DomGas Alliance

15 September 2008

Committee Secretary
Senate Economics Committee
Parliament House
Canberra ACT 2600

Dear Sir / Madam

The DomGas Alliance is pleased to provide a submission to the Committee's inquiry on the impact of the Apache Energy Varanus Island incident.

The Varanus Island incident reinforces the importance of domestic gas supply for local industry and households, and the need for greater consideration to be given to increased competition, diversity and security of supply.

The DomGas Alliance

The DomGas Alliance was formed in 2006 in response to serious gas supply shortages and includes current and prospective gas users and gas infrastructure investors. Members include: Alcoa of Australia, Alinta, Dampier Bunbury Pipeline, ERM Power / NewGen Power, Fortescue Metals Group, Horizon Power, Newmont Australia, Synergy, Verve Energy and Windimurra Vanadium.

Alliance members represent the majority of Western Australia's domestic gas consumption and gas transmission capacity, including smaller industrial and household users of gas. The Alliance works closely with the State and Federal Governments to promote competition and supply of gas for industry and households in Western Australia.

Impact of the Varanus Island Incident

The Varanus Island incident – which shut off 30% of the State's total gas supply - resulted in significant economic damage to individual Alliance companies and to a multitude of other gas users. Many members were dependent on Apache Energy for gas supply. The loss of this supply resulted in severe disruption to operations as well as higher costs as companies were forced – to the extent they were able – to switch to alternative gas supplies or energy fuels.

The outage had a compounding impact on industry by disrupting the local production and supply of other essential inputs, such as fertilisers, reagents for the mineral processing industry and industrial gases such as carbon dioxide. The incident has had far-reaching economic, employment and investment impacts and has resulted in significant inconvenience to households.

The Alliance supports an inquiry into the cause and management of the outage to ensure appropriate mechanisms are implemented to prevent a repeat of the incident. In addition, the Alliance supports a thorough review of:

- The reliability of each section of the gas supply chain;

- The effectiveness of the technical regulation which oversees the design and ongoing operation of these facilities;

- The extent of redundancy built into the State's gas supply and delivery systems; and

- The ability of emergency response arrangements to bring production back on line quickly – or to provide alternative fuel supplies.

At a broader level, the Varanus Island incident reinforces the State's high level of dependence on domestic gas supply, and industry's dependence on competitively priced energy. The incident underlines the need for:

- Greater diversity of supply sources;

- Effective competition in the upstream gas market;

- Specific incentives to encourage exploration for and development of domestic gas;

- An appropriate balance between domestic gas supply and LNG export; and

- Setting aside sufficient reserves of gas to ensure the State's long term requirements are met.

The Alliance's submission will focus on these key issues.

The importance of domestic gas supply

Western Australia is dependent on domestic gas to supply energy, support essential services, fuel industry and supply households. Natural gas supplies 51% of the State's primary energy and 60% of electricity generation.

Demand for gas will continue to grow. A 2007 study by Economics Consulting Services concluded that Western Australia alone will require around 900 TJ/day of gas in the next 6 years to meet new and replacement demand, including 650 TJ/d of new gas. This is equivalent to the total size of the existing market for gas.

The study identified at least $23 billion in projects 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.

Since 2007, expectations of future gas demand have further increased, including in relation to potential development in the State's Mid-west. The Alliance has engaged Economics Consulting Services to complete an updated study of future gas demand, which we will be pleased to provide the Committee once completed.

Rising natural gas prices are impacting Australian industry

Before the Varanus Island emergency, Western Australia was already experiencing a serious gas supply shortage. Current and prospective gas users are unable to secure long term gas supplies in substantial quantity. The price of such short term gas that is available has risen dramatically. Wholesale gas prices have tripled over the past 12-18 months with prices reported for recent gas sales now almost three times Eastern States prices on a delivered basis.

At the same time, oil and gas producers continue to expand exports of LNG, and Australian industry is experiencing increased competition for Australia's scarce energy resources with industry in China, India and Japan.

