

4 February 2013

Budget Policy Division
Department of the Treasury
Langton Crescent
PARKES ACT 2600

Attention: Mr Bill Brummitt

Email: prebudgetsubs@treasury.gov.au

2013-14 Pre-Budget Submission

Please find attached a submission from the Australian Petroleum Production & Exploration Association (APPEA) in relation to the 2013-14 Federal Budget.

APPEA would be pleased to further expand on any of the issues raised in the submission. Contact in APPEA is Damian Dwyer, telephone 02 62670902 or email ddwyer@appea.com.au.

Yours sincerely

David Byers
CHIEF EXECUTIVE



HEAD OFFICE

Level 10
60 Marcus Clarke St
Canberra ACT 2601

GPO Box 2201
Canberra ACT 2601

T +61 2 6247 0960
F +61 2 6247 0548
E appea@appea.com.au
ABN 44 000 292 713

BRISBANE OFFICE

Level 36
32 Turbot St
Brisbane QLD 4000

T +61 7 3231 0500
E brisbane@appea.com.au

PERTH OFFICE

Level 4
190 St Georges Tce
Perth WA 6000

PO Box 7039
Cloisters Square
WA 6850
T +61 8 9426 7200
F +61 8 9321 9778
E perth@appea.com.au

SYDNEY OFFICE

Suite 4, Level 8
3 Spring St
Sydney NSW 2000

T +61 2 8241 1900
E sydney@appea.com.au



AUSTRALIAN PETROLEUM PRODUCTION & EXPLORATION
ASSOCIATION LIMITED

SUBMISSION TO THE FEDERAL GOVERNMENT

2013-14 Federal Budget

January 2013

The Australian Petroleum Production & Exploration Association (APPEA) is the peak national body representing Australia's oil and gas exploration and production industry. APPEA has 90 full member companies exploring for and producing Australia's oil and gas resources. The companies currently account for around 98 per cent of Australia's total oil and gas production and the vast majority of exploration. APPEA also represents over 200 service companies providing a range of goods and services to the industry. Further details about APPEA can be found at our website at www.appea.com.au.

1. Industry Background

The Australian Oil and Gas Industry is a major contributor to economic prosperity

The petroleum exploration and production industry is an integral part of the Australian economy. The industry's direct contribution includes:

- the supply of reliable, clean, efficient energy supplies for households and industry;
- employment of tens of thousands of Australians;
- regional investment;
- export income (and the replacement of imports); and
- the payment of significant amounts of government tax revenues (on average, more than \$7 billion per annum over the last five years).

In addition, substantial indirect benefits flow from the industry, including to the national and state economies via a growing services and contractor sector. Reliable, secure and competitively priced energy is crucial to industry, our communities and households. It underpins Australia's economy and industrial structure. Within this framework, oil and gas plays a key role. At present, petroleum (oil and gas) accounts for nearly 60 per cent of Australia's primary energy needs – this is expected to increase over the next two decade. The policy framework must ensure that Australia's explorers and producers are not competitively disadvantaged with producers of other energy sources and similar activities that are undertaken in other countries. Measures that attract increased exploration in the many yet-to-be explored or under-explored areas of Australia are also important.

Australia's upstream oil and gas industry has entered a period of unprecedented growth and transformation. Almost \$200 billion is currently being invested in oil and gas projects including seven major liquefied natural gas (LNG) projects. This will increase Australian GDP by up to 2.2 per cent a year and require a construction workforce peaking at over 100,000 full-time equivalent jobs. By 2025, the construction and operation of these projects will add more than \$260 billion¹ to Australian GDP and contribute between \$7.9 billion and \$12.1 billion a year in taxation revenue². This is just the contribution of the first wave, only considering currently committed and under construction projects.

The construction activity now underway is delivering large economic benefits to the nation. Gas supply to Australian industry and households is being increased and by 2017 Australia could overtake Qatar as the world's largest exporter of LNG.

Once operational, these projects will also help reduce the growth in Australian and global greenhouse gas emissions, improve Australia's energy security and increase the competitiveness of our energy markets. They will also provide a long-term boost to jobs and income for service industries and tax revenues for governments. The second wave of investment has the potential to increase Australia GDP by \$455³ billion by 2035. This investment will require a construction workforce peaking at over 167,000 full-time equivalent jobs, and contribute between \$12.1 billion and \$12.8 billion in taxation revenue.

¹ Figure is quoted in net present value (NPV) terms.

² Deloitte Access Economics, *Harnessing our comparative advantage* (June 2012)

³ Figure is quoted in net present value (NPV) terms.

Petroleum Exploration and Production in Australia

The trend in Australia's production of liquid petroleum (crude oil, condensate and LPG) has been steadily downwards in the last decade resulting in a growing gap between Australia's liquids production and its consumption of petroleum products. Our net oil liquids import bill is growing.

The long term growth in the Australian oil and gas industry is dependent on the level of exploration. Oil and gas cannot be produced without first locating new resources and these cannot be discovered without drilling wells. Unless there is a major shift in exploration activity resulting in a sequence of new discoveries, the annual loss of income to the nation will keep increasing.

Wells cannot be drilled without access to good geoscientific data. A recent review of Geoscience Australia confirmed that there are strong 'public good' grounds for public investment in geoscience research and that such investment delivers positive returns to the community.

Figure 1: Exploration Wells Drilled and Exploration Expenditure



Source: ABS, APPEA

Exploration activity can be measured in numerous ways. Figure 1 highlights the wells drilled in onshore and offshore areas in the period covering 1997-98 to 2011-12, together with total exploration expenditure. Exploration activity is often cited in terms of expenditure, however this often misguides in terms of the quantum undertaken, because it measures cost, not activity. The level of physical activity undertaken is a far more appropriate guide.

To date, much of the exploration activity undertaken in Australia has been in shallow water mature basins or brownfields onshore areas, with field recovery sizes generally becoming smaller. The

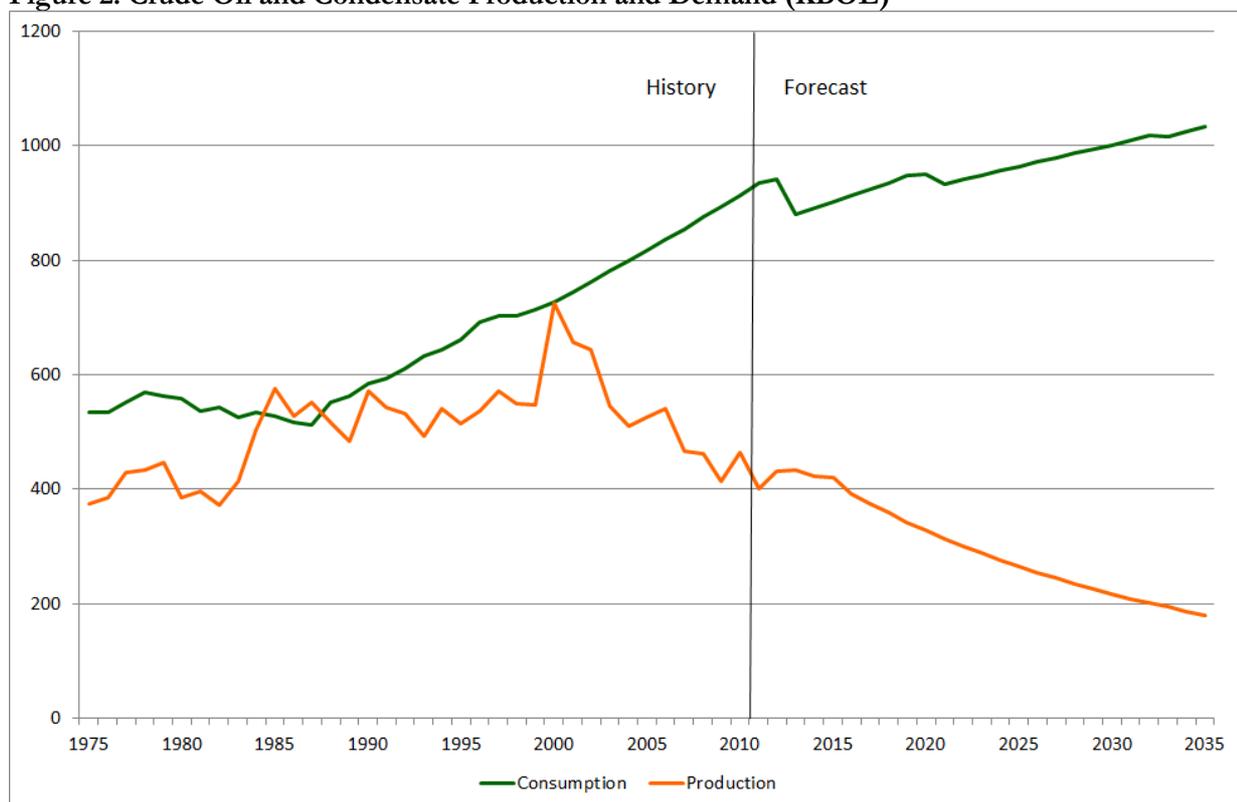
discovery of significant new accumulations will to a large extent be dependent on exploration in new basins (both onshore and offshore), where the risk/reward balance is fundamentally different.

