[5]

This is of significant concern given demand for gas is expected to rapidly increase. Economics Consulting Services (ECS) estimates that Western Australia will require almost 900 terrajoules / day of gas in the next 6 years to meet new and replacement demand.

The ECS report identified 17 large projects in WA currently seeking gas for expansion or new developments. Failure to secure domestic gas supply could force projects to resort to more greenhouse-intensive energy such as coal. The implementation of a national emissions trading scheme will further increase domestic demand for natural gas supply.

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[5] 35,000 petajoules (PJ) of Australia's 173,000 PJ of gas resources are now contracted: Joint Working Group Report, p.7.

The current gas supply shortage

Western Australia is experiencing a crisis in domestic gas supply. In particular:

- Current and prospective users have been unable to secure long term supplies in substantial quantity.
- WA wholesale gas prices have almost tripled.
- Prices reported for recent sales are now almost three times Eastern States prices on a delivered basis.
- There have been no firm commitments by gas producers to bring any new domestic gas production capacity on-stream.
- There is a long term strategy by producers to price domestic gas against LNG / international oil prices

The Synergies Economic Consulting Report found compelling evidence that the WA gas market has failed. The Report recommended urgent policy intervention by government to ensure supply and competition in the domestic gas market.[6]

The gas supply shortage undermines Australia's climate change future

The sharp rise in WA gas prices has made natural gas uncompetitive with greenhouse-intensive coal for base-load power generation and resource processing.

Over the past 12-18 months, WA domestic gas prices have almost tripled with recent contracts being in excess of $7 per gigajoule. Producers' price expectations for new production are reported to be close to double this again. This compares to current coal prices are around $2 per gigajoule.

Escalating prices and the shortage of gas has already forced a number of WA resource and energy projects to switch to coal-fired energy. These include:

- the WA Government's recent announcement that it will build a coal-fired plant as opposed to an environmentally friendly gas-fired plant
- the Gindalbie Karara iron ore project; and
- Newmont Asia-Pacific's Boddington gold project

[6] Synergies Economic Consulting, *WA Gas Supply & Demand: The Need for Policy Intervention*, July 2007, p.4.

This shift to greenhouse-intensive coal is occurring at a time when oil and gas companies continue to expand exports of Australia's clean energy reserves as LNG. It is also occurring at a time when Australia is moving to establish greenhouse reduction targets and a national emissions trading scheme.

In the absence of policies to secure domestic gas supply, an emissions trading scheme would have limited effect in shifting energy use from carbon-intensive coal. The gas shortage and escalating prices will also undermine any State or national plans to increase the proportion of gas fired power generation, such as the Queensland Government's 13% gas fired power target.

Australia therefore faces a future where coal will be the only viable energy source for the bulk of Australia's needs, with or without an emissions trading scheme.

The gas supply crisis is a national issue

While Western Australia is experiencing the gas supply crisis and escalating prices, the issue has national implications.

Western Australia is the most energy-intensive economy in Australia, given its resources and minerals processing base. It is also the State with the highest consumption of natural gas. Natural gas supplies half of WA's primary energy and fuels 60% of the State's electricity generation.

The domestic gas shortage could be the single greatest factor contributing to WA's greenhouse gas growth over next decade. Any fall in the share of natural gas in the State's fuel mix – and its replacement by greenhouse-intensive coal – has long term implications for Australia's carbon footprint.

Western Australia also holds 80% of Australia's natural gas resources. These resources are being rapidly depleted or contracted out by oil and gas companies as LNG exports. The loss of Australia's clean energy reserves therefore undermines Australia's ability to meet greenhouse reduction targets, as well as State targets such as Queensland's 13% gas-fired power target.

There is, therefore, a considerable disjoint between public statements made by the Australian Petroleum Production and Exploration Association (APPEA) – which cites a target that 70% of Australia's total new power generation capacity be gas-fired by 2017 – and actual industry practice.

Recent media statements by APPEA on climate change have also focused on LNG exports, while ignoring the need to ensure domestic gas supply to meet Australia's own greenhouse gas targets.

Gas prices in the Eastern States could rise by as much as 600 per cent – making natural gas uncompetitive with coal

The experience in Western Australia confirms a long term strategy by oil and gas companies to maximise returns by pricing domestic gas against LNG / international oil prices. This is notwithstanding the fact there is no international price for gas.

