

29 October 2010



Mr John Hawkins
Secretary
Senate Select Committee on the Scrutiny of New Taxes
PO Box 6100
Parliament House
CANBERRA ACT 2600

(via e-mail: neutaxes@aph.gov.au)

Dear Mr Hawkins

I refer to your letters dated 12 October 2010 and 13 October 2010 seeking comments from the Australian Petroleum Production & Exploration Association (APPEA) on the Committee's *Inquiry into Minerals Resources Rent Tax* and *Inquiry into Carbon Pricing*. APPEA welcomes the opportunity to respond to the Committee's requests.

APPEA is the peak national body representing the collective interests of the upstream oil and gas exploration and production industry. The Association has more than 80 full member companies that explore for and produce Australia's oil and gas resources. These companies currently account for an estimated 98 per cent of the nation's petroleum production. In addition, APPEA also represents more than 200 associate member companies that provide a wide range of goods and services to industry.

In relation to the extension of the petroleum resource rent tax to cover all oil and gas operations in Australia, APPEA is not in a position to provide any commentary to the Committee on the terms of reference until such time as draft amending legislation is released for comment.

In relation to carbon pricing issues, APPEA notes the Government has recently announced the Multi-Party Committee on Climate Change as the key forum for advancing propositions to price carbon in the Australian economy. The Government has also announced a Business Roundtable to provide advice to the Government on carbon pricing implications from an Australian business perspective. A number of oil and gas companies are represented on the Roundtable.

At this early stage, it is not possible for APPEA to offer detailed comments on carbon pricing mechanisms as a specific carbon pricing proposal has not emerged from this policy development process.

It is the case, however, that as it has in the past APPEA will assess any proposal against a set of guiding climate change policy principles. These are set out in the enclosed document, *Climate Change Policy Principles, A Government/Industry Partnership for a Cleaner Energy Future*, and are provided to assist policy makers in the development of responses to the risks posed by global climate change.

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Importantly, the document notes Australia's natural gas reserves have the unique potential – in both the short-term and the long-term – to significantly reduce greenhouse gas emissions. This could occur both domestically through greater use of natural gas (particularly for electricity generation) in Australia, and throughout the Asia-Pacific region through increased liquefied natural gas (LNG) exports.

APPEA believes Australia's policy response to climate change must be fair, national, environmentally effective, and able to deliver abatement at least cost. Within that context, the opportunity that exists for Australia to generate significant additional national economic, environmental and social benefits from its substantial natural gas reserves by:

- establishing a long-term carbon price signal across the whole economy;
- recognising the role that Australia's domestic gas industry can play in assisting Australia move to a significantly less carbon intensive future and Australia's LNG exports can play in assisting the world move to a significantly less carbon intensive future; and
- recognising cleaner global contributor exports (including the LNG industry) by ensuring policies minimise the costs they face in the absence of a carbon price being imposed on higher emitting energy sources in customer countries and competitors.

As Australia's climate change policy continues to evolve, the natural gas industry will continue to apply and assess any scheme against a common sense test. That is, does it result in the expansion of cleaner energy sources including natural gas and the growth of Australia's LNG industry, consistent with the outcomes that could be expected were there an international price on carbon?

These issues are all of ongoing critical importance to the prosperity of Australia's \$29 billion per annum oil and gas industry. APPEA, and its members, are committed to working towards a profitable, safe, environmentally responsible and socially responsible oil and gas exploration, development and production industry.

We look forward to further engagement with the Committee. Please feel free to contact Mr Noel Mullen, Deputy Chief Executive – Corporate & Commercial on 6267 0904 or via e-mail at nmullen@appea.com.au in relation to taxation issues and Mr Damian Dwyer, Director – Energy Markets & Climate Change on 6267 0902 or via e-mail at ddwyer@appea.com.au in relation to carbon pricing issues.

Yours sincerely

Belinda Robinson
CHIEF EXECUTIVE

Enc.