Gas and Petroleum Liquids Production

According to BREE, the moderate growth in energy forecasts is due to a decline in the cost of renewable energy generation and the effect of government policies. In particular, the RET and carbon pricing are expected to increase energy prices and dampen the demand for energy. This will be partly offset by assumed strong economic growth over the projection period.

Figure 2 highlights historical and forecast crude oil and condensate production, together with the forecast level of consumption (demand). Petroleum liquids production is expected to fall well short of domestic demand. The moderate growth in energy consumption is largely driven by the implementation of Government policies. According to BREE, the moderate growth in energy forecasts is due to a decline in the cost of renewable energy generation and the effect of government policies. In particular, the RET and carbon pricing are expected to increase energy prices and dampen the demand for energy. This will be partly offset by assumed strong economic growth over the projection period.

Figure 2: Crude Oil and Condensate Production and Demand (KBOE)



Source: BREE, APPEA

Australia's production of crude oil, condensate and naturally occurring LPG as a proportion of petroleum products consumption, increased from 52.9 per cent in 2010, to 63.0 per cent in 2011 to 67.4 per cent in 2012 (Table 1). Over the five-year period from 2008 to 2012, the ratio has averaged 43.6 per cent.

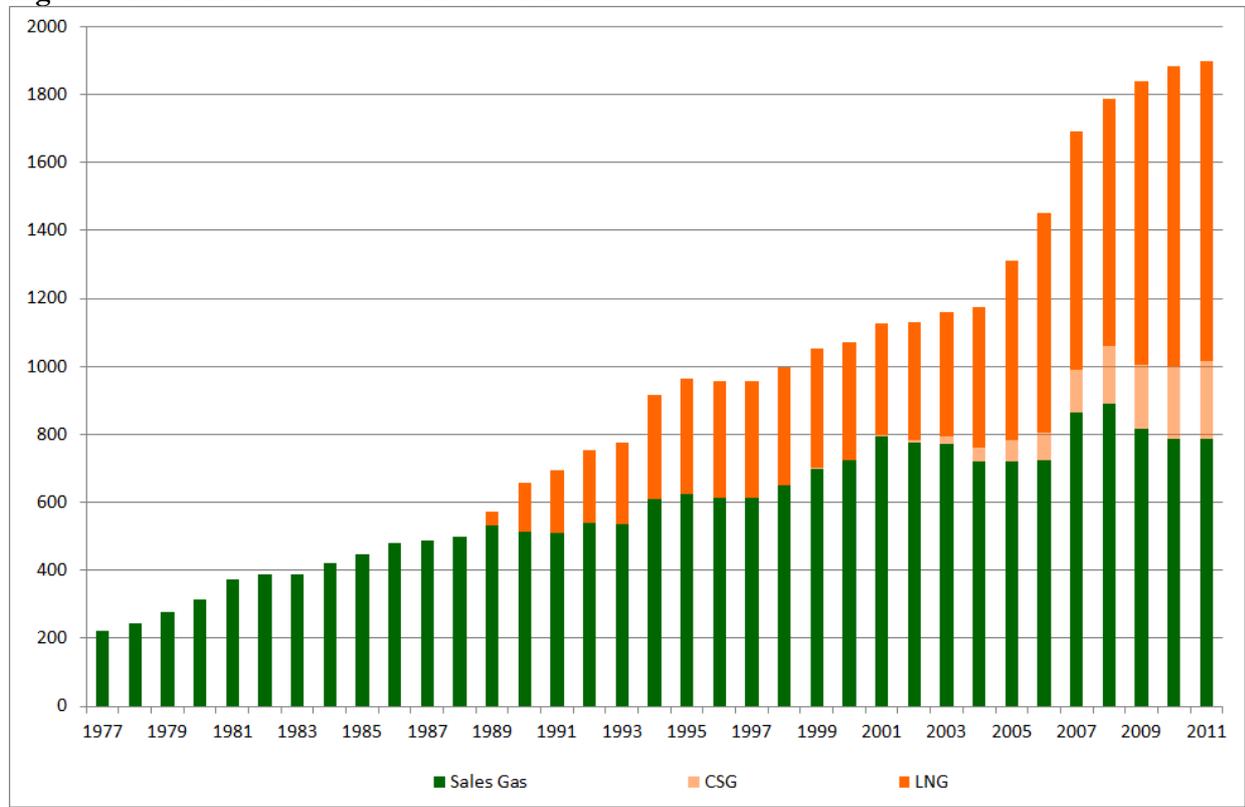
Table 1: Australia's Production and Consumption of Petroleum Liquids, 2008-2012

Year	Production PJ	Consumption PJ	Ratio %
2008	1,102	2,062	53.4
2009	997	2,072	48.1
2010	1,105	2,090	52.9
2011	1,136	1,803	63.0
2012	1,222	1,814	67.4

Sources: APPEA, BREE

Australia has significant quantities of discovered gas resources, many of which remain undeveloped. Opportunities exist to develop new gas based projects, including through the export sale of natural gas and domestic gas processing industries. Appropriate policy settings can assist gas sales, generating significant economic benefits for the Australian economy.

Figure 3: Australian Natural Gas Production



Source: APPEA

Government forecasts of domestic gas production are relatively strong. However, there are many factors that can challenge this growth including: high development costs, limitations on interconnecting infrastructure, fiscal imposts, duplicative regulatory/green tape and competition from subsidised fuels. These factors will all impact on the growth of this sector.

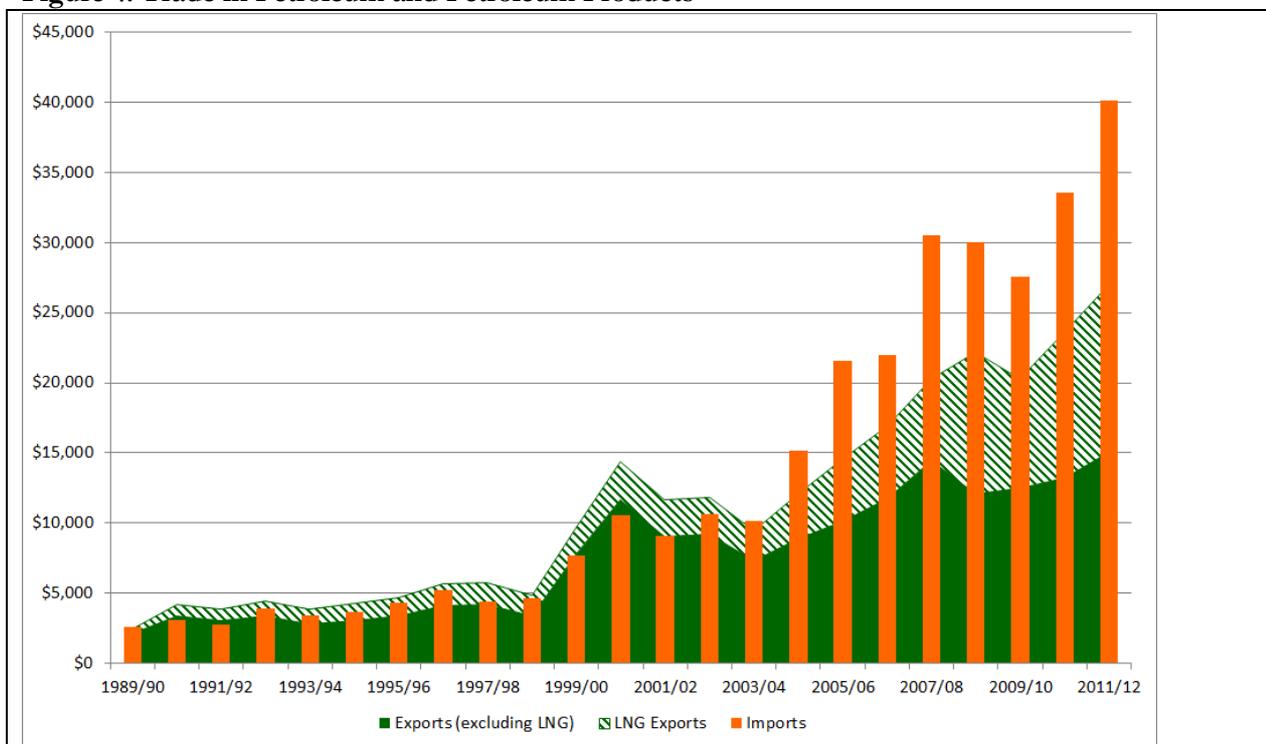
Not all discoveries are currently commercial and therefore may not be able to be developed. The long distances involved in transporting some gas to market has a significant impact on the economics of gas developments. The emergence of natural gas found in coal seams as a resource