As recognised by UNCTAD, the world market for natural gas is fragmented in different regional markets. There is no world price for natural gas.[7] The Synergies Economic Consulting report also warns that prices are likely to vary significantly in different countries or geographic regions.[8]

Country [9]	2004 $A / GJ	Country	2004 $A / GJ
Argentina	1.50	Kazakhastan	1.44
Barbados	25.76	South Korea	10.84
Bolivia	2.29	New Zealand	3.86
Brazil	12.75	Russia	1.05
Canada	7.09	UK	6.42
Chile	6.74	United States	7.99
Taiwan	10.68	Venuzuela	0.46
Japan	12.44		

Given the significant regionalisation of gas prices, there is no rationale for Australian users to be paying the same natural gas prices as energy-poor countries like Japan and China.

In the last 12-18 months, lack of availability has resulted in WA domestic gas prices rising from being comparable with Eastern States prices, to being almost three times Eastern States prices on a delivered basis.

Price expectations by oil and gas companies in recent tenders would also equate to gas prices of over $15 / GJ. If achieved, this would represent a rise in gas prices by over 600 per cent.

The experience in Western Australia has serious consequences for governments, businesses and households in the Eastern States. The Commonwealth – State Joint Working Group Report on Natural Gas Supply

[7] Synergies Report, p.48.
[8] Synergies Report, pp.48-49.
[9] Synergies Report, p.49.

expressed concerns about the likely impact on Eastern States gas prices from competition with LNG exports:

> "The effects of price competition are already being felt in Western Australia. Gas prices in WA have increased to around double the prices in the Eastern market, where exports of gas are not presently viable."[10]
>
> "The announcement of two potential LNG terminals using CSM [coal seam methane] has the potential to impact on both supply and price in the Eastern gas market."[11]

There have also been reports of oil and gas companies withholding the supply of gas to the domestic market in order to focus on future LNG sales. The Sydney Morning Herald reports on Queensland Gas' proposed LNG project at Gladstone:

> "The Queensland Gas managing director, Richard Cottee, said the company was limiting its domestic sales to focus on future higher-value LNG sales. 'We are going for value, not volume,' he said. 'We are not entering into any further long-term sales contracts,'"
>
> "Mr Cottee said some of Queensland Gas's new wells being developed in the meantime would be de-watered and then shut in to allow the company to obtain higher LNG prices at a later date."
>
> 'There is no requirement for forced sales of our gas [to the domestic market],' he said. 'We have faith we can meet the LNG target without causing a glut of gas in the interim.'[12]

This reflects the long term strategy of oil and gas producers to withhold domestic supply and price domestic gas against LNG / international oil prices. This will lead to significant increases in domestic gas prices in the Eastern States, which would make natural gas uncompetitive with coal.

Supplying local industry is the most greenhouse-efficient use of Australia's clean energy reserves

From a global perspective, the most greenhouse-efficient use of Australia's clean energy reserves is to supply local industry. This is particularly given the processing, export and re-gasification of LNG is a greenhouse-intensive process.

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[10] Joint Working Group Report on Natural Gas Supply, p.16.
[11] Joint Working Group Report on Natural Gas Supply, p.9.
[12] 'Queensland Gas looks to high-value LNG', *Sydney Morning Herald*, 6 March 2008, available at: http://business.smh.com.au/queensland-gas-looks-to-highvalue-lng/20080305-1x7t.html?skin=text-only

A recent study by Carnegie Mellon University researchers found that over its lifecycle, LNG produces greenhouse gas emissions approaching that of coal. These greenhouse impacts occur as LNG is extracted, liquefied, shipped overseas in tankers, then regasified and put into pipelines before it can be used as an energy fuel in the importing country.[13]

In contrast, domestic use of natural gas produces significantly lower greenhouse gas emissions. There is therefore a need for policies to ensure Australia's clean energy reserves are used to reduce Australia's carbon emissions.

A long term strategy is needed to secure domestic gas supply

The Alliance welcomes the Garnaut Review Interim Report's statement that it will provide recommendations on policy interventions when there is clear evidence of market failure.[14]

The experience in Western Australia clearly demonstrates the failure of the domestic gas market to ensure domestic supply and to meet Australia's long term greenhouse challenge. Clear evidence of market failure include:

- current and potential gas users have been unable to secure long term supply of competitive priced gas;
- escalating prices have made gas uncompetitive with coal for baseload power generation;
- the State's recent announcement that it will build a coal-fired power station despite "abundant" reserves of natural gas;
- minerals and resource processing projects have been forced to switch from gas to coal-fired energy;
- at the same time, oil and gas companies continue to expand exports of Australia's clean energy reserves.

