



# **Queensland Government Consultation Paper on Domestic Gas Security**

**Submission by the DomGas Alliance**

**20 October 2009**



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## KEY POINTS

- The Queensland Government has a once-in-a-generation opportunity to secure the State's future energy needs.
- An effective domestic reservation policy would support energy security, while promoting investment, development and employment growth in Queensland for decades.
- Domestic gas reservation has been a long-established feature of the West Australian gas market since the 1970s.
- Domestic gas supply has delivered immense benefits. It underpinned the establishment of the North West Shelf project and subsequent LNG export industry, and delivered stable and affordable energy supply to WA businesses and households for 25 years.
- For a reservation policy to be effective, it should provide for:
  - *Certainty* – domestic gas obligations should be made *unconditional* and not subject to “commerciality” escape clause;
  - *Flexibility* – LNG producers should be given sufficient flexibility in how they can meet their domestic supply obligations;
  - *Resource and export growth* – domestic supply should increase with any future expansion in gas reserves or LNG exports; and
  - *Timeliness* – the reservation commitment should be applied to both reserves and production; domestic gas should be supplied no later than LNG start-up and not unduly delayed.
- Experience in Western Australia does not support claims that a Queensland reservation policy would discourage exploration and investment in Queensland, increase Queensland's sovereign risk or reduce its attractiveness as a place to invest, or constitute unwarranted market intervention.
- The WA reservation policy has not prevented major gas producers from continuing to invest in new developments and LNG projects.
- Exploration activity in Western Australia in fact *significantly increased* since the introduction of the 15 per cent reservation policy in 2006.
- A domestic reservation policy is a common feature in many other energy producing countries. A 15 or 20 per cent reservation policy is in fact modest by world standards.

- 92 per cent of the world's natural gas resources are controlled by national governments or national oil companies and cannot be accessed by international oil companies on an open basis.
- A reservation policy would enhance Queensland's attractiveness as a place to invest by giving major project developers long term certainty over the availability and affordability of energy supply.
- For a policy to be effective in its application, it should be implemented to coincide with the establishment of the coal seam methane / LNG industry. This would provide certainty to project developers and create clear expectations on energy security.
- The Commonwealth Government should implement a national reservation policy to support and complement State reservation policies.
- A national reservation policy would avoid potential conflicts of laws while sending a consistent message to gas developers on energy security.
- It is also vital to ensure effective competition in the upstream gas market – by requiring joint venture participants to sell separately to Australian consumers and not through cartel selling arrangements.

### **Key elements of an effective reservation policy**

- It should provide for domestic gas obligations that are *unconditional*.
- It should not be subject to a “commerciality” escape clause that would allow LNG producers to avoid domestic gas obligations.
- It should be applied consistently to discourage individual projects from claiming “special exemptions”.
- It should require actual supply of gas as opposed to “offering for sale”.
- It should give producers flexibility in how they would meet domestic supply obligations.
- It should encourage the most efficient means of meeting domestic supply obligations - whether by supplying domgas from the relevant field or, where it is not commercially viable to do so, by supplying domgas from other fields.
- It should grow with any future expansion in project gas reserves and production
- It should be applied as a *percentage* of reserves and production, as opposed to a fixed volume.
- It should be tied to both reserves and production.
- It should require domestic gas to be supplied prior to, or at least no later than, start-up of LNG production.
- It should ensure priority of domestic gas supply over LNG export in the event of any reserves shortfall.

# 1. THE DOMGAS ALLIANCE

The DomGas Alliance is Western Australia's peak energy user group and represents natural gas users, infrastructure investors and prospective domestic gas producers. The Alliance aims to promote security and affordability of gas supply for industry, small business and households.

The Alliance was formed in 2006 in response to a serious shortage of gas supply for new developments in WA. Alliance members represent around 80 percent of Western Australia's domestic gas consumption and gas transmission capacity, including smaller industrial and household users of gas. The Alliance also includes companies working to develop domestic gas fields.

Members include: Alcoa of Australia, Alinta, Burrup Fertilisers, DBP, ERM Power / NewGen Power, Fortescue Metals Group, Horizon Power, Murphy Oil, Newmont Australia, Synergy and Verve Energy.

The Alliance welcomes this opportunity to share the experiences of the WA gas market and reservation policy by providing a submission to the Queensland Government's Domestic Gas Market Security Consultation Paper.



## **2. THE WEST AUSTRALIAN GAS MARKET**

### **2.1 WA's gas dependent economy**

Western Australia is the most energy and gas-dependent economy in Australia. Natural gas supplies half of the State's primary energy requirements and fuels 60 per cent of the State's electricity generation. In contrast, natural gas supplies 19 per cent of the primary energy needs of Australia as a whole.

The State's natural gas consumption averaged an estimated 1,194 TJ/day in 2006-07 – seven times the volume used in 1983 prior to deliveries from the North West Shelf.<sup>1</sup> Since 1984, domestic demand for gas has been growing at around 8.5 per cent per year.

Manufacturing, electricity generation and mining account for up to 90 per cent of annual domestic gas consumption in Western Australia. Importantly, 60 per cent of the State's electricity generation is gas-fired. Availability and affordability of natural gas therefore has a major direct impact on industry, small business and households through electricity prices, as well as gas prices.

### **2.2 Gas production**

Western Australia accounts for around 80 per cent of Australia's natural gas resources.<sup>2</sup> The State also accounts for the bulk of Australia's LNG exports through the North West Shelf Project.

The North West Shelf Joint Venture, which comprises six producers, supplies around 70 per cent of the WA domestic gas market. The NWJSV is operated by Woodside, with the other participants being: Shell, Chevron, BP, BHP Billiton, and Mitsui-Mitsubishi.

Apache-led joint ventures supply almost all of the remaining 30 per cent of the WA domestic gas market.

Western Australia currently exports around 16 million tonnes of LNG per year. All LNG is produced by the North West Shelf Joint Venture. The NWSJV operates five LNG processing trains, with Train 5 commissioned in 2008.

In September 2009, Chevron, Shell and ExxonMobil announced final investment approval for the Gorgon Project. The project will construct three LNG processing trains with a total capacity of 15 million tonnes per year, and a domestic gas plant.

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<sup>1</sup> ABARE, *Natural gas consumption by State*, 2008.

<sup>2</sup> ABARE, *Energy in Australia 2009*, available at:  
[http://www.abareconomics.com/interactive/09\\_auEnergy/](http://www.abareconomics.com/interactive/09_auEnergy/)

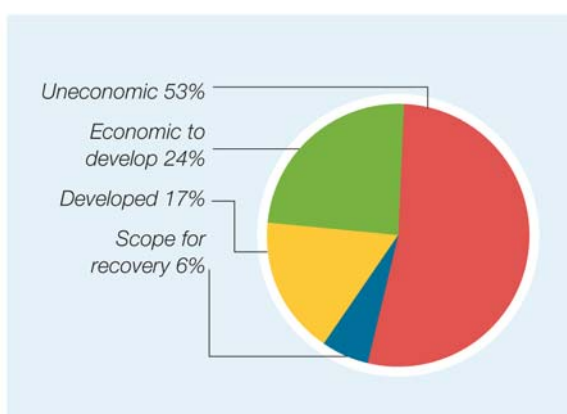
Woodside is progressing its Pluto LNG Project with first gas expected late 2010. The project involves construction of a 4.3 million tonnes per year LNG train, with Woodside preparing development of a second and third LNG train in addition to a pipeline gas (domestic) facility.

### 2.3 Gas reserves

Western Australia is estimated to have 120-140 trillion cubic feet (Tcf) of gas resources. This estimate however refers to “P50” resources with only a minimum 50% or higher probability of economic recovery.

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 that these reserves could be commercially developed. Many of the fields have gas quality issues which impact on development economics and environmental acceptability.

Figure: WA Gas Reserves



This was recognised by the 2007 Commonwealth – States Joint Working Group Report on Natural Gas Supply which noted there were significant barriers to easily accessing and commercialising a significant proportion of the State’s natural gas reserves.

### 2.4 Challenges to domestic gas security

Despite its so-called “abundance” of natural gas, Western Australia is experiencing serious gas security challenges. These include serious domestic gas shortages and dramatic increases in gas prices. This has had a profound impact on investment, development and employment, as well as the State’s response to climate change.

This submission provides a brief overview of the WA gas security experience. More detailed information is contained in the DomGas Alliance’s *Western Australia’s Domestic Gas Security Report 2009*.<sup>3</sup>

<sup>3</sup> Available at: [www.domgas.com.au](http://www.domgas.com.au)

## 2.4.1 Availability of supply

### ***Current gas shortage***

Western Australia has been experiencing a serious shortage of domestic gas since at least 2004. Current and prospective gas users are unable to secure gas supplies in substantial quantity.

Major producers are limiting domestic gas contracts to a maximum 6 years. This is impacting investment as long term contracts are necessary to underpin capital intensive developments such as manufacturing, minerals processing and power generation.

At the same time, major producers continue to expand LNG exports while entering into 20-25 year contracts with overseas LNG customers.

**Table: WA domgas and LNG contracts**

<b>Recent domgas contracts</b>	<b>Recent LNG contracts</b>
Oct 2008 – Santos 6 year contract to supply Moly Mines	Dec 2008 – Shell 20 year contract to supply China
Jan 2009 – Santos 7 year contract to supply CITIC Pacific	Aug 2009 – ExxonMobil 20 year contract to supply India
<i>WA gas users unable to secure long term contracts</i>	Aug 2009 – ExxonMobil 20 year contract to supply China
<i>Significant unfilled demand</i>	Sept 2009 – Chevron 15 year contract to supply Korea
	Sept 2009 – Chevron two 20 year contracts to supply Japan
	Sept 2009 – Chevron 20 year contract to supply Korea

Apache Energy's Julimar Project highlights the increased focus of major producers on LNG exports at the expense of the supplying the Australian market. The Julimar-Brunello field is expected to produce 200 million cubic feet of gas per day and was well suited for development as a domestic gas project.