that is capable of helping meet Australia’s domestic and the world’s global energy demand also presents exciting opportunities – recent investment decisions confirm this potential. Gas from shale rocks also has an important role to play. Again, with appropriate fiscal and policy settings, Australia’s gas reserves may be capable of supplying sustainable and cleaner alternative fuels into a range of markets both at home and overseas.

Trade in Petroleum and Petroleum Products

In 2003-04, Australia switched from being a net exporter of oil, gas and derived petroleum products, to a net importer. The previous position allowed Australia to generate valuable export earnings and therefore positively contribute to our overall trade position. The ability of domestic production to replace costly imports of petroleum has also been of significance. There has been a turnaround in this surplus position in the last five years which has led to the emergence of a significant trade deficit.

Figure 4: Trade in Petroleum and Petroleum Products



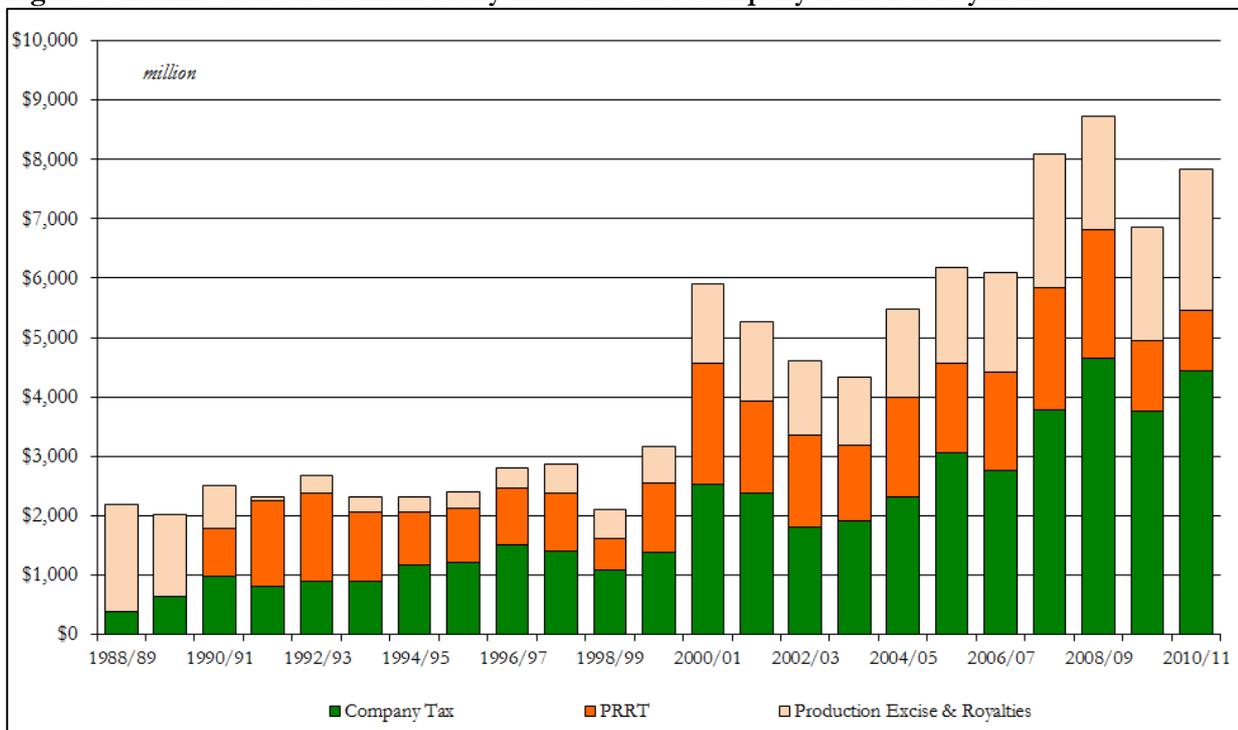
Source: BREE 2012

Figure 4 includes petroleum liquids (crude oil, condensate and LPG), liquefied natural gas and petroleum products. While Australia was in surplus prior to 2003-04, the net deficit position has grown to now average around \$10 billion per annum. It is expected that this deficit will continue to increase, notwithstanding a possible rise in the level of export gas (LNG) in the coming years. APPEA estimates that the annual trade deficit in crude oil and condensate could grow to exceed \$25 billion per year by 2020.

Industry Taxes, Costs and Labour Availability

A variety of taxes, charges and fees apply to petroleum production in Australia. Charges include resource taxes (including the petroleum resource rent tax, petroleum royalties and production excise), company income tax and a wide variety of other taxes, fees and charges ranging from import duties to state based transfer fees. Figure 5 shows the distribution of key taxation payments. Overall, APPEA estimates that taxes equate to around half on the industry's overall level of pre-tax profit (see Figure 7).

Figure 5: Estimated Petroleum Industry Resource and Company Taxation Payments



Source: APPEA Financial Survey

In July 2010, the Government announced that modified fiscal terms would apply to petroleum production sourced from areas not then subject to the petroleum resource rent tax (PRRT). In addition to the existing royalty and production excise regimes, the PRRT was extended to cover production currently not subject to PRRT, with effect from 1 July 2012. Transitional, technical and administrative details remain the subject of discussion between the industry, the Australian Taxation Office and policy agencies. The new obligations will impose a significant additional layer of administrative complexity on companies, potentially complicating future investment decisions.

Reducing costs and improving labour productivity are also critical to securing future investment. The cost of building and operating oil and gas projects is increasing rapidly. Since 2005, average global upstream capital costs have doubled while operating costs have increased by 43 per cent (Figure 6).

Australia is not immune from this trend and is disadvantaged further by the high costs of bringing exploration equipment from centres such as the Gulf of Mexico. Australia's labour costs (including allowances) for marine construction activities are higher than all of our LNG competitors. The sector has also been affected by increases in Australia's construction and labour

costs. International comparisons of LNG construction costs⁴ indicate that Australian LNG projects are among the most expensive to develop.

By 2013 about 30 per cent of Australia's economic activity will depend on the success of capital investments, making it the most investment-intensive economy in the OECD according to a study undertaken for the Business Council of Australia (BCA). Compared to the US Gulf Coast, Australian resources projects are 40 per cent more expensive to deliver. Australian labour is typically 35 per cent less productive for resources projects near cities, and 60 per cent less productive for projects in remote locations. Infrastructure costs are also much more expensive – airports are 90 per cent higher, hospitals 62 per cent, shopping centres 43 per cent and schools 26 per cent (BCA 2012).

The BCA study identified six strategic priorities, including: the maintenance of open and competitive markets for labour, materials and equipment; reforming government approvals processes; capacity building; and lifting workplace productivity.