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CLIMATE CHANGE POLICY PRINCIPLES

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A Government/Industry Partnership for a Cleaner Energy Future

NOVEMBER 2010

TABLE OF CONTENTS

1. INTRODUCTION	2
2. APPEA: THE VOICE OF AUSTRALIA'S UPSTREAM OIL AND NATURAL GAS INDUSTRY	3
3. PRINCIPLES TO GUIDE CLIMATE CHANGE POLICY DEVELOPMENT	3
4. THE ROLE OF NATURAL GAS IN A CLEANER ENERGY FUTURE	5
4.1 The importance of natural gas as a low greenhouse gas emissions energy source in Australia	5
4.2 The importance of natural gas as a low greenhouse gas emissions energy source in the Asia-Pacific region	7
5. A PLAN FOR ACTION	8
ATTACHMENT 1: COMPARISON OF RESOURCE TAXATION OF GAS AND COAL PRODUCTION IN VICTORIA AND NEW SOUTH WALES.....	9

1. INTRODUCTION

Reducing greenhouse gas emissions is a global priority.

Our abundant natural gas resources place Australia in an enviable position to maintain long-term, clean 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 risk of climate change.

Societies around the world will continue to face two major, interdependent challenges:

1. to maintain and expand energy supplies to meet growing consumer demand; and
2. to address the social and ecological risks posed by rising greenhouse gas emissions and the potential for human-induced climate change.

Managing greenhouse gas emissions and meeting growing energy demand requires action by individuals, companies, and governments. This will entail an integrated set of solutions, including increasing efficiency, advancing lower-carbon energy technologies, and supporting effective national and international policies.

Given the importance of competitively priced and reliable energy to global economies and improved living standards, it is essential that policies aimed at reducing greenhouse gas emissions do so at the lowest possible cost. This requires using an appropriately designed carbon pricing mechanism to impose economy-wide, predictable and transparent costs to shape business and consumer plans and investments. In addition, global participation is critical to reducing costs and risks.

Adaptation is also an important element of climate change policy response. Adaptation strategies must be used to mitigate the risks that a changing climate may pose.

Australia's natural gas reserves can play a key role in the nation's climate change response. Natural gas has the unique potential, in both the short-term and the long-term, to significantly reduce greenhouse gas emissions both domestically, through greater use of natural gas in the domestic market particularly in electricity generation, and in Asia, through increased liquefied natural gas (LNG) exports.

The Australian Petroleum Production & Exploration Association (APPEA) is committed to working with policy makers as they develop responses to the global risks posed by climate change.

APPEA has developed a series of policy principles, set out in Section 3, that should underpin Australia's response to the risks posed by climate change. It is committed to working with policy makers around the implementation of these principles.

2. APPEA: THE VOICE OF AUSTRALIA'S UPSTREAM OIL AND NATURAL GAS INDUSTRY

Since 1959, APPEA has been the peak national body representing the collective interests of the upstream oil and gas exploration and production industry. APPEA's full member companies, those that explore for and produce Australia's oil and gas resources, account for an estimated 98 per cent of the nation's petroleum production. In addition, APPEA also represents associate member companies that provide a wide range of goods and services to the industry¹.

APPEA assists its members by working with the Commonwealth, State and Territory governments to ensure that Australia's regulatory and commercial framework promotes investment and maximises the return to the Australian community from the nation's oil and gas resources.

APPEA aims to secure the right conditions so that member companies can operate safely, sustainably, and profitably. Importantly, APPEA also seeks to increase community and government understanding of the upstream oil and gas industry by publishing information about its activities and economic importance to the nation. APPEA also conducts several forums for exchanging ideas and contributing to the development of the industry's policy positions.

As a part of this, APPEA wants to work with governments to achieve credible industry actions and governmental climate change policies. Such policies must address climate change concerns in an economically and commercially viable way and contribute to a regulatory and commercial framework that promotes investment and maximises the return to the Australian community from the nation's oil and gas resources.

3. PRINCIPLES TO GUIDE CLIMATE CHANGE POLICY DEVELOPMENT

The *Climate Change Policy Principles* are provided to assist policy makers in developing responses to the risks posed by global climate change.

Throughout the world, national and regional policymakers are considering a variety of legislative and regulatory options to mitigate greenhouse gas emissions. APPEA believes assessing these options requires an understanding of their likely effectiveness, scale, and cost, as well as their implications for economic growth and quality of life.

