



# Gas Reservation Issues Paper

## CONTENTS

<b>KEY POINTS</b> .....	<b>2</b>
<b>INTRODUCTION</b> .....	<b>5</b>
<b>THE AUSTRALIAN UPSTREAM OIL AND GAS INDUSTRY</b> .....	<b>6</b>
<b>THE INDUSTRY HAS SUPPORTED ECONOMIC GROWTH DURING THE COVID-19 RECESSION AND CAN SUPPORT THE ROAD TO RECOVERY</b> .....	<b>9</b>
THE CHALLENGES FACING THE INDUSTRY AND PROSPECTS FOR A RETURN TO GROWTH .....	9
ECONOMIC DIVIDENDS FROM SECURING A NEW WAVE OF AUSTRALIAN OIL AND GAS DEVELOPMENT .....	9
APPEA BLUEPRINT – <i>POWERING AUSTRALIA'S RECOVERY</i> .....	11
<b>A SUMMARY OF THE ECONOMICS OF DOMESTIC GAS RESERVATION</b> .....	<b>12</b>
<b>PREVIOUS ANALYSIS OF DOMESTIC GAS RESERVATION SYSTEMS IN AUSTRALIA</b> .....	<b>12</b>
AN OVERVIEW OF REPORTS EXAMINING DOMESTIC GAS RESERVATION .....	13
OBSERVATIONS BY THE PRODUCTIVITY COMMISSION ON STUDIES THAT HAVE BEEN COMMISSIONED TO SUPPORT CALLS FOR DOMESTIC GAS RESERVATION .....	15
<b>AUSTRALIAN MANUFACTURING: DETERMINANTS OF PERFORMANCE AND APPROPRIATE POLICY RESPONSES – CHARTING A WAY FORWARD</b> .....	<b>16</b>
<b>COMMENTS ON KEY ISSUES RAISED AND QUESTIONS ASKED IN THE ISSUES PAPER</b> .....	<b>17</b>
1. HOW WOULD A PROSPECTIVE NATIONAL GAS RESERVATION SCHEME ADDRESS A POTENTIAL DOMESTIC GAS SHORTFALL AND IMPACT GAS MARKETS IN THE MEDIUM OR THE LONGER TERM? .....	18
2. HOW WOULD A PROSPECTIVE NATIONAL RESERVATION SCHEME AFFECT INVESTMENTS IN OIL AND GAS PROJECTS? .....	19
3. WHAT WOULD BE THE IMPACT OF A PROSPECTIVE NATIONAL RESERVATION SCHEME ON AUSTRALIA'S LNG TRADE? .....	20
4. WHAT WOULD BE THE QUANTIFIABLE BENEFITS OF A PROSPECTIVE NATIONAL RESERVATION SCHEME FOR DOMESTIC GAS USERS AND FOR POWER GENERATION? .....	20
5. ARE THERE GAS RESERVATION MODELS THAT HAVE WORKED IN OTHER JURISDICTIONS WHICH COULD WORK AT THE NATIONAL LEVEL IN AUSTRALIA OR ARE THERE EXAMPLES OF UNSUCCESSFUL POLICIES AUSTRALIA CAN LEARN FROM? .....	21
6. HOW WOULD A PROSPECTIVE NATIONAL GAS RESERVATION SCHEME INTERACT WITH STATE AND TERRITORY POLICIES AND REGULATIONS? .....	22
<b>CONCLUSIONS/NEXT STEPS</b> .....	<b>22</b>
<b>ATTACHMENT 1: AN OVERVIEW OF POLICY AND REGULATORY APPROACHES TO LNG EXPORTS AND THE DOMESTIC GAS MARKET IN CANADA AND THE UNITED STATES</b> .....	<b>24</b>



## KEY POINTS

### Introduction

- APPEA welcomes the opportunity to provide comment on the *Gas Reservation Issues Paper* (the Issues Paper). APPEA's submission addresses specific aspects of the Issues Paper, focussing on those areas that are particularly important for the upstream oil and gas industry.
- In doing so, much of APPEA's focus is on the threshold question of whether (or not) a prospective national domestic gas reservation scheme is required.

**In the absence of any clearly established need, APPEA recommends the Australian Government does not seek to impose a prospective national domestic gas reservation scheme.**

### The Australian upstream oil and gas industry

- 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. Our abundant natural gas resources in particular, place Australia in an enviable position to maintain long-term, cleaner energy security domestically and internationally. Maintaining and enhancing this contribution will be vital as Australia looks to its recovery from the COVID-19 recession.
- This means that the stakes are high in realising the industry's potential benefits. The decisions the Australian Government makes around a prospective national gas reservation system will play an important role in determining whether the industry can realise its potential and whether or not the Australian economy benefits from new upstream oil and gas investment opportunities.

### The industry has supported economic growth during the COVID-19 recession and can support the road to recovery

- Australia's oil and gas industry has helped shield the country from more damaging economic fallout from COVID-19 by delivering steady export income, supporting jobs and preserving energy security.
- However, even before the onset of the COVID-19 pandemic, oil prices had begun to fall sharply and this was exacerbated by the global pandemic. The shutdown of industry and businesses the world over and billions of people living in lockdown significantly reduced demand for oil and gas. Challenging market conditions remain. The task the industry, and Australia more broadly, now faces is how to restore confidence, encourage investment and return to growth.
- Our ability to secure the next wave of investment in oil and gas exploration and production has strong foundations but faces intense challenges. The investment landscape is riskier, with higher hurdle rates, and global competition for mobile capital is fierce. There is heightened risk that undue regulatory and tax imposts deter long-term investment.
- The economic dividends from securing a new wave of oil and gas developments are large. EY's new report, *Australia's oil and gas industry: kickstarting recovery from COVID-19*, finds that if we can secure the key projects, under a "high growth trajectory" national economic output increases by over \$350 billion with over 220,000 jobs created over the next 20 years.
- These results are important reminders that the upstream oil and gas industry is in and of itself a major source of economic growth and employment – its contribution to the Australian economy is far more widespread, and important, than a narrow view of the role it plays in supplying natural gas to a subset of Australian manufacturing.



- Australia's reputation as a reliable supplier of LNG is a vital component of the industry's competitiveness and has been a key factor in the industry's ability, across Australia, to establish stable long-term relationships with customers and to attract investment into the industry in a fiercely competitive global environment.
- Significant caution needs to be exercised when considering regulatory interventions that risk the attractiveness of Australia as a destination for upstream oil and gas industry investment and send worrying signals to both domestic and international investors and major trading partners. These include investors and trading partners with whom the Australian industry has spent a generation building relationships.
- With that in mind, in August, APPEA presented to government APPEA's investment recovery blueprint – *Powering Australia's Recovery*. The blueprint puts forward the policy actions that government can take to restore industry confidence and encourage new investment: improve fiscal settings; streamline regulation; support exploration and development; and promote open and competitive markets.

### **A summary of the economics of domestic gas reservation**

- A domestic gas reservation scheme acts as a simultaneous tax on the export of gas and subsidy to domestic gas users – both of which directly undermine the economy's efficiency.
- The result is an unequivocal economic loss, with the economy forgoing the export income only to inefficiently subsidise domestic consumption. The longer-term consequences see reduced investment leading to lower levels of capacity and production, which in turn raises the risk that domestic supply is in fact compromised, rather than assured and upward rather than downward pressure is placed on prices.
- Arguments in favour of a domestic reservation scheme are often based on inappropriate input-output economic modelling which is partial in nature and does not account for the opportunity cost of the inputs used in domestic production.

### **Previous analysis of domestic gas reservation systems in Australia**

- Proposals for domestic gas reservation (or similar) schemes have featured sporadically in the energy debate nationally and in various jurisdictions since at least 2006. During that time, various analyses of the fundamental economics, the economic impacts and efficacy of these proposals have been the subject of extensive analysis. The consistent findings of this series of reports is that reservation schemes are likely to impose costs on the Australian economy and lead to distortions in the domestic gas market, endangering investment and future gas supply.

### **Australian manufacturing: determinants of performance and appropriate policy responses – charting a way forward**

- Much of the focus on domestic reservation appears to be motivated by concerns about the competitiveness of Australian manufacturing. While such concerns are understandable and genuinely held, a prospective national domestic gas reservation policy is not the way to respond to these concerns.
- Analysis by The Centre for International Economics in a new report, *Australia's manufacturing industry: determinants of performance*, finds a variety of factors determine the fortunes of the manufacturing industry, all of which interact in various ways. It also finds that while gas is both an energy cost and an intermediate input cost (for some manufacturing industries), for both of these it makes a very small contribution to overall cost changes.



