



Eastern Australian Domestic Gas Market Study: January 2014

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KEY POINTS

GENERAL

- In all sectors of the economy – not just oil and gas – maintaining access to open and competitive markets is in Australia's best interest. Australia's gas industry is a source of comparative advantage that should be harnessed, not hindered. Just as Australia's long-term national interest is served by maintaining access to open and competitive markets for wine, coal, wheat, and iron ore, the same is true for gas.
- Australia's gas supply industry is focussed on both its domestic and export markets. Manufacturers are among its most important customers and it has a stake in the sector being reinvigorated – but policies focussed on the Eastern Australian gas market should not be pursued at the expense of one of the great success stories of our modern economy.
- APPEA therefore welcomes the key conclusion of the Study noted on page 18

The Department of Industry and BREE are confident that the eastern market will continue to meet the medium-term and longer-run needs of participants and provide signals to support the timely supply of gas. However, governments could consider pursuing a number of measures to further improve supply, market signals, and support efficient market operation.

- In responding to the Study, the Government's focus should be on measures to further improve supply, most particularly removing the current significant impediments to further supply that exist in New South Wales and Victoria and definitively ruling out regulatory interventions in the Eastern Australian gas market.

NATURAL GAS: A MAJOR CONTRIBUTOR TO AUSTRALIA'S ECONOMIC PROSPERITY

- The Australian natural gas industry, including in Eastern Australia, creates significant wealth for the country, including through the employment of many Australians, underpinning the revenue collections of governments and generating valuable export revenue for the Australian economy. Almost \$200 billion is currently being invested in oil and gas projects including seven major liquefied natural gas (LNG) export projects.
- According to economic modelling commissioned by APPEA in 2012 and conducted by Deloitte Access Economics, this will increase Australian GDP by up to 2.2 per cent a year and over the investment phase, will create about 103,000 (full-time equivalent) jobs across the Australian economy. Companies all over Australia supply goods and services to the oil and gas industry, and the use of fly-in, fly-out staffing is spreading the benefits of the industry across Australia.
- By 2020, the sector's economic contribution to the national economy will more than double to \$65 billion and taxation paid will rise from \$8.8 billion in 2012 (\$4.9 billion in corporate taxes and \$3.8 billion in production taxes) to reach almost \$13 billion.
- While the Australian economy has benefited and will continue to benefit significantly from LNG investments committed in the past, there are more projects under consideration, representing a potential additional investment exceeding \$180 billion.
- Realising these would benefit the entire nation. Analysis by McKinsey & Co shows GDP would increase by 1.5 per cent, about 150,000 jobs would be created across the Australian economy, and tax revenues created equivalent to nearly half the total federal debt. The benefits of improving productivity would also flow to other sectors.
- This means that the stakes are high in realising the industry's potential benefits.



CHALLENGES AND SOLUTIONS

- The “solution” to the issues considered by the Study is not to handicap, through inappropriate regulatory interventions or increasing red tape/green tape, a growing industry that is already delivering great benefits to Australians and capable of doing much more, for the simple reason that it offers a product Asian customers want and security of supply that Asian consumers really value.
- In particular, the furphy that the nemesis of manufacturing is energy costs should not be allowed to continue to flourish. Nor is it the case, as some have claimed, that Australia is paying amongst the highest domestic gas prices in the world. Eastern Australian gas prices are well below LNG prices paid by LNG importers such as Japan and Australia sits in the “middle of the pack” in terms of wholesale gas prices. It is important that contributors to this debate do so from a basis of fact, not uninformed assertion.
- As the Study confirms in a number of areas in its report, Australia (including Eastern Australia) has vast resources of natural gas. Geoscience Australia and the Australian Council of Learned Academies has estimated that Eastern Australia has gas reserves and resources totalling 407,107 petajoules (PJ).
- By way of comparison, Eastern Australia’s production of natural gas in 2011-12 was around 700PJ, meaning Eastern Australia has more than enough gas to service both domestic and export markets for decades.

AREAS OF POLICY FOCUS: RULING OUT PROTECTIONIST POLICIES

- It is vitally important that the Study, and most particularly the Government’s response to it, focus on the development of Eastern Australia’s gas industry and not be distracted by calls for inappropriate, inefficient and protectionist interventions in the domestic gas market.
- APPEA therefore welcomes the Study’s findings that

... the introduction of a reservation policy would also distort market signals which may increase the risk of under investment and defer the development of new gas supply, or may be ineffective if supply is simply unable to respond.

- APPEA recommends the Government, in its response to this Study, recognise the importance of not introducing additional impediments to a timely and efficient supply side response and dismiss the possibility of introducing a domestic gas reservation policy or so-called ‘national interest’ test. Focus should instead be placed on removing barriers to future gas supply.

AREAS OF POLICY FOCUS: IT IS VITAL THAT REGULATORY IMPEDIMENTS TO A SUPPLY SIDE RESPONSE ARE REMOVED

- As the Study highlights, governments have

... an interest in the effective and efficient regulation of the upstream petroleum industry to maximise returns from industry for the benefit of the Australian community.

- In relation to onshore gas regulation, as with all forms of regulation, the industry supports stable, predictable, robust regulation of its activities based on sound scientific principles and assessment.
- Queensland and South Australia both provide examples of a generally effective and proactive regulatory development processes. Queensland’s natural coal seam gas industry now employs about 30,000 people, has signed more than 4,000 landholder agreements and has so far contributed more than \$100 million to community projects and causes. South Australia has



also taken a proactive approach through the development, in consultation with stakeholders including APPEA, of its *Roadmap for Unconventional Gas*.

- Yet in New South Wales, where arbitrary government regulation continues to send the signal that the State is closed for business, our industry employs fewer than 300 people and has signed just 285 agreements with landholders.
- In Victoria, the October 2013 report of the *Victorian Gas Market Taskforce* set out a clear regulatory reform development and implementation agenda. The report found that Victoria should facilitate exploration and development of onshore gas – including natural gas from coal seams – and allow hydraulic fracturing. The report warns that failing to develop onshore gas could leave Victoria – like New South Wales – exposed to falling gas supplies and rising prices.
- Policies that undermine the development of energy projects and curtail energy production impose costs on the Australian community, in jobs, economic growth and higher energy costs.
- It is vital that both the New South Wales and Victorian Governments proactively support the development of the onshore gas industry so as to create a safe and efficient onshore gas industry that is underpinned by leading practice regulation and community engagement. All governments must work together to through COAG to remove regulatory and other barriers to allow more gas to flow into the Australian gas market.

AREAS OF POLICY FOCUS: THE EASTERN AUSTRALIAN GAS MARKET HAS ABUNDANT INFORMATION AVAILABLE TO IT

- Claims of “... increasing difficulties in attracting firm offers for supply ...” are not supported by the public availability of objective information on the range of gas supply agreements and other commercial transactions that have been entered into since December 2012.
- The range of gas supply agreements that have been struck since December 2012 also suggests that the Eastern Australian gas market has abundant information available to it. There is enough information available to allow supply contracts to be concluded between willing buyers and sellers and for a range of other commercial arrangements to take place. Reform initiatives in recent years have also greatly increased the level of information available to gas market participants in readily accessible and public formats.
- Nevertheless, APPEA recognises the importance of ensuring a competitive and well informed Eastern Australia gas market continues to develop along with the importance that bilateral contracts have played in underpinning market development in Eastern Australia.
- APPEA looks forward to further discussion with the government on how the Study’s provision of information proposal might work in practice, what additional information provision is proposed, how the range of existing data reported to regulatory authorities might be better used by market participants and policymakers and presented/made accessible by governments and how commercially sensitive information will be protected.

FURTHER CONSULTATION

- APPEA looks forward to further consultation on the issues considered in the Study and will be an active and constructive participant in this consultation process.



INTRODUCTION

Since 1959, the Australian Petroleum Production & Exploration Association (APPEA) has been the peak national body representing the upstream oil and gas exploration and production industry. APPEA has more than 85 member companies that explore for and produce Australia's oil and gas. In addition, APPEA's more than 220 associate member companies provide a wide range of goods and services to industry. Further information about APPEA can be found on our website, at www.appea.com.au.

APPEA welcomes the opportunity to provide comment on the Department's *Eastern Australian Domestic Gas Market Study*. This follows on from APPEA's on-going involvement with the Department during the preparation of the Study.

APPEA's submission addresses specific sections of the Study, focussing on those areas that are particularly important for the upstream oil and gas industry.

Australia's gas supply industry is focussed on both its domestic and export markets. Manufacturers are among its most important customers and it has a stake in the sector being reinvigorated – but policies focussed on the Eastern Australian gas market should not be pursued at the expense of one of the great success stories of our modern economy.

In particular, the furphy that the nemesis of manufacturing is energy costs should not be allowed to continue to flourish.

Structural adjustment in the economy has had a concentrated impact on manufacturing given its trade exposure, small scale, and relatively high costs in global terms. As the Productivity Commission found in its December 2013 preliminary findings report on the Australian automotive manufacturing industry¹, production scale (with all Australian vehicle assembly plants producing well below the scale needed to be internationally cost competitive) and labour costs are key drivers of the costs of vehicle and component manufacturers.

Add to that an \$A exchange rate appreciation between 2000 and 2013 of around 42 per cent in trade weighted terms² and you have a panoply of factors explaining the competitive predicament of the broader Australian manufacturing sector.

The future competitiveness of manufacturing will be closely tied to the competitiveness of the Australian economy more broadly. The best policy response from governments will be to focus on initiatives that boost productivity and encourage investment, including via lower tax burdens, efficient regulation, ongoing investment in skills, and greater labour market flexibility. This will give all companies – including those in the manufacturing sector – the best chance to adapt to structural pressures and increase their international competitiveness.

¹ Available at www.pc.gov.au/projects/inquiry/automotive/preliminary.

² See www.rba.gov.au/statistics/hist-exchange-rates/index.html and www.rba.gov.au/publications/smp/2013/nov/pdf/1113.pdf.



It is vitally important that the Study, and the Government's response to it, focus on the development of Eastern Australia's upstream oil and gas industry and not be distracted by calls for inappropriate, inefficient and protectionist interventions in the domestic gas market.

Contrary to the claims of those who promote such interventions, there is no simple or plausible "solution" to the challenge of rising gas prices, perhaps other than the production of more gas.

Australia is currently witnessing an unprecedented level of investment in the development of liquefied natural gas (LNG) export projects and the domestic flow-on effect of this is, to quote the Study on page 3, "... rising prices [but they] do not automatically mean the market has failed or that intervention is necessary." The misuse of the concept of market failure – a consistent feature of many involved in this policy debate – is considered further in Box 1.

Box 1. Misuse of the term 'market failure'

The basis for any intervention in the market must be a clearly and rigorously identified 'market failure'³. In assessing whether or not a market failure exists, three key aspects are worth emphasising:

- When markets are out of equilibrium, say because the economy is experiencing rapid growth, imbalances between supply and demand are typically a feature. The fact that some experience the consequences of that disequilibrium does not connote market failure: it is a necessary precursor for resolving imbalances. Suppressing these market signals will aggravate rather than resolve any imbalance.
- Even in an economy that is broadly in equilibrium, the fact that some believe that they are not getting as good a deal as they might does not mean there is market failure. For example, where high initial (sunk) costs are required to secure output, then if buyers could escape covering these costs, supply would never be forthcoming (absent public subsidies). That would constitute a market failure.
- Even where there are market failures, it does not necessarily follow that society would be better off seeking to correct the situation. All forms of government intervention involve costs, and those costs may exceed the efficiency benefits achievable from correcting the market failure. The risks and costs of 'government failure' need to be given no less weight in the assessment of policy options than those of market failure.