As part of this, the interaction between climate change mitigation policies and other national policies focusing on economic growth, population growth, energy supply and security, international trade and environmental and social responsibility must be considered and a consistent policy approach developed. As an example, the disparity in Australia's resource taxation system between natural gas and coal is a disincentive to move to lower emissions fuel sources. This is explained further at [Attachment 1](#).

¹ Further information about APPEA, its members, and the industry in Australia is available at www.appea.com.au.

Australia should make an equitable contribution, in accordance with its differentiated responsibilities and respective capability² to global action, to reduce greenhouse gas emissions.

- Australia should engage the international community in pursuing identified and beneficial environmental outcomes through greenhouse gas emissions reduction action that:
 - allows for differentiated national approaches;
 - promotes international participation;
 - minimises the costs and distributes the burden equitably across the international community;
 - is comprehensive in its coverage;
 - allows for the unrestricted flow of credible emissions units between international jurisdictions; and
 - is underpinned by streamlined, efficient and effective administrative, reporting and compliance arrangements.
- In this global context, Australia should develop a single national approach to regulating greenhouse gas emissions. This national approach should be developed and implemented transparently to maximise community support. It must provide stability and send clear signals to encourage sensible and broad-based investment and it must not be overly complex. This approach should:
 - deliver emissions reductions at the lowest possible cost to the Australian economy – this is best achieved through a price on emissions imposed on the widest possible coverage of emissions;
 - address all greenhouse gases, emission sources and sinks;
 - recognise the widest possible range of credible offsets;
 - be fully integrated with Australia’s energy policy;
 - in the event Australia takes action before comparable action is taken by the nations with which we compete, maintains the competitiveness of Australian export industries, particularly cleaner global contributor exports (including the LNG industry), by minimising the costs the industry faces in the absence of a carbon price being imposed on higher-emitting energy sources in customer countries and competitors; and
 - not discriminate against new entrants to Australian industry nor disadvantage “early movers” in Australian industry who have previously implemented greenhouse gas abatement measures.
- Adaptation strategies to mitigate the risks posed by a changing climate should include:
 - enhanced climate modelling to provide location specific climate change forecasts;
 - research into possible climate change impacts on the Australian environment;
 - development of land use and planning guidelines consistent with the available evidence of likely climate change impacts; and

² Australia’s contribution to the global climate change effort as set out here reflects the principle in Article 3.1 of the United Nations Framework Convention on Climate Change (see unfccc.int/essential_background/convention/background/items/1349.php). In determining Australia’s differentiated responsibilities and capabilities, consideration should be given to matters such as Australia’s economic growth and structure, population growth, energy production and energy use.

- the development of risk management strategies to reflect likely impacts of climate variability.
- Any additional measures targeted at reducing greenhouse gas emissions should only apply to sectors of the economy that are not covered by this single national approach.

4. THE ROLE OF NATURAL GAS IN A CLEANER ENERGY FUTURE

Greater use of Australian natural gas – in the domestic market, and in Asia as LNG exports – can significantly reduce greenhouse gas emissions.

4.1 The importance of natural gas as a low greenhouse gas emissions energy source in Australia

Australia could generate significant additional national economic, environmental and social benefits through greater utilisation of its substantial natural gas reserves.

Using more natural gas in Australia's power generation and resource processing would significantly enhance the nation's ability to meet increasing energy needs while at the same time reducing greenhouse gas emissions.

If Australia's ongoing energy demand is met – as coal-fired power generation retires – with a combination of natural gas and renewable energy (in line with the Government's Renewable Energy Target), greenhouse gas emissions would drop by as much as 20 per cent from 2000 levels while delivering twice as much power generation. This equates to a saving of nearly 1.5 billion tonnes of carbon dioxide emissions compared with maintaining the current level of coal-fired power generation.