- Alternative approaches to assistance for the Australian manufacturing industry may be more appropriate. An example is the Australian Government's newly established *Modern Manufacturing Strategy*. Combined with the Government's broader reform approach announced on 15 September 2020 and APPEA's blueprint for the oil and gas industry, the Strategy represent a more focussed and appropriate policy framework to examine and address some of the issues that appear to motivate calls for interventions such as a prospective national domestic gas reservation scheme.

### Comments on key issues raised and questions asked in the Issues Paper

1. *How would a prospective national gas reservation scheme address a potential domestic gas shortfall and impact gas markets in the medium or the longer term?* While in the short-term, a reservation scheme may see more gas flow into the domestic market, the longer-term consequences see reduced investment incentives leading to lower levels of capacity and production, which in turn raises the risk that domestic supply is in fact compromised by a reservation scheme, rather than assured.
2. *How would a prospective national reservation scheme affect investments in oil and gas projects?* Such a scheme is more likely to add to the challenges, rather than grasping the opportunities.
3. *What would be the impact of a prospective national reservation scheme on Australia's LNG trade?* Significant caution needs to be exercised when considering regulatory interventions that risk the attractiveness of Australia as an investment destination for upstream oil and gas industry investment and send worrying signals to both domestic and international investors and major trading partners.
4. *What would be the quantifiable benefits of a prospective national reservation scheme for domestic gas users and for power generation?* The quantifiable impacts of a prospective national scheme are better considered at a whole-of-economy level and through a more comprehensive CGE modelling exercise. Gas supply for power generation purposes is already underpinned by the March 2017 Gas Supply Guarantee.
5. *Are there gas reservation models that have worked in other jurisdictions which could work at the national level in Australia or are there examples of unsuccessful policies Australia can learn from?* EnergyQuest's new report, *Domestic Gas Market Interventions: International Experience – 2020 Update*, finds the international experience provides useful indicators for Australian policy-makers. International experience is that government interventions to reduce domestic wholesale gas prices are often unsustainable, and have numerous negative side-effects in terms of economic, energy and environmental policy. Peru is the only country identified that exports gas and has domestic gas reservation. Investment in exploration has collapsed in recent years and raises doubts about the country's ability to replace reserves in the medium- to long-term.
6. *How would a prospective national gas reservation scheme interact with state and territory policies and regulations?* Significant work would be required to ensure a national scheme could interact with the various, and diverse, State and Territory arrangements. It is unclear that a workable system would be possible.

### Conclusions/next steps

APPEA recommends an approach that focusses on the development and implementation, following consultation with industry, of the extensive list of reforms and policy approaches that was announced by the Prime Minister on 15 September 2020 that seeking to introduce a new, and potentially confusing and counterproductive approach, through a prospective national domestic gas reservation scheme.



## INTRODUCTION

The Australian Petroleum Production & Exploration Association (APPEA) is the peak national body representing Australia's oil and gas exploration and production industry. It has more than 60 full member companies. These are oil and gas explorers and producers active in Australia. APPEA members account for an estimated 95 per cent of the nation's petroleum production. APPEA also represents about 140 associate member companies that provide a wide range of goods and services to the upstream oil and gas industry.

APPEA works with Australian governments to help promote the development of the nation's oil and gas resources in a manner that maximises the return to the Australian community and industry. APPEA aims to secure regulatory and commercial conditions that enable member companies to operate safely, sustainably, and profitably. The Association also seeks to increase community and government understanding of the upstream petroleum industry by publishing information about the sector's activities and economic importance to the nation. APPEA also hosts conferences and other events each year to exchange ideas and contribute to the development of the industry's policy positions. Further information about APPEA can be found on our website, at [www.appea.com.au](http://www.appea.com.au).

APPEA welcomes the opportunity to provide comment on the *Gas Reservation Issues Paper* (the Issues Paper) released by the Department on 27 October 2020. In addition to this APPEA submission, a number of APPEA members have made individual submissions on the Discussion Paper. This response should be read in conjunction with submissions from individual APPEA members.

APPEA's submission addresses specific aspects of the Issues Paper, focussing on those areas that are particularly important for the upstream oil and gas industry. In doing so, much of APPEA's focus is on the threshold question of whether (or not) a prospective national domestic gas reservation scheme is required.

**APPEA recommends the Australian Government does not seek to impose a prospective national domestic gas reservation scheme.**

This submission puts to one side a number of issues that would need to be considered in moving to establish a prospective national scheme, including:

- The Constitutional validity of a national approach.
- The consistency of a scheme with Australia's free trade agreements (FTAs).
- Possible response(s) of Australia's major LNG trade and investment partners.

Should the Australian Government determine to proceed with a prospective national scheme, these issues would become critical.

The submission also puts to one side the many administrative and implementation issues that would arise from any move to establish a national scheme. For example:

- How "prospective" is defined (in the case of LNG projects, a large upfront investment has been made in the LNG plant and export pipeline, with an expectation that the initial and backfill developments will be processed through these facilities in order to generate a return on investment) and how to ensure any scheme applies only to new acreage.
- The ability to sell any "reservation gas" on commercial terms.



- How to ensure sufficient acreage is released to ensure that LNG projects can obtain adequate supply required to operate their plants and fulfill contractual obligations.
- How to treat any gas allocated to the domestic market and offered on market competitive terms but not purchased.
- Is a swaps and offsets policy development as part of any scheme and, as is considered further below, if it is possible for a prospective national scheme to operate with existing schemes.

## THE AUSTRALIAN UPSTREAM OIL AND GAS INDUSTRY

It is important to place our views on the issues raised by the Issues Paper 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.

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 possible for Australia to meet the world's growing energy needs over the coming decades while incorporating a strategy to curb emissions and address the risks posed by climate change.

Australia's oil and gas industry is a key and ongoing contributor to the Australian economy. The industry:

- Invested an estimated \$473 billion in the Australian economy, including around \$305 billion invested in Australian LNG projects, since 2010<sup>1</sup>.
  - This investment will deliver returns for Australia for decades to come, through increased gas supply for Australian customers, export revenue, jobs, royalties and taxes.
- Supports 80,000 jobs directly and indirectly in Australia and hundreds of thousands more in the manufacturing sector rely upon natural gas.
- Paid more than \$5.3 billion in wages to direct employees in 2016-17. The industry's average wages are more than double the national average.
- Supports a vast supply chain of businesses in manufacturing, services and construction.
  - This is in addition to the hundreds of thousands of jobs in electricity generation, manufacturing, transport and other industries which rely on our outputs.
  - Businesses ranging from national firms to local cafés all share in the economic benefits generated by the oil and gas industry<sup>2</sup>.
- Contributed around 4 per cent of Gross Domestic Production (GDP) in 2019-20, an increase from 3 per cent in 2018-19.

---

<sup>1</sup> See Wood Mackenzie (2020), *Australian Oil and Gas Industry Outlook Report*, page 4 (available at [appea.com.au/wp-content/uploads/2020/06/Australia-Oil-and-Gas-Industry-Outlook-Report.pdf](https://www.appea.com.au/wp-content/uploads/2020/06/Australia-Oil-and-Gas-Industry-Outlook-Report.pdf)).

<sup>2</sup> As an example, work for APPEA by Lawrence Consulting, released in 2019 found the natural gas industry contributed around \$55 billion to Queensland's economy over a seven year period. Almost \$5 billion was spent on wages state-wide during the period with the industry employing around 4,600 full-time employees, according to the *Economic Impact of Queensland's Petroleum and Gas Sector 2011-18* report. The industry spent around \$50 billion on goods and services from local community contributions and payments to local government as well as royalties, stamp duty and tax, the report found. See [www.appea.com.au/all\\_news/natural-gas-powering-queenslands-economy](https://www.appea.com.au/all_news/natural-gas-powering-queenslands-economy) for more information.