The "solution" to the issues considered by the Study is not to handicap, through inappropriate regulatory interventions or increasing red tape/green tape, a growing industry that is already delivering great benefits to Australians and capable of doing much more, for the simple reason that it offers a product Asian customers want and security of supply that Asian consumers really value.

Nor is it the case, as some have claimed, that Australia is paying amongst the highest domestic gas prices in the world. As Figures 1, 2 and 3 show, Eastern Australian gas prices (and Western Australia) gas prices are well below LNG prices paid by LNG importers such as Japan and that

³ In economics, the term market failure has a clear technical meaning. It refers to a situation in which, in equilibrium, markets will not operate in a way that maximises efficiency – that is, in a way such that the gains from reallocating resources would exceed the losses.



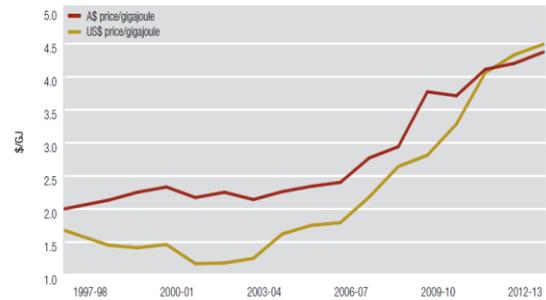
Australia sits in the “middle of the pack” in terms of wholesale gas prices⁴. It is important that contributors to this debate do so from a basis of fact, not uninformed assertion.

Figure 1. Average natural gas prices



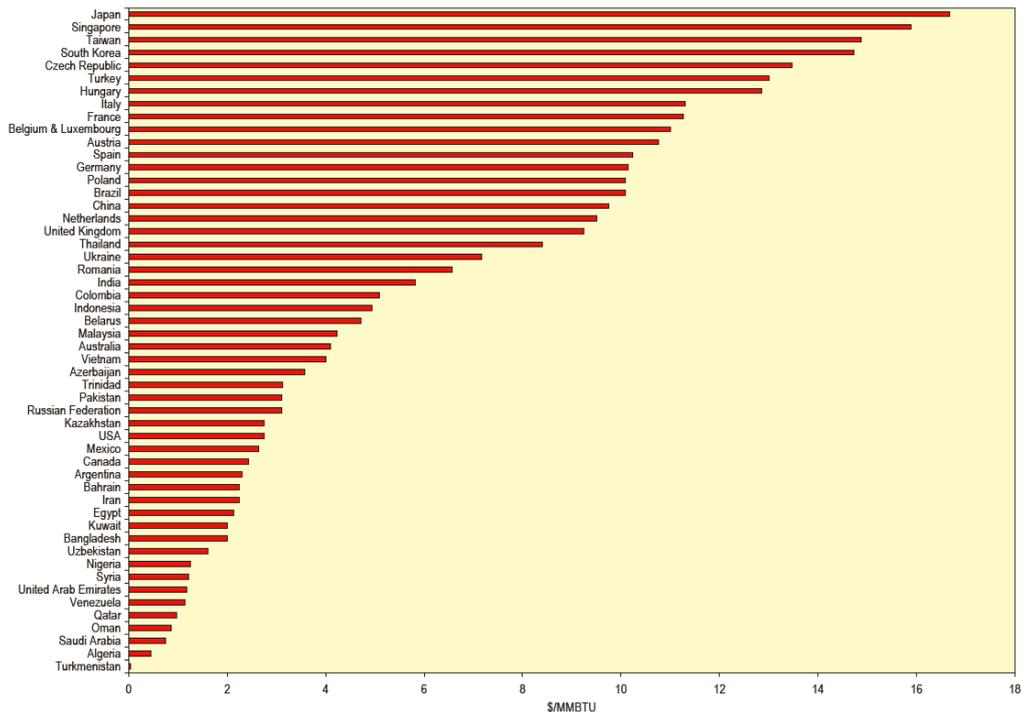
Source: Argus Monthly LNG, EnergyQuest, Western Australian Department of Mines and Petroleum (2013).

Figure 2. Western Australian Average Domestic Natural Gas Price



Note: The value of Western Australian domestic gas sales is based on the summation of total domestic gas sale values as at the point of entry into the Dampier to Bunbury natural gas pipeline (DBNGP) or where applicable, the Parmelia pipeline and Goldfields pipeline. Source: WA DMP (2013).

Figure 3. Wholesale prices in 2012 by Country



Source: International Gas Union (2013).

⁴ See www.igu.org/gas-knowhow/publications/igu-publications/Wholesale%20Gas%20Price%20Survey%20-%202013%20Edition.pdf for further information.



Impeding the oil and gas industry from taking optimal advantage of this opportunity – one that other countries are eager to capture if Australian producers falter – in a vain effort to ameliorate the decline of manufacturing in New South Wales, Victoria or South Australia is not logical.

It is time for reservationists to accept reality, a reality reinforced by the findings of this Study, and to address themselves to the factors affecting the competitiveness of the Australian economy – productivity, tax, regulation, skills and labour market flexibility.

Some major industrial gas users also acknowledge that market interference is unsustainable. As Orica Chairman, Mr. Russell Caplan, acknowledged recently in an interview reported in *The Australian*⁵ gas users need to stop seeking government intervention and look to “self-help” initiatives.

“At the end of the day, gas producers will want to sell gas at world prices,” Mr Caplan said. “I think that tide is irreversible and shouldn’t be reversed, because companies need to get out and look after themselves”.

THE EASTERN AUSTRALIAN UPSTREAM OIL AND GAS INDUSTRY

The *Eastern Australian Gas Market Study* should be seen within the context of the current state and potential future contribution of the upstream oil and gas industry to the Australian economy and to the welfare of all Australians.

Reliable, secure and competitively priced energy is crucial to our everyday lives in Australia. Within this framework, oil and gas plays a key role in meeting many of our energy needs.

As the Study confirms in a number of areas in its report, Australia (including Eastern Australia) has vast resources of natural gas.

As the Study notes on pages 22-23, Geoscience Australia⁶ and the Australian Council of Learned Academies⁷ have estimated that Eastern Australia has gas reserves and resources totalling 407,107 petajoules (PJ).

By way of comparison, Eastern Australia’s production of natural gas in 2011-12 was around 700PJ, meaning Eastern Australia has more than enough gas to service both domestic and export markets for decades.

Our abundant natural gas resources, in particular, place Australia in an enviable position to maintain long-term, cleaner energy security domestically and internationally. Natural gas makes it

⁵ See www.theaustralian.com.au/business/mining-energy/orica-chairman-russell-caplan-tells-gas-users-to-stop-seeking-assistance/story-e6frg9df-1226816189322 for further information.

⁶ Geoscience Australia (2012), *Australian Gas Resource Assessment 2012*, 14 May (available at www.ga.gov.au/products/servlet/controller?event=GEOCAT_DETAILS&catno=74032).

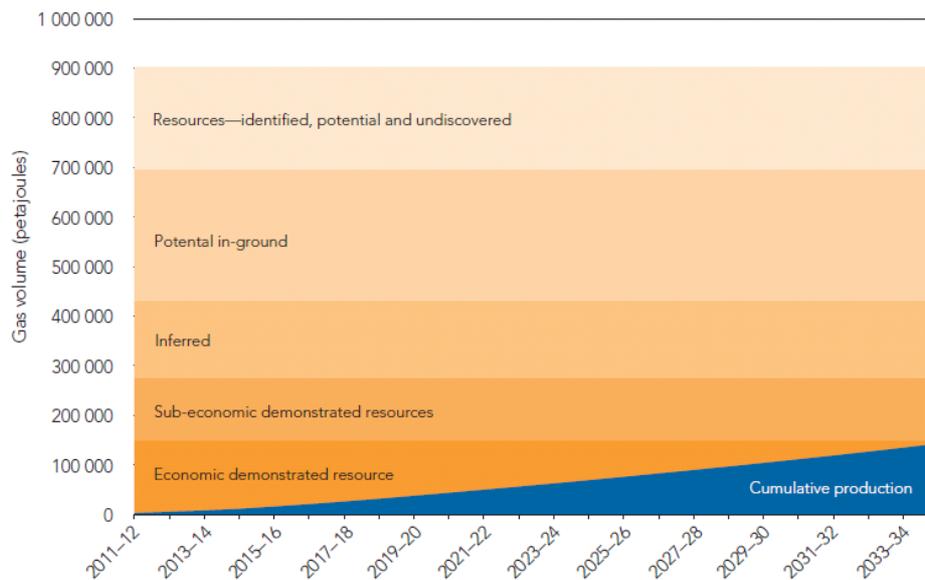
⁷ Australian Council of Learned Academies (2013), *Engineering energy: unconventional gas production*, 4 June (available at www.acola.org.au/index.php/projects/securing-australia-s-future/project-6).



possible for Australia to meet its own and the region's growing energy needs, particularly cleaner energy needs, over the coming decades.

This enviable position is highlighted in Figure 4, drawn from the November 2012 *Energy White Paper*⁸, that shows the relationship between Australia's vast gas resources and past and future expected gas production levels.

Figure 4. Demonstrated and potential Australian gas resources and cumulative production to 2034-35, plotted against gas resources in 2011-12 (PJ)



Note: Gas resource category is plotted by volume, not time.

Source: Geoscience Australia and the Bureau of Resources and Energy Economics (2012).

Just as importantly, as the Study highlights on page 11, the industry creates significant wealth for the country, including through the employment of many Australians, underpinning the revenue collections of governments and generating valuable export revenue for the Australian economy. Almost \$200 billion is currently being invested in oil and gas projects including seven major liquefied natural gas (LNG) export projects⁹.

According to economic modelling commissioned by APPEA and conducted by Deloitte Access Economics¹⁰, this will increase Australian GDP by up to 2.2 per cent a year and over the investment phase, will create about 103,000 (full-time equivalent) jobs across the Australian economy.

⁸ Australian Government (2012), *Energy White Paper 2012 – Australia's Energy Transformation*, 8 November.