Apache Energy is however now considering processing the gas as LNG through Woodside's Pluto Project.<sup>4</sup> This would mean a potential source of domestic gas being diverted to LNG exports.

<sup>4</sup> The Australian, 'Apache Energy's Julimar field to drive Woodside boom', 22 May 2009.

***Warehousing of gas reserves under Retention Leases when those resources might otherwise supply the local market***

Major producers appear to be using offshore Retention Leases (which are jointly managed by the Commonwealth and State) to park gas reserves - that might otherwise supply the domestic market on a commercial basis - for increasingly ambitious LNG developments.

Under the Commonwealth *Offshore Petroleum and Greenhouse Gas Storage Act 2006*, a retention lease must be converted to a production licence when a reserve is commercial. The current Act does not provide an exception for reserves – that might otherwise supply the domestic market – to be set aside for the purpose that they might at some time in the future contribute to an LNG development.

While LNG producers initially claimed that resources were uneconomic for domgas development, such arguments appear no longer valid given the significant rise in domestic gas prices. LNG producers now claim that warehousing of resources is necessary to enable sequential field development for LNG projects.

It is disappointing that current proposals by the Federal Government would endorse this approach. The Federal Government has proposed changes to retention lease management that would give LNG projects precedence over supplying the Australian economy.<sup>5</sup> This will have significant consequences for all Australian States with domestic supply needs and potential offshore gas reserves.

***WA's gas shortage will continue until at least 2020***

Western Australia will continue to experience serious gas shortages for the foreseeable future.

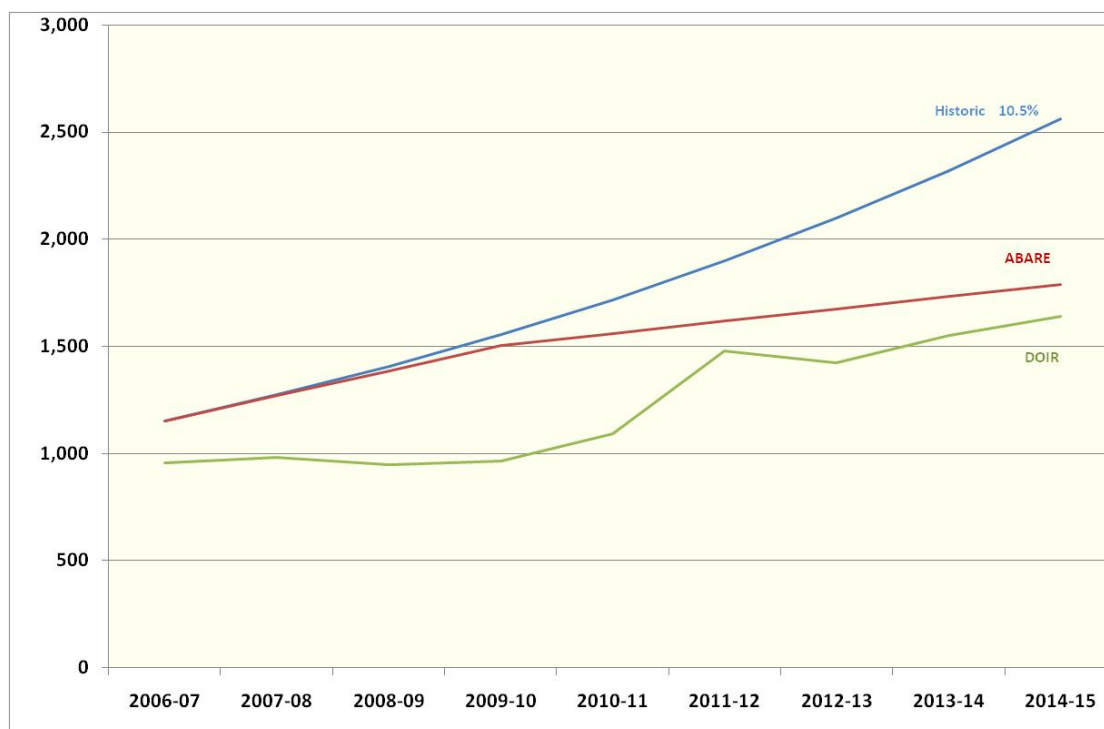
A 2008 study by Economics Consulting Services concluded WA will require over 1100 TJ/day in new and replacement gas by 2014-2015. The study concluded that 274 TJ/day of gas alone would be needed to meet replacement demand for power generation and minerals processing as existing long term contracts expire.<sup>6</sup>

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<sup>5</sup> Department of Resources, Energy and Tourism; *Review of Policy Relating to the Grant and Renewal of Retention Leases – Options Paper*, June 2009.

<sup>6</sup> Economics Consulting Services, *Natural Gas Demand Outlook for Western Australia and Economic Impact*, October 2008, p.5.

Chart: WA natural gas consumption forecast (TJ/day) <sup>7</sup>



According to North West Shelf gas producer BHP Billiton, WA will require 1000 TJ/d of *new capacity and reserves backing* by 2020 to replace existing supply and meet forecast growth:

- WA gas supply is currently predominantly sourced via two hubs: NWS (~ 65%) and Varanus Island (~30%).
- These hubs are running at their practical capacity and the fields currently supplying them are mature and are expected to decline.
- Existing natural gas supply capacity is fully utilised.
- Forecast growth and the decline of existing sources means that 1000 Tj/d of capacity and reserves backing must be added by 2020.
- Replacement of existing supply and supply to meet forecast growth must come from new sources.

Prospective domestic gas developments in WA are however unlikely to meet this requirement – *leaving a potential gas shortfall of around 500 TJ/d*. This shortfall is equivalent to half the size of the current WA gas market.

<sup>7</sup> Economics Consulting Services, *Natural Gas Demand Outlook for Western Australia and Economic Impact*, October 2008, p.5.

**Table: Prospective domestic gas projects**

<b>Project</b>	<b>Domestic gas Supply</b>	<b>Start-up</b>
Reindeer	Up to 120 TJ/d	From 2011
Macedon	Up to 200 TJ/d	From late 2012
Gorgon	Up to 150 TJ/d “if commercial”	From end 2015, rising to 300 TJ/d by 2021
Julimar	May be processed as LNG exports through Pluto	?
Pluto	5 years after LNG “if commercial”	?
Total New Gas Needed		1000-1100 TJ/d
Total New Gas Supply		470 TJ/d
<b>Potential Shortfall</b>		<b>500 TJ/d</b>

Claims by Gorgon operator Chevron of an “oversupply” in the domestic gas market have therefore no basis in fact. This claim was made by Chevron to justify its intention to significantly delay meeting both the timing and volume of the Gorgon domestic reservation commitment.

The Alliance notes the Queensland Consultation Paper’s assessment that LNG producers acting solely in pursuit of commercial interests might lead to a situation where: “the availability of gas in the ground may not translate into gas supplied to the Australian market in a timely manner to meet demand”.<sup>8</sup> This has been the experience in Western Australia for many years now.

#### **2.4.2 Affordability of supply**

Despite holding 80 per cent of Australia’s natural gas, Western Australian domestic gas prices are now among the highest in the country. They are also among the highest of any gas producing / exporting economy in the world.

Historically, prices for gas delivered to South West markets (including gas pipeline transmission costs) have been around \$3.50 - \$4.00 per gigajoule. Recent years have however seen a sharp rise in gas prices. This has seen wholesale gas priced at up to \$14-16 per gigajoule before transport costs.

<sup>8</sup> Queensland Government, *Domestic Gas Market Security of Supply: Consultation Paper*, September 2009, p.2.

The recent fall in “international” gas prices over the last 12-18 months has not translated to lower WA gas prices. Major producers continue to press for gas prices upwards of \$8 - 8.50 per gigajoule before transport costs. This equates to gas prices that are around *three times* the price for new gas compared to in Victoria.

It is alarming that major gas producers appear to be demanding a premium price return from WA consumers – in excess of that obtainable from overseas customers. Apache Energy has publicly announced that: “For price, it’s the domestic market, for quantity it’s the LNG market.”<sup>9</sup>

This represents significant failure in the gas market that warrants action by government. It is absurd that Australian consumers should be asked to cross-subsidise the overseas customers of LNG producers in the prices being paid for domestic gas.

### ***Impact of rising gas prices on industry***

Rising gas prices have had a significant impact on investment and economic development. Western Australia’s power generation, alumina refining, resource processing and manufacturing industries are highly sensitive to gas prices and depend on affordable energy supply.

The serious gas shortage and rising gas prices have impacted project investment in Western Australia. This includes a number of prospective projects being suspended or lost to overseas or interstate:

- Lack of certainty around long term gas supply was a key factor for Alcoa suspending a multi-billion dollar expansion of its Wagerup alumina refinery;
- DBP was required to significantly downsize an expansion of the Dampier to Bunbury Natural Gas Pipeline in 2006 as a number of prospective projects were unable to secure gas supply;
- DBP tenders for additional gas failed when the prospective supplier withdrew its offer;
- Coogee Chemicals has publicly stated that at current domestic prices of \$8 - \$15/GJ, it was now totally uneconomic for any new onshore downstream processing in Western Australia;
- very high gas prices have forced major construction materials producer Adelaide Brighton to switch to coal and lock-in a long term coal supply agreement;

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<sup>9</sup> Reuters, ‘Apache decision on Australian gas by October’, 4 June 2009, available at: <http://www.reuters.com/article/GlobalEnergy09/idUSTRE5535LZ20090604>

- gas suppliers were unable to meet existing contracted supply obligations, with Tap Oil for instance issuing a notice of force majeure in relation to its contract with Burrup Fertilisers; and
- the DomGas Alliance continues to be approached by major project developers unable to secure world-competitive gas prices to support project developments.