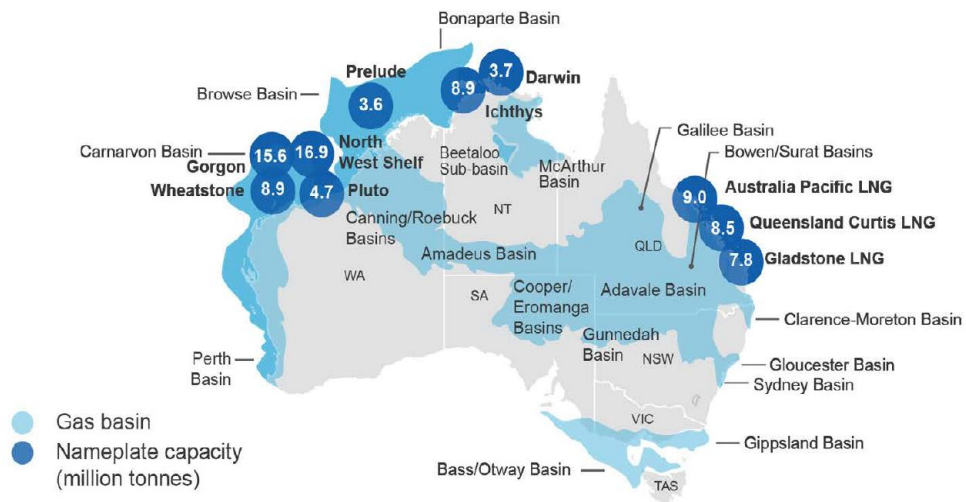


Maintaining this contribution will be vital as Australia looks to its recovery from the COVID-19 recession.

Liquefied natural gas (LNG) is now Australia's second largest export commodity after iron ore, with export revenue of around \$51 billion in 2018-19 and \$48 billion in 2019-20, and has more than doubled over the last two years (from \$22.3 billion in 2016-17).

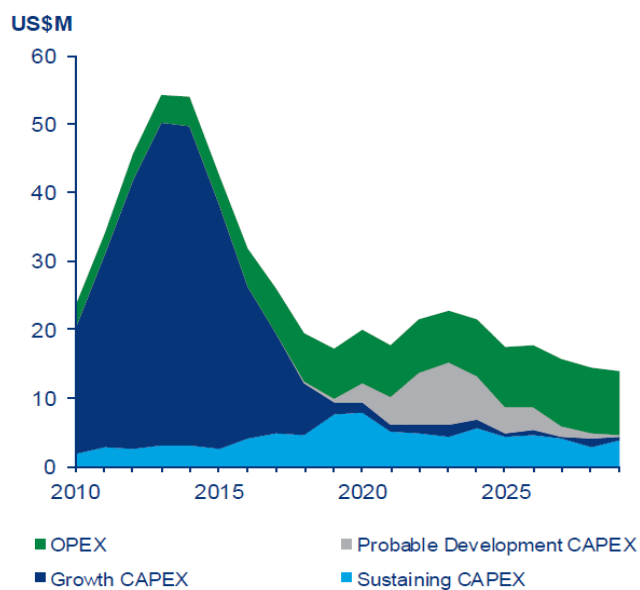
While export revenue is expected to decline on the back of recent falls in the price of LNG, volumes have been maintained and continue to supply export revenue for Australia. As prices recover, this contribution will also recover.

**Figure 1. Australia's LNG projects and gas basins**



Source: Department of Industry, Science, Resources and Energy (2020).

**Figure 2. Oil and gas investment in the Australian economy since 2010**



Source: Wood Mackenzie (2020).

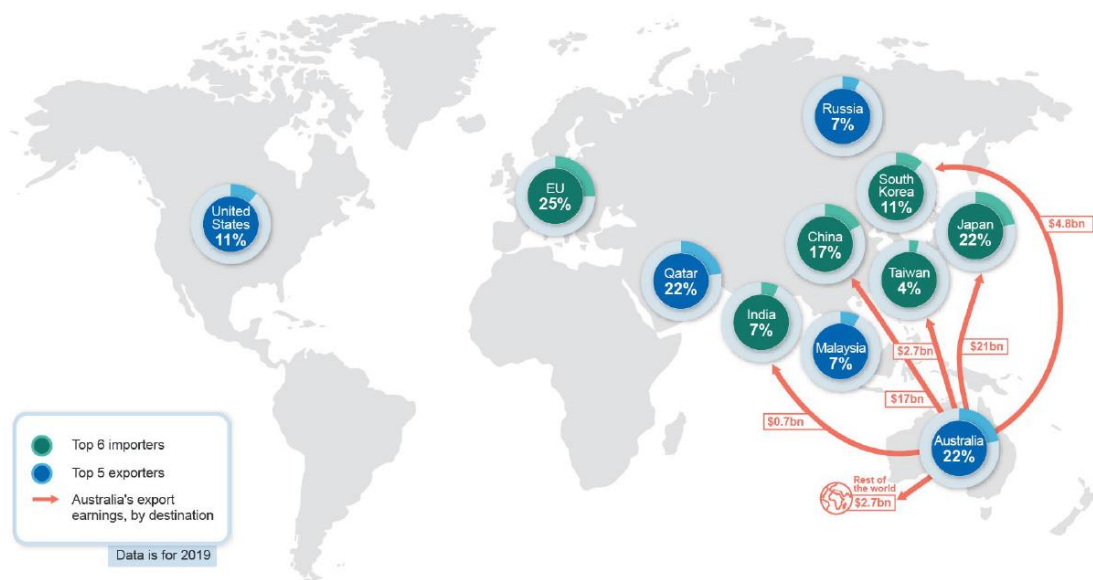


**Figure 3. Australia's LNG export industry, 2019**



Source: Department of Industry, Science, Resources and Energy (2020).

**Figure 4. LNG trade flows, 2019**



Source: Department of Industry, Science, Resources and Energy (2020).

In 2019, Australian LNG was exported to ten different destinations (Japan, China, South Korea, Malaysia, Singapore, Taiwan, Thailand, United Arab Emirates and Other Asia-Pacific). Many of these nations are also significant investors in Australian LNG projects.

The continued expansion of Australia's oil and gas industry provides incredible opportunities to all Australians. The economic advancement in our region is overwhelmingly positive for the nation, playing to our comparative advantages as a secure and reliable energy exporter.

Going after a vigorous reform agenda, ensuring open and competitive markets and a tax system that helps us maintain our international competitiveness can see industry and governments work together to support the positive role the Australian oil and gas industry can play in contributing to Australia's economic recovery following the COVID-19 global pandemic.





This means that the stakes are high in realising the industry's potential benefits. The decisions the Australian Government makes around a prospective national gas reservation system will play an important role in determining whether the industry can realise its potential and whether or not the Australian economy benefits from new upstream oil and gas investment opportunities.

## THE INDUSTRY HAS SUPPORTED ECONOMIC GROWTH DURING THE COVID-19 RECESSION AND CAN SUPPORT THE ROAD TO RECOVERY

Australia's oil and gas industry has helped shield the country from more damaging economic fallout from COVID-19 by delivering steady export income, supporting jobs and preserving energy security.

Our ability to secure the next wave of investment in oil and gas exploration and production has strong foundations but faces intense challenges. The investment landscape is riskier, with higher hurdle rates, and global competition for mobile capital is fierce. Many producers are now focusing on smaller, incremental projects.

This means there is an urgency to address Australia's competitive position through effective and nationally cohesive policy settings. There is heightened risk that undue regulatory and tax imposts deter long-term investment.

## THE CHALLENGES FACING THE INDUSTRY AND PROSPECTS FOR A RETURN TO GROWTH

Even before the onset of the COVID-19 pandemic, oil prices had begun to fall sharply and this was exacerbated by the global pandemic. The shutdown of industry and businesses the world over and billions of people living in lockdown significantly reduced demand for oil and gas.

Oil prices fell more than 75 per cent in the first four months of 2020. Prices now are still well below pre-pandemic levels. With most of the world still grappling with the virus, capital markets remain depressed and volatile. Investor confidence is low and the capital needed to kickstart new oil and gas projects is in short supply.

The result is a 'triple whammy', impacting the industry's appetite for the new investments that are needed to support Australia's COVID recovery.

Challenging market conditions remain. The task the industry, and Australia more broadly, now faces is how to restore confidence, encourage investment and return to growth.

## ECONOMIC DIVIDENDS FROM SECURING A NEW WAVE OF AUSTRALIAN OIL AND GAS DEVELOPMENT

The economic dividends from securing a new wave of oil and gas developments are large. New economic analysis prepared by EY as part of their report, *Australia's oil and gas industry: kickstarting recovery from COVID-19*, finds that if we can secure the key projects which are in the



industry pipeline, then under their “high growth trajectory”<sup>3</sup> scenario national economic output is estimated to increase by over \$350 billion with over 220,000 jobs created over the next two decades.

These results are important reminders that the upstream oil and gas industry can be in and of itself a major source of economic growth and employment – its contribution to the Australian economy is far more widespread, and important, than a narrow view of the role it plays in supplying natural gas to a subset of Australian manufacturing.

This means that as the industry grapples with challenging market conditions and fierce competition for scarce investment capital, regulations which suppress the industry’s potential to develop Australia’s resources can impose heavy economic costs. The economic efficiency losses of regulations which prevent the industry’s investment pipeline from being realised could far exceed those from Australia’s worst performing taxes.