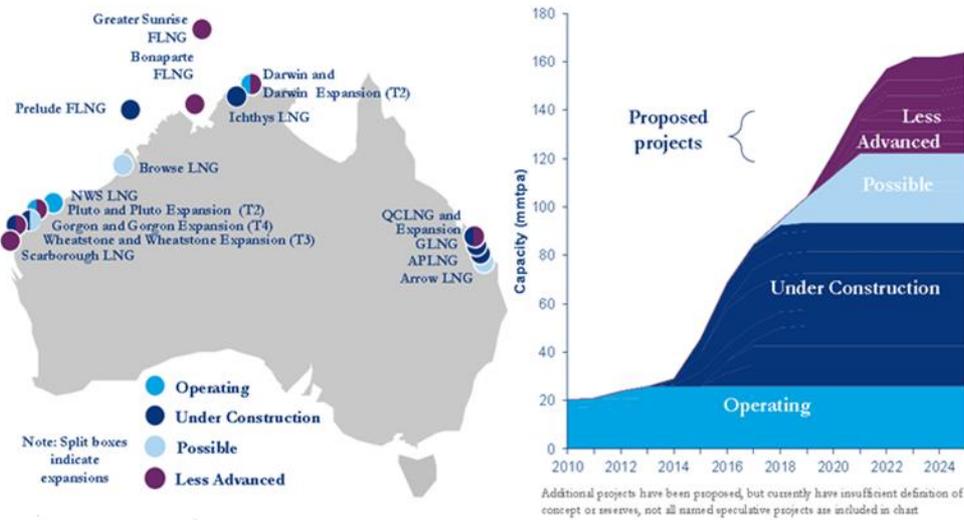
⁹ See Bureau of Resources and Energy Economics (2013), *Resources and Energy Major Projects*, for a listing of upstream oil and gas projects at the Publicly Announced Stage, Feasibility Stage, Committed Stage and Completed Stage (available at www.bree.gov.au/publications/resources-and-energy-major-projects).

¹⁰ See Deloitte Access Economics (2012), *Advancing Australia: Harnessing our comparative energy advantage*, 25 June (available at www.appea.com.au/wp-content/uploads/2013/04/120625_DAEreportAPPEAfinal.pdf).



Companies all over Australia supply goods and services to the oil and gas industry, and the use of fly-in, fly-out staffing is spreading the benefits of the industry across Australia. Figure 5 provides an overview of Australia's LNG projects.

Figure 5. Australian LNG projects: by liquefaction status



Source: Wood Mackenzie LNG Tool, August 2012.

By 2020, the sector's economic contribution to the national economy will more than double to \$65 billion and taxation paid will rise from \$8.8 billion in 2012 (\$4.9 billion in corporate taxes and \$3.8 billion in production taxes) to reach almost \$13 billion.

While the Australian economy has benefited and will continue to benefit significantly from LNG investments committed in the past, there are even more projects under consideration, representing a potential additional investment exceeding \$180 billion.

Realising these would benefit the entire nation. Analysis by McKinsey & Co¹¹ shows GDP would increase by 1.5 per cent, about 150,000 jobs would be created across the Australian economy, and tax revenues created equivalent to nearly half the total federal debt. The benefits of improving productivity would also flow to other sectors.

COMMENTS ON SPECIFIC SECTIONS OF THE STUDY

Natural gas makes it possible for Australia to meet the world's growing energy needs over the coming decades while incorporating a strategy to curb domestic and global greenhouse gas emissions.

¹¹ McKinsey & Co (2013), *Extending the LNG boom: Improving Australian LNG productivity and competitiveness*, 28 May (available at www.mckinsey.com/global_locations/pacific/australia/en/latest_thinking/extending_the_lng_boom).



1. INTRODUCTION

The Study asserts on page 12 and page 16 that before the transition to a market linked to high-value exports the Eastern Australian gas market was isolated, relatively stable and self-sufficient. This is only partly correct. The Eastern Australian gas market has during its history been through periods of significant uncertainty and change.

As is noted later in the Study (on page 25) concerns about falling gas reserves in the early 2000s lead to the investigation of alternative supply options, including imports through a pipeline from Papua New Guinea and, ultimately, the development of a new industry through the production of natural gas from coal seams. This was a period of significant uncertainty for all gas market participants.

The lessons that can be drawn from this earlier period – the successful operation of the market and a focus on stimulating supply side responses, are directly relevant to Study.

While exports from Eastern Australia are a new feature of the Eastern Australia gas market, periods of transition and uncertainty are not new.

1.3 DOMESTIC MARKET INFRASTRUCTURE

The Study states on page 15 that that “... *there is little public information about how processing, storage or pipeline capacity is being utilised and under what terms*”.

The Study, on page 91, acknowledges that the gas market has been through in recent years a period of almost constant reform that has greatly increased the level of information available in readily accessible and public formats (through the Gas Bulletin Board (GBB) and Gas Statement of Opportunities (GSOO)).

While APPEA supports consideration of ways to enhance and improve both the GBB and the GSOO, it is not clear that a case for increased and coercive information gathering powers has been made by the Study. This issue is considered further below.

1.4 MARKET STRUCTURE AND OPERATION

APPEA welcomes the Study's acknowledgement of the important of bilateral contracts to the development of the Eastern Australia gas market.

The ability of such gas supply agreements (GSAs) to appropriately allocate and manage risk and to provide the certainty to all market participants to invest (in the case of gas producers, many billions of dollars) in major projects has been a key feature of the growth and development of the gas market in Eastern Australia.

It is also the case that it is likely to remain a key feature of the market. The size of the gas market and the level of demand provided by individual industrial projects means that it is unlikely that major gas production facilities can be built without the certainty provided by the GSAs, or that necessary exploration can be funded.

1.5 POTENTIAL POLICY PROBLEMS AND OPTIONS

APPEA welcomes the key conclusion of the Study, in this area, noted on page 18 as



The Department of Industry and BREE are confident that the eastern market will continue to meet the medium-term and longer-run needs of participants and provide signals to support the timely supply of gas. However, governments could consider pursuing a number of measures to further improve supply, market signals, and support efficient market operation.

As will be considered further below, in responding to the Study, the Government's focus should be on measures to further improve supply. This should include removing the current significant impediments to further supply that exist in New South Wales and Victoria and definitively ruling out regulatory interventions in the Eastern Australian gas market.

2. UPSTREAM SUPPLY AND PRODUCTION

2.2 SUFFICIENT GAS RESERVES

As was noted above, APPEA welcomes the Study's clear finding, on page 20, that

... Australia has sufficient gas resources to meet both domestic and export needs. This includes gas resources for the eastern market ...

This section of the Study would have also benefited from a clear recognition of the key role that price plays in providing the incentive to develop the resources and bring gas supply to the domestic market. This point appears to have been underappreciated in this section of the Study and is certainly not acknowledged by those calling for regulatory intervention in the operation of the Eastern Australian gas market.

2.2.1 CONVENTIONAL GAS

This section, on page 22, makes the key point that

... at 31 December 2012 approximately 52 per cent of 2P conventional gas reserves (3,661PJ) in eastern Australia were uncommitted and available to the domestic market.

The entire domestic gas demand in Eastern Australia totals around 700PJ. There are sufficient conventional reserves available for development. This is before other onshore gas reserves, such as natural gas from coal seams, which the Study finds on page 23 are four to seven times larger than conventional reserves, are even considered.

2.2.2 CSG

The final key point in this section on page 23 is that 50 per cent of remaining 2P reserves are onshore in New South Wales. The significant restrictions that have prevented the industry from moving forward in New South Wales and have prevented this gas from coming to the Eastern Australia gas market, and which should be removed, should be one of the areas of key focus of the Government's response to the Study. These issues are considered (for both New South Wales and Victoria) further below.

2.3 DEVELOPMENT AND PRODUCTION

The Study asserts on page 24 that the



... critical issue for confidence in supply for the domestic gas market is the rate at which the gas reserves in eastern Australia can be developed and brought into production and the level of uncertainty in those production rates.

While this is indeed a critical issue, the Study focuses this section almost completely on production rates required for export.

This downplays one of the critical policy issues impacting adversely on the rate at which gas reserves can be brought to market – the restrictions on exploration and development in New South Wales and Victoria.

2.4 HOW LONG WILL GAS PRODUCTION CONTINUE?

This section usefully emphasises the production developments underway in Eastern Australia to bring further gas into the domestic market. It also highlights another key point that is often overlooked in this debate – the level of investment and cost required to bring domestic gas projects to market in Australia.

As an example, the Study notes on page 26

The Gippsland Joint Venture is currently completing the ... Kipper/Turrum/Tuna project (gas and oil production from Tuna has begun) and commencing the Longford gas conditioning plant expansion project.

The Joint Venture is investing **\$4.5 billion** in offshore and onshore to bring on-line new fields which will help maintain current domestic gas production from Bass Strait¹². Domestic gas projects are multi-billion dollar undertakings and the cost of project developments have risen significantly in recent years.

These projects, like any other commercial undertaking, need to provide a sustainable rate of return for the project proponents and their investors.

In addition to focussing on removing existing impediments to increasing the supply of natural gas to the Eastern Australian gas market, policy responses should focus on initiatives that will help to reduce the costs facing project proponents in developing domestic gas projects. These policy responses are considered further below.

2.4.3 NEW SOUTH WALES CSG DEVELOPMENT

This section highlights the regulatory impediments to further gas supply in New South Wales and the urgent need to remove inappropriate regulatory impediments in both New South Wales and Victoria.

As the Study notes on page 30

¹² See www.exxonmobil.com.au/Australia-English/PA/news_releases_20131022.aspx for further information.



CSG developments in New South Wales have the potential to supply more than half of current New South Wales domestic demand within the next five years. These developments include Santos's Narrabri CSG Project, AGL's Camden Gas Project Expansion, Metgasco's Casino Project and AGL's Gloucester CSG Project ...

Santos is proceeding with its exploration and appraisal program near Narrabri, having gained the necessary state and federal approvals for the first stage of the program in October 2013. However, **regulatory issues may see the project delayed over the coming years.** Two other CSG developments in New South Wales, AGL's Camden Gas Project Expansion and Metgasco's Casino Project, **were suspended after the announcements on State Environmental Planning policy and their commencement remain uncertain.**
[Emphasis added]

The best response to concerns about rising gas prices and gas availability is greater supply. Removing the onerous regulatory restrictions facing producers (particularly in New South Wales and Victoria) is imperative.

2.5 APPROPRIATE REGULATION

As the Study highlights on page 31, governments have

... an interest in the effective and efficient regulation of the upstream petroleum industry to maximise returns from industry for the benefit of the Australian community.

In relation to onshore gas regulation, as with all forms of regulation, the industry supports stable, predictable, robust regulation of its activities based on sound scientific principles and assessment.

Queensland and South Australia both provide examples of a generally effective and proactive regulatory development process.

It is worth considering that Queensland's natural coal seam gas industry now employs about 30,000 people, has signed more than 4,000 landholder agreements and has so far contributed more than \$100 million to community projects and causes¹³.

South Australia has also taken a proactive approach through the development, in consultation with stakeholders including APPEA, of its *Roadmap for Unconventional Gas*¹⁴.

Yet in New South Wales, where arbitrary government regulation continues to send the signal that New South Wales is closed for business, our industry employs fewer than 300 people and has signed just 285 agreements with landholders¹⁵.

¹³ See www.appea.com.au/industry-in-depth/industry-statistics for further information.

¹⁴ APPEA participated in the development of the Roadmap through its membership of the Roundtable for Unconventional Gas Projects in SA (see www.pir.sa.gov.au/petroleum/prospectivity/basin_and_province_information/unconventional_gas/unconventional_gas_interest_group/roadmap_for_unconventional_gas_projects_in_sa/current_members_of_the_roundtable_for_unconventional_gas_projects_in_sa) and maintains its involvement through membership of a number of the Roadmap's ongoing Working Groups.

¹⁵ See www.appea.com.au/industry-in-depth/industry-statistics for further information.



Policies that undermine the development of energy projects and curtail energy production impose costs on the Australian community, in jobs, in economic growth and ultimately in higher energy costs.