The domestic gas shortage and rising prices are impacting Australian industry through higher energy costs. This is eroding international competitiveness at a time when industry is already facing significant pressures from escalating labour and material costs, a rising Australian dollar, high interest rates and increased overseas competition.

The experience in Western Australia has consequences for industry in the Eastern States, particularly in the manufacturing, automotive and processing sector. Escalating gas prices in Western Australia reflect a long term strategy of oil and gas producers to increase prices to a notional "international" price based on LNG or international oil prices. This is despite there being no world price for gas with gas prices varying significantly between different countries and regions, and being tightly controlled in many countries, including China.

The development of LNG projects in the Eastern States and LNG pricing for domestic gas will therefore lead to dramatic price increases for manufacturers and industry - by over 300 per cent. This was recognised by a recent report by Commonwealth / State officials which warned:

> "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."[1]
>
> "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."[2]

A recent presentation by Origin Energy considered that access to international LNG markets is likely to result in significant increases in gas prices.[3] The National Generators Forum have also warned that LNG export developments in Gladstone, Queensland, could potentially double the price of gas in the eastern states from the current $3.50 per gigajoule:

> "We are worried that prices on the eastern seaboard will mirror the far higher export price, as is the case with domestic gas prices in WA, where an LNG export industry already exists."[4]

The Alliance understands that oil and gas producers in the Eastern States have also acted to withhold supply. For instance, the *Sydney Morning Herald* recently reported on Queensland Gas' proposed LNG project at Gladstone and that the company was limiting supply to domestic users to obtain higher LNG prices in the future. This included by shutting down new wells that might otherwise supply Australian industry.[5]

Australia only has limited reserves of natural gas, yet aspires to be the world's second largest LNG exporter

Claims by producers that Australia has "vast" or "over a hundred years" of gas are incorrect. Australia holds just over 2% of the world's natural gas resources, which represents little more than one year of world gas consumption. At the same time, Australia is aspiring to be the world's second largest gas exporter.

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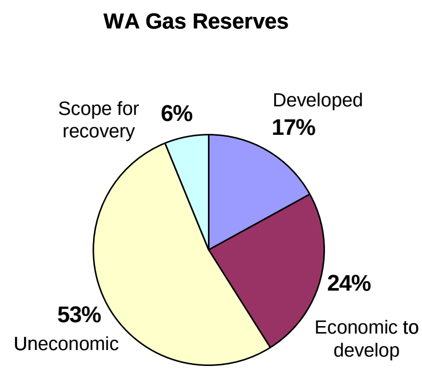
[1] Joint Working Group Report on Natural Gas Supply, p.16.
[2] Joint Working Group Report on Natural Gas Supply, p.9.
[3] Origin Energy, presentation ot Macquarie Conference, May 2008.
[4] 'Gas price under pressure', *The Australian*, 1 July 2008.
[5] 'Queensland Gas looks to high-value LNG', *Sydney Morning Herald*, 6 March 2008, available at: http://business.smh.com.au/queensland-gas-looks-to-highvalue-lng/20080305-1x7t.html?skin=text-only