In fact, for every billion dollars of industry activity lost through regulation there could have an overall efficiency loss of up to \$1.79 billion to the economy. Such costs should be recognised alongside the potential social and environmental risks of projects which many regulations are seeking to manage or avoid.

The gains from reinvigorated activity in the oil and gas industry have the potential to spread throughout the economy, providing a kickstart for Australia’s industrial base by lowering energy prices, boosting demand for services, and generating wealth for all Australians.

Australia’s reputation as a reliable supplier of LNG is a vital component of the industry’s competitiveness and has been a key factor in the industry’s ability, across Australia, to establish stable long-term relationships with customers and to attract investment into the industry in a fiercely competitive global environment.

Decisions around a prospective domestic gas reservation scheme needs to be considered within this context.

Significant caution needs to be exercised when considering regulatory interventions that risk the attractiveness of Australia as an investment destination for upstream oil and gas industry investment and which send worrying signals to both domestic and international investors and major trading partners. These include investors and trading partners with whom the Australian industry has spent a generation building relationships. These trading partners are also, in many cases, significant investors in Australian LNG projects.

---

<sup>3</sup> See EY (2020), *Australia’s oil and gas industry: kickstarting recovery from COVID-19*, page 7 (available at [Oil and gas industry continuing to support Australia’s economic recovery from COVID-19 | APPEA](#) and [EY-Report-Australias-oil-and-gas-industry-Kickstarting-recovery-from-COVID-19.pdf \(appea.com.au\)](#)). The report’s “high growth trajectory” scenario encompasses investment and production for oil and gas projects that are under development or have a high level of investor commitment and capital expenditure to sustain existing facilities and fields. In addition, the scenario includes oil and gas investments and associated production yields for projects that are considered prospective, but which have higher development uncertainty and have not yet secured firm commercial commitments. It highlights a visible frontier of resource development and industry expansion that could be realised under favourable policy and market conditions. Under this scenario, average production is significantly higher than the 20-year historical average – with a 64 per cent increase.



A national scheme, sitting over the top of established approaches, risks making new investments even more challenging and creating the very problem a domestic gas reservation system purports to address.

The real challenge – and the real opportunity – is how to return the industry to growth so that it can be the enabler for Australia's broader economic recovery.

#### APPEA BLUEPRINT – POWERING AUSTRALIA'S RECOVERY

With that in mind, in August, APPEA presented to government APPEA's investment recovery blueprint – *Powering Australia's Recovery*<sup>4</sup>.

The blueprint puts forward the policy actions that government can take to restore industry confidence and encourage new investment.

- Improve fiscal settings, including investment allowances: some of the actions are relatively simple changes.
  - Following the recent, and welcome, expansion to the scope of the full expensing measure to allow more businesses to access the scheme and amendments to provide further flexibility by extending the temporary full expensing measure, outlined in the 2020-21 Federal Budget, to include large businesses with a track record of substantial investment in Australia, the Australian Government could immediately encourage more projects by extending the sunset date on the measure until 30 June 2025 for contractual commitments and final investment decisions (FID) which occur by 31 December 2021.
  - Reducing depreciation periods and making employee wages on large projects deductible are also relatively simple and effective measures to boost long-term investment.
- Streamline regulation: streamlining environmental regulation is one of the most important actions government can take to encourage investment. The overlap of environmental requirements between states and the Commonwealth and duplication of processes increases costs and delays while doing little to help protect the environment.
  - The Productivity Commission has estimated that a one-year delay to a major offshore LNG project can cost in the order of \$500 million to \$2 billion in net revenues lost. For a smaller project, the same delay would cost around \$26 million to \$59 million<sup>5</sup>.
  - The independent review of the *Environmental Protection and Biodiversity Conservation Act 1999* (the EPBC Act)<sup>6</sup> is an opportunity to reduce uncertainty and duplication while ensuring the environmental outcomes are protected.
  - In a similar way, the Productivity Commission's *Resource Sector Regulation* inquiry<sup>7</sup> provides an important opportunity to improve the regulatory arrangements facing the industry without lowering standards.

<sup>4</sup> See [www.appea.com.au/wp-content/uploads/2020/09/APPEA-Powering-Australias-Recovery.pdf](http://www.appea.com.au/wp-content/uploads/2020/09/APPEA-Powering-Australias-Recovery.pdf) for more information.

<sup>5</sup> Productivity Commission (2013), *Major Project Development Assessment Processes*, Research report (available at [www.pc.gov.au/inquiries/completed/major-projects/report](http://www.pc.gov.au/inquiries/completed/major-projects/report)).

<sup>6</sup> See [epbcactreview.environment.gov.au](http://epbcactreview.environment.gov.au) for more information and [epbcactreview.environment.gov.au/sites/default/files/2020-05/ANON-QJCP-UGHK-W%20-%20APPEA.pdf](http://epbcactreview.environment.gov.au/sites/default/files/2020-05/ANON-QJCP-UGHK-W%20-%20APPEA.pdf) for a copy of the APPEA submission to the review.

<sup>7</sup> See [www.pc.gov.au/inquiries/current/resources#report](http://www.pc.gov.au/inquiries/current/resources#report) for more information. See also [www.pc.gov.au/data/assets/pdf\\_file/0007/247795/sub044-resources.pdf](http://www.pc.gov.au/data/assets/pdf_file/0007/247795/sub044-resources.pdf) and [www.pc.gov.au/data/assets/pdf\\_file/0006/256407/subdr091-resources.pdf](http://www.pc.gov.au/data/assets/pdf_file/0006/256407/subdr091-resources.pdf) for copies of the APPEA submissions to the inquiry.



- **Support exploration and development:** improving the investment landscape by extending the Junior Minerals Exploration Incentive to allow junior oil and gas explorers to attract scarce and mobile capital.
- **Promote open and competitive markets (not intervention):** consistent with a central theme of this submission, sensible reforms that help the market to operate efficiently encourage investment. On the flipside, when governments intervene in ways that impede market efficiency, they impact investor confidence and discourage new projects and entrants. As part of these actions, APPEA has recommended:
  - The Australian Domestic Gas Security Mechanism (ADGSM) remains unchanged until it ends on 1 January 2023.
  - The Australian Government does not seek to impose a national domestic gas reservation scheme (the key recommendation of this submission).
  - The Australian Government works with jurisdictions to encourage the lifting of bans and moratoriums and the approval of gas projects.

## A SUMMARY OF THE ECONOMICS OF DOMESTIC GAS RESERVATION

The economic theory and principles governing the impact of a reservation system are well established<sup>8</sup>. A domestic gas reservation scheme acts as a simultaneous tax on the export of gas and subsidy to domestic gas users – both of which directly undermine the economy's efficiency.

The result is an unequivocal economic loss, with the economy forgoing the export income only to inefficiently subsidise domestic consumption. The longer-term consequences see reduced investment incentives leading to lower levels of capacity and production, which in turn raises the risk that domestic supply is in fact compromised by a reservation scheme, rather than assured. At the same time, artificially depressed prices fuel inefficient investment in downstream productive capacity, adding to the inefficiency that the policy perpetuates.

As is considered further below, arguments in favour of a domestic reservation scheme are based on inappropriate input-output (I-O) economic modelling which is partial in nature and does not account for the opportunity cost of the inputs used in domestic production. The framework which does appropriately capture the impacts of the policy is a computable general equilibrium (CGE) model.

## PREVIOUS ANALYSIS OF DOMESTIC GAS RESERVATION SYSTEMS IN AUSTRALIA

Proposals for domestic gas reservation (or similar) schemes have featured sporadically in the energy debate nationally and in various jurisdictions since at least 2006. During that time, various analyses of the fundamental economics, the economic impacts and efficacy of these proposals have been the subject of extensive analysis.

---

<sup>8</sup> A more detailed and technical analysis of the fundamental economics of a domestic gas reservation scheme is contained in Section 3 of the Deloitte Access Economics report, *The economic impacts of a domestic gas reservation* (available at [www.appea.com.au/wp-content/uploads/2013/10/DAE-Economic-impacts-of-gas-reservation-2.pdf](http://www.appea.com.au/wp-content/uploads/2013/10/DAE-Economic-impacts-of-gas-reservation-2.pdf)).