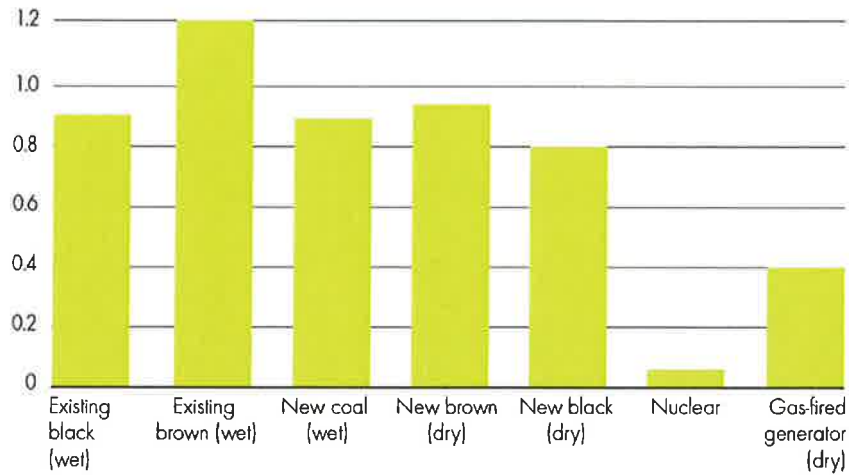
It also achieves a doubling of electricity production whilst delivering almost 10 per cent of the Australian Government's 2050 goal to reduce greenhouse gas emissions by 60 per cent.

These impressive environmental outcomes are possible because currently available natural gas technologies produce only 30 to 50 per cent of the emissions produced by current coal technologies in generating electricity. According to the Commonwealth Scientific and Industrial Research Organisation (CSIRO), current generation coal fired power stations produce between 0.8 and 1.2 tonnes of carbon dioxide equivalent greenhouse gas emissions (CO₂-e) per megawatt hour (MWh) of generation while a combined cycle gas turbine power station produces only around 0.35 to 0.36 tonnes CO₂-e/MWh³.

This is illustrated in Figure 1, which shows the significantly lower greenhouse gas emission associated with the gas-fired electrical power generation compared to the use of other fossil fuels.

³ Energy Futures Forum (2006), *The Heat is on: the future of energy in Australia*, December (see www.csiro.au/science/EnergyFuturesForum.html for further details).

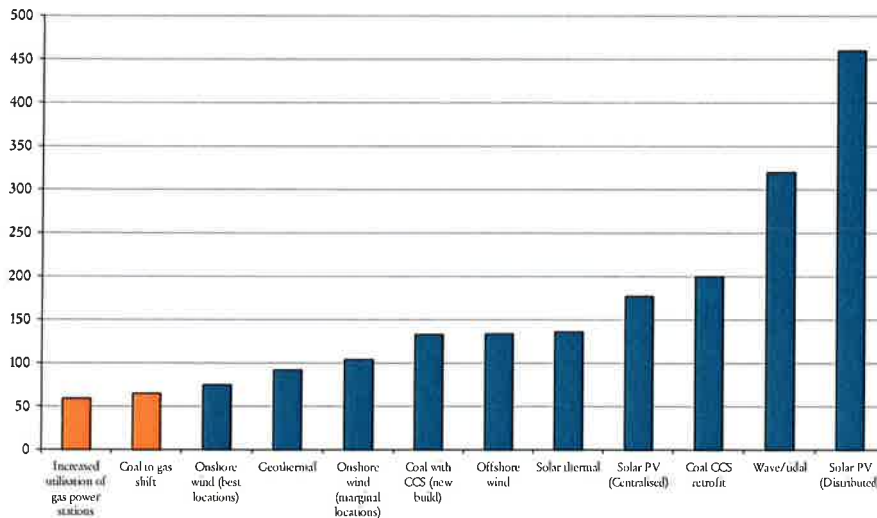
Figure 1: Emissions intensity of various fuel types for electricity generation (tonnes CO₂-e/MWh)



Sources: ACIL Tasman, Company websites/reports, McLennan Magasanik Associates, ROAM Consulting (2009).

Natural gas provides the lowest cost means by which Australia can reduce greenhouse gas emissions in the electrical power generation sector, both through increased use of existing gas-fired power stations and a ‘coal to gas shift’ (that is, ensuring new power stations are gas-fired). Figure 2 shows the cost of reducing emissions in the electrical power generation sector⁴.