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

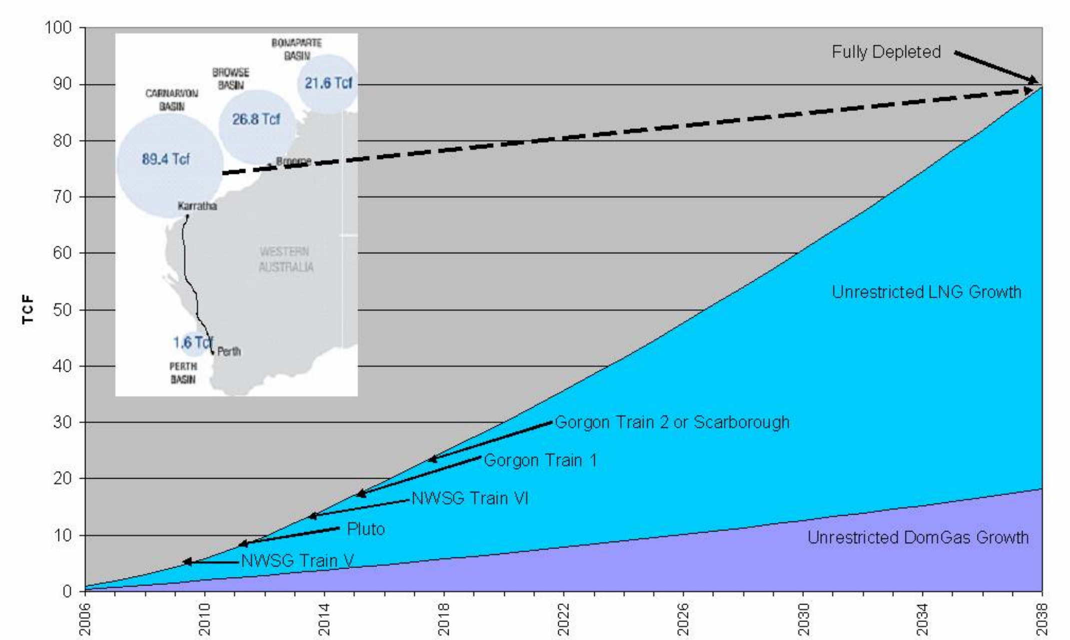
Importantly, only 17% of Western Australia's estimated natural gas resources relate to developed fields. The bulk of resources are located offshore and in deep water; there is no certainty these could commercially be developed. Many of the fields have gas quality issues which impact on development economics 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 commercialising a significant proportion of Australia's reserves.[6]

The Alliance believes that gas resources in the Carnarvon Basin – which supplies the bulk of Western Australia's gas needs – could be fully depleted within 30 years. In addition, if producer targets for up to 60 million tonnes a year on LNG exports are realized, the bulk of gas will be committed under long term contract between 2015 and 2020. This will put at risk availability of clean energy for Australian industry.

Depletion of Western Australia's LNG resources



[6] Joint Working Group Report on Natural Gas Supply, p.7.

Natural gas must underpin 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.

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 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.[7] 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.

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

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.

There are significant greenhouse risks for Australia

Availability and pricing of gas is, therefore, an issue of great strategic importance for Australia's climate change future. At current price levels in Western Australia, however, natural gas is no longer competitive with 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. 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

By increasing the cost of clean energy, rising gas prices undermine industry's ability to meet national greenhouse targets and dramatically increase the cost of any emissions trading scheme.

Removing gas from a competitive fuel mix will also lead to higher overall energy costs. Coal prices traditionally shadow gas prices. Rising gas prices will therefore result in higher coal prices - and higher fuel costs for power generation, and electricity costs for industry and households.

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 need for greater competition, diversity and security of supply

The Varanus Island incident underlines the need for greater competition, diversity and security of natural gas supply for industry and households.

To that end, there is a need for State and Federal governments to:

- Strengthen the Retention Lease system to ensure that gas fields that can supply the domestic market are developed and that producers do not withhold supply. Greater transparency in the process is also needed to promote opportunity and third party participation.

- Remove anti-competitive selling arrangements whereby major gas producers currently sell jointly as a cartel to local customers.

- Establish a 2050 national energy security strategy, underpinned by a domestic reservation policy, to ensure competitive long term supply.

- Ensure domestic supply obligations are met.

- Ensure the original intent of the North West Shelf State Agreement is met in relation to new LNG export developments.

- Facilitate common user gas supply infrastructure to reduce project costs and promote development.

- Review tax and royalty arrangements to promote domestic gas exploration and development.

- Encourage and support the development of “tight gas” fields.

- Facilitate and expedite approvals processes for gas exploration and development.

- Eliminate unnecessary government imposts that act as a disincentive to gas exploration and development.

- Ensure that the Federal Government’s trade negotiations support, or at the very least not undermine, Australia’s long term energy security.