It is therefore vital that the New South Wales (and Victorian) Government proactively support the development of the onshore gas industry so as to create a safe and efficient onshore gas industry that is underpinned by leading practice regulation and community engagement.

2.7 COST OF DEVELOPMENT

This section of the Study highlights the relatively high and growing costs of developing natural gas for supply to Eastern Australian gas market.

As the Study notes on page 35, gas reserves are becoming more expensive to find and extract, placing upward pressure on prices.

The appropriate policy response is to therefore focus on policy initiatives that remove unnecessary costs and other regulatory impediments from producing this gas.

3. DEMAND

This section provides a useful overview of the composition of demand and particular industrial demand in the Eastern Australian gas market.

The Study at page 39 notes that:

- Industrial gas demand in the Eastern Australian gas market is significantly concentrated in a small number of industries, with only a small subset of these industries (metals processors and refiners, chemicals and plastics producers, and non-metallic mineral processors) having gas as a significant input to their production processes.
- Growth in gas consumption for industrial purposes has been declining steadily over time.

This provides an important counter to the claim that the nemesis of manufacturing is rising energy costs. The best policy response from governments will be to focus on initiatives that boost productivity and encourage investment, including via lower tax burdens, efficient regulation, ongoing investment in skills, and greater labour market flexibility. This will give all companies – including those in the manufacturing sector – the best chance to adapt to structural pressures and increase their international competitiveness.

Claims are made on page 42 of the Study of “... increasing difficulties in attracting firm offers for supply ...”. This is not supported by the amount of objective information on the range of GSAs and other commercial transactions that have been entered into since December 2012 that is available. Some are highlighted in Box 2.



Box 2. GSAs and other commercial transactions that have been entered into since December 2012

1. Origin Energy Limited (Origin) on 20 December 2012 announced¹⁶ the signing of a long-term gas sales agreement with the MMG Group (MMG). Under the terms of the agreement, Origin will supply MMG with a total volume of up to 22PJ of gas over a seven-year period, commencing in 2013.
2. Beach Energy Limited, through its wholly owned subsidiary Delhi Petroleum Pty Ltd, announced¹⁷ on 10 April 2013 it had signed a gas sales agreement with Origin Energy Retail Limited for the sale of up to about 139PJ of sales gas for a term of eight years. Origin has an option to extend the term of the agreement by two years, which would result in the sale of up to approximately 173PJ of sales gas.
3. Lumo Energy on 14 May 2013 announced¹⁸ an agreement with BHP Billiton Ltd and ExxonMobil Australia for the supply of 22PJ of gas over three years starting in 2015.
4. Strike Energy Limited on 16 July 2013 announced¹⁹ it had entered into a binding term sheet with Orica Australia Pty Ltd, a subsidiary of Orica Limited, for the supply of up to 150PJ of gas over a 20-year period.
5. Origin on 19 September 2013 announced²⁰ it had signed a binding gas supply agreement with Esso Australia Resources Pty Ltd and BHP Billiton Petroleum (Bass Strait) Pty Ltd to purchase up to 432PJ of natural gas. Under the terms of the agreement, gas supply to Origin will start in 2014. Annual contract volumes will increase over a nine-year period.
6. ExxonMobil Australia on 11 November 2013 announced²¹ that its subsidiary, Esso Australia Resources Pty Ltd, along with BHP Billiton Petroleum (Bass Strait) Pty Ltd, has executed a long-term agreement for the sale of gas to Orica Limited. The agreement will supply up to 42PJ of gas over a three-year period starting in 2017.
7. Origin on 28 November 2013 announced²² the signing of a gas sales agreement with QGC Pty Limited (QGC). Under the terms of the agreement, Origin will supply QGC with up to a total of 30PJ of gas in calendar year 2014 and 2015.
8. Santos Ltd on 4 December 2013 announced²³ that it had recently signed five domestic gas contracts for a total of 30PJ of gas over generally five-year periods.

¹⁶ See www.originenergy.com.au/news/article/asxmedia-releases/1454 for further information.

¹⁷ See www.beachenergy.com.au/IRM/Company/ShowPage.aspx/PDFs/2934-16785602/BeachsignsmajorgassalesagreementwithOriginEnergy and www.originenergy.com.au/news/article/asxmedia-releases/1478 for further information.

¹⁸ See www.afr.com/p/markets/market_wrap/lumo_strikes_gas_deal_with_esso_FD8v5OF1saveqPKo7T5990 for further information.

¹⁹ See strikeenergy.com.au/images/stories/pdf/20130716_1%20Strike%20%20Orica%20Joint%20Statement.pdf and www.orlda.com/News---Media/Orica-and-Strike-Energy-sign-binding-term-sheet for further information.

²⁰ See www.originenergy.com.au/news/article/asxmedia-releases/1516 and www.exxonmobil.com.au/Australia-English/PA/news_releases_20130919.aspx for further information.

²¹ See www.exxonmobil.com.au/Australia-English/PA/news_releases_20131111.aspx and www.orlda.com/News---Media/-BHP-Billiton for further information.

²² See www.originenergy.com.au/news/article/asxmedia-releases/1535 for further information.

²³ See www.santos.com/Archive/NewsDetail.aspx?p=121&id=1407 for further information.



9. Santos on 19 December 2013 announced²⁴ that the GLNG project participants have executed an agreement with Origin Energy for the purchase of 100PJ of gas for supply to the GLNG project. The gas will be supplied over a period of five years starting from January 2016. Under the terms of the agreement, Origin can supply additional volumes of up to 94PJ of gas during the same five-year period.
10. Incitec Pivot Limited on 19 December 2013 announced²⁵ the execution of a 23-month gas supply agreement for the Phosphate Hill manufacturing plant in north-west Queensland, effective from 1 February 2015. The terms of the agreement are confidential.
11. Strike on 15 January 2014 announced²⁶ that the company has entered into a Gas Supply Option Agreement for 30PJ of gas with Orora Limited. Strike has granted an option to Orora for the supply of 30PJ of gas, to be delivered at 3PJ per annum, at a fixed price over a ten-year term from 2017, the expected commencement of production from the Project.

The range of gas supply agreements and other commercial arrangements (more of which are likely to be announced in coming months) suggest that there is enough information available to allow supply contracts to be concluded between willing buyers and sellers.

It is also a more useful and objective information base for policy development than self-serving member surveys of the type reported on page 42 of the Study.

3.3 ELECTRICITY GENERATION

The Study, on page 43, highlights the Renewable Energy Target (RET) as a factor affecting the amount of gas-fired generation on the National Electricity Market. However, it does not highlight the adverse and inefficient outcomes for gas-fired electricity and the operation of the Eastern Australian gas market that are driven by the RET.

As part of its submission to the Climate Change Authority's Review of the RET, APPEA commissioned BAEconomics to examine the implications for the Australian economy of the RET²⁷.

The BAEconomics report found a mandated renewable energy target such as the RET is less efficient at achieving a given environmental outcome because it forces higher cost renewable energy into the electricity generation mix at the expense of exploiting lower cost emissions abatement opportunities from gas generation and elsewhere in the economy.

It shows that, compared to a situation where a national carbon abatement policy is in place, the addition of the RET reduces Australian GDP by \$6.5 billion in today's dollars more than the unadulterated approach and reduces gas-fired generation by 2,313 GWh in 2020.

²⁴ See www.santos.com/Archive/NewsDetail.aspx?p=121&id=1409 and www.originenergy.com.au/news/article/asxmedia-releases/1539 for further information.

²⁵ See investors.incitecpivot.com.au/phoenix.zhtml?c=170340&p=irol-news&nyo=1 and phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MiE1NjY3fENoaWxkSUQ9LTF8VHlwZT0z&t=1 for further information.

²⁶ See strikeenergy.com.au/images/stories/pdf/20140115_Strike%20Signs%20New%20Gas%20Supply%20Option%20Agreement.pdf and www.ororagroup.com/about_us/media_centre/news/Media-Release_Gas-Supply-Option-Agreement_150113.html for further information.

²⁷ See consultation.climatechangeauthority.gov.au/climate-change-authority1/submissions/73/attachment for a copy of APPEA's submission and for a copy of the BAEconomics report, *Implications of the RET for the Australian economy*, September 2012 (available at www.baeconomics.com.au/wp-content/uploads/2012/09/baeconomics-appea-ret-report-8sep12.pdf).



The inefficiencies introduced by the RET therefore represent a direct regulatory disincentive to further gas supply development in Eastern Australia by forcing high cost renewable energy into the electricity generation mix at the expense of exploiting lower costs greenhouse gas abatement from gas-fired electricity generation. The RET is an economically inefficient policy operation that should be discontinued.

3.5 CONCLUSIONS

As this section of the Study correctly concludes, the effect of rising gas prices on industry costs and competitiveness needs to be viewed in the context of a range of factors that impact on the overall competitiveness of manufacturing and industrial gas users.

We do not agree with the assertions in the Study, on page 45, that

In the current environment, the extent and rate of change in the gas market and the consequent supply uncertainty appear to be making it difficult for firms to be confident that they are being offered gas on fair terms.

or that

The difficulty being experienced by large gas users highlights the need for improving information available in the market to facilitate informed and efficient short and long-term purchasing decisions.

As was noted above, the experience since December 2012 provides evidence that there is enough information available to allow supply contracts to be concluded between willing buyers and sellers. Over that time, at least eleven gas supply agreements and other commercial arrangements have been announced (more of which are likely to be announced in coming months), providing compelling evidence that there is enough information available to allow supply contracts to be concluded between willing buyers and sellers. This is considered further below.

4. INFRASTRUCTURE

4.1 OVERVIEW

APPEA agrees with the statement on page 47 of the Study that

Development of new upstream gas supply and effective competition in wholesale gas markets is linked to access to efficiently priced gas transportation, processing and storage services which in turn relies on a combination of efficient price signals and regulatory arrangements.

APPEA also supports ongoing reform in this area and actions to identify and rectify any regulatory shortcomings that have been identified through previous development processes (for example, the 2012 Energy White Paper) or are already underway (for example, through the Standing Council on Energy and Resources (SCER)).

If deliverability of gas is constrained by an absence of capacity to transport it where it is needed, then the liquidity of the upstream market will be constrained as a result. In addition, the transmission services market structure, characterised by a small number of shippers holding large



amounts of firm capacity and conducting private trades between the shippers, or between a shipper and a non-shipper, can result in a relatively illiquid market lacking in transparency.

In addition, if transportation, processing and storage include distribution network costs, then in New South Wales, these costs account for around 65 per cent of delivered gas prices. Carbon costs account for around 5 per cent and gas production costs account for around 30 per cent²⁸. It is therefore not accurate, as the Study states on page 47, to say that these costs are lower proportion of delivered gas than production costs.

4.3.1 PROCESSING

The Study, on pages 51, 53 and 54, raises issues around third party access to processing infrastructure. As the Study notes, such arrangements are governed by the *Competition and Consumer Law 2010*.

While the Study reports a number of claims that were made during the conduct of the Study, it does not make a compelling case for change, particular for amendments to the *Competition and Consumer Law 2010*, which would have implications stretching far beyond the upstream gas industry.

Upstream facilities are designed for specific purposes, which may differ markedly from facility to facility, particularly with respect to the processing of liquids and the removal of contaminants. Considerable redundancy can be built into these facilities to provide for continual supply of gas while some processing units are shut-in for maintenance. Spare capacity as a concept is not directly translatable from pipeline transportation systems.