Rising government and taxation charges (including cost recovery levies) add to increasing industry costs. For example, recent changes to limit the Living Away From Home Allowance concession add to labour costs and don't recognise that industry activities such as fly-in, fly-out operations are essential.

Many other studies highlight the decline in Australia's productivity over the past decade. A series of twice-yearly research reports by RMIT University show a steady decline in corporate satisfaction with industrial productivity. Over the six months to April 2012, just 52 per cent of employers said they had high productivity levels compared to 70.8 per cent when the survey started in April 2010. The latest survey also found it is taking longer to finalise greenfields agreements for new resource projects and that 19 per cent of projects stalled because an agreement with the unions could not be finalised (RMIT 2012).

⁴ APPEA State of the Industry 2012

Figure 6: Upstream Cost Indices 2000 to 2012



Source: IHS CERA

In July 2012, the Federal Ministers for Resources and Energy and Regional Development warned that increases in wages and conditions applied to some projects were unsustainable and risked future investment. Business groups are calling for reform of the Fair Work Act 2009 to improve labour market flexibility and enable them to introduce productivity improvement initiatives. The review of the Act in August and reforms announced by the Government in October do not address these concerns adequately.

Regulatory Reform

In addition, there is a high level of overlap and duplication in regulation covering the Australian oil and gas industry – between Federal Government agencies and between the Federal and state governments. This is particularly the case in regard to environmental approvals – with overlaps between NOPSEMA, SEWPaC and a range of state regulatory bodies.

A key driver/focus for reform is that Australia has become a high cost destination for delivering capital projects. There are many contributors to high costs locally: high construction labour costs without offsetting productivity levels, the (current) level of the Australian dollar inflating costs of equipment and materials sourced locally but also high regulatory burdens with extensive and often duplicative environmental and community approvals processes. If cost pressures continue, Australia could become an uncompetitive place to invest, putting expansions of current projects and delivery of projects in the pipeline at risk. The additional burdens that are directly related to regulatory duplications and overlap are well within the control of governments to address.

2. Budget Issues and Recommendations

Maintaining a competitive framework for petroleum exploration

It is critical for the nation to obtain a comprehensive understanding of its petroleum resources, particularly in onshore and offshore frontier areas where there has been little or no exploration. A diversified and active exploration industry is essential if Australia is to maximise the value of its petroleum resources and maintain a sustainable oil and gas industry. To achieve this outcome, it is important to:

- Increase public investment in onshore pre-competitive geoscience initiatives, maintain offshore programs and improve the coordination of publicly funded geoscientific data management systems so as to stimulate greater interest in onshore and offshore frontier areas.
- Develop and implement a package of measures for increasing onshore and offshore frontier exploration, including enhanced fiscal terms and other incentives.

2013 marks the 60th anniversary of Australia's first oil discovery at Rough Range near Exmouth. The industry has grown rapidly since that time, with petroleum exploration expenditure estimated to total \$3.2 billion in 2011-12. However, much of the increase in expenditure is due to rising costs as petroleum exploration activity has generally trended downwards since the 1980s. In 2011, the number of exploration wells spudded and metres drilled in offshore areas was at one of its lowest levels for at least 20 years. Onshore activity increased only slightly from record lows in 2010. Such levels of exploration will not make meaningful inroads into the vast parts of Australia that remain unexplored.

Most exploration for conventional oil and gas is occurring in proven basins such as the Carnarvon, Gippsland, Cooper and Browse. The largely unexplored frontier basins have significant potential for another major petroleum province to arrest the decline in Australia's liquids production or contribute to further growth in the gas industry.

In recent years, governments have made more titles available in frontier areas. The industry has taken up most, but not all. Companies acquiring such permits typically commit to work programs of further geological studies, seismic acquisitions and the potential drilling of a small numbers of wells. This is a good start, but more is required to encourage high-risk, high-cost exploration activity in those permits and in Australia's many other unexplored frontier areas. Australia is a high-cost destination for exploration due, in part, to its distance from the world's major petroleum centres. As a result, the cost of mobilising drilling rigs and equipment is high.

Other countries have successfully introduced carefully crafted fiscal and regulatory regimes to ensure they are capable of attracting greater investment in frontier exploration. This type of capital is highly mobile and Australia needs to offer terms that are competitive internationally and help offset the higher cost and risk structure. In relation to the provision of pre-competitive information, geoscience agencies in Australia (including Geoscience Australia) make a valuable contribution by undertaking geological assessments of under-explored areas. Several reviews over recent years confirm that geoscience data collection is a public good that warrants government investment and delivers substantial economic benefits. Most recently, a Strategic Review of Geoscience Australia (GA) released by the Department of Finance and Regulation in May 2011

noted the “strong, public good attributes” of GA’s information products. Economic modelling illustrated the benefits to the economy from the funding and activities of GA.

At a national level, the services provided by Geoscience Australia must continue to be publicly funded. The data products they provide help governments make informed policy decisions and are used by other government and non-government organisations in the management or use of land and marine environments. In November 2012, the Government committed to the funding of \$114 million to Geoscience Australia over the forward estimates period to improve the nation’s understanding of our onshore and offshore resource base. This commitment has been welcomed by industry.

Recommendation – Funding of Geoscience Australia

The Government commits to the long term funding of Geoscience Australia.

Proposals for increasing the attractiveness of frontier exploration have been discussed with governments extensively and directly, and been through several policy review processes. However, none have been agreed and implemented. In addition, a very limited fiscal incentive available through the petroleum resource rent tax system for offshore areas ended in 2009.

A 2007 pre-election commitment to introduce a flow-through share scheme was subsumed into the broader tax reform process. The Government has committed to again consider the matter in 2015. Overall, little progress has been made over recent years. Meanwhile, the competition for global exploration investment is increasing with countries in Africa, for example, actively seeking investment and offering good prospectivity and terms that encourage companies to quickly move discoveries into development.

Historically, the current work program bidding system has attracted a diverse range of companies to Australia, including smaller companies prepared to explore in remote parts of basins and to progress and promote exploration with new technologies and techniques. It also provides another significant benefit to Australia. The knowledge and information gained through exploration is passed to Geoscience Australia and state geological surveys for further research and to assist government in acreage management and policy development. The decision to selectively introduce cash bidding for some offshore areas and the details of the system will need to be very carefully considered if it is not to undermine the benefits of the existing acreage release framework.

The review by the Business Tax Working Group of aspects of the business tax system in 2012, including the option to modify the immediate deductibility of exploration costs (which was subsequently rejected) would have acted to increase the after-tax cost of these activities and resulted in less exploration in Australia. Exploration programs with marginal economics would have been less likely to proceed, with the impact falling most heavily on high-risk exploration (particularly in frontier areas) and exploration undertaken by small producers with limited cash flow. APPEA welcomed the decision of the Business Tax Working Group to reject any changes.

Modified titling terms

The industry considers that modified titling terms for selected areas would assist in opening up some of Australia’s onshore and offshore frontiers by awarding acreage of meaningful size to

reward the committed explorers. While the impact of such a provision would be further strengthened if it were accompanied with selective fiscal measures, industry sees merit in the immediate introduction of revised titling terms in selected areas. In implementing this measure, it is recommended that the definition of frontier areas that would apply in terms of the geographic application of a permit or licence be as follows (subject to negotiation with the relevant government regulatory agency):

‘All basins, onshore and offshore, where no hydrocarbon has been recovered to surface for commercial development and with agreement with federal and state/NT technical experts, as simply defined by a 100 km buffer from known and material discoveries.’

The model, which industry has been termed eRecon, maintains the existing work program bidding system with the following key criteria/features:

- large release areas, between 200-400 graticules = ~36,000 sq. km (this is permissible under the current system but has seldom been used in recent years; any less than 200 graticules will not provide sufficient regional geological perspective and that the normal bidding process would apply);
- nominations to be made under the existing gazettal system;
- bidding through normal bidding rounds, with no over the counter option, thereby maintaining the standard competitive bid system;
- modified guidelines to allow in the absence of no competing or better bids, the bid with no field work program to be acceptable within the Primary Term;
- “Voluntary” surrender of no less than 50 per cent of acreage at end Year 3 – all proprietary data and reports relating to that area to become open file – government can use to promote the acreage;
- for the acreage retained (no more than 50 per cent) – current confidentiality provisions apply;
- years 4, 5 and 6 must have some field work, but not necessarily a well and standard confidentiality terms apply; and
- renewal at end of year 6, standard 50 per cent renewal/relinquishment, and if no well drilled before, to renew must have a well commitment within Years 7, 8 or 9. Year 6 becomes a drill/drop decision point.