Additional background on these policy recommendations is provided by way of attachment, or by contacting myself, Alliance’s Executive Officer, on 0403 310 897 or gavin.goh@dbp.net.au.

The Alliance welcomes the opportunity to assist the Committee in its inquiry, to promote a secure and competitive gas future for Australian consumers.

Yours sincerely

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POLICY RESPONSES TO PROMOTE GREATER COMPETITION, DIVERSITY AND SECURITY OF SUPPLY

More stringent review of retention leases

Section 38B of the *Petroleum (Submerged Lands) Act 1967 (Cth)* provides for the grant of a Retention Lease over petroleum discoveries. This applies where a petroleum discovery proves to be currently non-commercial but has the potential to become commercial within 15 years.

The initial term of a Retention Lease is five years. This may be renewed provides it still meets the required uncommerciality criteria. A Retention Lease must be converted to a Production Licence when a reserve is commercial. Retention Leases are administered by the Joint Authority comprising both the Commonwealth and the State.

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 assessment of Retention Leases to ensure that they are not used by producers to withhold domestic gas supplies. The Commonwealth – State Joint Working Group on gas supply recommended more stringent assessment, and this has been supported by the Federal Resources and Energy Minister.

A review is also underway on how the policy might be applied in the future, including ways to improve transparency in the Retention Lease process, and to ensure that commerciality tests are stringently applied. A copy of the Alliance's submission is **attached**.

The Alliance believes that in the first instance, reserves held under Retention Leases should be assessed to determine whether they are capable of supplying the domestic market on a commercial basis. The Alliance also supports amendment of the administrative guidelines or legislation to further reinforce this expectation.

The Alliance 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.

Greater transparency and disclosure will improve the underlying basis of decisions, encourage third party participation, subject application claims to greater scrutiny, strengthen the application of the commerciality test and promote opportunity and field development.

There is also a need for the Designated Authority to develop and publish methodology on how it assesses retention leases, and against what metrics. This could include:

- a published methodology that outlines how the Joint Authority assesses different metrics, and how this assessment takes into account other factors; and

- the publication of a quarterly / half-yearly or annual report or assumptions book that outlines these factors and key assumptions, for example labour and raw material costs, local gas demand, rate of return, and expectations on CAPEX and OPEX. This report would provide greater certainty and transparency for the market, and encourage opportunity for potential suppliers.

Remove anti-competitive 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. This arrangement forces gas consumers to deal with a single entity rather than with individual Joint Venturers. This significantly reduces the number of sellers and, as a result, 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.

The Alliance has written to the ACCC calling for a review of the joint selling arrangement. The matter is currently being investigated by the ACCC's Enforcement Branch. In the absence of any authorisation, joint selling appears to be in breach of section 45 and 45A of the *Trade Practices Act 1974* which prohibits price fixing and 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.

Review tax and royalty arrangements to promote domestic gas development

The Alliance supports a review of existing taxation and royalty arrangements to provide financial incentives for domestic gas 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 considered to encourage inshore and onshore domestic gas 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.

The Alliance is currently completing a detailed review of tax and royalty arrangements with the view to recommending measures to encourage gas exploration and development for the domestic market. The Alliance will be pleased to provide a copy of the review to the Committee once completed.

Promote 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 domestic gas and LNG projects still delivers domestic gas supply. A copy of the Wood McKenzie report and Alliance policy paper is **attached**.

Promote development of onshore tight gas

WA potentially has 9-12 Tcf of 'tight gas' resources in the Perth Basin, located close to existing gas pipeline infrastructure. 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. Alcoa and Latent Petroleum have recently partnered to evaluate and develop WA's first tight gas field – the Warro gas field. The Alliance supports these efforts and the need for the Commonwealth and State to explore financial incentives for tight gas development.

Ensure the original intent of the North West Shelf State Agreement is met with new LNG export developments

The North West Shelf State Agreement is scheduled in the *North West Shelf Gas Development (Woodside) Act 1977.* The Agreement was originally due to expire in 2010, but was extended in 1984 to 2025. The gas reservation commitments under the original agreement have been met by the North West Shelf Gas producers.