APPEA considers that commercial negotiation is the least cost and more effective method for achieving third party access to upstream facilities. Commercial negotiation has led to a number of access arrangements being achieved without threat of government intervention. There is no reason to expect that commercial negotiation will not continue to deliver these outcomes. In the event of some failure of negotiation, the provisions of the *Competition and Consumer Law 2010* are available, should a party seek to invoke them.

Examination of competition pressures and outcomes in the upstream industry has not revealed evidence of a failure of market forces to operate efficiently with respect to processing of third party gas streams. The upstream industry has a very clear preference for commercial negotiation to arrive at mutually agreed arrangements for such third party access.

4.4 CONCLUSIONS

APPEA supports many of the conclusions that the Study reaches in this section. APPEA also supports the need to introduce greater transparency into price and other commercial outcomes for pipeline capacity and access.

²⁸ Independent Pricing and Regulatory Tribunal (2013), *Review of regulated retail prices and charges for gas, from 1 July 2013 to 30 June 2016*, 17 June, page 4 (available at www.ipart.nsw.gov.au/files/1a730622-cee2-41b5-b3f0-a1dd00af0623/Final_Report_-_Review_of_regulated_retail_prices_and_charges_for_gas_-_June_2013.pdf).



In particular, APPEA supports the efforts underway through SCER²⁹ to introduce a pipeline trading capacity initiative (as was considered and recommended by the November 2012 Energy White Paper). The importance of these reform initiatives stands on their own merits. We reject any assertion that there are "... *upstream competition problems* ...". The Study has not demonstrated the existence of upstream competition "problems" but rather that the upstream Eastern Australian gas market is working to deliver outcomes effectively for Australians.

5. MARKETS AND PRICE DISCOVERY

5.1 OVERVIEW

The importance of bilateral contracts to underpin market development has been a key feature of the Eastern Australian gas market since it commenced and is an outcome that has been driven by and served the needs of both producers and consumers.

Such contracts have not been driven by or to the advantage of producers at the expense of consumers. In most cases, this includes the use of commercial-in-confidence clauses and other measures to protect commercially sensitive information.

5.2 GAS SUPPLY CONTRACTS

It would also be, as was noted above, a mistake to overemphasise the unique nature of the transition underway in the Eastern Australian gas market, which has been through periods of transition previously or to assert that information asymmetries exist that favour producers. The level of market activity underway in recent months, suggests that information is available to market participants to allow GSAs and other commercial arrangement to be agreed into. As the Study notes on page 63

A number of long-term gas contracts have recently expired or will soon expire, compounding the difficulties in the current contracting environment. This has been a particular focus in the debate about assured retail gas supply into New South Wales.

This reality also underlines the importance of removing existing regulatory impediments to a supply response in both New South Wales and Victoria.

The Study also notes on page 63

While there is a strong drive to re-establish long-term supply contracts to deliver certainty, those contracts would perpetuate high-priced outcomes if they were locked in at the current historically high prices. Conversely, shorter contracts, which may not be attractive to some market participants who seek certainty through long-term contracts, may lead to more efficient and liquid pricing as contracts roll over.

²⁹ See www.scer.gov.au/workstreams/energy-market-reform/gas-market-development/gtptc for further information.



These tensions exist across all parts of the supply chain. They are also not unique to the Eastern Australian gas market. Markets exist to resolve these tensions and to bring buyers and sellers together.

5.3 GAS TRANSPORTATION, PROCESSING AND STORAGE CONTRACTS

As noted above, APPEA supports the introduction of a pipeline trading capacity initiative to improve the efficiency of pipeline transportation services and provide greater transparency in relation to existing capacity trade and the lack of a transparent market mechanism to allocate unused pipeline capacity. Allowing gas to flow efficiently through the transportation system will be a key way to improve the operation of the Eastern Australian gas market.

5.4 DOMESTIC TRADING MARKETS AND PRICE DISCOVERY

APPEA and the upstream gas industry have been active participants in the development of relevant short-term trading markets. The upstream industry actively supported and participated in the work of the Gas Market Leaders Group (GMLG), which developed the gas Short-Term Trading Market³⁰, the GBB and the GSOO.

The industry has demonstrated its willingness to participate actively in gas market development processes in the past and expects this to continue into the future.

5.5 THE INFLUENCE OF INTERNATIONAL MARKETS

While, as the Study notes on page 65, there is no worldwide benchmark price for LNG, this is not unique to the gas industry. Worldwide benchmark prices do not exist for many goods and services, with a range of local factors influencing pricing outcomes.

There are diverse views about the outlook for international gas markets, but this is not a unique situation facing gas markets. There are a diverse range of views around the outlook for any number of international commodity markets. As with many of these markets, a range of commercial and other strategies have developed over time to assist market participants manage these uncertainties and associated risks.

5.5.1 LNG NETBACK PRICING

The Study on page 66 discusses LNG netback prices. A common concern is that the introduction of a gas export industry will drive domestic gas prices to international price parity with LNG export prices (the so-called LNG netback price). While such a concern is understandable, there are a number of issues that need to be considered.

³⁰ This has in turn led more recently to the introducing of the voluntary gas supply trading exchange at Wallumbilla in Queensland.



As has been noted by independent analysts³¹, in a constrained market such as Eastern Australia, where long-term CPI-escalating contracts still dominate, the only way this could happen would be if all producers targeted the LNG market only. This is clearly not happening.

Market fragmentation issues (including the number of suppliers in competition with each other to supply the domestic market) and the size of the total recoverable reserves of onshore gas complicate any analysis of the long-term price of gas in the Eastern Australian gas market and whether a netback price will be reached and/or sustained.

Furthermore, the cost structure of domestic gas production facilities is very different from LNG production facilities. The capital expenditure requirements for the massive developments required for high risk, high cost LNG developments are much higher than the (still very significant) capital expenditure requirements for a domestic gas development.

In the domestic electricity market natural gas as a fuel source for electricity generation faces very strong competition from other energy sources, particularly coal³² (and will continue to face significant competition for coal for the foreseeable future) along with growing renewable energy sources.

The proximity of Eastern Australia's vast onshore gas reserves and resources means that the costs involved in getting gas to domestic consumers is less than those involved in supplying international customers. Domestic gas operations do not require the large-scale capital investments in liquefaction, storage and harbour facilities that are required for LNG operations.

A range of factors need to be considered in properly understanding relationships between LNG and domestic gas markets. For example:

- How is the export price to be determined – is it the short-term or spot price or for longer-term contracts, and if so, what spot markets and what contracts?
- Is the export price to include or exclude the cost of re-gasification, and shipping?
- How is cost to be defined – variable cost, or some other calculation providing for a recovery and return on investment, how should opportunity costs be included?

LNG and domestic gas businesses operate in a competitive market, and are not regulated utilities in which prices reflect costs plus a fixed return on investment. This limits the relevance of the kind of netback calculations that are often referenced in the debate on net-back pricing.

The relevant issue for domestic gas prices is the same as for LNG prices – the relationship between demand and supply in the relevant market, in this case the Eastern Australian gas market.

It is this relationship that will determine the price of gas and will shape the commercial arrangements for its transaction.

³¹ See, for example, Morgan Stanley (2009), *Australia Oil & Gas Correction: Fact or Fiction?*, Research Note, 4 February.

³² See, for example, Australian Energy Regulator (2013), *State of the Energy Market 2013*, 20 December, page 94 (available at www.aer.gov.au/node/23147).



5.6 MARKET INFORMATION

This section of the Study provides a useful overview of the significant level of publicly and privately available information that is now a feature of the Eastern Australian gas market. Significantly more information is now available to the market than was the case historically.

These developments have arisen through both evolution of the gas market, industry led initiatives and government actions. The range and pace of these developments is, in many cases, not readily apparent to those that have not been directly involved in them and are often underappreciated by those not actively involved in the gas market development program on an ongoing basis. It is also the case that these gas market developments can be expected to continue in coming years.

5.8 CONCLUSIONS

In relation to the Study's conclusion on page 69 that there

... remains a high degree of uncertainty about the key drivers of price outcomes that are exacerbating tensions in the domestic gas market ...

APPEA notes the gas market already has abundant information available to it. The range of gas supply agreements that have been struck since December 2012 suggests that there is enough information available to allow supply contracts to be concluded between willing buyers and sellers.

The relatively small size of the Eastern Australian gas market by international standards has historically placed limitations on the liquidity and complexity of gas markets across Australia, including the Eastern Australian gas market. It is also the case the market has been traditionally based around bilateral contracts. However, the market has experienced growth in diversity and complexity in recent years.

APPEA welcomes the opportunity to consider future gas market reform development options, including those that increase the level and range of information available to market participants – across all parts of the gas supply chain. These issues are considered further below.

6. MODELLING AND EMPIRICAL ANALYSIS

6.2 IES MODELLING PURPOSE AND APPROACH

The Study reports on page 72 that IES's modelling considered a scenario of low gas production due to supply constraints. This scenario is likely to be quite relevant and operate as the actual 'reference case' unless the existing regulatory restrictions in New South Wales and Victoria are removed. However, the scenario does not feature in the commentary in this chapter, but is rather relegated to the IES report itself.



This is disappointing, as it means an opportunity to highlight the adverse economic consequences and Eastern Australian gas market outcomes that flow from these regulatory restrictions, has not been taken.

As modelling commissioned by APPEA in 2013 and conducted by ACIL Allen Consulting showed³³, by comparing two contrasting scenarios – the “Base Scenario” which entails the natural expansion of the state’s gas industry and a “CSG Freeze Scenario” under which New South Wales continues to source 95 per cent of its natural gas from other states – the CSG Freeze Scenario would result in:

- Wholesale gas prices in Sydney projected to be 24 per cent higher (on average) relative to the Base Scenario over the period 2025 to 2035.
- A reduction of around \$4.0 billion (in real 2012-13 dollars) in direct capital investment in New South Wales upstream natural gas from coal seams development and a loss of around \$2.9 billion of associated recurrent operating expenditure foregone over the period to 2035. These losses would result in investment moving to other jurisdictions and the net result sees a total reduction in real New South Wales Gross State Product of \$14.2 billion over the period to 2034-35.
- New South Wales real income \$24.6 billion lower over the period to 2035 (\$7.9 billion lower in net present value terms which equates to \$1100 per New South Wales resident).
- New South Wales employment falling noticeably by a cumulative total of 34,287 employee years compared to the Base Scenario – equivalent to an average loss of 1,441 full time equivalent (FTE) jobs each year.
- Loss of royalty and tax revenues. Royalties and payroll tax over the period to 2035 reduced by about \$1.9 billion aggregate.
- A loss in average New South Wales household real income of \$290 per household per year and an increase in average New South Wales household electricity bills of \$31 per household per year and an increase in gas bills of around \$22 per household.

This scenario (low gas production due to (regulatory) supply constraints) should be a key focus (in an economic modelling context) for the Government in considering its response to the Study.