## AN OVERVIEW OF REPORTS EXAMINING DOMESTIC GAS RESERVATION

The following provides an overview of some of the more notable reports that have been released in recent years:

- The Australian Government's 2015 *Energy White Paper*<sup>9</sup>, which found:

*Reservation would have negative consequences for the economy. Requiring a proportion of gas production to be reserved for the domestic market would act as a tax on the production of LNG. This would reduce profits from gas production, leading to fewer economic benefits that would not be offset by gains in other sectors of the economy. Less profitable gas production would attract less investment, resulting in reduced gas supply in the longer-term.*

*Gas reservation is effectively a subsidy to domestic gas users. Artificially low domestic prices do not encourage gas users to use gas more efficiently or encourage innovation in the use of alternative fuels and processes. Ongoing investment in infrastructure that may not be required if users found alternatives to gas or used gas more efficiently is not efficient investment.*

- The Department's own *Gas Market Report, November 2014*<sup>10</sup> article, "A note on the economics of domestic gas reservation policy", which found:

*The need for a gas reservation policy is based on the premise that a market failure results from the domestic gas market linking to the export market, insofar as it introduces a distortion to the domestic market that creates an inefficient allocation of resources. Simply put, without a reservation policy the domestic market will not supply sufficient gas at a price that will allow the market to behave efficiently.*

*As a consequence, a reservation policy is seen as a mechanism to avoid a shortfall in the supply of gas and/or lower the price of gas to domestic users. The objective is to remove the perceived inefficiency by making available cheaper gas than otherwise to users, and thereby benefiting the economy more than if the gas was exported.*

*This view is not supported by theory. There are two general economic effects arising from the implementation of a domestic gas reservation policy:*

- *A reduction in economic welfare due to reductions in the economic benefits obtained by gas users or producers that are not offset by gains in other sectors of the economy.*
- *A transfer of income from gas producers to gas consumers. The net benefit from which is dependent on the particular winners and losers from the policy, and the extent that their gains and losses are ultimately accounted for in Australia.*

---

<sup>9</sup> See [apo.org.au/sites/default/files/resource-files/2015-04/apo-nid54017.pdf](http://apo.org.au/sites/default/files/resource-files/2015-04/apo-nid54017.pdf) for further information.

<sup>10</sup> See [web.archive.org/awa/20161017164913mp/http://www.industry.gov.au/Office-of-the-Chief-Economist/Publications/Documents/gas-market/gasmarketreport-201411.pdf](http://web.archive.org/awa/20161017164913mp/http://www.industry.gov.au/Office-of-the-Chief-Economist/Publications/Documents/gas-market/gasmarketreport-201411.pdf) for more information. This article was itself a synthesis of a range of reports prepared in the period 2008-2014.



- The Productivity Commission's March 2015 research paper, *Examining Barriers to More Efficient Gas Markets*<sup>11</sup>, found:

*Policies that seek to counteract the pressures from structural adjustment arising from the opening of the export market, such as domestic gas reservation, could distort important signals for adjustment and are unlikely to be efficient or effective in the long run.*

*Governments should be mindful that policies that interfere with market signals could undermine investment incentives, including incentives to bring on new sources of gas supply.*

The Commission's east coast gas market model was used to examine the economic impacts of a scenario where any fields not producing gas in the first model year are required to supply a specified proportion of their gas production to domestic users as they begin production (that is, modelled fields that are already producing gas are not subject to reservation). The Commission's modelling found that over a 20-year period, economic welfare was reduced by about \$24 billion.

As the Issues Paper notes on page 5, the Commission repeated this finding this year, in its March 2020 *Resources Sector Regulation Draft Report*<sup>12</sup>, which found:

*Domestic gas reservation schemes can reduce returns to investors and discourage investment in gas exploration and extraction, leading to higher prices in the longer run and imposing net costs on the community.*

- A March 2019 article in *The Economic Record*, "Western Australia's Domestic Gas Reservation Policy: Modelling the Economic Impact with a Computable General Equilibrium Approach"<sup>13</sup>, by Kelly Neill, Professor Peter Hartley, Professor Rodney Tyers and Professor Philip Adams, which found

*The gas reservation policy of Western Australia (WA) diverts 15 per cent of liquefied natural gas exports to the local market, suppressing domestic gas prices. To examine the policy's effects, this paper employs a detailed model of the WA gas market that incorporates project-by-project supply, the very large fixed costs typical of gas supply projects, foreign ownership on both sides of the market and oligopolistic pricing power. This model is interlinked with the established Centre of Policy Studies' Victoria University Regional Model of the Australian state and national economies and shows that the policy, as it has been applied to the Gorgon and Wheatstone projects, imposes an overall net loss to the nation of around \$600 million each year. The net loss to Australian households is estimated to be \$300 million. Moreover, no net long-run advantage is seen to be conferred on WA's workers or consuming households.*

- The Australian Competition and Consumer Commission (ACCC) examined reservation schemes during its 2015-16 inquiry into the east coast gas market, finding it its April 2016 *Final Report*<sup>14</sup>:

---

<sup>11</sup> See [www.pc.gov.au/research/completed/gas-markets](http://www.pc.gov.au/research/completed/gas-markets) for more information.

<sup>12</sup> See [www.pc.gov.au/inquiries/current/resources/draft](http://www.pc.gov.au/inquiries/current/resources/draft) for more information.

<sup>13</sup> See [onlinelibrary.wiley.com/doi/abs/10.1111/1475-4932.12459](https://onlinelibrary.wiley.com/doi/abs/10.1111/1475-4932.12459) for more information.

<sup>14</sup> See [www.accc.gov.au/publications/inquiry-into-the-east-coast-gas-market](http://www.accc.gov.au/publications/inquiry-into-the-east-coast-gas-market) for more information.





*Gas reservation policies should not be introduced*

*Gas reservation policies seek to shield domestic users from the effects of linking to export markets. They include policies to require a percentage share of gas reserves or production to be placed in the domestic market, or export controls which require a licence for exporting gas subject to certain conditions, such as a national interest test, which could include considerations of the impact on domestic supply.*

*In the short term, such policies may reduce prices for domestic users as additional gas is forced onto the domestic market above efficient market demand. These artificially reduced prices weaken the economic incentives for further gas exploration and appraisal. In addition, new gas projects which are scaled to the domestic market may be forced out of the market due to poor economic returns. Over time, reservation policies would reduce the likelihood of new sources of gas being developed, to the detriment of the level and diversity of supply for domestic gas users.*

*In a market that is facing supply issues arising from LNG, moratoria, and a low oil price, further impediments to gas supply development would be detrimental and so should not be introduced.*

- The Deloitte Access Economics October 2013 report, *The economic impacts of a domestic gas reservation*<sup>15</sup>, found 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, including a projected cost of \$6 billion in forgone GDP by 2025.

The consistent findings of this series of reports is that reservation schemes are likely to impose net costs on the Australian economy and lead to distortions in the domestic gas market, endangering investment and future gas supply.

OBSERVATIONS BY THE PRODUCTIVITY COMMISSION ON STUDIES THAT HAVE BEEN COMMISSIONED TO SUPPORT CALLS FOR DOMESTIC GAS RESERVATION

Importantly, the Productivity Commission, as part of its *Examining Barriers to More Efficient Gas Markets* research report, analysed a number of studies that have been commissioned to support calls for domestic gas reservation. This analysis by the Commission found:

- These studies have mainly relied on 'input-output multipliers' to estimate the effects of the expansion of the LNG industry. However, multiplier analysis and associated I-O modelling tends to overestimate the benefits of domestic gas reservation. This is because the assumptions underpinning multiplier analysis do not account for a number of important economic effects.
  - Labour, land and capital resources released by a decline in gas intensive domestic industries would be reallocated to other industries over time. Multiplier analysis underestimates the amount of production in the absence of domestic gas reservation by not accounting for increased production in other industries from a reallocation of resources.

---

<sup>15</sup> See [www.appea.com.au/all\\_news/domestic-gas-reservation-a-significant-cost-to-the-nations-economy](http://www.appea.com.au/all_news/domestic-gas-reservation-a-significant-cost-to-the-nations-economy) and [www.appea.com.au/wp-content/uploads/2013/10/DAE-Economic-impacts-of-gas-reservation-2.pdf](http://www.appea.com.au/wp-content/uploads/2013/10/DAE-Economic-impacts-of-gas-reservation-2.pdf) for more information.



- Higher gas prices would encourage greater production and investment in gas exploration and development. Multiplier analysis underestimates the amount of production in the absence of domestic gas reservation by not accounting for increased gas production.
- Higher gas prices would prompt some gas intensive users to substitute to other energy inputs or adopt more energy efficient production methods, and some users of output produced by gas intensive industries would substitute to other supply sources. Multiplier analysis overestimates the decline in production in the above industries in the absence of domestic gas reservation by not accounting for these effects.
- In the short-term, reduced output in gas intensive industries would free up inputs such as labour and land, putting downward pressure on the prices of those inputs. Over the longer-term, lower input prices would help to facilitate the expansion of other industries. Multiplier analysis underestimates the amount of production in the absence of domestic gas reservation by not accounting for increased production in other industries due to decreased input prices.