While government and media attention has largely focused on the recent Gorgon Project announcement, less attention has been directed to the impacts of the continuing gas shortage on the broader WA economy.

### ***Impact of rising gas prices on households***

Higher gas prices are also impacting small business and households through higher energy bills. June 2009, the WA Government approved significant increases in business and residential gas tariffs. These new tariffs came into force on 1 July 2009.

As a result, the annual gas bill of the average Mid West and South West household has increased by \$78 or almost 23 per cent.<sup>10</sup>

**Table: Impact of Tariff Cap Increases on Median Customers (based on Annual Bills)<sup>11</sup>**

	<b>Cost increase</b>	<b>Gas Disruption Costs</b>	<b>Total</b>
Mid-West / South-West Residential	\$78 (20%)	\$11 (2.4%)	\$89 (22.9%)
Mid-West / South-West Non-Residential	\$78 (4.9%)	\$47 (2.8%)	\$126 (7.9%)
Kalgoorlie – Boulder Residential	\$86 (20%)	\$11 (2.2%)	\$98 (22.6%)
Kalgoorlie-Boulder Non-Residential	\$109 (20%)	\$17 (2.6%)	\$127 (23.2%)
Albany Residential and Non-Residential	\$78 (20%)	-	\$78 (20%)

<sup>10</sup> WA Office of Energy, *Gas Tariffs Review: Interim Report to the Minister for Energy*, June 2009, p.3.

<sup>11</sup> WA Office of Energy, *Gas Tariffs Review: Interim Report to the Minister for Energy*, June 2009, p.3.

A key driver for the gas tariff increases was significantly higher wholesale gas prices. As the WA Office of Energy report notes:

“Natural gas commodity costs in the Western Australian domestic market have increased dramatically in recent periods, moving sharply away from historical prices in the \$2.50 per GJ range earlier this decade.”<sup>12</sup>

### ***Impact of rising gas prices on climate change***

Natural gas has a vital role in meeting Australia’s greenhouse challenge and is the only conventional energy source that can underpin the transition to a low carbon economy during the next 20 years.

Natural gas produces less than half the greenhouse emissions compared to coal and uses proven, readily available technology. Over its life, a new 350 megawatt 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.<sup>13</sup>

With the 80 per cent of Australia’s natural gas reserves, Western Australia should be well-placed to lead the transition to a lower carbon economy.

Escalating prices and domestic gas shortages however present significant risks to the State’s response on climate change. At current prices, gas is no longer competitive with coal for baseload power generation and most resource processing.

*This is unlikely to change under an emissions trading scheme.*

At a wholesale gas price as low as \$7 per gigajoule (before transport costs), natural gas would only be competitive with \$2 per gigajoule coal at the following carbon costs:

- \$90 per tonne carbon cost - on a long run marginal cost (LRMC) basis, that is, for new baseload power plant construction;
- \$110 per tonne – on a short run marginal cost (SRMC) basis, that is, for plant already built.

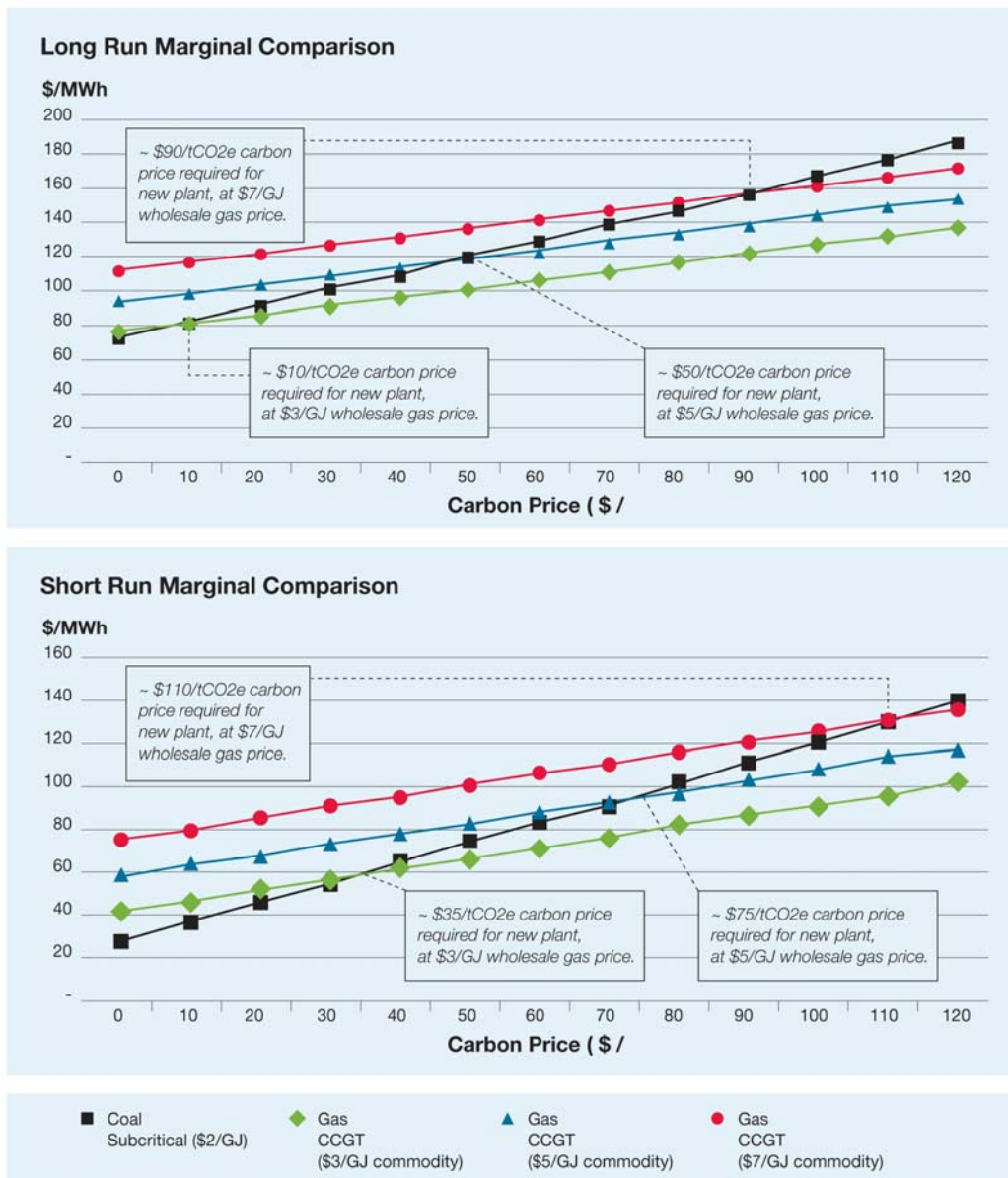
Recent wholesale domestic gas prices have been as high as \$14-16 per gigajoule before transport costs.

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<sup>12</sup> WA Office of Energy, *Gas Tariffs Review: Interim Report to the Minister for Energy*, June 2009, pp.14-15.

<sup>13</sup> Simshauser, P. and Wild, P., *The WA Power Dilemma*, 2007, available at [www.bbpower.com](http://www.bbpower.com).

**Figure: Competitiveness of \$7 / GJ gas vs. \$2 / GJ coal**



Abbreviations: • CCGT: combined cycle gas turbine • tCO<sub>2</sub>e: tonne of CO<sub>2</sub> equivalent • MWh – megawatt hours  
 • kW: kilowatt • WACC: weighted average cost of capital

Gas availability and pricing is also critical to WA meeting national renewable energy targets. Only natural gas can supply the peaking capacity necessary to underpin any expansion of renewable energy generation.

As a result of the gas shortage and escalating prices, a number of resource and energy development projects have had to resort to coal-fired energy. The State’s two recent baseload power generator tenders have been coal-fired as opposed to gas-fired (Griffin Bluewaters 1 and 2).

At a time when Australia is moving to reduce greenhouse emissions, the shortage of gas has resulted in the State constructing new coal-fired power stations. The domestic gas shortage could be the single greatest factor contributing to emissions growth in Western Australia over the next decade.

### 2.4.3 Longevity of supply

Claims by the LNG industry that Australia has “vast” or “hundreds of years” of natural gas are misleading. Such claims significantly overstate Australia’s gas resources and disguise the energy security risks from:

- the depletion of available gas resources; and
- the “locking up” of available gas production through 20-25 year LNG export contracts.

Given the strategic importance of domestic gas supply, it is vital that Federal and State gas policies are driven by objective assessments of fact, as opposed to rhetoric.

According to the Australian Bureau of Resource Economics, Australia has just 98,000 petajoules (or 98 trillion cubic feet Tcf) of natural gas. This represents just 1.4 per cent of world reserves or 57 years supply *at current production levels*.<sup>14</sup> Australia’s natural gas reserves are therefore extremely modest compared to major gas producing countries.

**Table: Natural gas resources by country** <sup>15</sup>

Country	% World Resources
Russia	27 %
Qatar	15 %
Saudi Arabia	4 %
United Arab Emirates	4 %
United States	3 %
<i>Australia</i>	2 %

Federal Government and LNG industry ambitions about Australia becoming an “LNG superpower” - and overtaking Qatar as the world’s largest LNG exporter – do not align with this reality.

<sup>14</sup> ABARE, *Energy in Australia 2009*, overview, section 2, available at: [http://www.abareconomics.com/interactive/09\\_auEnergy/](http://www.abareconomics.com/interactive/09_auEnergy/)

<sup>15</sup> Other country data sourced from: US Energy Information Administration, *International Energy Outlook 2008*, p.44.