Figure 2: Cost of abatement for alternative electrical power generation technologies (\$A/tonnes of greenhouse gas emissions abated)



Source: ClimateWorks Australia (2010).

Note: The ClimateWorks Australia report does not consider the cost of nuclear power in Australia.

The increased use of natural gas also has several additional environmental benefits, such as:

⁴ See ClimateWorks Australia (2010), *Low Carbon Growth Plan for Australia: March 2010* (available at www.climateworks.com.au/low_carbon_growth_plan.html) for more information.

- reduced emissions of particulates;
- reduced emissions of sulphur dioxide (an important contributor to smog and acid rain); and
- significantly lower demand for water for power station cooling.

Much greater use of Australia's extensive gas resources will be crucial in meeting the challenge of significantly reducing global greenhouse gas emissions at lowest possible cost whilst enhancing Australia's economic and export performance.

4.2 The importance of natural gas as a low greenhouse gas emissions energy source in the Asia-Pacific region

Australia's LNG industry is in a unique position to contribute substantially to the economic development of the nation and reduce greenhouse gas emissions. Australia's vast reserves of natural gas and proximity to growing markets make us well-placed to meet the global climate change challenge while substantially contributing to Australia's economic growth.

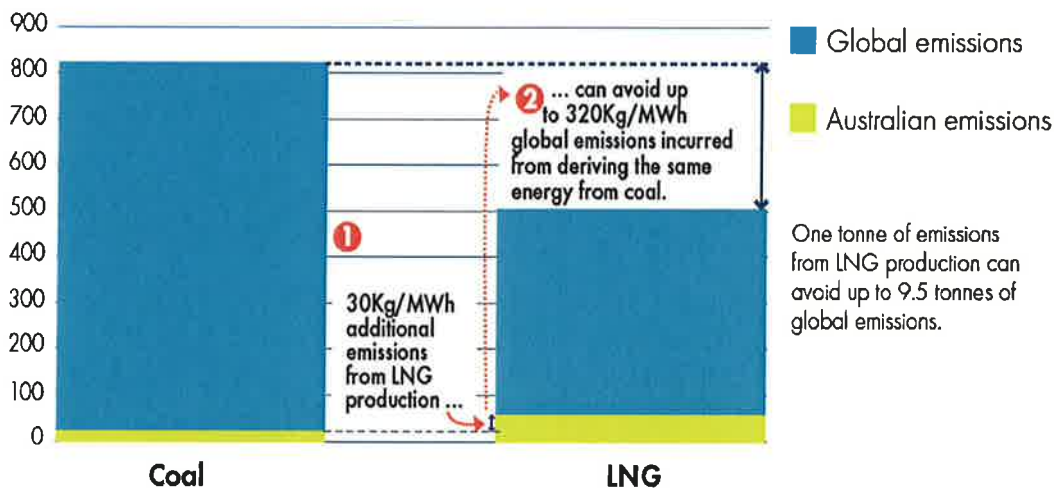
A 2008 study by WorleyParsons⁵, for example, compares lifecycle greenhouse gas emissions of Australian LNG exports from the North West Shelf Project with Australian east coast black coal exports in terms of lifecycle greenhouse gas emissions: from extraction and processing in Australia through to an end use of combustion (using different power generation technologies) in China for power generation.

Figure 3 below is derived from data within the study, and shows that:

- for every tonne of CO₂-e emitted in LNG production within Australia, between 5.5 and 9.5 tonnes of emissions from the coal alternative can be avoided globally.
- LNG has a substantially lower greenhouse footprint associated with it compared to coal – not just in combustion emissions, but throughout its lifecycle; and
- the lifecycle greenhouse intensity for LNG is about 40 per cent lower than that of coal.

⁵ WorleyParsons (2008), *Greenhouse Gas Emissions Study of Australian LNG*, July.

Figure 3: Displacement of coal by LNG (kg/MWh CO₂-e by fuel source)



Source: WorleyParsons (2008).

This shows the significant benefits to Australia and internationally from the greater use of gas as a lower greenhouse gas emitting energy source.