The Commission concluded:

*Some gas market stakeholders have commissioned studies which showed that domestic gas reservation would deliver a net benefit to the Australian community. However, those studies are based on 'multiplier' methodology that assumes that the economy will not adjust to the contraction of a sector and that resources will simply become redundant and will not find alternative uses in other sectors. This approach tends to significantly overestimate the benefits of domestic gas reservation and these studies do not, therefore, provide strong evidence for informing the policy debate.*

## AUSTRALIAN MANUFACTURING: DETERMINANTS OF PERFORMANCE AND APPROPRIATE POLICY RESPONSES – CHARTING A WAY FORWARD

Much of the focus on domestic reservation appears to be motivated by concerns about the competitiveness of Australian manufacturing. While such concerns are understandable and genuinely held, a prospective national domestic gas reservation policy is not the way to respond to these concerns.

Analysis by The Centre for International Economics in a new report, *Australia's manufacturing industry: determinants of performance*<sup>16</sup>, finds:

- The entire Australian manufacturing industry accounts for around 6 per cent of national GDP, a share that has been steadily declining for many years.
- A variety of factors determine the fortunes of the manufacturing industry, all of which interact in various ways.
- While the output of manufacturing has been relatively constant for a number of years, the rapid growth of other sectors – particularly services – means that its share has inevitably declined.

---

<sup>16</sup> See Centre for International Economics (2020), *Australia's manufacturing industry: determinants of performance* (available at [www.appea.com.au/wp-content/uploads/2020/11/CIE-Australian-manufacturing-industry.pdf](http://www.appea.com.au/wp-content/uploads/2020/11/CIE-Australian-manufacturing-industry.pdf)).



- Australian manufacturing is on the whole an import competing activity which means because it must compete with a variety of other producing nations, its fortunes are closely linked with global developments as well as with cost developments in the domestic economy.
- Intermediate input costs and wages are the main costs of most manufacturing industries, with wages being a key determinant of net export performance.
- While gas is both an energy cost and an intermediate input cost (for some parts of the broader manufacturing industry), for both of these it makes a very small contribution to overall cost changes.
- In recent history, a large appreciation of the Australian exchange rate, along with increasing unit labour costs led to major competitive pressures for the Australian industry. In particular, these unit labour cost increases were not experienced in most other manufacturing nations.
- In addition, the productivity performance of Australian manufacturing has not been sufficient to offset these disadvantages, and in a number of cases has lagged well behind other countries.

This work suggests that alternative approaches to assistance for the Australian manufacturing industry may be more appropriate.

An example is the Australian Government's newly established *Modern Manufacturing Strategy*<sup>17</sup>. Through the Strategy, a whole of government, whole of sector approach that examines opportunities for Australian manufacturing scale-up, become more competitive and resilient, provides an opportunity to examine and address some of the determinants of performance noted above.

Combined with the Government's broader reform approach announced on 15 September 2020 (aside from a prospective national domestic gas reservation scheme) and APPEA's blueprint for the oil and gas industry, the Strategy, which includes lowering energy costs as one of its elements, represents a more focussed and appropriate policy framework to examine and address some of the issues that appear to motivate calls for interventions such as a prospective national domestic gas reservation scheme.

## COMMENTS ON KEY ISSUES RAISED AND QUESTIONS ASKED IN THE ISSUES PAPER

The following sections set out APPEA comments on key areas of the Issues Paper and answers to the six questions posed on page 4 of the Issues Paper.

As noted above, APPEA's submission addresses specific aspects of the Issues Paper, focussing on those areas that are particularly important for the upstream oil and gas industry and is generally focused on the threshold question of whether a prospective national gas reservation scheme is required.

A key issue is that it remains unclear as to the exact objectives of any scheme. The Issues Paper on page 3 says:

*On 15 September 2020, the Prime Minister, the Hon Scott Morrison MP, reiterated the centrality of gas to Australia's economic recovery and that the Government is committed*

---

<sup>17</sup> See [www.industry.gov.au/data-and-publications/make-it-happen-the-australian-governments-modern-manufacturing-strategy](http://www.industry.gov.au/data-and-publications/make-it-happen-the-australian-governments-modern-manufacturing-strategy) for more information.



*to exploring options for a prospective gas reservation scheme to ensure Australian gas users get the energy they need at a reasonable price.*

and goes on to say:

*The Minister for Resources, Water and Northern Australia, the Hon Keith Pitt MP, has stated that the Government is committed to encouraging investment to unlock Australia's gas resource potential – boosting exports, jobs and energy supplies.*

It is not clear that these two statements reconcile. As such, what a scheme would seek to achieve remains unclear. This adds to the uncertainty around the consideration of any scheme, which can, as has been noted elsewhere in this submission impact adversely on investment decision-making, particular for projects actively considering FID.

In addition, the Issues Paper notes on page 7:

*However many gas users face an uncertain outlook. There has been some price relief for commercial and industrial (C&I) gas users, especially in spot markets. The economic downturn associated with the pandemic has led to lower demand for some C&I users' products and increased the risks they face, including the risks posed by take-or-pay obligations.*

The oil and gas industry also faces a very uncertain outlook. This is in terms of both the policy and regulatory arrangements it faces and the market conditions looking to 2021 and beyond. In the case of 'take-or-pay' obligations, the oil and gas industry utilises 'take-or-pay' approaches to share the risk of such downturns between producers and consumers. These arrangements allow for investor confidence in forward cash flows to invest in developing projects. The industry has also seen buyers taking advantage of the flexibility in their contracts to reduce takes and replace supply with lower priced, spot gas.

#### 1. HOW WOULD A PROSPECTIVE NATIONAL GAS RESERVATION SCHEME ADDRESS A POTENTIAL DOMESTIC GAS SHORTFALL AND IMPACT GAS MARKETS IN THE MEDIUM OR THE LONGER TERM?

As noted above, while in the short-term, a reservation scheme may see more gas flow into the domestic market, the longer-term consequences see reduced investment incentives leading to lower levels of capacity and production, which in turn raises the risk that domestic supply is in fact compromised by a reservation scheme, rather than assured and upward rather than downward pressure is placed on prices<sup>18</sup>.

It is also unclear what a national prospective scheme could add any value to the various policy approaches already in place at that national level, as summarised in Box 1.1 on pages 6-7 of the Issues Paper and in most Australian jurisdictions, as summarised in Box 1.2 on page 9 of the Issues Paper.

---

<sup>18</sup> Some projects may, depending on their commercial circumstances, be directly and adversely impacted in the very short-term if any scheme was to change the nature of their commercial arrangements with LNG producers (for example, a smaller producer that has a long-term commercial arrangement with an LNG producer, where that commercial arrangement is their major cash flow source, may face significant and immediate challenges if there were any adverse changes to that arrangement).



APPEA and its members have committed to working constructively with the Australian Government on the various reforms announced by the Prime Minister on 15 September 2020<sup>19</sup> and is working with the various approaches taken in the States and Territories.

APPEA is not, through this process, seeking to alter the existing approaches that are in place in the States and Territories.

Rather, APPEA recommends an approach that focusses on the development and implementation, following consultation with industry, of the extensive list of reforms and policy approaches that was announced by the Prime Minister on 15 September 2020 rather than seeking to introduce a new, and potentially confusing and counterproductive approach, through a prospective national domestic gas reservation scheme.

## 2. HOW WOULD A PROSPECTIVE NATIONAL RESERVATION SCHEME AFFECT INVESTMENTS IN OIL AND GAS PROJECTS?

As noted above, and supported by the range of analytical work outlined above and real world experience considered below, the longer-term consequences see reduced investment incentives leading to lower levels of capacity and production, which in turn raises the risk that domestic supply is in fact compromised by a reservation scheme, rather than assured and upward rather than downward pressure is placed on prices.

The challenge the industry, and Australia more broadly, now faces is how to restore confidence, encourage investment and return to growth.

A prospective national gas reservation scheme is unlikely to stimulate the upstream oil and gas industry exploration and development needed to deliver new gas supplies and competitive prices. Such a scheme is more likely to add to the challenges, rather than grasping the opportunities.

Recent analysis by Core Energy & Resources, in its report for AEMO<sup>20</sup>, *Gas Reserves and Resources and Cost Estimates, Eastern Australia, NT, November 2019*, finds that recent spot prices (which have approximately halved in the last two years, as outlined in Figure 3 on page 11 of the Issues Paper) sit below the estimated cost of production of 2P Reserves and significantly below the cost to develop the identified 2C resources. This implies that the current spot market prices are not sustainable as a way to encourage longer-term investment.