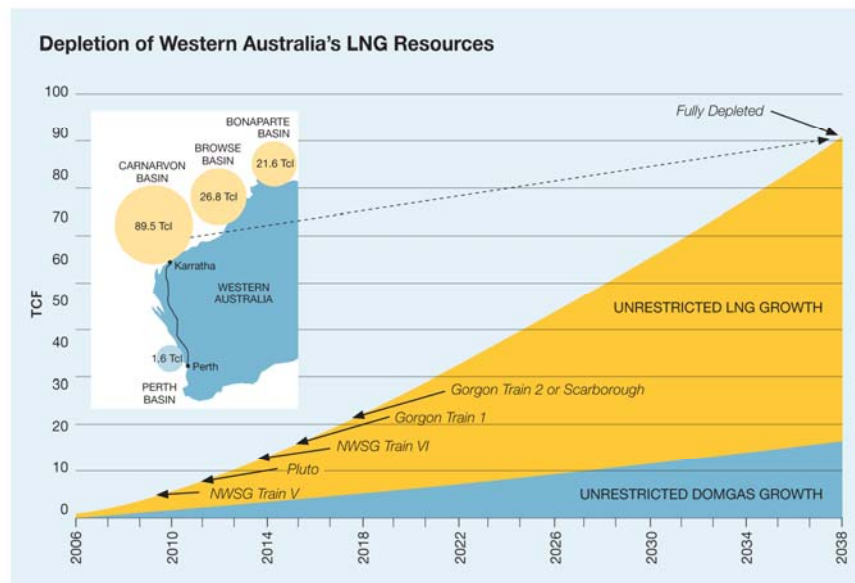
At the same time, LNG producers continue to claim gas is “deeper, dirtier, dryer and more distant” – “the four Ds” – to justify dramatic increases in domestic gas prices.

There are therefore serious energy security concerns for Australian industry and households where government policies are driven by LNG industry rhetoric as opposed to Australia’s actual resource endowment.

In Western Australia’s case, the energy security risks from the depletion or contracting out of gas reserves are real:

- Gas resources in the Carnarvon Basin – which supply the bulk of WA’s existing domestic gas – could be depleted within 30 years with unrestricted growth of LNG exports;
- Total WA domestic gas reserves could be exhausted as early as 2027;
- If government and producer export targets of 50-60 million tonnes per annum of LNG are realised, the total existing resources in the Carnarvon Basin will be fully committed by 2015-2020;
- Where gas is locked-up in long term LNG export contracts, it is no longer available to meet the needs of local industry and households.

Figure: Depletion of Western Australia’s LNG resources



### 3. WA DOMESTIC GAS RESERVATION

#### 3.1 North West Shelf Project reservation commitment

Domestic gas reservation has been an established feature of the WA gas market since the 1970s. Indeed, it was the domestic gas reservation commitment that underpinned the establishment of the original North West Shelf Project, and Australia's subsequent LNG export industry.

The North West Shelf State Agreement, which facilitated the Project, was concluded between the State Government and the North West Shelf Joint Venture participants, and ratified by State Parliament as a schedule to the *North West Shelf Gas Development (Woodside) Act 1979*.

The original intent of the North West Shelf State Agreement was to ensure sufficient priority was placed on meeting the requirements of the WA domestic gas market.

Accordingly, the original Agreement committed the NWSGJV parties to the supply of domestic gas to SECWA of up to 10.5 million cubic metres per day (or 414 TJ/d) over 20 years. It also envisaged LNG exports of up to 6.5 million tonnes per year over a term not less than 20 years.<sup>16</sup>

When the State Agreement was originally negotiated, the North West Shelf Gas project was envisaged to have three phases:

- Phase I – the domestic gas development, which involved construction of the domgas processing plant and the Dampier to Bunbury Natural Gas Pipeline (DBNGP). This was underpinned by the 20 year take-or-pay contract entered into with the State Energy Commission of WA (SECWA), which was in turn backed up by a major commitment from Alcoa.
- Phase II – the initial LNG export phase, involving the construction of LNG Trains 1 and 2; and
- Phase III – the expansion of capacity to process and export LNG, resulting in the construction of LNG Train 3.

In 1994, the Agreement was amended to provide for the disaggregation of the original SECWA contract into the supply of "First Priority" gas – the balance of the 3023 PJ which was the subject of the SECWA contracts – to the SECWA Replacement Buyers.

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<sup>16</sup> *North West Gas Development (Woodside) Agreement Act 1979*, Schedule 1, recitals (c) and (d)

These contracts were originally for 12 years and, the Alliance understands, have been subsequently renewed. The NWSGJV currently supplies daily maximum quantities exceeding 550 TJ/d to the domestic market.

### **3.2 The domestic gas reservation has delivered significant benefits to Western Australia**

The NWS reservation commitment has delivered significant economic, social and environmental benefits to Western Australia. It underpinned the establishment of the North West Shelf Project - Australia's largest gas development - and the subsequent LNG export industry.

It provided stable, secure and affordable energy supply to Western Australia for 25 years which enabled development of the State's mining, minerals processing, power generation and manufacturing industries.

It also provided price competition to other alternative energy sources such as coal, ensuring competitive energy pricing for state development.

As the WA Government noted in 2006:

“The domestic gas reservation for the North West Shelf project is considered to have created an incentive for the project to sell gas into the domestic market, even if the price obtained was less than for exported LNG, as the only available alternative would be to leave the reserved gas in the ground, providing no return at all.”

“This has effectively resulted in the price of domestic gas being significantly less than average world prices. This in turn has placed competitive pressures on other alternative energy sources, such as coal. *The availability of low cost gas is considered to have been a major driver of the State's strong economic growth over the past two decades.*”<sup>17</sup>

The long term benefits to Western Australia from the reservation commitment in supporting investment, development, employment and exports have therefore been incalculable.

### **3.3 The NWS reservation commitment has not kept pace with the State's growing energy needs or increased LNG exports**

While the North West Shelf reservation commitment has delivered significant benefits to Western Australia, the commitment has not kept pace with the State's growing energy needs. According to the WA Government's assessments:

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<sup>17</sup> WA Department of Industry and Resources, *WA Government Policy on Securing Domestic Gas Supplies: Consultation Paper*, February 2006, p.2.

- Of the original 4.7 Tcf of domestic gas reserved under the NWS State Agreement, around 2 Tcf of gas remains to be used and all of this has been allocated under contracts to existing gas users.
- An additional 1.85 Tcf of gas is reserved under the state agreement for the yet to be constructed Gorgon project.
- These gas reservations, along with the approximately 30 per cent of domestic gas currently supplied from smaller, non-export size fields, will only be sufficient to meet the State's needs for approximately 10 years.<sup>18</sup>

The original reservation commitment has also failed to keep pace with the significant expansion in LNG exports. Since the original NWS State Agreement was concluded, LNG exports from the Project have increased significantly:

- Debottlenecking of the three original LNG trains increased capacity to 7.5 million tonnes per annum from the 6.5 million tonnes per annum originally envisaged;
- LNG Train 4 was completed in 2005;
- LNG Train 5 was commissioned in 2008 – increasing LNG exports to 16.3 million tonnes per year;

LNG exports from the NWSGJV have therefore increased by over 150 per cent from the originally envisaged 6.5 million tonnes per annum, with further expansions foreshadowed.

In contrast, supply to the domestic market by the NWSGJV has increased only marginally.

In 1997, the North West Shelf Joint Venture participants claimed, as part of their justification for seeking ACCC authorisation for joint selling, that authorisation would enable an expansion in domestic gas processing plant capacity to 1,100 TJ/d through the construction of an additional domestic gas processing train. This commitment was never met despite the ACCC granting authorisation to sell jointly, and clear demand for domestic gas.

The risk to the State's energy security from the focus on LNG developments was recognised by the WA Government

“The domestic gas reservations under the North West Shelf State Agreement have essentially been used up, through allocation to commercially agreed contracts. Given the recent escalation in demand (and prices) for LNG, there now appears to be little incentive for the

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<sup>18</sup> WA Department of Premier and Cabinet, *WA Government Policy on Securing Domestic Gas Supplies*, October 2006.

NWS Joint Venturers to supply additional quantities of gas to the domestic market. This is borne out by the fact that the NWSJV has recently scaled back its local marketing effort, while putting additional resources into marketing gas into new export markets (particularly China and the USA) where demand is growing rapidly and higher returns can be expected.”

The focus on LNG exports has further intensified in recent years:

- Woodside is developing the Pluto Project which comprises a 4 million tonne per annum LNG train. The company is plans to build at least two more LNG trains to increase production to 12 mtpa;
- Woodside has flagged the potential for extra six LNG processing trains in WA and 77 million tonnes of additional capacity within the next few years; and
- Chevron, Shell and ExxonMobil is developing the Gorgon Project which will entail three LNG trains with total capacity of 15 million tonnes per annum.

This underlines the importance of a comprehensive reservation policy to ensure that the long term energy needs of the local community are met.

### **3.4 Gorgon Project domestic reservation**

The Gorgon Project is Australia’s largest gas development project since the original North West Shelf Project. The Gorgon Project involves development of the gas reserves of the Greater Gorgon Area by Chevron (Project operator), Shell and ExxonMobil.

The original Gorgon Project proposed construction of two LNG processing trains for the production of up to 10 million tonnes of LNG per year. The Project was subsequently expanded to include a third LNG processing train to increase LNG production to 15 million tonnes per year.

The Gorgon State Agreement, scheduled in the *Barrow Island Act 2003*, includes a domestic gas reservation obligation. This commits the Gorgon participants to:

- reserve gas sufficient for the delivery of 2000 petajoules to the WA market;<sup>19</sup> and
- establish a domestic gas plant by 31 December 2012 to deliver at least 300 terajoules per day of natural gas.

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<sup>19</sup> Gorgon State Agreement, clause 17(1).

With around 40 Tcf of identified gas resources in the Greater Gorgon area, the 2000 petajoule (2 Tcf) obligation equates to only a 5 per cent domestic reservation commitment.