5. A PLAN FOR ACTION

Australia has substantial natural gas resources. Developing these resources can provide significant national economic and social benefits. The relatively low-cost emissions abatement opportunity offered by increased use of natural gas means developing these resources can also deliver significant environmental benefits.

The development of Australia's significant resources of natural gas can deliver significant national economic, environmental and social benefits. APPEA will continue to work with all Australian governments to realise these benefits.

In order to realise these benefits, APPEA will continue working with all Australian governments to:

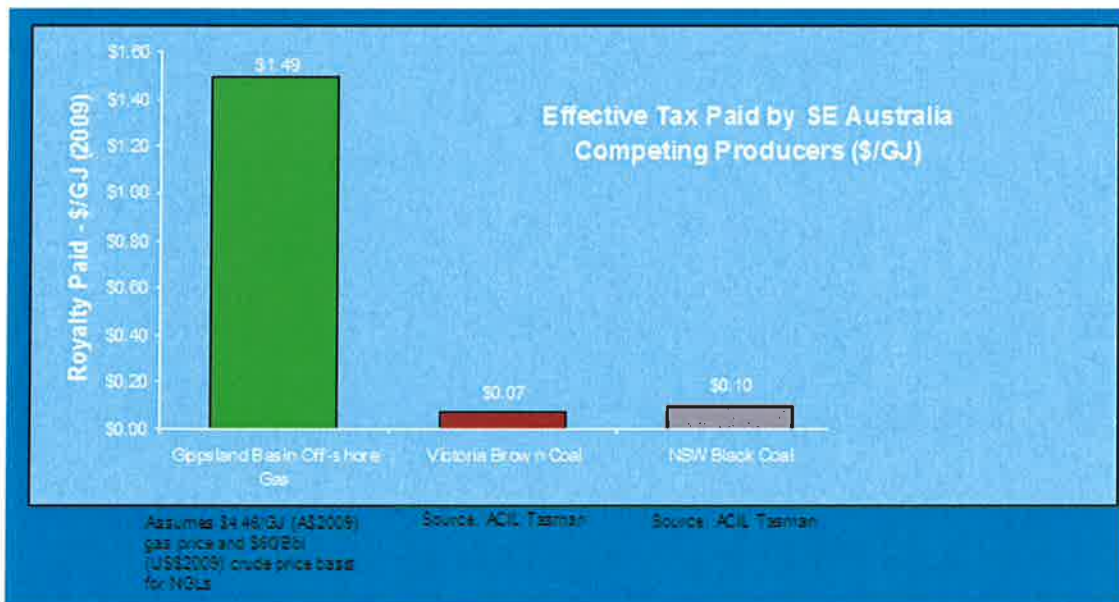
- support a national climate change policy response consistent with the policy principles outlined in this paper;
- work to increase the supply of natural gas for electrical power generation thereby lowering the emissions intensity of Australia's electricity supply sector;
- work to expand the use of natural gas in the domestic economy, for example in resource processing, with consequent reduction in the emissions intensity of resource processing; and
- increase the export of Australian LNG to help Australia's Asian trading partners lower their greenhouse gas emissions, thereby contributing to a potential significant reduction in global emission compared to the use of higher emitting fuels.

ATTACHMENT 1: COMPARISON OF RESOURCE TAXATION OF GAS AND COAL PRODUCTION IN VICTORIA AND NEW SOUTH WALES

One of the biggest, if not the biggest, factor affecting how well Australia curtails growth in emissions will be our ability to increase the share of electrical power generation fueled by natural gas – domestically and internationally.

This does not require any new technology; it simply requires commonsense policy that allows energy sources to compete on their merits. Australia's policy framework does not always meet this commonsense test. The resource taxation system, for example, taxes (expressed as dollars per unit of energy produced) the production of natural gas in the Gippsland Basin at fifteen times the rate of brown coal despite natural gas emitting only around 30 per cent of the greenhouse gas emissions.

Figure 4: Effective Tax Paid by SE Australian Competing Producers (\$/GJ)



Source: ACIL Tasman (2010).

Such policy distortions result in cleaner burning fuels being more expensive in the energy market and act as barriers to the transformation of the energy economy.