The system has the benefit of being relatively simple, it avoids the need for legislative amendment, has the potential to greatly improve the geological understanding of thus-far under-explored areas and provides minimal disruption to the existing successful work program bidding regime.

Recommendation – Reconnaissance Licence

The Government introduces modified titling and licence terms with a view to seeking an expanded exploration effort in remote and frontier areas.

Targeted fiscal measures

An effective fiscal measure could attract investors to Australia’s frontier areas. This type of exploration faces particularly high costs and risks and is often remote from infrastructure and markets. With few major oil discoveries over the past decade, Australia is considered to have low oil prospectivity. Therefore, an exploration program in one of Australia’s frontier areas typically

carries higher than average risks with lower than average returns, when compared to many other regions of the world. Public investment in frontier geoscience helps to reduce the risk and the after-tax returns can be increased by offering modified fiscal terms under the company tax system.

Recommendation – Frontier Exploration

The Government commits to work with industry to examine options to introduce an adjustment to the income tax regime for petroleum exploration in defined frontier areas (both onshore and offshore) for eligible exploration expenditures.

Junior Exploration Initiatives

The diversity in size and activity in the Australian petroleum industry has been a major contributor to its success. A number of Australia's major oil and gas discoveries have resulted from the innovative and pioneering work undertaken by junior exploration companies, while the prospectivity of some basins has been established by the work undertaken by small independent companies at the frontier stage of the exploration cycle. Of more recent times, junior explorers have underpinned the emergence of the coal seam gas as an important energy source and the growth of shale gas activities.

The challenges confronting small to mid-sized Australian companies in raising capital to fund exploration have been long standing, but have increased markedly. In addition, there has been a trend for companies to direct funds towards overseas exploration programs. While this globalisation is in part a welcome development and highlights the international nature of the industry, it is also at least in part a reflection of the increased levels of regulatory complexity in Australia arising.

Entities that do not have adequate income are unable to obtain tax relief and are therefore required to carry deductions forward. The inability to obtain a tax deduction means that the after tax cost of exploration is significantly higher for these companies. One method to address this situation is through allowing an eligible entity to transfer its entitlement to an income tax deduction to shareholders at the time the expenditure is incurred. The Government's in-principle recognition of the case for such a system in its 2007 election platform was the first important step in recognising the positive role of such an initiative. The industry considers it is timely for this issue to be revisited.

Recommendation – Junior Explorer Initiative

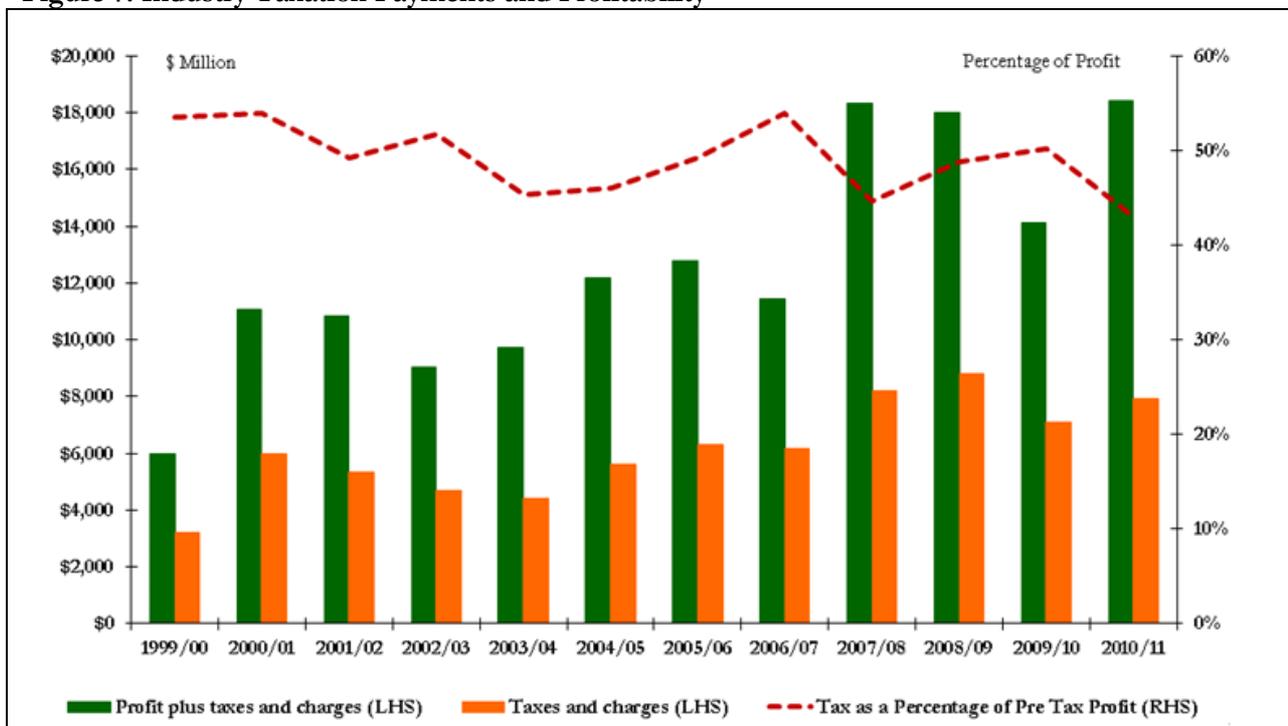
The Government commits to review the impact of the taxation system on companies with limited or no income in terms of their inability to deduct exploration expenditure.

Commercialising Discovered Resources

While gas prospectivity is relatively good, many large gas fields remain undeveloped decades after discovery. From a development perspective, the large capital requirements, long construction periods and lengthy periods required to generate positive project returns for such projects also act to increase Australia's risk profile. Global competition for petroleum capital investment funding is increasing and there are a growing number of alternatives. Ensuring that we have a competitive

fiscal framework is critical in maintaining and improving on Australia's overall competitive position.

Figure 7: Industry Taxation Payments and Profitability



Source: APPEA

APPEA estimates that on average, around half of the industry's pre-tax profits are paid to governments in the form of taxation. In this context, oil and gas producers are subject to company tax and the full range of other state and federal government taxes applying to business generally, as well as to resource taxes. Tax systems and settings that are not administratively efficient and internationally competitive impact on project economics and investment decisions.

Company Tax Provisions

The company tax system plays a key role in influencing both investment decisions in the industry and Australia's ability to compete for international investment funds. The treatment of capital costs largely accounts for the variable impact of company tax across different business activities in the Australian economy. The result is that a dollar spent on operating related activities can be more effective in after tax terms than a dollar spent on capital.