Since the initial State Agreement was negotiated in 1979 however, LNG exports from the NWSGJV will have increased by over 150% from the originally envisaged 6.5 million tonnes per annum, with further expansions foreshadowed. By comparison, supply to the domestic market by the NWSGJV has increased only marginally. Domestic users are unable to secure new gas supplies and prices have risen threefold.

Given the State's dependence on the NWSGJV for almost 70% of its domestic gas, and the fact that the JV parties continue to hold the bulk of the State's gas reserves, it is critical that continued expansion of LNG exports be matched by increased commitments to the domestic market.

It is important that the original intention of the Agreement – that of placing priority on the availability of gas to the WA domestic market – be maintained in the ongoing administration of the Agreement. The need for LNG contract extensions – and new developments such as LNG Train 6 mooted by Woodside - may provide the State with the opportunity to pursue further domestic gas supply commitments.

Domestic gas reservation

Claims by producers and government that Australia has abundant reserves of natural gas are incorrect. For an energy intensive economy, Australia holds just over 2% of the world's natural natural gas resources, yet aspires to be the world's second largest exporter of LNG.

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

WA's 130 Tcf of estimated natural 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. If government and producer export targets of 50-60 million tonnes per annum of LNG are reached, the total existing resources of the Carnarvon Basin will be fully committed by 2015-2020. Once committed to long term LNG contracts, gas is unavailable to meet current and emerging needs of the local economy.

The Alliance believes that in the face of this, 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 also supports the development of a unified State/Commonwealth position on reservations and a national energy security strategy to ensure competitive long term supply.

A report by Curtin University found that governments around the world are acting to ensure long term domestic gas security. Other countries with significant gas reserves are introducing policies to ensure that their domestic requirements are adequately provided for. The report also found that over 90% of world gas reserves are directly or indirectly controlled by national oil companies. Only 8% of world reserves are subject to full access by international oil companies – Australia represents a quarter of these reserves.

Establish a 2050 national energy security policy

The Alliance supports the need for a national energy security strategy to ensure long term competitive supply to local industry and households. A 2050 Vision and Strategy should be developed to ensure supply for the next 50-100 years. This should include three elements:

- Economic – the importance of gas supply for the State's mining, manufacturing and process industries

- Social – recognising the benefits to households and local communities on energy supply and on the prosperity created by downstream industries

- Environmental – the importance of gas supply in Australia's response on climate change

Facilitate and expedite approvals

The current approvals process and stringent demands placed on developments create significant barriers to entry for new players and serve to protect larger incumbent producers.

While efforts have been made in this area, there are opportunities for further streamlining of State and Federal approvals processes for new projects. The Alliance supports a review of existing approvals processes to identify opportunities for further streamlining.

Eliminate unnecessary government imposts

The promotion of a competitive gas market requires the elimination of unnecessary costs throughout the gas supply chain.

The Alliance encourages both State and Federal governments to examine the impact of all policies and regulations impacting on the gas supply chain, with a view to reducing unnecessary costs and inefficiencies.

Ensure the Federal Government's trade negotiations support, or at the very least not undermine, Australia's energy security

The Alliance is concerned that the Federal Government is currently contemplating treaty commitments which would underpin Japan and China's energy supply requirements.

Such commitments – and their implications for domestic law - could limit the ability of State and Federal governments to ensure Australia's energy security. They could also create unsustainable expectations on the part of trading partners, with consequential impacts on the administration of Australia's resource, energy and investment regimes.

It is critical that Australia's Free Trade Agreement negotiations support and not undermine Australia's energy security.

The DomGas Alliance

The DomGas Alliance was formed in 2006 in response to serious gas supply shortages and includes current and prospective gas users and gas infrastructure investors.

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Alliance members represent the majority 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 works closely with the State and Federal Governments to promote competition and supply of gas for industry and households in Western Australia.