6.2.1 KEY FINDINGS

Those analyses that have been undertaken in a rigorous fashion have consistently shown similar outcomes to those reported in the Study on page 73:

*IES's modelling of the eastern market showed that **there are sufficient conventional gas and CSG resources to meet both domestic gas demand and the gas demand for eight LNG trains in Queensland from 2013-14 to 2022-23.** This is consistent with other findings, including by Geoscience Australia, BREE and the Australian Council of Learned Academies,*

³³ ACIL Allen Consulting (2013), *Potential Economic Significance of New South Wales Coal Seam Gas: a Reassessment of Impacts on Energy Markets and on the New South Wales and Australian Economies*, 29 May (available at www.appea.com.au/wp-content/uploads/2013/06/27303-New_South_Wales-CSG-Report-20130529.pdf and www.appea.com.au/media_release/rude-energy-shock-awaits-nsw-businesses-and-households).



that have demonstrated the potential for both conventional and unconventional gas development in eastern Australia.

*Key to this finding is the assumption that both gas resources and associated supporting infrastructure are **developed and brought into production in a timely manner**. The price of this gas was found to be above historical prices due to the rising costs of production and the influence of LNG netback pricing on the domestic market.*

*IES's work showed that the price of gas is already moving up the supply cost curve, above historical gas prices, because of rising exploration, development and production costs. It also showed that development will move to higher cost gas resources, raising the price of gas for end users, **if the development of lower cost gas resources is constrained by regulatory barriers or other restraints**. [EMPHASIS ADDED]*

APPEA welcomes these key findings.

6.2.2 GAS PRICING

The limitations of netback pricing as an analytical concept to inform policy development for the Eastern Australian gas market are important in considering modelling outcomes.

It should come as no surprise that assuming prices will be higher results in modelling outcomes that produce higher prices compared to alternative scenarios.

Caution should be used when considering any prices forecasts or projections arising from economic models.

6.2.3 RESERVES

APPEA welcomes the key finding reported on page 75 that Eastern Australia has significant gas reserves and endorses the model's obvious finding that new gas supply in New South Wales would slow the depletion of existing gas reserves.

The finding on page 75 that

The 2P conventional gas reserves from the Otway and Bass basins were depleted by 2021-22 and gas production from those basins drew from 3P reserves and 2C resources from 2021 ...

requires correction. This is more correctly characterised as existing 2P conventional gas reserves. If production moves into what are currently 3P reserves and 2C resources, then by definition, they have become 1P or 2P reserves, and 2P reserves are therefore not depleted.

6.2.4 SUPPLY AND DEMAND

APPEA also welcomes the Study's key finding on page 75 that the "... modelling showed that there was sufficient supply to meet expected domestic demand and the demand of eight LNG trains over the study period ..."

6.3 SKM MODELLING

The SKM modelling and its reported results appear more problematic than the IES modelling results considered above.



In particular, it is unclear:

- On what basis scenarios around the base case, high LNG case and low LNG case have been made. In particular, the high LNG case appears unrealistically optimistic.
- How the alternative assumptions (“no diversion” versus “diversion”) are consistent with the earlier discussion around the asserted importance for LNG netback pricing. Gas that is used to satisfy LNG contracts has the same opportunity cost as gas supplied to the domestic market. It is therefore unclear how the differing pricing outcomes arise or indeed why they matter. If gas is flowing to its highest value use, this will produce the most efficient and highest value outcome for the owners of the resource – the Australian people.

It is entirely inappropriate to include in the SKM modelling, reported in pages 79-80 of the Study, a scenario based on assertions contained in a report by an industry association with a vested interest in a particular outcome.

The inclusion of such a scenario calls into question the validity and objectivity of the modelling reported in this section of the Study and should not feature in the Government’s consideration of its response to the issues raised in the Study.

The assertion by the Study on page 80 that

Overall, the price ranges in SKM’s projections for the high contract diversion to LNG assumption seem reasonably consistent with recent media reporting of contract prices.

is flawed. A more substantial analysis than “recent media reporting” is required to validate a statement of this nature.

6.4.1 CORE ENERGY GROUP

APPEA welcomes the Core Energy Group’s finding, reported on page 81 of the Study that

... there would be adequate 2P reserves to satisfy domestic demand projections to 2033 ...

The Core Energy Group also identifies the adverse implications for domestic consumers who have contracts maturing over the next five years of the restrictions on supply side options resulting from restrictions on developing onshore gas resources in New South Wales (and Victoria).

6.4.2 GAS STATEMENT OF OPPORTUNITIES

The Study, on page 82, reports that modelling prepared for the GSOO found

... potential gas supply shortfalls in New South Wales and Queensland, under some scenarios ...

Importantly, the GSOO found, for New South Wales



... a potential gas shortfall of 50-100TJ on peak winter days by 2018 ... The analysis indicated that new production from the Gloucester Basin and a new storage facility in Newcastle might not completely alleviate the shortfall.

This warning from the independent Australian Energy Market Operator (AEMO) again highlights the importance of lifting the inappropriate restrictions on natural gas exploration and production in New South Wales³⁴.

The report shows that committed and advanced gas projects in New South Wales are not sufficient to completely alleviate potential supply shortfalls.

6.5 THE WESTERN AUSTRALIAN MARKET

Recognising the focus of this Study is on the Eastern Australian gas market, APPEA would refer the Government to its most recent submission that considered the Western Australian gas market and associated policy issues, such as the adverse economic and gas market consequences that flow from the Western Australia Domestic Gas Reservation Policy, the APPEA submission to the Western Australia Economic Regulation Authority's *Inquiry into microeconomic reform in Western Australia*. A copy of APPEA's submission can be found at Attachment 1³⁵.

6.5.2 GAS PRICES

It is not accurate to claim, as the Study does on page 85 that

The Western Australian domestic gas market's transition to LNG-linked prices is similar to the transition occurring in the eastern market.

The experiences have been fundamentally different. For example, as the Grattan Institute³⁶ notes on page 33 of its June 2013 report, *Getting gas right: Australia's energy challenge*

When the North West Shelf project began exporting gas in 1989, domestic gas prices did not increase immediately ...

... prices were also shaped by a major deal in which the State Government committed to buy a large volume of gas from the North West Shelf project. The deal made the project possible and enabled a major expansion in Western Australia's gas market. But the contracted volumes were very generous, exceeding local demand. This helped to keep prices low, compared with export prices ...

Since the mid-2000s the domestic market has been under strain. Western Australia's minerals boom has driven growth in demand, gas production costs have increased due to higher input costs and some fields have been depleted.

³⁴ See www.appea.com.au/media_release/nsw-needs-natural-gas-and-fast for further information.

³⁵ It can also be found on the ERA WA's website, at

www.erawa.com.au/cproot/11998/2/Australian%20Petroleum%20Production%20and%20Exploration%20Association%20Limited%20-%20Public%20Submission%20-%20Inquiry%20into%20Microeconomic%20Reform%20Discussion%20Paper.pdf.

³⁶ See grattan.edu.au/publications/reports/post/getting-gas-right-australias-energy-challenge.



The report goes on to note, on page 38

During the late-1990s and 2000s, there was very little investment in domestic gas processing capacity in the Western Australian market ... Ample supply and low prices discouraged gas producers from developing new infrastructure.

This means that with LNG exports from Western Australia commencing in 1989, any changes that have taken place in recent years have not been driven by exports, but by the interaction of supply and demand in the Western Australian domestic gas market.

In addition, more recent analysis by the Independent Market Operator (IMO) in Western Australia, as part of their GSOO³⁷, has confirmed Western Australia has more than enough natural gas for both domestic and export markets. The GSOO confirms forecasts of strong annual growth for WA's domestic gas supply over the next decade. The report confirms there is more than enough gas and processing capacity to meet any of the IMO's forecast demand scenarios. It notes that producers remain willing to supply gas to the domestic market if commercially acceptable terms can be agreed with existing or potential gas consumers.

WA is experiencing a growing level of competition in the domestic gas supply market as new capacity comes on stream, as demonstrated by the recent addition of the Devil Creek, Macedon and Red Gully domestic gas facilities. These projects proceeded because buyers were willing to commit to commercial terms that underpin the enormous investment required to develop and construct a gas processing facility.

Development of Western Australia's domestic gas market has been driven by market forces, price movements and the growth of the gas export industry, not by interfering with commercial incentives.

6.6 CONCLUSION

APPEA welcomes the conclusions that the Study draws on page 85, that

IES modelling showed that there were sufficient conventional gas and CSG resources and gas production to meet domestic demand and the demand of eight LNG trains from 2013-14 to 2022-23.

and

Both IES and AEMO concluded that the expansion of some pipeline capacity and continued reserves development will be needed to ensure that new gas production occurs in a timely manner. Delays in the exploration and development of gas resources could affect the timing of reserves becoming available to the market and ultimately the price of gas as supply tightens.

³⁷ See www.imowa.com.au/publications-and-reporting/gas-statement-of-opportunities.



These conclusions underpin the importance of removing regulatory and other barriers to allow more gas to flow into the Eastern Australian gas market and the importance of not introducing additional impediments to a timely and efficient supply side response.

7. POLICY OPTIONS

7.1 CONTEXT

In all sectors of the economy – not just oil and gas – maintaining access to open and competitive markets is in Australia's best interest.

Australia's gas industry is delivering substantial, economy-wide benefits in terms of investment, jobs, and regional development. For this benefit to be sustained, governments must resist calls for policy interventions that force non-commercial outcomes.

The Study clearly articulates the important role that Australian natural gas will play in delivering economic growth and energy security. It also, subject to the comments below, recognises the critical importance of market-based energy policies and sends an important signal to investors in its rejection of domestic gas reservation policies and other such industry protection measures.

It will be vital that the Government's response and its development of the *Eastern Australian Gas Supply Strategy to 2020* and the 2014 Energy White Paper continue to reject these calls for intervention and focus instead on market-based energy policies.

Arguments for domestic gas reservation are short-sighted and self-interested. Gas reservation policies actually impair local gas supply and affordability, rather than improve it.

Laws that dictate where and how gas can be sold invariably deter the very investment needed to develop Australia's abundant gas reserves and resources.

LNG projects, to which Australia now looks to underpin the national economy for decades to come, are complex, extremely costly and require a decades-long horizon.

Australia's LNG industry is a source of comparative advantage that should be harnessed, not hindered.

7.2 TOWARDS TRANSPARENT PRICES AND COMPETITIVE MARKETS

As noted above, the Eastern Australian gas market already has abundant information available to it. The range of gas supply agreements that have been struck since December 2012 suggests that there is enough information available to allow supply contracts to be concluded between willing buyers and sellers.

Nevertheless, APPEA recognises the importance of ensuring a competitive and well informed Eastern Australia gas market continues to develop and also recognises the importance that bilateral contracts have played in underpinning market development in Eastern Australia. APPEA also recognises the significant gas market development that has been pursued over the last decade, in which the upstream industry has been an active participant, and does not wish reform options pursued just for the sake of reform, but rather to ensure gas is developed and allowed to flow to its highest value use, thus providing the greatest return to the ultimate owner of the resource.



7.4 GAS MARKET REFORM AGENDA

Ongoing gas market reform, that is based on the operation of competitive markets and only supports intervention in the presence of clearly identified market failure (that can be improved through intervention), should remain an important feature of governments policy responses.

The upstream industry has been a key focus of and participant in reform over the past decade and stands ready to participate constructively in future gas market reform processes.

7.4.1 A REVIEW OF GAS MARKET COMPETITION

There is no benefit in adding further to the profusion of reviews to which the gas market been subject in recent years.