The State Agreement permits the Gorgon participants to apply to the Minister to extend the date for the establishment of the domestic gas project on the grounds that the domgas project “is not then Commercially Viable”.<sup>20</sup>

The State Agreement defines “Commercially Viable” as meaning that a domgas project could be established “such that the commercial rates of return (including recovery of all capital and operating costs, taxes, royalties and other charges associated with the delivery of domestic gas) meet or exceed the minimum return considered acceptable for this type of project by a reasonable petroleum developer or by investors or lenders to this type of project.”<sup>21</sup>

Commercial Viability is determined by having regard to prevailing market conditions (market access, contract duration, prices, certainty and timing of market opportunities), and the use of proven technology readily available within the industry.<sup>22</sup>

The Gorgon participants have significantly delayed both the timing and volume of domestic gas supply. Following an application by the Gorgon participants, the Minister for State Development extended the date of establishment of the domgas project to 31 December 2015.<sup>23</sup>

Chevron has also indicated that:

- first domgas supply will only be “at or around ready-for-start up of the Project’s third LNG train”;<sup>24</sup>
- even at First Gas, the Project participants only anticipate supplying “up to 150 TJ/day of domgas”;<sup>25</sup> and
- “it is their current expectation that may take six years after First Gas in 2015 to reach the 300 TJ/day target under the state Agreement”.

In seeking to justify the delays in meeting the 300 TJ/d domgas supply commitment, Chevron has claimed the need to avoid “an expected oversupply (!) in the domestic market”.<sup>26</sup>

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<sup>20</sup> Gorgon State Agreement, clause 17(7)

<sup>21</sup> Gorgon State Agreement, clause 17(8).

<sup>22</sup> Gorgon State Agreement, clause 17(9).

<sup>23</sup> Gorgon participants’ submission to the ACCC in support of application for interim and final authorisation, 20 May 2009, para. 2.17.

<sup>24</sup> Chevron Australia, *Gorgon Project Update*, October 2008.

<sup>25</sup> Gorgon participants’ submission to the ACCC in support of application for interim and final authorisation, 20 May 2009, para. 7.51.

<sup>26</sup> ‘Barnett opens door to gas reserve changes’, *The West Australian*, 16 June 2009.

As outlined above, such a claim is patently false. Western Australia faces a gas shortfall of 500 TJ/d until 2020. This shortfall is equivalent to half the size of the existing WA gas market.

Chevron's actions are a disguised attempt to withhold supply from a very tight domestic gas market in order to increase domestic prices. That they are able to do so in spite of the State Agreement reservation commitments underlines the need for a more effective reservation policy.

### **3.5 The current reservation policy**

#### **3.5.1 15 per cent reservation policy**

The North West Shelf and Gorgon reservation commitments are contained in their respective State Agreements and therefore limited in application to their respective projects. They do not apply to prospective new gas developments in the State.

The need for a State-wide domestic reservation policy was identified by the WA Government in 2006:

“In addition to the Gorgon project, there are a number of other large gas projects in Commonwealth waters adjacent to Western Australia under active consideration. These include the Scarborough project (BHP Billiton the lead proponent), Browse Basin (Woodside, Inpex) and Pluto (Woodside).”

“The driving force behind each of these projects is the rapidly expanding global market for LNG. In the absence of any other constraints, project proponents can be expected to seek to maximise their financial returns by developing each of these projects purely for export LNG sales, without a domestic gas component.”

“From the State's perspective, in order to ensure the continued availability of low cost gas supplies into the domestic market, it would appear prudent to impose domestic gas reservation requirements on each of these projects, through the use of State Agreements covering onshore processing facilities, in a manner similar to that used for the NWS and Gorgon.”

“It will also be important to ensure that, where gas reservations are imposed, that appropriate mechanisms are in place to ensure that the reserved gas can be delivered to the domestic market.”<sup>27</sup>

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<sup>27</sup> WA Department of Industry and Resources, *WA Government Policy on Securing Domestic Gas Supplies: Consultation Paper*, February 2006, pp.2-3.

In October 2006, the WA Government announced a 15 per cent domestic gas reservation policy. The key elements of the policy are:

- The State's objective is to secure domestic gas commitments up to the equivalent 15 per cent of LNG production from each export gas project.
- This target reflects (then) current estimates of future domestic gas needs, estimated gas reserves and forecast LNG production. As these estimates could change over time the target will be subject to periodic review.
- The State will negotiate with LNG project proponents, on a case by case basis, regarding the method by which they will meet their domestic gas commitments.
- Market mechanisms designed to provide gas producers with maximum flexibility will be considered – including the option of fulfilling the obligation from a different source.
- The price of gas sold onto the domestic market will be determined through commercial negotiations between the gas producers and the consumers of that gas.<sup>28</sup>

The 15 per cent reservation policy has been strongly endorsed by Premier Barnett and the present WA Government:

“[T]he 15 per cent, that's been around since [Premier Charles Court's] day in the North-West Shelf agreement in a sense, it's not new. Alan Carpenter certainly articulated it in a strong way and I support what he did on that.”

“[W]ith respect to domestic gas, you can therefore expect governments to play a pretty strong role: it's our gas, we want to see it developed, exported as LNG, but we want to see the needs of the domestic gas market met. It is a proper objective, of the State Government has and one the Commonwealth Government supports.”<sup>29</sup>

Premier Barnett has also indicated that the State was considering ways to further strengthen the policy, while at the same time giving producers greater flexibility in how they would meet reservation commitments.

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<sup>28</sup> WA Department of Premier and Cabinet, *WA Government Policy on Securing Domestic Gas Supplies*, October 2006.

<sup>29</sup> Premier Colin Barnett, 'Transcript – Speech – Petroleum Club of Western Australia', 8 September 2009.

### 3.5.2 Pluto Project domestic reservation

In December 2006, Woodside committed to the State's 15 per cent reservation policy in announcing investment in the Pluto LNG development. In welcoming this decision, the WA Government articulated the policy's application to Pluto:

- Under the terms of the Pluto domestic gas arrangement, Woodside has agreed to market and sell the equivalent of 15 per cent of the project's produced LNG to the WA energy market, providing it is commercially viable.
- Woodside and the State will negotiate in good faith an appropriate test of commercial viability.
- The commencement date of the commitment will occur five years after the date LNG is first exported from Pluto, or the date on which the 30-millionth tonne of LNG produced at the Pluto site is exported."<sup>30</sup>

Unlike the North West Shelf and Gorgon Projects, the Pluto Project is not the subject of a State Agreement. It is unclear what arrangements have been implemented to formalise the policy's application to Pluto, other than an exchange of letters between the WA Government and Woodside.

The Alliance understands that Woodside is seeking to expedite development of Pluto LNG Train 2 by further exploration or buying-in gas from other fields.

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<sup>30</sup> Premier Alan Carpenter, 'Woodside commits to domestic gas reservation policy', media statement, 8 December 2006.

## 4. KEY ELEMENTS OF AN EFFECTIVE GAS RESERVATION POLICY

The WA gas reservation policy has been effective in reinforcing expectations with LNG producers on the importance of domestic supply. Recent experience however highlights significant loop holes in the policy's application, which allow LNG producers to delay or avoid meeting reservation commitments.

In particular, the actions of the Gorgon Project participants to delay meeting reservation commitments, on the grounds of avoiding an “oversupply” (!) in the WA gas market, highlights the need for a more effective reservation policy.

For a reservation policy to be effective, it should provide for:

- *Certainty* – domestic gas obligations should be made *unconditional* and not subject to “commerciality” escape clause;
- *Flexibility* – LNG producers should be given flexibility in how they can meet their domestic supply obligations;
- *Resource and export growth* – domestic supply should increase with any future expansion in gas reserves or LNG exports; and
- *Timeliness* – the reservation commitment should be applied to both reserves and production; domestic gas should be supplied no later than LNG start-up and not unduly delayed.

### 4.1 Certainty and unconditionality

The purpose of a domestic reservation policy is to ensure minimum supply of gas to the domestic market. This purpose is compromised where the policy is subject to a commerciality “escape clause”. As experience demonstrates, such a clause provides too much scope for producers to avoid meeting domestic supply obligations.

In 2006, the WA Government assessed that 2 trillion cubic feet of gas will be needed from existing and proposed gas projects to meet WA's gas requirements to 2020. Of this, it was assessed that the Gorgon Project would need to supply 1.85 Tcf.<sup>31</sup> It was therefore assumed that almost all of the entire 2000 petajoule Gorgon reservation volume would be delivered by 2020.

The Gorgon participants have however acted to delay both the timing and volume of domestic gas supply on the grounds of avoiding an “oversupply” in the domestic gas market:

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<sup>31</sup> WA Department of Industry and Resources, *WA Government Policy on Securing Domestic Gas Supplies: Consultation Paper*, February 2006, p.7.

- first domgas supply will only be “at or around ready-for-start up of the Project’s third LNG train”;
- even at First Gas, the Project participants only anticipate supplying “up to 150 TJ/day of domgas”; and
- they do not envisage meeting the Gorgon State Agreement target of 300 TJ/day until 2021 – i.e. 12 years after the final investment decision on the Project.

Given the vital role that the Gorgon Project must play in helping meet WA’s serious gas shortage, the actions of the project participants to delay or avoid their domestic reservation commitment raises serious concerns on the effectiveness of a policy that allows producers an “escape clause”.

To that end, it is relevant that LNG producers have for many years sought to justify the warehousing of offshore gas reserves under Retention Leases on the basis that it was not economic to develop these reserves for the domestic market. It is only recently that LNG producers have changed their arguments to now claiming that reserves are necessary to underpin major LNG developments. The current Retention Lease process provides little certainty to gas consumers and other prospective gas developers.

The Gorgon ACCC joint selling authorisation process also highlights the ease with which major producers can procure multiple consultants’ reports to support their claims that arrangements are not feasible, practical or commercially viable.