Australia's fiscal regime for gas developments must be globally competitive. In an environment of rising project costs and a growing and aggressive presence of state-owned oil and gas companies, the incidence and timing of taxation payments is increasingly a key factor. This takes on heightened importance for many large scale gas projects where a time horizon in excess of decades may be necessary before an investor is able to generate a positive return on capital. Taxation represents one of a limited number of policy instruments within the control of governments that can be used to encourage investment activity. The generally lower returns and longer lead times

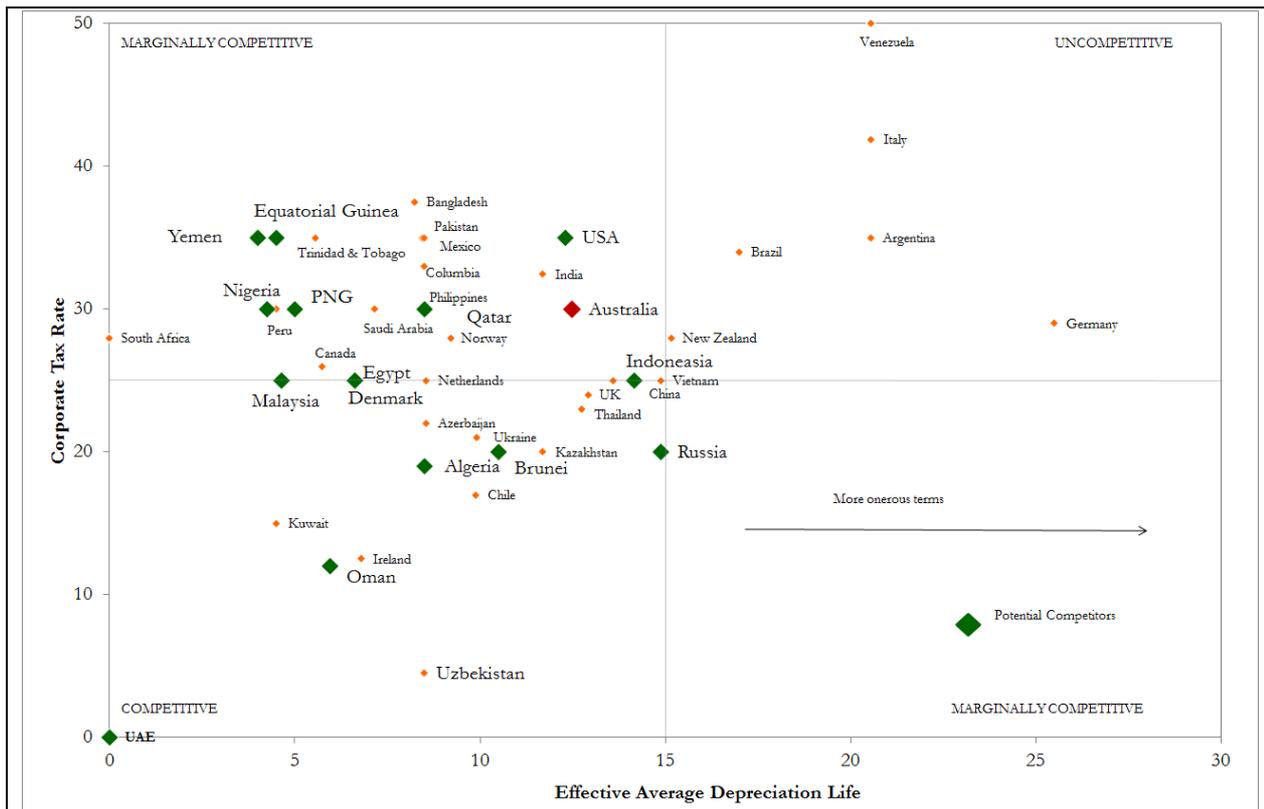
associated with gas projects lend themselves to potentially greater economic improvements through fiscal changes, while still generating the wider economic benefits that their development brings to the Australian economy.

The accelerated depreciation provisions that were in place up until the end of the 1990's helped mitigate against this bias against capital investment by providing depreciation write-off rates above the rate that would otherwise apply based on an assets engineering or effective life. The negative impacts associated with the use of long write-off periods for plant and equipment are exacerbated by the mismatch in timing between when expenditures are incurred and when a tax deduction can first be claimed (in excess of five years for many assets in the gas industry).

Under Australia's current company tax rules, the average period over which much of the capital invested in gas projects may be deducted or written off is between 10 and 20 years. This is much longer than the three-to-ten year write-off periods available to gas projects overseas that compete with Australian projects for investment capital and gas customers. The depreciation rules create a bias in the tax system against investment in capital intensive industries like oil and gas. The company tax depreciation regime applying to the Australian oil and gas industry can distort investment decisions and make it harder for Australian gas projects to be internationally competitive. The Final Report of the Business Tax Working Group confirmed the important role played by the depreciation regime.

Figure 8 compares the company tax rate that applies in a range of energy producing exporting countries with the estimated periods over which capital can be written-off for depreciation purposes under the company tax regime. The depreciation write-off scale attempts to factor in the special incentives that have been introduced by some countries, including investment allowances or accelerated depreciation (or both) to encourage investment in gas plant and equipment. It is clear that Australian developers face a challenging framework compared to our competitors.

Figure 8: Depreciation/Company Tax Comparison – Gas Producing Countries



Source: APPEA (based on data supplied by KPMG)

Any decision to extend the write-off lives to periods longer than currently apply (as highlighted in the chart) will further disadvantage Australian producers compared with other jurisdictions. In reality, a reduction in the write-off period is warranted when Australia is compared with other countries, particularly those that produce gas.

Recommendation – Depreciation Enhancements

The depreciation lives of assets used in capital intensive projects, such as those in the gas industry, should be modified through a reduction over the periods in which capital equipment can be written-off for company tax purposes.

Improving the Petroleum Resource Rent Tax

From 1 July 2012, the PRRT was extended to apply to onshore areas and the North West Shelf Project. The potentially negative impacts of extending the PRRT should not be underestimated. Unlike offshore areas, PRRT will apply in addition to the existing state and territory royalties (as well as crude oil and production excise), creating another layer of administration and costs for taxpayers.

The onshore industry is different to the offshore industry inasmuch that it is made up of a larger number of licence areas and apart from the CSG-LNG sector, a larger number of much smaller projects and companies. All companies, regardless of their size and extent of onshore activity, will need to introduce new accounting systems and comply with complex and costly compliance

obligations even though many may not incur a tax liability as they have limited or no production. All companies (irrespective of size) will also be required to lodge a starting base return during 2013-14. This will be a complex and potentially costly administrative exercise.

The onshore industry is also generally more diverse in terms of the nature and scope of its activities. In particular, the search for and development of unconventional forms of oil and gas (CSG, shale gas and tight gas) is at different stages of development in different parts of the country. The CSG industry is well established in Queensland, but is only in its relatively infancy elsewhere. Companies looking to find and develop shale gas and tight gas resources are still at the early stage of determining the applicability of overseas-sourced technology to local conditions and initial resource assessment.

PRRT must apply to unconventional petroleum in a way that reflects the different operational, commercial and risk structures of typical unconventional projects. Differences in environmental impacts and activities and contributions to local infrastructure must also be recognised and accounted for in project expenses. The opportunity for these new sources of petroleum to grow must not be lost or constrained due to inappropriate or poorly administered fiscal settings.

Extension of the PRRT needs to be completed in a manner that:

- minimises complexity and compliance costs for small companies, particularly those likely to pay little or no tax;
- recognises the differences between conventional and unconventional petroleum, does not inhibit the growth of either and does not undermine state initiatives to support their development (such as royalty concessions for tight gas);
- recognises the potentially negative impact of the extension of the regime onshore for small companies and projects through provisions that ensure such projects and companies do not incur a premature PRRT liability (and therefore discourages investment);
- ensures that existing problems with the PRRT are not extended to new taxpayers but are resolved for all; and
- improves administration of the PRRT to achieve greater consistency with the tax's policy intent and objectives.

In terms of administration, a review into the future operation of the regime was undertaken by the Parliamentary Library in December 2011 (Bill Digest No.86, 2011-12). It was noted that “(t)he extension of the PRRT is likely to impose considerable upfront and on-going costs on both the companies that will be subject to the PRRT and on the Australian Taxation Office which will be responsible for administering the legislation.” As onshore companies become more familiar with the regime, options for simplifying and streamlining its administration may arise and should be considered. A review of the ATO's administration of the tax would also improve its compliance with the government's stated policies and objectives.

Recommendation – PRRT

The Government commits to work with industry to ensure that the operation of the regime reflects current commercial practice, is consistent with the policy intent, ensures small projects and companies are not adversely disadvantaged through the extension of the regime onshore and that the existing uncertainties associated with administration and the interpretation of key elements of the provisions are resolved as a matter of priority.

Taxes on Business Inputs (Tariffs)

As a general principle, governments should seek to tax the outputs of industry - this was the underlying rationale for the introduction of the GST in 2000. Where there are taxes on business inputs, governments should be taking steps towards their removal. Import duties and tariffs that apply to business inputs are taxes on investment, more often than not at the front end of projects. Such charges are an inefficient means of raising revenue and should ideally be minimised to provide a more competitive investment environment.