The Synergies Economic Consulting Report also found compelling evidence that the WA gas market has failed.

Urgent action is therefore needed to ensure long term supply of natural gas to the domestic economy, and that natural gas is competitive with coal.

[13] Carnegie Mellon University, 'Carnegie Mellon Researchers Urge U.S. Officials To Study Indirect Impacts of Fossil Fuels That May Limit Future Energy Alternatives', 22 August 2007, http://www.cmu.edu/news/archive/2007/August/aug22_LNG.shtml
[14] Garnaut Review Interim Report, p.6.

The DomGas Alliance supports measures that will secure long term supply and competition in the domestic gas market. These include:

- a "use it or lose it" approach to gas discoveries to ensure supply is not withheld from the domestic market

- a level playing field between sellers and buyers in the domestic gas market – including the removal of anti-competitive joint selling arrangements by which gas producers combine as a group to sell to domestic customers

- lower barriers of entry and measures to encourage domestic gas supply – including through common use mid-stream gas gathering and processing infrastructure, and tax and royalty arrangements that encourage domestic gas supply

- a national gas reservation strategy to ensure the long term supply of competitively priced gas to the domestic market

The DomGas Alliance supports the WA Government's efforts to secure long term gas supply through a 15% domestic gas reservation policy.

However, a national strategy is needed to support the objectives of long term domestic gas supply and Australia's climate change objectives.

A report by Curtin University found that governments around the world are acting to ensure long term domestic gas security in an increasingly energy and carbon-constrained world. Countries with significant gas reserves are introducing policies to ensure that their domestic requirements are adequately provided for.

The DomGas Alliance supports the need for a 2020 Vision and Strategy that recognises the economic, social and environmental importance of domestic gas supply. This must look to a long term time-frame – 50 to 100 years – and also reflect Australia's climate change policy objectives.

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ATTACHMENT: KEY POLICY RESPONSES TO ENSURE COMPETITIVE GAS SUPPLY

More stringent review of retention leases

- 53% of WA's gas reserves are currently held under Retention Leases on the basis that they are uneconomic to develop.
- Further reserves are held in Exploration Licences which are close to expiry and are due to be converted to either Production Licences or Retention Leases
- The Alliance supports more stringent government review of the Retention Lease process to ensure that it is not used by producers to withhold domestic gas supplies.
- The Commonwealth – State Joint Working Group on gas supply recommended more stringent review, and this has been supported by new Federal Resources and Energy Minister Martin Ferguson.
- The Alliance supports amending the current legislation to specify that if an individual field within a Retention Lease is capable of supplying the domestic market on a commercial basis, this should be the basis of assessment.
- The Alliance also supports greater transparency and disclosure in the retention lease process.
- There is currently no gazetting system which would make public the substance of a retention lease application, nor is there a formal procedure for third parties to participate.
- This provides for an asymmetry of information that exclusively benefits existing lease holders.

Removing joint selling arrangements:

- The North West Shelf Joint Venture producers – which supply almost 70% of the domestic market - currently sell gas to domestic customers through a joint selling entity North West Shelf Gas.
- The arrangement forces gas consumers to deal with a single entity rather than with individual Joint Venturers. This significantly reduces competition in the domestic market.
- Gas consumers are prevented by the Trade Practices Act from buying jointly.

- The impact of joint selling is further exacerbated by the concentration in gas supply. Two operating entities (North West Shelf and Apache) supply close to 100% of the domestic market and control the developed fields that currently service the WA domestic market.

- The participants in the North West Shelf Gas Joint Venture hold the vast majority of undeveloped reserves in the Carnarvon Basin.

- The Synergies Economic Consulting Report recommended removing the joint selling arrangement to promote competition and supply in the domestic gas market.

- In the absence of any authorisation, joint selling appears to be in breach of section 45 of the Trade Practices Act which prohibits arrangements which substantially lessen competition.

- The Alliance is also concerned about joint selling becoming standing practice in other gas developments.

- Producers should not maintain selling arrangements that would have or be likely to have the effect of substantially lessening competition.