The WA experience demonstrates that for a reservation policy to be effective, it must provide *certainty* both to gas producers and to gas consumers. Whatever reservation target is adopted by the Queensland Government, it should be made an *unconditional* obligation. Such an obligation would:

- provide certainty to downstream users on future gas availability that would enable investment in mining, minerals processing and power generation;
- provide certainty to gas project developers that the policy would be stringently and consistently applied, which enables them to factor-in the commitment in evaluating and developing projects; and
- align with the policies being adopted in other countries to ensure security of supply.

In the absence of an unconditional reservation policy, governments also expose themselves to undue political pressure on the part of project proponents seeking preferential treatment or exemptions. The Gorgon participants have for example been highly effective in using perceived “threats” to the \$50 billion project as a means of securing desired regulatory

outcomes – even where such outcomes adversely impact local business and households.

An unconditional reservation obligation would remove this opportunity on the part of LNG producers. In any event, commerciality issues can be adequately managed by giving producers greater flexibility in how they would meet reservation obligations.

The Queensland Consultation Paper queries whether a reservation requirement should be “to sell” or to “make available” gas to buyers.<sup>32</sup> If a requirement is simply to “make gas available” there would be nothing preventing LNG producers from offering gas at terms that make it unattractive or unfeasible to local users – for example by only offering 4 year contracts. Such a condition would also place the State Government in a difficult position of arbitrating whether terms on offer are *bona fide*.

If, on the other hand, the requirement is “to sell”, this would provide a strong commercial incentive for producers to supply in order to monetise resources as the alternative would be to simply leave resources in the ground.

**Certainty – key elements of an effective reservation policy**

- It should provide for domestic gas obligations that are *unconditional*.
- It should not be subject to a “commerciality” escape clause that would allow LNG producers to avoid domestic gas obligations.
- It should be applied consistently to discourage individual projects from claiming “special exemptions”.
- It should attach a requirement to “supply” domestic gas as opposed to “sell” or “offer to sell” domestic gas.

## **4.2 Flexibility**

To balance an unconditional commitment, producers should be given flexibility in how they would meet this obligation. This could include:

- allowing producers to “trade” obligations between different fields – e.g. supplying 10% domgas from Field A and 20% domgas from Field B;
- allowing producers to “trade” obligations with other producers;

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<sup>32</sup> Queensland Government, *Domestic Gas Market Security of Supply: Consultation Paper*, September 2009, p.5.

- allowing producers to meet their obligations by supporting domgas developments in other fields – e.g. where a medium sized field could only support LNG, the producer could seek to bring on a smaller field for the domestic market that could be credited; and
- allowing producers to meet obligations by supporting third party domestic gas developments - e.g. by supporting a smaller producer to develop a domestic gas field that might otherwise not be developed for the domestic market.

This flexibility allows producers to adopt the most efficient way of meeting their domgas obligations for a given field – whether by supplying domgas from that field or, where it is not commercially viable to do so, by meeting this commitment from production outside the field.

It is important that in providing producers flexibility, the objective should remain the delivery of additional domgas supply than might otherwise be the case.

**Flexibility – key elements of an effective reservation policy**

- It should allow producers sufficient flexibility on how they would meet domestic supply obligations.
- It should encourage the most efficient means of meeting domestic supply obligations - whether by supplying domgas from the relevant field or, where it is not commercially viable to do so, by supplying domgas from other fields.

### 4.3 Tied to resource and export growth

As outlined above, the original North West Shelf reservation has failed to keep pace with Western Australia’s expanding energy needs or the Project’s LNG exports. LNG exports from the Project have increased by over 150 per cent from the originally envisaged 6.5 million tonnes per annum, with further expansions foreshadowed. In contrast, supply to the domestic market by the NWSGJV has increased only marginally.

In October 2009, Chevron announced a significant gas discovery in the Carnarvon Basin which could help support Chevron’s ambition for a further two LNG processing trains in the Gorgon Project. The Gorgon Project State Agreement provides for a domestic reservation commitment of 2000 petajoule (2 Tcf) and 300 TJ/d. It is unclear to what extent this commitment can increase with any increase in Project reserves or LNG exports.

As the North West Shelf and Gorgon experience demonstrate, it is vital that any reservation commitment grow with any future expansion in gas reserves

and production. This could be achieved by attaching the commitment as a *percentage* of reserves and production. If, on the other hand, the commitment is set as a fixed volume, domestic supply would be limited in absolute terms notwithstanding any future expansion in the project or LNG exports.

**Linked to growth – key elements of an effective reservation policy**

- It should grow with any future expansion in project gas reserves and production
- It should be applied as a *percentage* of reserves and production, as opposed to a fixed volume.

#### **4.4 Timeliness**

Any reservation commitment should be tied to both *reserves* and *production*. Where a reservation commitment is tied only to the reserves of a project or field, there is no certainty that domestic gas would ever be supplied over the life of the project. This could result in long delays with domestic supply being relegated to the tail-end of LNG projects or field life. Where domestic supply is tied to declining fields and increasingly expensive production, it might no longer being economic to supply.

The Gorgon Project highlights the need for reservation obligations to be stringently tied to LNG production to avoid undue delays in supply. Domestic gas comprises a very small component of the Gorgon Project which remains overwhelmingly LNG-focused. Domestic gas is expected to account for just 5 per cent of Gorgon gas production and 5 per cent of expected revenues.

It is expected to account for less than 5 per cent of project investment and operating costs given the relatively low cost of processing gas to pipeline specification compared to the high capital and operating costs of producing LNG.

Given domestic gas comprises such a modest component of the overall Gorgon Project, there is little justification for the project participants delaying domestic gas supply until after construction of all three LNG trains. The 300 TJ/d domestic gas commitment would only marginally increase project costs and should instead be supplied at the start-up of the first LNG processing train. It should not be delayed until 2021, some 12 years after the final investment decision on the project.

Similarly, the Pluto domestic gas commitment only requires domestic supply five years after the date LNG is first exported from Pluto. Even then, Woodside could seek to avoid this obligation by claiming it is not “commercially viable” to supply domestic gas.

**Timeliness – key elements of an effective reservation policy**

- It should be tied to both reserves and production.
- It should require domestic gas to be supplied prior to or at least no later than start-up of LNG production.
- It should ensure priority of domestic gas supply over LNG export in the event of any reserves shortfall.

#### **4.5 A national reservation policy**

The 2006 WA Reservation Policy highlighted the importance of Commonwealth policies to promote gas security and support State policies:

“Most of the gas resources off the coast of Western Australia fall under Commonwealth jurisdiction. The Australian Government therefore has a strong and legitimate interest in the development of these resources.”

The State Government is of the view that the issues facing Western Australia regarding the long term security of domestic gas supply are ones that will soon also be facing the eastern states. Given that the majority of the nation’s gas resources are located offshore from Western Australia, decisions made concerning the development of these resources have major implications for Australia’s energy mix, the international competitiveness of gas consuming energy intensive domestic industries, and the achievement of national greenhouse gas abatement targets.”<sup>33</sup>

The need for a national reservation policy is underlined by Shell’s announcement that it will develop its Prelude and Concerto gas fields in the Browse Basin off the WA coast using Floating LNG technology.<sup>34</sup> A floating LNG plant allows producers to develop fields in Commonwealth waters, thereby limiting the ability of State governments to apply a reservation commitment.

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<sup>33</sup> WA Department of Premier and Cabinet, *WA Government Policy on Securing Domestic Gas Supplies*, October 2006, p.7.

<sup>34</sup> Shell, ‘Prelude LNG Development to Deploy Shell’s Floating LNG Technology’, Media release, 8 October 2009.

While the situation in Queensland is different to Western Australia in terms of State government control over gas resources, a national reservation policy can play an important role in complementing and supporting the State's reservation policy.

A national reservations policy would avoid potential conflict of laws while sending a consistent message to prospective gas developers. This would minimise the opportunity for LNG producers to play one level of government off against another – as they sought to do in Western Australia with the State's 15 per cent reservation policy. It would also ensure that any potential new offshore gas discoveries in Queensland are subject to a domestic reservation policy.

In the absence of a national reservations policy, there is little preventing the Commonwealth from acting to override a Queensland reservation policy. The Federal Government has for example been contemplating treaty commitments, as part of Free Trade Agreement negotiations, which would underpin Japan and China's energy security requirements.

These include provisions that would commit the Commonwealth and States not to apply export restrictions on energy resources. A State reservation policy would constitute an "export restriction" and could therefore be overturned by the Commonwealth legislating under its external affairs constitutional powers.

#### **4.6 The importance of competition**

The Queensland Government's proposed reservation policy would play a critical role in ensuring availability and affordability of domestic gas supply for Queensland industry and power generation.

It should be recognised however that security and availability of supply will not, by itself, ensure affordable gas pricing for Queensland consumers. The terms and conditions under which gas is supplied are determined by the degree of competition in the gas market, and the market power exercisable by gas producers.

Recent years have seen significant consolidation in the Queensland gas market. This has led to a transformation in the gas industry from one characterised by a large number of independent producers to one characterised now by a very small number of large producers.

The absence of competition has led to significant price increases in Western Australia. Western Australia has one of the most anti-competitive gas markets in Australia. Just two producer groups control almost 100 per cent of the domestic gas market.

Through cartel selling arrangements of the North West Shelf Joint Venture, six of the world's largest oil and gas companies combine together to fix prices and terms in selling to local consumers. As a result, producers exercise immense market power with significant ability to increase prices or withhold supply.

The ACCC has created and entrenched this situation over many years by intervening in the market to authorise cartel selling arrangements by major oil and gas producers. The ACCC has proposed to extend such arrangements to allow Shell, Chevron and ExxonMobil to combine together to sell Gorgon gas to Australian consumers – despite the same producers separately selling 95 per cent of Gorgon gas to overseas customers.