In particular, recommendations for a further review of the competitive nature of the gas market are unnecessary and will lead to further market uncertainty.

7.4.2 COMPLETE CURRENT REFORMS

APPEA agrees that the current range of gas market forms, particularly:

- The introduction of the gas supply hub at Wallumbilla,
- The *National Harmonised Framework for Coal Seam Gas*, and
- the pipeline capacity trading initiative

are important elements of the ongoing reform agenda and should be completed and/or implemented as a matter of priority. APPEA supports the work of the SCER and the development of the Multiple Land Use Framework, which provides a platform for consistency across government in relation to land access. However, more important than harmonisation between state land access legislation are common standards and practices of behaviour, and that the agriculture and resources industry are supported by government in working together to improve outcomes for both industries and directly with regional communities to address some of the concerns about development of natural gas on private land including concerns about water management and farmers' and pastoralists' rights.

7.4.3 AGREE ON A FORWARD REFORM AGENDA

Specifying a forward gas market reform program requires consultation with market participants. A new forward agenda should also follow a consideration of the success of previous reform agendas to ensure that lessons from those experiences inform any forward reform agenda. The reform principles agreed by the Gas Market Leaders Group provided a useful basis for guiding the GMLG's work. In a similar way, a forward work program could be usefully underpinned by a set of reform principles.

The development of reform principles (a draft of which are provided by the Study on page 95) should be conducted through a separate consultation exercise undertaken through and overseen by SCER rather than through the Study process.



7.5 PROMOTE GAS SUPPLY COMPETITION

In all sectors of the economy – not just oil and gas – maintaining access to open and competitive markets is in Australia's best interest.

7.5.1 ADDRESS REGULATORY IMPEDIMENTS TO SUPPLY

Removing the existing regulatory impediments to supply, particularly in New South Wales and Victoria, is one of the key short-term policy initiatives that should be undertaken to further the development of the Eastern Australian gas market.

In Victoria, the October 2013 report of the Victorian Gas Market Taskforce³⁸ set out a clear regulatory reform development and implementation agenda. The report found that Victoria should facilitate exploration and development of onshore gas – including natural gas from coal seams – and allow hydraulic fracturing. The report warns that failing to develop onshore gas could leave Victoria – like New South Wales – exposed to falling gas supplies and higher prices. The recommendation to remove the state's hydraulic fracturing moratorium was underpinned by the Gas Market Taskforce report finding, on page 30, that *"Investigations into the effects of hydraulic fracturing ... have found there is no evidence of groundwater contamination."*

As the Task Force Chair, the Hon Peter Reith, said in the introduction to the Gas Market Taskforce report, *"The only sensible course of action is for the Victorian Government and other eastern states to promote production of additional gas supply."*

New South Wales has vast gas reserves and resources, however recent New South Wales Government announcements and policy positions, including the buffer zone, would sterilise a large proportion of identified gas resources, eliminating years of potential gas supply to the state³⁹. Onshore natural gas in New South Wales has the potential to become an important part of the energy supply mix in the state, reducing the state's reliance on interstate gas supplies and improving energy supply security. A growing onshore sector in New South Wales would deliver significant economic benefits to the state and to the nation.

The multiple changes of regulations in a short time frame, such as has occurred in New South Wales, is a deterrent to investment. Consistent regulations will help ensure the barriers to the expansion of downstream gas supply and distribution networks are minimal. The industry needs certainty in terms of regulation to encourage investment in exploration and production, pipeline infrastructure and storage facilities. In particular, the New South Wales Government should urgently reverse its policy of blanket exclusion of vast tracts of land from gas development.

³⁸ Available at www.energyandresources.vic.gov.au/about-us/publications/Gas-Market-Taskforce-report and www.appea.com.au/media_release/more-delay-and-uncertainty-as-victoria-rebuffs-gas-market-review.

³⁹ For further information, please see APPEA's submission to the New South Wales Legislative Assembly State and Regional Development Committee inquiry into *Downstream gas supply and availability in New South Wales* (see www.parliament.nsw.gov.au/prod/parlment/committee.nsf/0/FCDC7EAF8B2C87F6CA257B4300755E93 for information the Inquiry and [www.parliament.nsw.gov.au/prod/parlment/committee.nsf/0/45678349cd902516ca257bd500113a9d/\\$FILE/Submission%20No.%2047%20final%20version%20APPEA.pdf](http://www.parliament.nsw.gov.au/prod/parlment/committee.nsf/0/45678349cd902516ca257bd500113a9d/$FILE/Submission%20No.%2047%20final%20version%20APPEA.pdf) for a copy of APPEA's submission).



7.5.3 JOINTLY FACILITATE PRIORITY GAS PROJECTS

APPEA welcomes the recommendations contained in this section, particularly the recommendation on page 98 that

There are particular projects that could have significant implications for market dynamics and increased supply given their potential development timing and geographic location. State and territory governments and the Australian Government should do all they can to assist such projects negotiating regulatory approvals in a timely and efficient manner.

and the finding on page 98 that

These reforms and ongoing facilitation could be adopted for gas projects which are likely to be able to produce gas within the next five years during the height of the tightness in the market, and ongoing reform should be continued in streamlining regulatory processes as a priority.

The Australian oil and gas industry supports a strong and robust environmental regulatory framework. It should be effective and efficient with clear objectives and transparent oversight.

Australia has an impressive history of facilitating and delivering large capital-intensive major projects, such as new LNG plants or expansions. However, some of this confidence is being eroded by burdensome regulatory oversight and requirements. Addressing this issue should be a key priority for Australian governments as the nation enters a period of growth in new petroleum project development.

Evidence from the oil and gas industry proves that Australia's environmental regulatory framework contains numerous overlapping, excessive and inconsistent requirements that are causing unnecessary project delays and costs. The legislation does not always clearly define or achieve its objectives, or add any additional benefit to the Australian economy. It imposes additional costs on the industry and, in some cases, delivers conflicting outcomes that extend project timeframes and costs.

APPEA's report, *Cutting Green Tape: Streamlining Major Oil and Gas Project Environmental Approvals Processes in Australia*⁴⁰, shows, through a series of industry case studies, how green tape is currently hindering the oil and gas industry's ability to optimise its contribution to Australia's future economic development and identifies potential areas of reform.

Continued commitment to regulatory reform is needed at all levels of government. Overlapping and inefficient regulation for both project development and operations continues to create higher operating costs for the Australian oil and gas industry – which poses a real threat to attracting ongoing foreign investment.

APPEA acknowledges the considerable progress that has been made in certain areas to streamline red-tape in Australia in the last six months. In particular the work undertaken to establish the

⁴⁰ APPEA (2013), *Cutting Green Tape: Streamlining Major Oil and Gas Project Environmental Approvals Processes in Australia*, 25 March (available at www.appea.com.au/wp-content/uploads/2013/04/APPEA_Cutting-Green-Tape.pdf).



framework for a 'one-stop-shop' for Commonwealth and State/Territory Government environmental approvals under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), and the streamlining of offshore petroleum activities in Commonwealth waters under both the EPBC Act and the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGs Act)⁴¹. We remain optimistic that this process will provide an important precedent for achieving best practice environmental regulation whilst cutting the cost of doing business in Australia.

APPEA supports regulation that is:

- Only necessary where it is required to deliver an achieved policy objective
- Underpinned by sound science and evidence
- Objective-based, and does not place unnecessarily prescriptive conditions on operators
- Appropriate to the nature and scale of the project, and not based on minimal impact
- Supported by extensive guidance and assistance is provided to operators
- Considered in the context of all legislation: Federal, State and Council to ensure that conflicting objectives are identified and minimised.

The Productivity Commission's December 2013 report, *Major Project Development Assessment Processes*⁴², underlines the inefficiencies in the regulatory processes that currently apply to major projects in Australia.

More importantly, it advances a range of sensible options to streamline the current arrangements and capture the benefits of major projects and investment. The report represents one of the most comprehensive reviews of the regulatory and oversight processes that apply to resource projects in Australia. It highlights the duplicative and multiple layers of red and green tape that projects must navigate to unlock the economic benefits of our nation's resources.

APPEA supports the thrust of the Commission's recommendations, particularly the centerpiece focus on establishing a 'one project, one assessment, one decision' framework for approvals through bilateral assessment and approval agreements (Recommendation 7.1) and the wider use of strategic assessments (Recommendation 11.1).

Specific recommendations for statutory timelines for assessment and approval decisions would be a big step forward if adopted and APPEA urges the Government to take action accordingly.

Recommendation 6.3 in the report proposes the repeal of the 'water trigger' amendment under the EPBC Act in the event that a regulatory impact assessment of the measure suggests that the provision does not provide any meaningful benefits to the community. This is a particularly welcome recommendation for development of natural gas from coal seams.

⁴¹ See www.appea.com.au/media_release/moves-to-reduce-unnecessary-green-tape-a-step-forward and www.appea.com.au/media_release/sensible-move-to-assess-offshore-regulations for more information.

⁴² See www.pc.gov.au/projects/study/major-projects/report and www.appea.com.au/media_release/productivity-commission-report-identifies-logical-regulatory-improvements-for-major-projects for further information.



The water trigger was introduced into the EPBC Act in June 2013 – as the result of politics not science – and was never even subjected to the most rudimentary regulatory impact assessment process.

The water trigger, under the *Environment Protection and Biodiversity Conservation Act 1999*, should be repealed as a matter of priority.

7.5.4 IMPROVE ACCESS TO AN COOPERATION ON PRE-COMPETITIVE GEOSCIENCE

APPEA welcomes the findings and recommendations in this section of the Study. Pre-competitive information informs governments' decision-making on which areas within a region or basin are viable to offer for private exploration. The information is then also used in promoting the exploration potential of those areas, with the aim of achieving the most favourable terms for the release of exploration permits to industry.

The Government should continue to provide funding to precompetitive geoscientific study and investigate (in collaboration with other jurisdictions/Commonwealth) was to better use and promote Australia's existing repository of geoscientific knowledge to further attract investment.

7.6 IMPROVE THE COMMERCIAL AND REGULATORY ENVIRONMENT FOR INFRASTRUCTURE

APPEA welcomes the findings and recommendations in this section of the Study, particularly the recommendations on page 99 for policy which acts to

- *improve information to market and regulators on the pricing and utilisation of infrastructure*
- *review the suitability of alternative carriage models for pipeline regulation*
- *consider government support for infrastructure (such as feasibility studies)*
- *facilitate the development of capacity trading.*

In particular, as noted above, reforms to introduce pipeline capacity trading, considered on pages 101-103 of the Study, should proceed as a matter of priority.

7.7 MARKET DATA AND TRANSPARENCY

As has been noted a number of times throughout this submission, the Eastern Australian gas market already has abundant information available to it, including on the production of natural gas from coal seams.

The range of gas supply agreements that have been struck since December 2012 suggests that there is enough information available to allow supply contracts to be concluded between willing buyers and sellers.

7.7.1 IMPROVE INFORMATION TO THE MARKETS ON CSG DELIVERY RISKS

APPEA looks forward to further discussion with the government on how this provision of information proposal might work in practice, what additional information provision is proposed, how the range of existing data reported to regulatory authorities might be better used by market participants and policymakers and presented/made accessible by governments and how commercially sensitive information will be protected.