Domestic gas reservation policy

- If the LNG export target of 50-60 mtpa is reached, the total resources of the Carnarvon basis will have been committed by 2015-2020.

- However, there remain significant questions over the commercial viability of much of the resource discovered to date.

- WA has less than 2% of the world's gas reserves, yet aspires to be the world's second largest exporter of gas.

- Other countries with significant gas reserves are introducing policies to ensure that their domestic requirements are adequately provided for.

- A report by Curtin University found that governments around the world are acting to ensure long term domestic gas security.

- The Alliance believes that in the face of development plans for 50-60 mtpa of LNG exports, some form of reservations policy is necessary to secure long term domestic gas supply. The Alliance, therefore, supports the efforts of the WA government in this regard.

- The Alliance supports the development of a unified State/Commonwealth position on reservations.

- The report also found that over 90 per cent of world gas reserves are directly or indirectly controlled by national oil companies

- Only 8 per cent of world reserves are subject to full access by international oil companies – Australia represents a quarter of these reserves.

Common user midstream infrastructure

- Third party participation in – and multiple use of - midstream gas supply and processing infrastructure has the potential to facilitate new domestic gas developments by lowering investment barriers and costs.

- The Alliance engaged energy consulting firm Wood McKenzie to conduct an analysis of opportunities for common use mid-steam gas gathering and processing facilities.

- The report concluded that there were significant benefits including lower barriers to entry, a more economically efficient use of capital leading to lower gas supply chain costs and increased transparency in the costs of supply.

- Government can facilitate discussions between relevant stakeholders, and by improving transparency and disclosure in the retention lease system.

- An effective gas reservation policy would also ensure that any consolidation between domgas and LNG projects still delivers domestic gas supply.

Onshore tight gas

- WA potentially has 9-12 Tcf of onshore unconventional or 'tight gas' resources in the Perth Basin, located close to existing gas pipeline infrastructure. This compares to around 10 Tcf of potential offshore domgas developments.

- Tight gas currently accounts for around 30% of total gas production in the United States.

- The State Government is examining opportunities to facilitate tight gas development, including by meeting current technology barriers.

- The Alliance supports these efforts and there is also a need for the Commonwealth and State to explore financial incentives for tight gas development.

Review existing exploration incentives

- The Alliance supports reviewing existing taxation and royalty arrangements to provide financial incentives for domgas developments.

- Under the Petroleum Resource Rent Tax (PRRT) which applies to Commonwealth waters, exploration expenditure in areas designated as frontier between 2004 and 2008 are eligible for a 150% uplift.

- Similar incentives should be explored to encourage inshore and onshore domgas developments.

- The Alliance also supports mechanisms such as Flow Through Shares and any other arrangements which would lead to increased exploration in the inshore and onshore areas where fields amenable to development for the domestic market are most likely to be discovered.

Assessments of future gas supply and demand

- The Federal Government is conducting a National Energy Security Assessment on the outlook for electricity, gas and liquid fuel supply and demand over the next 5-15 years.

- This assessment is already underway with stakeholder consultation planned for Q2 of 2008.

- Claims by producers and government that Australia has abundant reserves of gas are incorrect.

- Current estimates of gas reserves considerably overstate availability by failing to take into account: the practical availability of resources, the rapid expansion of LNG export production, or the contracting out of available resources to long term LNG contracts.

- WA's 120 Tcf of estimated gas resources refers to resources with only a minimum 50% probability of recovery.

- Only 17% of WA's resources relate to developed fields. The bulk of resources are currently located deep offshore and have gas quality issues. There is no certainty that it would be economic to develop gas from remote reserves for the domestic market.

- For an energy intensive economy, Australia holds just over 2% of the world's natural gas resources, yet aspires to be the world's second largest exporter of LNG.

- With the continued expansion of LNG exports, the bulk of gas in the Carnarvon Basin – which supplies the WA domestic market - will be fully contracted between 2015-2020.

- There is a need for an accurate information base to support long term planning and to ensure that appropriate policies are implemented.

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 investors.

Members include: Alcoa of Australia, AlintaAGL, Synergy, Dampier Bunbury Pipeline, ERM Power/New Gen Power, Newmont Australia, Fortescue Metals Group, Windimurra Vanadium and Horizon Power.

Alliance members represent the majority 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.

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