The absence of competition has impacted consumers through higher gas and electricity prices. Major producers continue to press for wholesale gas prices that are around three times higher than in Victoria – despite WA's "vast" gas reserves.

It is therefore important that the Queensland Government support separate selling of domestic gas by joint venture participants – to ensure effective competition in the Queensland gas market.

## 5. AN EVIDENCE BASED APPROACH

Any consideration of a Queensland reservation policy should be based on assessments of fact, as opposed to opinion or rhetoric. To that end, the policy is expected to attract intense opposition by APPEA and the LNG export industry on the grounds that it would threaten “billions of dollars in investment”, drive away exploration, increase the State’s sovereign risk or constitute unwarranted market intervention by government.

Similar claims were made in 2006 by LNG producers in Western Australia, and by the then Federal Minister for Resources, Energy and Tourism, the Hon. Ian Macfarlane MP, in response to the WA Government’s 15 per cent reservation policy. Experience in Western Australia has shown these concerns to be unfounded.

Claims by the LNG industry and their commissioned consultants’ reports should therefore be treated with caution. In the Alliance’s experience, such claims are often based on narrow assumptions and present alarmist conclusions.

Opinions and economic modelling should not in any event override actual market experience. This strongly supports the conclusion that a reservation policy:

- Would not discourage exploration and investment in Queensland;
- Would not increase Queensland’s sovereign risk or reduce its attractiveness as a place to invest;
- Would not constitute unwarranted market intervention by government.

### 5.1 A reservation policy would not discourage exploration and investment in Queensland

Domestic reservation has not discouraged exploration and investment in Western Australia, and would not discourage exploration and development in Queensland.

The WA reservation policy has not for instance prevented Woodside from developing the major Pluto gas project, or from outlining plans to expand the project with at least two more LNG trains to increase production to 12 million tonnes per annum. This is despite Woodside CEO Don Voelte previously claiming the State’s reservation policy to be “crazy” and that it would make Pluto uneconomic.

Nor has it prevented Woodside from flagging an extra six LNG processing trains and a potential 77 million tonnes of additional LNG capacity within the next 15 years in Western Australia.

In a recent speech, Woodside highlighted Australia’s advantages as an investment destination over international competitors. No mention was made of the WA gas reservation policy:

“In addition to world class gas reserves, Australia has existing LNG infrastructure, experience in LNG production, established and diversified LNG marketing experience, political and fiscal stability and an open economy that allows private enterprise to pursue commercial LNG negotiations.”<sup>35</sup>

The WA gas reservation policy has also not prevented Chevron from flagging growth plans in Western Australia to make it one of its “biggest businesses”, with equity production from Gorgon and Wheatstone approaching that in the United States. Chevron Chairman and Chief Executive David O’Reilly has stated:

"When Gorgon and Wheatstone are up and running our equity production in Australia by the end of the coming decade should be very close to what we're producing in the United States, which would make Australia one of our biggest businesses.”<sup>36</sup>

The article reports that Australia's stable political environment, substantial gas reserves and proximity to fast-growing Asian economies make it an attractive place to invest in, particularly with U.S. gas prices low due to a flood of domestic gas supply into the US market.

**Table: The rhetoric vs. the reality**

<b>The Rhetoric</b>	<b>The Reality</b>
<p>“The economics of Pluto ... are so fine that an LNG development would not be viable if 15 per cent of field reserves were unavailable for LNG production.”<sup>37</sup></p>	<p>Woodside flags the potential for an extra six LNG processing trains and 77 million tonnes of additional LNG capacity within the next few years.</p>
<p>“The Pluto project would not go ahead if the gas reservation policy was applied.”<sup>38</sup></p>	<p>Woodside outlines ambition to expand Pluto with at least two more LNG trains to increase production from 4 million tonnes per annum to 12 mtpa.</p>
<p>“[W]e think it’s counter productive in the long-term and will not help to promote investments in the long-term large LNG projects.” (ExxonMobil)<sup>39</sup></p>	

<sup>35</sup> Woodside CEO Don Voelte, Presentation to APPEA Conference, 2 June 2009.

<sup>36</sup> Dow Jones Newswires, ‘Chevron CEO Flags Australia LNG Deals, Growth Plans’, 18 October 2009.

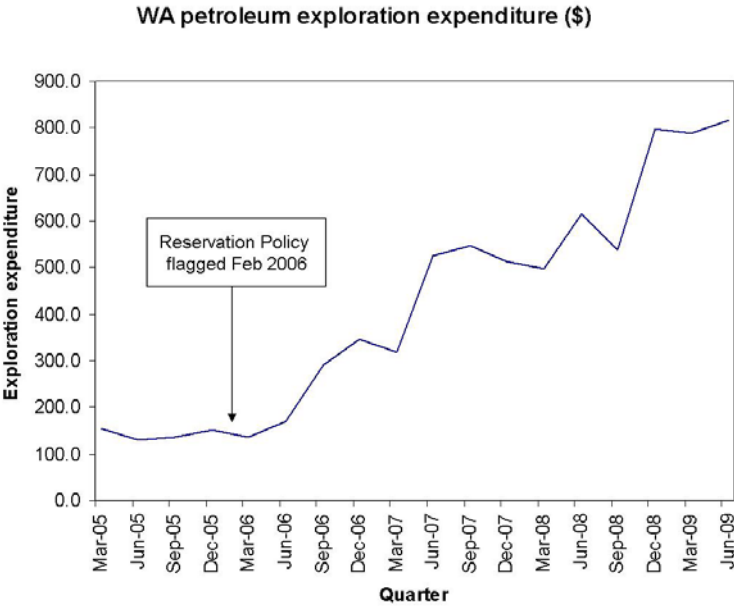
<sup>37</sup> The Australian, ‘Woodside, WA sort out deal on Pluto’, 9 October 2006, reporting comments by Woodside CEO Don Voelte.

<sup>38</sup> The Australian, ‘Woodside, WA sort out deal on Pluto’, 9 October 2006, reporting comments by Woodside CEO Don Voelte.

<sup>39</sup> ABC News Online, ‘ExxonMobil complements Carpenter over gas policy handling’, 12 October 2006, quoting ExxonMobil.

<p>“Two companies who are considering and in fact well into the development of LNG options in Western Australia told me in the last 24 hours that those projects would not go ahead if a reservation scheme of the type being proposed was enforced on them.”<sup>40</sup></p> <p>“Our reputation as one of the world’s best LNG exporters and our ability to guarantee no sovereign risk is under real threat.”<sup>41</sup></p>	<p>Exploration expenditure significantly increases from June 2006</p> <p>Alcoa and ARC Energy enter an agreement to expand ARC’s Canning Basin exploration program.</p> <p>“With first gas for Pluto next year as well as the Gorgon, Browse and Sunrise opportunities in the years ahead, there is no doubt the timing for Australian LNG is now.”<sup>42</sup></p>
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Contrary to fears that the WA reservation policy would drive away exploration, exploration activity in WA has in fact *significantly increased* since the introduction of the policy in 2006. This is confirmed by public data available from the Australian Bureau of Statistics:



**Data source: ABS**

In October 2009, the Federal Government awarded ten offshore exploration permits in Western Australia and the Northern Territory for new investment worth \$158 million. Of the ten offshore permits awarded, *eight relate to Western Australia*.<sup>43</sup> As the Federal Minister for Resources and Energy commented:

<sup>40</sup> The West Australian, ‘Opponents go head-to-head in very public stoush’, 1 September 2006, quoting former Federal Minister Ian Macfarlane.  
<sup>41</sup> The West Australian, ‘Opponents go head-to-head in very public stoush’, 1 September 2006, quoting former Federal Minister Ian Macfarlane.  
<sup>42</sup> Woodside CEO Don Voelte, Presentation to APPEA Conference, 2 June 2009.  
<sup>43</sup> Minister for Resources and Energy, ‘\$158 million investment in offshore exploration’, 2 October 2009.

“Despite the global economic downturn, the awarding of these ten new exploration permits indicates that *Australia remains a highly attractive and secure destination for offshore petroleum exploration.*”<sup>44</sup>

Claims by the LNG industry and their consultants’ reports that a reservation policy would drive away exploration or development, and lead to lower Queensland government royalties, should therefore be dismissed. This has not been the experience in Western Australia and should not be the experience in Queensland.

## **5.2 A reservation policy would not increase Queensland’s sovereign risk or attractiveness as a place to invest**

A domestic reservation policy is a common feature in many other energy producing countries. As the WA Government noted in 2006:

“Domestic market obligations, where a proportion of a project’s production entitlements are reserved for local energy markets (and/or state owned energy utilities), are a common feature in many other oil and gas exporting nations.”<sup>45</sup>

Recent years have seen an increasing focus by governments on energy security. This was confirmed by a report by Curtin University which found governments around the world are now acting to secure scarce energy reserves to ensure future energy security.<sup>46</sup>

A 15 or 20 per cent State reservation policy is modest by world standards. WA Premier Barnett recalls that:

“I think the industry is probably going to accept that ... [there] is going to be a domestic reservation ... I can remember in a previous life in the 1990s when some representative in [the gas] industry came along and complained about issues like that, and said how much easier it was to do projects elsewhere in the world. So I offered them the choice where the State would take 95 per cent of production or 80 per cent whatever the norm is and that was the end of that conversation.”

“[T]he industry gets a good deal in Australia, it’s a fantastic deal compared to production sharing arrangement in developing countries ... I don’t think the [15 per cent reservation] is a great burden on industry.”<sup>47</sup>

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<sup>44</sup> Minister for Resources and Energy, ‘\$158 million investment in offshore exploration’, 2 October 2009.

<sup>45</sup> WA Department of Premier and Cabinet, *WA Government Policy on Securing Domestic Gas Supplies*, October 2006.