The net cost of tariffs and import duties are invariably more severe on capital intensive investments and particularly so where costs are focussed before or at the commencement of a projects life. This is typically the case for projects in the oil and gas industry, including those large scale projects such as LNG developments, where total capital costs can be in the tens of billions of dollars for each project. These costs are incurred many years before the commencement of production and well before an investor has generated a risk adjusted return on committed capital funds. For technology, supply and safety reasons, much of the equipment that is used in such projects must be imported. Without the ability to obtain duty relief for key imports through the various duty relief provisions, these projects will simply be more costly to develop.

Any uncertainties (both in terms of timing and eligibility) surrounding the ability to obtain duty relief adds to risk and costs. The Industries Assistance Commission in 1982 identified the following core criteria as being desirable for any tariff relief system:

- be simple to administer;
- be easily understood and predictable;
- produce consistent results;
- operate at minimum administrative cost;
- operate quickly and enable speedy decision making;
- be open to public scrutiny;
- provide incentive for compliance; and
- provide an independent avenue for appeal.

These criteria remain fundamental to assessing the application of duty relief arrangements. A well designed duty relief system is capable of meeting both the core criteria for an efficient system and the Government's objectives in relation to Australian industry participation.

The Enhanced Project By-law Scheme (EPBS) is an important instrument in obtaining duty relief for large oil and gas investment projects. The scheme has enhanced regional development in Australia by providing incentives for project proponents to involve Australian industry in project development, construction and maintenance in exchange for duty concessions. The scheme, in its current state, allows for businesses to procure products as they normally would, provided that they can evidence that a full, fair and reasonable opportunity has been afforded to Australian industry to tender for the project. In the absence of any decision to remove or liberalise all tariff duties that apply to imported equipment, the continuation of the current arrangements in their current form is essential.

An independent report was prepared by Access Economics in 2010 for the Government into the operation of the EPBS and confirmed the importance of the regime. Specifically, Access Economics made the following observation:

“It [the EPBS] provides a legitimate avenue for proponents to access duty concessions on a project specific basis where these arguably serve no protective purpose and provides a mechanism to improve the engagement process between proponents and local suppliers in a commercial context. In this way, the two core aspects of the scheme tightly align — they both centre on encouraging broader economic development.” (page ii)

Recommendation – Enhanced Project By-Law Scheme

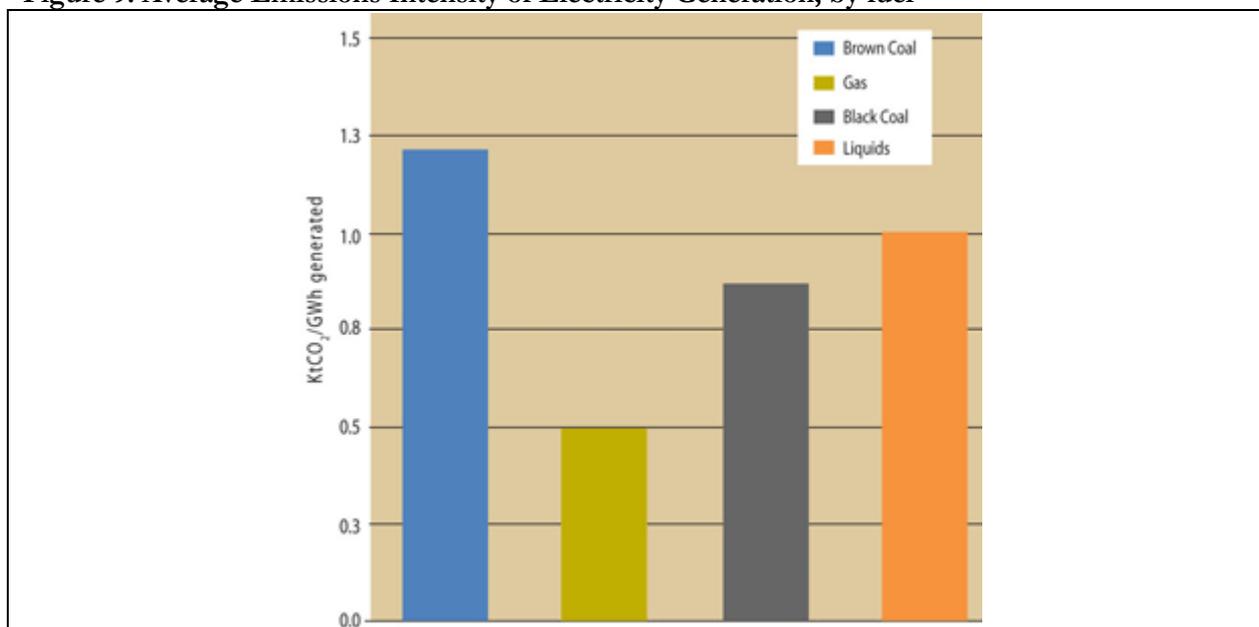
The Government commits to the retention of the existing EPBS regime, and that any further modifications to its administration are undertaken in full consultation with the project proponents.

Carbon Pricing

Increased use of Australia’s large gas resources would deliver large economic, environmental and energy security benefits for the nation.

The use of gas to generate electricity in Australia and abroad can result in 50 to 70 per cent less greenhouse gas emissions than electricity generated from other fossil fuels. For every tonne of carbon dioxide associated with the production, export and consumption of Australian LNG, up to 9.5 tonnes of CO₂-e are avoided in customer countries when LNG is used in place of coal⁵.

Figure 9: Average Emissions Intensity of Electricity Generation, by fuel



Source: SKM | MMA (2010), ACIL Tasman (2010), Department of Climate Change and Energy Efficiency (DCCEE) analysis

⁵ See [www.woodside.com.au/our-approach/climate-change/documents/worleyparsons%20\(2008\)%20greenhouse%20gas%20emissions%20study%20of%20australian%20lng.pdf](http://www.woodside.com.au/our-approach/climate-change/documents/worleyparsons%20(2008)%20greenhouse%20gas%20emissions%20study%20of%20australian%20lng.pdf) for further information.

Unlike renewable energy forms, the technology is available now to significantly reduce Australia's greenhouse gas emissions through a greater reliance on gas-fired electricity generation. It does not require expensive and high risk government subsidies and can deliver much larger levels of abatement at a much lower cost.

A greater use of gas for power generation would also deliver other environmental benefits including reduced emissions of particulates and sulphur dioxide and reduced water usage for power station cooling. Air-cooled technology allows gas-fired power stations to use less than three per cent of the water used by a typical water-cooled coal-fired power station.

Despite the significant economic, environmental and security benefits offered by gas, growth in Australia's gas market is being constrained by a range of market distortions including energy subsidy schemes such as the Renewable Energy Target (RET) and state solar schemes, higher rates of resources taxation compared to that applying to coal, restrictions on gas and electricity prices and other forms of government intervention in Australia's gas market. These distortions can discourage new investment and the entry of new market participants thereby increasing energy prices and inhibiting supply diversity and security.

APPEA argues that operating a renewable energy target (RET) in conjunction with a carbon pricing mechanism is driving up the cost of meeting the Australian Government's 2020 greenhouse gas reduction target and inhibiting the ability of natural gas to reduce emissions. Modelling from BAE Economics shows, that with a carbon price now in place, a renewable energy target operating in parallel simply adds to the cost of achieving emissions reduction targets. The study shows when compared to a standalone emissions trading scheme, the RET plus emissions trading will reduce Australian GDP by an additional \$6.5 billion and reduce gas-fired electricity generation by 2,313 gigawatt hours by 2020 without delivering any additional reduction in emissions⁶.

The introduction of carbon pricing in Australia from 1 July 2012 has reduced the competitiveness of Australia's LNG industry by imposing a large new cost not borne by overseas competitors. Australian LNG projects will be required to pay the tax on at least 34 per cent of their emissions in the first year, with the percentage increasing each year. This is further increasing Australia's already high cost structure and further reducing the ability of Australian LNG projects to remain price competitive.