The APPEA investment recovery blueprint considered above, *Powering Australia's Recovery*, puts forward the policy actions that government can take to restore Australian oil and gas industry confidence and encourage new investment.

---

<sup>19</sup> See [www.pm.gov.au/media/gas-fired-recovery](http://www.pm.gov.au/media/gas-fired-recovery) and [www.pm.gov.au/media/national-energy-address-tomago-nsw](http://www.pm.gov.au/media/national-energy-address-tomago-nsw) for more information.

<sup>20</sup> See of [aemo.com.au/-/media/files/gas/national\\_planning\\_and\\_forecasting/gsoo/2020/final\\_reserves\\_contracts\\_cost\\_report.pdf?la=en](http://aemo.com.au/-/media/files/gas/national_planning_and_forecasting/gsoo/2020/final_reserves_contracts_cost_report.pdf?la=en)), page 13, for more information.



### 3. WHAT WOULD BE THE IMPACT OF A PROSPECTIVE NATIONAL RESERVATION SCHEME ON AUSTRALIA'S LNG TRADE?

Significant caution needs to be exercised when considering regulatory interventions that risk the attractiveness of Australia as an investment destination for upstream oil and gas industry investment and send worrying signals to both domestic and international investors and major trading partners.

These include investors and trading partners with whom the Australian industry has spent a generation building relationships as a secure trading partner and a secure and credible investment destination.

A plethora of significant, challenging and some in case likely insurmountable issues would need to be addressed if a decision were made to move forward with a prospective national scheme. These would include the Constitutional validity of a national approach, the consistency or otherwise of a national scheme with Australia's FTAs and the adverse implications for future trade and investment relationships as Australia seeks to secure a new wave of investment in the Australian oil and gas industry.

### 4. WHAT WOULD BE THE QUANTIFIABLE BENEFITS OF A PROSPECTIVE NATIONAL RESERVATION SCHEME FOR DOMESTIC GAS USERS AND FOR POWER GENERATION?

The quantifiable impacts of a prospective national scheme are better considered at a whole-of-economy level and through a more comprehensive CGE modelling exercise. With that in mind, the observations by the Productivity Commission outlined above are directly relevant to any work on 'quantifiable benefits' that may be included in submissions to the Department in response to the Issues Paper.

As noted above, the consistent findings of the series of notable reports that have been conducted over the last ten years or so that reservation schemes are likely to impose costs on the Australian economy and lead to distortions in the domestic gas market, endangering investment and future gas supply.

On the other hand, as EY's *Australia's oil and gas industry: kickstarting recovery from COVID-19* report finds, the economic dividends from securing a new wave of oil and gas developments are large. If we can secure the key projects which are in the industry pipeline, under a "high growth trajectory" scenario, national economic output is estimated to increase by over \$350 billion with over 220,000 jobs created over the next two decades.

Gas supply for power generation purposes is already underpinned by the March 2017 Gas Supply Guarantee (GSG)<sup>21</sup> agreed between the Australian Government, gas producer and gas pipeline companies in 2017. The GSG runs until 2023 and is under review.

---

<sup>21</sup> See [AEMO | Gas Supply Guarantee](#) and [Review of the Gas Supply Guarantee | AEMC](#) for more information.





5. ARE THERE GAS RESERVATION MODELS THAT HAVE WORKED IN OTHER JURISDICTIONS WHICH COULD WORK AT THE NATIONAL LEVEL IN AUSTRALIA OR ARE THERE EXAMPLES OF UNSUCCESSFUL POLICIES AUSTRALIA CAN LEARN FROM?

To provide for a more rigorous examination of gas market interventions in other countries, and consider some of their features and their impacts, APPEA commissioned EnergyQuest to update their 2013 analysis, examining gas market interventions around the world.

EnergyQuest's new report, *Domestic Gas Market Interventions: International Experience – 2020 Update*<sup>22</sup>, finds the international experience provides useful indicators for Australian policy-makers.

International experience is that government interventions to reduce domestic wholesale gas prices are often unsustainable, and have numerous negative side-effects in terms of economic, energy and environmental policy.

- Of the five developed OECD countries reviewed, none have made material use of government interventions in their gas markets. The US and Canadian export controls have not been used in practice to restrict gas exports. The US has a total LNG export capacity in operation, or under construction, of 114 million tonnes per annum (Mtpa), with a further 22.4 Mtpa approved, but yet to reach FID. Canada has been exporting gas to the US for almost 60 years, and has approved 26 licences to export gas and propane, including up to 40 Mtpa of LNG.
  - An overview of the approaches taken in Canada and the United States can be found at [Attachment 1](#).
- Of the 15 developing countries reviewed, seven were net exporters of gas (Qatar, Oman, Egypt, Algeria, Russia, Peru and Malaysia), and eight were net importers of gas (United Arab Emirates, Brazil, Argentina, Mexico, China, India, Indonesia and Thailand).
  - Governments in these 15 developing countries, all intervene in domestic price setting for natural gas.
  - While these policies may produce low headline domestic prices, the experience is that they artificially stimulate demand and tend to restrict supply, leading to gas shortages and imports of gas from other countries at higher prices. There is little incentive for energy efficiency and often governments must decide on the allocation of scarce gas to particular industries, picking winners on political grounds.
  - The regulatory policies are often associated with government ownership, or control of downstream industries, and controls on exports to avoid leakage of the subsidies provided by regulated gas prices.
  - Many of these countries are experiencing upward pressure on domestic gas prices, in some cases to import parity. However, it is typically politically difficult to increase prices once they are regulated.
- Regulation does not necessarily produce low gas prices in these countries. According to the International Gas Union survey of wholesale gas prices in 2019<sup>23</sup>, five of the countries reviewed in this report (Brazil, China, India, Malaysia and Thailand) had higher average gas prices than Australia.

<sup>22</sup> See EnergyQuest (2020), *Domestic Gas Market Interventions: International Experience – 2020 Update* (available at [www.appea.com.au/wp-content/uploads/2020/11/EnergyQuest-APPEA-Report\\_2020.pdf](http://www.appea.com.au/wp-content/uploads/2020/11/EnergyQuest-APPEA-Report_2020.pdf)).

<sup>23</sup> See IGU (2020), *Wholesale Price Survey 2020 Edition* (available at [igu.org/resources/wholesale-price-survey-2020-edition](http://igu.org/resources/wholesale-price-survey-2020-edition)).



- The other ten countries (Qatar, United Arab Emirates, Algeria, Egypt, Mexico, Argentina, Peru, Oman, Indonesia and Russia) have particularly low prices due to tight regulations and government intervention.
- Peru is the only country identified that exports gas and has domestic gas reservation. Investment in exploration has collapsed in recent years and raises doubts about the country's ability to replace reserves in the medium- to long-term.

These findings also move beyond simplistic and inaccurate assertions often made that Australia is the only country that does not intervene or have some kind of national domestic gas reservation scheme.

## 6. HOW WOULD A PROSPECTIVE NATIONAL GAS RESERVATION SCHEME INTERACT WITH STATE AND TERRITORY POLICIES AND REGULATIONS?

Significant work would be required for a national scheme could interact with the various, and diverse, State and Territory arrangements. It is unclear that a workable system would be possible.

More likely, a national scheme, sitting over the top of established approaches that individual jurisdictions are very unlikely to discontinue, risks making new investments more challenging and creating the very problem a domestic gas reservation system purports to address.

## CONCLUSIONS/NEXT STEPS

To conclude:

- As noted above, and supported by the range of analytical work real world experience, the longer-term consequences see reduced investment incentives leading to lower levels of capacity and production, which in turn raises the risk that domestic supply is in fact compromised by a prospective national domestic gas reservation scheme, rather than assured and upward rather than downward pressure is placed on prices.
- The challenge the industry, and Australia more broadly, now faces is how to restore confidence, encourage investment and return to growth.
- A prospective national gas reservation scheme is unlikely to stimulate the upstream oil and gas industry exploration and development needed to deliver new gas supplies and competitive prices. Such a scheme is more likely to add to the challenges, rather than grasping the opportunities.
- The APPEA investment recovery blueprint considered above, *Powering Australia's Recovery*, puts forward the policy actions that government can take to restore Australian oil and gas industry confidence and encourage new investment.
- Much of the focus on domestic reservation appears to be motivated by concerns about the competitiveness of Australian manufacturing. While such concerns are understandable and genuinely held, it is not clear that a prospective national domestic gas reservation policy is the way to respond to these concerns. Alternative approaches to assistance for the Australian manufacturing industry may be more appropriate. An example is the Australian Government's newly established *Modern Manufacturing Strategy*.