<sup>46</sup> Leonard, Manuhutu and West, *Domestic Energy Reservation Policies: An International Comparison*, Curtin University, June 2008.

<sup>47</sup> Premier Colin Barnett, ‘Transcript – Speech – Petroleum Club of Western Australia’, 8 September 2009.

Egypt for example has a national reservation policy that reserves one-third of natural gas for exports, one-third for domestic use and one-third “to save for our children” – a 68 per cent reservation policy.

That policy has not prevented Egypt from accounting for Apache Energy’s largest acreage position and 22 per cent of production revenue. Apache continues to have an active drilling program, completing 215 of 238 wells and conducting 701 work overs and recompletions.<sup>48</sup>

Malaysia has a national depletion policy which applies domestic production limits for oil and gas.<sup>49</sup> A 1974 Act also placed custody of Malaysia’s petroleum resources with the national petroleum corporation Petronas. These policies do not appear to have prevented Shell from expanding petroleum exploration and production in Malaysia, including natural gas in offshore Sabah and Sarawak, and by operating through production sharing agreements.

Other countries have sought to secure energy supply through the use of export taxes or duties to manage energy exports. China for example has used export taxes to manage the export of coal and natural gas.

The Curtin University report notes that 92 per cent of world natural gas reserves are controlled by national governments and national oil companies. Only 8 per cent of world reserves are available to international oil companies on an open access basis. Australia with under 2 per cent of world reserves therefore represents *a quarter of the total global opportunity* available to international oil companies on an open access basis.

In terms of investor and sovereign risk, Australia ranks well other major gas producers. International risk management group Coface ranks Australia fourth in the world in terms of lowest country risk, after Luxembourg, Sweden and Switzerland.<sup>50</sup> This is well above other major LNG producers Malaysia, Qatar, Saudi Arabia, Egypt, Indonesia and Russia.

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<sup>48</sup> Apache Energy website, <http://www.apachecorp.com/Operations/Egypt/index.aspx>.

<sup>49</sup> Leonard, Manuhutu and West, *Domestic Energy Reservation Policies: An International Comparison*, Curtin University, June 2008.

<sup>50</sup> Coface Group, *Country rankings by risk rating*, available at: <http://www.trading-safely.com/sitecwp/ceen.nsf/vwCRO/EDDC0F81926049ADC12569D0003A6548>

**Table: Country risk rankings** <sup>51</sup>

<b>Country</b>	<b>Lowest to highest risk</b>
<b>Australia</b>	<b>4</b>
Malaysia	18
Qatar	23
Saudi Arabia	61
Egypt	67
Indonesia	71
Russia	116

Given the global control of natural gas resources, and Australia's political and fiscal stability, a 15 or 20 per cent State reservation policy would have a marginal if any impact on the ongoing attractiveness of Australia's or Queensland's natural gas resources to international oil companies.

Indeed, a reservation policy would *enhance* Queensland's attractiveness as a place to invest by promoting energy security. As the Queensland Government Consultation Paper correctly considers, certainty over long term availability and affordability of energy would encourage capital intensive investment in the State's mining, minerals processing and manufacturing sectors.

It is vital that an effective reservation policy be implemented now to coincide with the establishment of the coal seam methane / LNG industry. This would provide certainty to project developers and create clear expectations on energy security.

### **5.3 A reservation policy will not constitute unwarranted market intervention by government**

Claims that a reservation policy represents unwarranted government intervention ignore the fact that elected governments intervene in the market place where there are clear public interest to do so. To that end, a reservation policy is no different to actions taken by government to ensure occupational health and safety, reduce greenhouse emissions, or provide tax or royalty concessions to major oil and gas producers.

Energy security is an issue of vital importance for Queensland – as it is for Western Australia. Access to secure and affordable energy, particularly natural gas, underpins the State's mining and resource processing industries, fuels power generation, and supplies small business and households. Natural

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<sup>51</sup> Coface Group, *Country rankings by risk rating*, available at: <http://www.trading-safely.com/sitecwp/ceen.nsf/vwCRO/EDDC0F81926049ADC12569D0003A6548>

gas security is also crucial in meeting the Queensland Government's 20 per cent energy target.

Despite the vital importance of energy security, Australian governments have in the past shown a degree of complacency towards Australia's scarce natural gas resources. This has to some extent been driven by LNG industry claims about "hundreds of years of gas" and ambitions of "billion dollar LNG exports". As a result, is a tendency to approach Australia's gas resources as simply another export commodity, as opposed to a vital strategic resource like water.

The strategic foresight shown by the Queensland Government is therefore commendable. Elected governments not only can, but *should*, act to ensure a balance is struck between the commercial interests of gas producers, and the needs of the Australian community.

As the Queensland Consultation Paper correctly notes, LNG producers are acting to maximise individual commercial returns with decisions being taken at a global and not just Australian or Queensland level. It cannot be assumed that these commercial interests necessarily coincide with the broader public interest:

"Current Queensland gas market conditions (contract availability and pricing) are being influenced by LNG project proponents' requirements to satisfy their Boards, bankers and LNG customers that they have security over sufficient gas supply to underwrite proposed LNG project investments."<sup>52</sup>

As the Queensland Consultation Paper correctly assesses: "increasing global LNG demand over the medium to long-term, and economies of scale, provide incentive for the increasingly vertically integrated gas entities (with producers holding significant stakes in LNG plants) to develop LNG trains".<sup>53</sup> This has been the experience in Western Australia.

The consequences of non-action by government are profound and include:

- serious and ongoing energy shortages as production is depleted or locked-away into 20 year LNG contracts;
- sharply rising energy prices;
- a loss of industry competitiveness and downstream, value-adding processing;
- lost investment, development opportunities and jobs.

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<sup>52</sup> Queensland Government, *Domestic Gas Market Security of Supply: Consultation Paper*, September 2009, p.2.

<sup>53</sup> Queensland Government, *Domestic Gas Market Security of Supply: Consultation Paper*, September 2009, p.3.

It should be pointed out that major producers have not, in the past, shown a reluctance in pressing for significant government intervention where it is in their commercial interest to do so.

Major oil and gas producers continue to secure authorisation from the ACCC to engage in anti-competitive joint selling and price fixing to Australian consumers. Such conduct is otherwise prohibited by the *Trade Practices Act*.

This market intervention by government to protect major producers from competition and an open market has delivered them significant commercial benefits – in the form of higher domestic gas prices.

## 6. CONCLUSION

The Queensland Government has a once-in-a-generation opportunity to secure the State's future energy needs.

An effective domestic reservation policy would support energy security, while promoting investment, development and employment growth in Queensland for decades. Such a policy would ensure a right balance is struck between the commercial interests of gas producers, and the long term needs of the local community.

Domestic gas reservation has been an established feature of the West Australian gas market since the 1970s. The reservation policy underpinned the establishment of the original North West Shelf project and Australia's subsequent LNG export industry.

It has delivered stable, secure and affordable energy supply to WA business and households for 25 years, supporting development of the State's mining, minerals processing, power generation and manufacturing industries.

For a reservation policy to be effective, it should provide for:

- *Certainty* – domestic gas obligations should be made *unconditional* and not subject to “commerciality” escape clause;
- *Flexibility* – LNG producers should be given sufficient flexibility in how they can meet their domestic supply obligations;
- *Resource and export growth* – domestic supply should increase with any future expansion in gas reserves or LNG exports; and
- *Timeliness* – the reservation commitment should be applied to both reserves and production; domestic gas should be supplied no later than LNG start-up and not unduly delayed.

Experience in Western Australia does not support claims that a Queensland reservation policy would discourage exploration and investment in Queensland, increase Queensland's sovereign risk or reduce its attractiveness as a place to invest, or constitute unwarranted market intervention.

The WA reservation policy has not prevented major gas producers from continuing to invest in new developments and LNG projects. Exploration activity in Western Australia in fact *significantly increased* since the introduction of the 15 per cent reservation policy in 2006.

A domestic reservation policy is a common feature in many other energy producing countries. A 15 or 20 per cent reservation policy is in fact modest by world standards. 92 per cent of the world's natural gas resources are controlled by national governments or national oil companies and cannot be accessed by international oil companies on an open basis.

A reservation policy would enhance Queensland's attractiveness as a place to invest by giving major project developers long term certainty over availability and affordability of energy supply.

It is vital that an effective reservation policy be implemented now to coincide with the establishment of the coal seam methane / LNG industry. This would provide certainty to project developers and create clear expectations on energy security.

The Commonwealth Government should implement a national reservation policy to support and complement State reservation policies. A national reservation policy would avoid potential conflicts of laws while sending a consistent message to gas developers on energy security.

It is also vital to ensure competition in the upstream gas market – by requiring joint venture participants to sell separately to Australian consumers and not through cartel selling arrangements.

## APPENDIX: KEY ELEMENTS OF AN EFFECTIVE DOMESTIC GAS RESERVATION POLICY

- It should provide for domestic gas obligations that are *unconditional*.
- It should not be subject to a “commerciality” escape clause that would allow LNG producers to avoid domestic gas obligations.
- It should be applied consistently to discourage individual projects from claiming “special exemptions”.
- It should require actual supply of gas as opposed to “offering for sale”.
- It should give producers sufficient flexibility on how they would meet domestic supply obligations.
- It should encourage the most efficient means of meeting domestic supply obligations - whether by supplying domgas from the relevant field or, where it is not commercially viable to do so, by supplying domgas from other fields.
- It should grow with any future expansion in project gas reserves and production
- It should be applied as a *percentage* of reserves and production, as opposed to a fixed volume.
- It should be tied to both reserves and production.
- It should be applied as a percentage of reserves and production, as opposed to a specified volume.
- It should require domestic gas to be supplied prior to, or at least no later than, start-up of LNG production.
- It should ensure priority of domestic gas supply over LNG export in the event of any reserves shortfall.