7.7.2 IMPROVE PLANNING AND TRANSPARENCY MECHANISMS

APPEA supports moves to examine, in consultation with stakeholders, possible ways to enhance the operation of the GBB. The immediate focus should be on improvements to the operation of the GBB itself and better use/presentation of existing information, rather than the addition of new reporting requirements for GBB participants.

The development of other forms of information provision, including the GSOO and industry-led initiatives outlined on page 105 of the Study, are an important part of the evolution of the Eastern Australian gas market and should continue, to the extent, as noted by the Study, they are supported and valued by market participants.

APPEA sees little, in any, role for governments in the development of these industry-led initiatives.

7.8 IS THERE ANY ROLE FOR NON-MARKET INTERVENTIONS?

The Study, in this section on pages 106-108, should put to rest any further calls for interventions such as protectionist domestic gas reservation policies, unnecessary national interest tests or similar policies. It correctly highlights the inefficient and unnecessary nature of such interventions.

7.8.1 EXAMPLES OF RESERVATION AND IS THERE ANY ROLE FOR NON-MARKET INTERVENTIONS?

APPEA welcomes the Study's key conclusion in this section, that

... the introduction of a reservation policy would also distort market signals which may increase the risk of under investment and defer the development of new gas supply, or may be ineffective if supply is simply unable to respond.

As APPEA and a range of policy and other analysts (and indeed, every Australian government⁴³ except Western Australia) have noted the introduction of market interventions such as a domestic gas reservation policy on Australia's east coast would come at significant cost to the nation's economic welfare.

⁴³ The November 2012 Energy White Paper explicitly ruled out support for intervention in gas markets to reserve supplies for the domestic market (see pandora.nla.gov.au/pan/137242/20130916-1123/www.ret.gov.au/energy/Documents/ewp/2012/Energy_%20White_Paper_2012.pdf, page 134). This section of the Study reinforces the findings of the 2012 Energy White Paper. For Queensland, see www.afr.com/p/business/companies/queensland_holds_out_gas_reservation_bH4F18XMadJ3Lk858OgdBP; for New South Wales, see [www.parliament.nsw.gov.au/prod/parlment/committee.nsf/0/318a94f2301a0b2fca2579f1001419e5/\\$FILE/121108%20CSG%20Govt%20Response.pdf](http://www.parliament.nsw.gov.au/prod/parlment/committee.nsf/0/318a94f2301a0b2fca2579f1001419e5/$FILE/121108%20CSG%20Govt%20Response.pdf) at page 12; for South Australia, see hansard.parliament.sa.gov.au/docloader/House%20of%20Assembly/2013_07_25/Daily/House%20of%20Assembly_C_Daily_DIST_2013_07_25_v8.pdf at page 6,667; and for Victoria, see www.energyandresources.vic.gov.au/_data/assets/pdf_file/0008/205469/Victorian-Gas-Market-Taskforce-Final-Report-October-2013.pdf at page 7.



For example, in its October report 2013⁴⁴, *The economic impacts of a domestic gas reservation*, Deloitte Access Economics found:

- The introduction of a domestic gas reservation policy on the east coast of Australia would come at a significant cost to the nation's economic welfare.
- The impact of a domestic gas reservation is to – in effect – place a simultaneous tax on domestic gas production and subsidy on domestic gas consumption. The result is that the economy forgoes export income in order to inefficiently subsidise domestic consumption. Like all taxes and subsidies, a domestic gas reservation policy distorts economic decisions and generates an unequivocal economic loss – one which compounds over time as future investment decisions are affected.
- Against a scenario where production, investment and export decisions are not impeded, the introduction of a domestic gas reservation on the east coast is projected to cost the Australian economy \$6 billion in forgone GDP at 2025. Any modest economic benefits to gas users are dwarfed by the losses emanating from foregone export earnings – losses not just in the gas sector but in related sectors like construction and trade; to households via reduced wages and employment opportunities; and to government via reduced tax receipts.
- Proponents of domestic gas reservation fail to point out the economic cost of such a policy. Analyses undertaken by domestic gas reservation proponents fundamentally fail to account for the policy's full economic impacts. When the flow-ons are analysed comprehensively – in an economy-wide context as per the DAE RGEM model – the economic losses are unequivocal.

In an advanced economy underpinned by competitive markets, such as Australia, one industry should not be required to subsidise a small number of activities in another industry.

As the DAE Report notes on page 13

The benefits of freer markets and freer trade have been accepted by successive Australian governments and indeed by all developing economies of the world. The steady removal of market distortions has delivered significant economic benefits to the nation. A domestic gas reservation would only serve to reverse those gains.

A copy of the DAE report can be found at [Attachment 2](#).

Laws that dictate where and how gas can be sold invariably deter the very investment needed to develop Australia's abundant gas reserves. This in turn raises the risk that domestic supply will be compromised by a domestic gas reservation rather than assured.

In a similar way, the introduction of a so-called national interest test to apply to gas export projects would impose further red tape and another barrier to the development of a natural gas industry delivering substantial economic benefits, in terms of investment, jobs and regional development across Australia. The irony is that many of those who have called for this extra layer of regulation

⁴⁴ Available at www.appea.com.au/wp-content/uploads/2013/10/DAE-Economic-impacts-of-gas-reservation-2.pdf.



have consistently supported policy announcements that removed the weight of red and green tape on their own members.

A national interest test proposal would add a significant regulatory burden to gas production, duplicate existing regulatory processes and do absolutely nothing to increase gas supply. As has been highlighted in the Study itself, gas projects currently face an extensive project approval process in Australia at both a state and national level. The current regime already considers all the relevant issues.

ITS Global considered national interest tests in its September 2013 report, *AiG Proposal to Reserve Australian Natural Gas for Domestic Use*. The report found a well-functioning market economy is the best insurance that market outcomes are in the public interest, are adequate for domestic consumers, and do not discriminate between domestic and foreign consumers. For the domestic supply of gas to be internationally competitive, Governments need to cut the regulatory and tax burdens on the sector, rather than add to them.

It also found that for the Australian community, the proposal would deliver costs but no benefits.

- It would impose transaction costs that would discourage investment and job creation. The most serious is the cost of investment delay — in terms of GDP foregone — which could be up to \$5.5 million per day.
- It would encourage 'rent seeking', particularly by gas users and environmental NGOs.
- The opaque nature of the process and the scope for delay and rent-seeking would worsen Australia's sovereign risk and discourage essential foreign investment in LNG processing.

The proposal would inhibit investment, job creation and export expansion in gas production, while encouraging inefficient local energy use.

Adoption of a national interest test would also put our international relationships at risk by:

- Selectively increasing the existing restrictions on foreign investment.
- Not complying with Australia's free trade agreements with the United States and New Zealand.
- Signalling an unwillingness to liberalise foreign investment bilaterally, including when negotiating FTAs.
- Most probably not complying with Australia's WTO obligations.

A copy of the ITS Global report can be found at [Attachment 3](#).

7.8.2 TRADE-OFFS

As the Study notes on page 107, interventions of this kind have a range of adverse consequences

*... the economic cost from introducing a domestic reservation policy is determined by netting-off the resulting gains for domestic consumers against the losses for both producers and government revenue, and efficiency losses as the gas market adjusts to the new conditions. The overall net economic impact is likely to see a **reduction in economic welfare** if Australia foregoes export earnings (and tax revenues) in favour of (presumably lower value) domestic production, and lower future exploration and gas development activity.*



*The desired market response to a tightening in supply and the associated higher gas price is an increase in gas exploration, development and production. **A reservation policy acts contrary to this goal by creating a perverse signal to the upstream sector, which diminishes incentives for bringing on new supply and potentially creates conditions for tightness in the gas market to persist.** [Emphasis added]*

In relation to proposed variations to the most draconian forms of intervention, the Study rightly concludes on page 108

*The primary difficulty with such variants is they are either ineffective (affect supply only in the long run and well after current shortages) or still present a **very negative signal to investors at a time which the reverse is required.** In the eastern market they are also complicated by cross jurisdictional effects, where benefits and costs of interventions would cross state borders, but reservation policy would be instituted within a particular jurisdiction. While reservation of future acreage might be the least distortionary, it remains **difficult to justify.***

An added complexity is while there remains ambiguity on willingness of governments to intervene in markets, this also may affect the investment environment. It is possible associated policy uncertainty may cause market participants to delay making commitments to gas contracts and investments until the uncertainty is resolved. [EMPHASIS ADDED]

The Government should, in its response to this Study, dismiss the possibility of introducing a domestic gas reservation policy and/or a national interest test. Focus should instead be placed on removing barriers to future gas supply.

As the Study concludes on page 108

The explicit dismissal of reservation policies by government would be consistent with avoiding potential market distortions and the consequent adverse outcomes associated with this type of intervention. Reservation policies that lower domestic gas prices risk discouraging both new supply from being brought to market, which may contribute to recurrent or persistent market tightness, and investment in the upstream sector. In the absence of evidence that there is a major market failure, increasing supply in response to market signals remains the preferred approach for dealing with tightness in the gas market.

A domestic reservation policy is not an obvious, first-preference policy tool to remedy a tightening in eastern market gas supply. It is unlikely to make any difference to the difficulties being experienced by some consumers during the current transition period. It is also likely to have negative implications for supply response and the market in general in future. Building confidence in, and oversight of, the market as described in this report is a more appropriate response to the challenge ...

7.9.1 IMPROVE GAS MARKET GOVERNANCE

APPEA agrees with the Study's conclusion on page 110. As SCER has developed the Australian Gas Market Development Plan which outlines how existing work is aimed at improving the functioning of the market and removing impediments to supply, SCER is also well placed to provide leadership, in consultation with stakeholders, in the consideration of the options discussed in the Study.



7.9.2 DEVELOP CLEAR ACCOUNTABILITY TIMELINES AND PROTOCOLS

APPEA agrees with the Study's conclusion on page 111 that it would be timely to revise and update the Australian Gas Market Development Plan and introduce a public milestone report on agreed reforms.

8. CONCLUSIONS AND NEXT STEPS

Australia's oil and gas industry is a major contributor to Australia's economic prosperity. The major challenge to the industry's continued growth is maintaining Australia's international competitiveness in the face of growing global competition. A high-cost local environment and the emergence of new LNG competitors in East Africa, North America and elsewhere will make it much harder to win market share and attract investment.

The industry and governments must do everything possible to ensure projects under construction commence production in a timely manner and that further investment is attracted into the oil and gas industry in Australia.

The Study shows the market is indeed working to supply natural gas for both domestic and export use.

It also highlights that the continuation of the market's capacity to deliver depends on industry's ability to continue to explore for and develop Australia's vast gas resources. It is not a lack of natural gas but onerous regulatory restrictions in some jurisdictions (notably New South Wales and Victoria) that are impeding gas supply. The Study usefully highlights the duplicative and multiple layers of red and green tape that projects must navigate to unlock the economic benefits from our nation's resources.

Australia needs more gas production, not more regulation. With that in mind, APPEA welcomes the Study's emphasis on existing gas supply impediments in New South Wales and Victoria. APPEA looks forward to working further with all governments to allow a more efficient and science-based regime to be developed and implemented.

The Study also puts to rest any further calls for interventions such as protectionist domestic gas reservation policies, unnecessary national interest tests or similar policies. It correctly highlights the inefficient, counter-productive and unnecessary nature of such interventions.