Overall, APPEA recommends an approach that focusses on the development and implementation, following consultation with industry, of the extensive list of reforms and policy approaches announced on 15 September 2020 and does not seek to introduce a new, and potentially confusing and counterproductive approach, through a prospective national domestic gas reservation scheme.

APPEA will continue to participate in the consideration of a prospective national domestic gas reservation scheme and looks forward to ongoing consultation with the Government and with the Department.



## ATTACHMENT 1: AN OVERVIEW OF POLICY AND REGULATORY APPROACHES TO LNG EXPORTS AND THE DOMESTIC GAS MARKET IN CANADA AND THE UNITED STATES

- Canada:

- Federal and provincial bodies coordinate policy and regulation in Canada. Provincial authorities, the largest and most influential of which is the Alberta Energy Resources Conservation Board (ERCB), handle most sector oversight.
- The national regulatory body is the Canada Energy Regulator (CER) and its Commission, which is responsible for regulating pipelines, energy development and trade in the Canadian public interest. Legislative authority is provided through section 118 of the *National Energy Board Act (R.S.C., 1985, c. N-7)*<sup>24</sup>.
- The only gas market intervention with domestic implications is that export projects require approval<sup>25</sup>.
- The export and import of natural gas is authorised by the Commission under either long-term licences or short-term orders. Following a public hearing, long-term licences may be issued for up to 25 years. Short-term orders for a maximum period of two years can be issued without a public hearing.
- The Canadian approach has a number of significant features:
  - In approving export projects, the Commission (and its predecessor, the National Energy Board (NEB)) has pointed to the fact that the exported LNG will not only open new markets for Canadian gas production, but the Board believes that ongoing development of shale gas resources will ultimately further increase the availability of natural gas for Canadians (similar to the way in which access to international markets opened up supply onshore gas in Queensland).
  - The Commission (and the NEB) has also found that the quantities of exports do not exceed the surplus remaining after due allowance has been made for the reasonably foreseeable requirements for use in Canada, having regard to the trends in the discovery of gas in Canada.

United States:

- The US gas industry was highly regulated from the 1930s to the 1980s. Wellhead gas prices were deregulated in 1989. Transmission pipeline services were unbundled in 1992, with regulation remaining on tariffs and access.
- The only current market intervention with domestic implications is that projects planning export to non-FTA countries require export approval<sup>26</sup>. Current restrictions on US LNG exports appear to be an historical hangover. Under provisions first enshrined in the *National Gas Act 1938*, it is illegal to export or import gas without a permit from the DOE. A permit is to be issued “unless the proposed exportation or importation will not

---

<sup>24</sup> See [laws-lois.justice.gc.ca/eng/acts/n-7/section-118.html](https://laws-lois.justice.gc.ca/eng/acts/n-7/section-118.html).

<sup>25</sup> See [www.cer-rec.gc.ca/en/about/who-we-are-what-we-do/responsibility/export-import-energy.html](https://www.cer-rec.gc.ca/en/about/who-we-are-what-we-do/responsibility/export-import-energy.html) and [www.cer-rec.gc.ca/en/applications-hearings/view-applications-projects/lng-export-licence/frequently-asked-questions-liquefied-natural-gas-lng-export-licence-applications.html](https://www.cer-rec.gc.ca/en/applications-hearings/view-applications-projects/lng-export-licence/frequently-asked-questions-liquefied-natural-gas-lng-export-licence-applications.html).

<sup>26</sup> See [www.energy.gov/fe/services/natural-gas-regulation](https://www.energy.gov/fe/services/natural-gas-regulation) and [www.energy.gov/fe/services/natural-gas-regulation/how-obtain-authorization-import-andor-export-natural-gas-and-lng](https://www.energy.gov/fe/services/natural-gas-regulation/how-obtain-authorization-import-andor-export-natural-gas-and-lng).



- be consistent with the public interest*". This requirement was legislated before the development of LNG or international trade in pipeline gas.
- In 1992 Congress deemed that exports to countries with which the US has an FTA *"shall be deemed to be consistent with the public interest and applications for such importation or exportation shall be granted without modification or delay"*. This was to bring the U.S. into line with the provisions of the North America Free Trade Agreement (NAFTA) providing for gas imports from Canada and exports of significant volumes of pipeline gas to Mexico.
  - The DOE issued a set of Policy Guidelines in 1984 setting out the criteria it employs in evaluating applications. The goals of the Policy Guidelines are to minimise federal control and involvement in energy markets and to promote a balanced and mixed energy resource system. The Guidelines provide that *"... the market, not government, should determine the price and other contract terms of imported (or exported) natural gas. The federal government's primary responsibility in authorizing imports (or exports) will be to evaluate the need for the gas and whether the import (or export) arrangement will provide the gas on a competitively priced basis for the duration of the contract while minimizing regulatory impediments to a freely operating market"*.
  - The DOE's review of export applications focusses on:
    - The domestic need for the natural gas proposed to be exported;
    - Whether the proposed exports pose a threat to the security of domestic natural gas supplies; and
    - Any other issue determined to be appropriate, including whether the arrangement is consistent with DOE's policy of promoting competition in the marketplace by allowing commercial parties to freely negotiate their own trade arrangements.
  - The DOE has approved all applications placed before it.
  - The US approach has a number of significant features:
    - DOE's authority to regulate the export of natural gas arises under section 3 of the *Natural Gas Act* (NGA) and section 301(b) of the *DOE Organization Act*. This authority is vested in the Secretary of Energy and has been delegated to the Assistant Secretary for Fossil Energy.
    - Section 3(a) of the NGA sets out the standard for review of most LNG export applications:

*[N]o person shall export any natural gas from the United States to a foreign country or import any natural gas from a foreign country without first having secured an order of the [Secretary of Energy] authorizing it to do so. The [Secretary] shall issue such order upon application, unless after opportunity for hearing, [he] finds that the proposed exportation or importation will not be consistent with the public interest. The [Secretary] may by [the Secretary's] order grant such application, in whole or part, with such modification and upon such terms and conditions as the [Secretary] may find necessary or appropriate.*
    - Section 3(a) therefore sets out a rebuttable presumption that a proposed export of natural gas is in the public interest. Section 3(a) also authorises DOE to attach terms or conditions to the order that the Secretary finds are necessary or appropriate to protect the public interest.
    - In the *Energy Policy Act* of 1992, Congress introduced a new section 3(c) to the NGA. Section 3(c) created a different standard of review for applications to export natural gas, including LNG, to those countries with which the US has in effect an FTA requiring the national treatment for trade in natural gas.



Section 3(c) requires such applications to be deemed consistent with the public interest, and requires such applications to be granted without modification or delay<sup>27</sup>. A similar approach in Australia would see almost all of our LNG exports automatically authorised. Australia has entered into 14 FTAs with both individual countries and groups of countries<sup>28</sup>, including all of Australia's major LNG export markets. A number of other agreements are under negotiation.

---

<sup>27</sup> Very importantly, earlier in 2020, the DOE established a new policy extending through to 2050 the standard term for authorizations to export natural gas from the lower-48 states—including domestically produced LNG, compressed natural gas, and compressed gas liquid—to countries with which the US does not have a FTA requiring national treatment for trade in natural gas, and with which trade is not prohibited by US law or policy (non-FTA countries). See [www.energy.gov/fe/downloads/policy-extending-natural-gas-export-authorizations-2050](http://www.energy.gov/fe/downloads/policy-extending-natural-gas-export-authorizations-2050) for more information.

<sup>28</sup> See [dfat.gov.au/trade/agreements/Pages/trade-agreements.aspx](http://dfat.gov.au/trade/agreements/Pages/trade-agreements.aspx) for more information. Most recently, Australia on 15 November 2020 announced it had signed the Regional Comprehensive Economic Partnership (RCEP) Agreement between Australia and 14 other Indo-Pacific countries. RCEP is the world's largest free trade agreement, representing countries with nearly 30 per cent of global GDP and the world's population. It centres on a shared regional commitment to open trade and investment (see [www.pm.gov.au/media/regional-trade-deal-boost-export-opportunities-aussie-farmers-and-businesses](http://www.pm.gov.au/media/regional-trade-deal-boost-export-opportunities-aussie-farmers-and-businesses) and [www.dfat.gov.au/trade/agreements/not-yet-in-force/rcep](http://www.dfat.gov.au/trade/agreements/not-yet-in-force/rcep)). Australia also has a number of FTAs concluded by not yet in force and a number under negotiation.