With carbon pricing now the centre-piece of Australia's policy approach to greenhouse gas emissions, other legacy greenhouse policies and programs should be urgently reviewed. Only those schemes that address a clear market failure (not addressed by the carbon price) at least cost and do not compromise the efficiency of the carbon pricing mechanism should be retained. High cost schemes and subsidies should be abolished.

APPEA's submission to the Climate Change Authority's Review of the RET scheme argued that⁷ the RET should be phased out as soon as practicable, particularly since on current projections, the scheme is likely to have reached its 20 per cent target well before 2020. While the Review

⁶ BAEconomics report, *Implications of the RET for the Australian economy* (available at www.appea.com.au/images/stories/Reports/baeconomics%20appea%20ret%20report%208sep12.pdf) for further information.

⁷ See APPEA's submissions to the RET Review at www.climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/SUB-RET-2012-108.pdf and www.climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/PB-RET-2012-185.pdf for further information.

recommended the scheme be largely retained, the continuation of the RET will negatively impact on least cost reductions in greenhouse gas emissions.

In 2008, members of the Council of Australian Governments (COAG) agreed to review all of their other carbon reduction programs. However, according to the Productivity Commission, in June 2011 there were still around 230 emission-reduction policies in place around Australia. Some states have since started to review and wind back their expensive solar photovoltaic schemes and in April 2012 COAG recommitted to a review process. The cross-jurisdictional COAG Taskforce on Regulatory Reform was given the task of identifying reforms to rationalise carbon reduction and energy efficiency policies and programs that are not complementary to a carbon price; or are ineffective, inefficient or impose duplicative reporting requirements on business. The Taskforce is due to provide its advice to COAG by April 2013.

In particular, the Energy Efficiency Opportunities Program should be discontinued as it duplicates rather than complements, the carbon price mechanism. The practice of attaching greenhouse conditions to environmental approvals should be discontinued and such conditions should be removed from existing project approvals.

Recommendation – Carbon Pricing

APPEA supports a national climate change policy that delivers abatement at least cost and delivers investment outcomes consistent with there being an international price on carbon. The Government should review and remove any climate change policy or program (including the Renewable Energy Target) that does not address a clear market failure (not addressed by the carbon price) or compromise the efficiency of the carbon pricing mechanism.

Workforce Development and Productivity

One of today's most prominent public debates is on the availability, cost and productivity of the labour needed to support the high levels of resources sector construction activity over the next five years. Numerous surveys and studies point to problems in each of these three factors. A recent report on the industry stated that access to sufficient skilled labour is a pivotal concern for the oil and gas industry. It states that improving labour mobility and flexibility is the key to improving labour productivity.⁸

The availability and productivity of skilled labour continues to challenge the industry.

The availability and productivity of skilled labour is also a major challenge for the industry as investment and construction activity across the resources sector rises to unprecedented levels. Around \$200 billion is being invested in LNG projects currently under construction and other LNG projects at advanced stages of planning could cost as much again.

Increasing the size of the skilled labour workforce must be accompanied by reforms to increase its productivity. Australia's labour productivity, including that in the oil and gas sector, has been declining, resulting in higher project costs and delays to project completions.

⁸ Deloitte Access Economics 2012.

A report produced by Pitcrew Management Consulting Services for APPEA considered the labour requirements over the next five years of 248 major resources, energy and infrastructure projects under construction or being planned for development across Western Australia, Northern Territory and Queensland and identified total capital expenditure for these projects at \$527.1 billion, of which \$318.3 billion has been approved.

Construction labour demand is expected to peak at 95,000 during 2014 and engineering demand peaking at 31,000 in late 2013. Workforce demand for oil and gas projects currently under construction is expected to more than double by the second half of 2014 to 45,000. The Department of Education, Employment & Workplace Relations (DEEWR, cited in AWPA 2012 Report on Resource Sector Skill Needs) estimates that direct employment in oil and gas extraction will rise by 11% per annum between 2011-12 and 2016-17, increasing employment in the industry from around 16,600 to 28,000 in 2017.

In recent years the oil and gas industry has invested significantly in training and education initiatives to meet their workforce needs. Operators and contractors alike have worked independently and in partnership with government at all levels to develop and implement strategies for increasing the size, capability and productivity of the industry's Australian workforce. However, the extent of the demand, the specialised nature of many of the occupations required and constraints around labour mobility (that is, many skilled workers are reluctant to relocate families or fly-in/fly-out of cities to remote locations for work) mean that the industry must have timely and efficient access to skilled migration programs, as well as a more flexible, market-based workplace relations system. Improved labour mobility and flexibility is the key to improving labour productivity.

There is ample evidence that shortages of construction and professional staff (including engineers) are bidding up wages and adding to construction and operating costs. A 2012 survey of global oil and gas salaries by recruitment agency Hays Oil & Gas estimated that average salaries for locally-sourced, permanent staff in Australian oil and gas industry increased by 13% in 2011, making them the second highest in the world after Norway, 32 per cent higher than the US and more than double the global average.

A range of economic and labour market analyses strongly support the case that there has been a decline in productivity across the Australian economy and more specifically a decline in labour productivity in the oil and gas and mining sectors in recent years. Set against this trend, while employment in the oil and gas and mining sectors has grown substantially in the past decade this growth in employment has been accompanied by very substantial growth in investment, which should in the medium to longer term improve these sector's technological capabilities, and, subject to world demand trends, should add very substantially to the sectors' output. This growth is however very dependent on the sector having timely and effective access to a skilled, flexible and productive workforce.

The Fair Work Commission

APPEA has previously called on the Australian Government to commit to workplace relations reform to help reduce institutional barriers to investment in the oil and gas industry. In its submission to the Fair Work Act 2009 Review, APPEA identified a range of barriers embedded in Australia's industrial relations framework that could cost investment and jobs in the sector:

- the requirement to negotiate greenfields agreements exclusively with employee organisations, which has exposed major projects to unreasonable union demands;
- requirements allowing unions to insist on the inclusion of restrictive provisions, such as restricting the right to employ contractors, that run counter to the productivity objective referred to in the Object of the Act (at section 3(a)); and
- unions having right of entry to a site, regardless of whether they have members on that site.
- There is presently \$200 billion worth of liquefied natural gas projects under construction in Australia.

Anecdotal evidence indicates costs have increased by more than 35 per cent over little more than a year at some offshore oil and gas construction projects in Western Australia and Victoria. In July 2012, the Federal Ministers for Resources and Energy and Regional Development warned that increases in wages and conditions applied to some projects were unsustainable and risked future investment. Business groups are calling for reform of the *Fair Work Act 2009* to improve labour market flexibility and enable them to introduce productivity improvement initiatives. The review of the Act in August and reforms announced by the Government in October do not address these concerns adequately. On December 2012 the *Fair Work Amendment Act 2012* received Royal Assent with several impacts coming into effect on 1 January 2013.

It is critical therefore that action is taken by industry and governments to deliver this skilled and productive workforce. For its part, the oil and gas industry will continue to invest strongly in capital and in the necessary skills, education and training for its workforce. The industry will also continue to require its contractors, particularly in the construction phase of our projects, to have in place workforce development plans and be able to demonstrate a commitment to ongoing training of trade apprentices. The industry will provide resources and support for the skills development of the future workforce, will promote improved workforce participation for all Australians within our sector, and work to create economic and job opportunities in regional Australia, particularly for Indigenous Australians. We will ensure we operate at the highest environmental and safety standards.

Recommendation

APPEA is seeking government commitment to:

- provide a responsive and efficient skilled migration system that recognises the complex structure of resource projects and the international nature of the oil and gas industry's workforce;
- reform of the industrial relations system to give Fair Work Australia or the Office of the Fair Work Ombudsman a stronger role in preventing disputes, and to ensure that workplace collaboration focuses on genuine and good faith bargaining;
- reform industrial relations for the vocational education and training sector to remove workplace rigidity and wage structures, ensure that trainers with industry expertise are able to access competitive salaries, and ensure workplace arrangements are conducive to the development of skill sets that meet industry requirements;
- introduce workforce participation and flexibility provisions within workplace laws to allow labour to move more easily between projects; and
- ensure effective and efficient regulation and a reduction of regulatory red tape.