18 February 2016

Submissions
Climate Change Authority
GPO Box 1944
Melbourne VIC 3001
Via email: submissions@climatechangeauthority.gov.au

CCA INVITATION FOR INPUT: AUSTRALIA'S CLIMATE CHANGE POLICY OPTIONS

Dear Sir or Madam,

I am writing to you on behalf of the members and associates of Gas Energy Australia concerning your invitation for input on the Australia's Climate Policy Options report.

Gas Energy Australia is encouraged by the Climate Change Authority's (CCA) work in addressing environmental challenges facing the Australian and global community. Gas Energy Australia recognises the role of human activities in contributing to climate change and the need to introduce effective policies to reduce emissions. With Australia's target to reduce emission by 26-28% below 2005 levels by 2030, we consider this Special Review into policy options an important step to meeting our international obligations and improving economic, environmental and social outcomes in Australia. We offer the following responses to selected questions in the Australia's Climate Policy Options second draft report.

1. **The Authority proposes assessing policies primarily on their cost effectiveness, environmental effectiveness and equity. Are these principles appropriate? Are there any other principles that should be applied, and if so, why?**

   Gas Energy Australia supports the approach to assessing climate change policies based on three criteria of cost effectiveness, environmental effectiveness and equity. This will increase the level of transparency and objectivity in the introduction of policies while addressing environmental, economic and social goals. Current climate change schemes such as the Australian Renewable Energy Agency (ARENA) funding program and the Renewable Energy Target (RET) continue to support renewable energy technology. This is despite the finding in the Productivity Commission's recent *Carbon Emission Policies in Key Economies* research report that the cost of abatement for the RET scheme was estimated to be 2-6 times greater than an equivalent gas switching incentive program in Queensland in 2009 and 2010.

   Gas Energy Australia contends that the continuation of these schemes may be due to public perceptions about renewable energy technology rather than its abatement performance. We welcome the more objective approach to evaluating climate change policies based on the three key criteria. However, Gas Energy Australia also acknowledges the difficulty in meeting the equity criteria due to the need for subjective judgements about the appropriate distribution of costs. We suggest that a higher weighting should be given to cost and environmental effectiveness criteria in the evaluation of policy options.

2. **What lessons can be learned from Australia and overseas on the effectiveness of mandatory carbon pricing, and its interaction with other climate policies?**

   The Productivity Commission's *Emissions Reduction Policies in Key Economies* research report also compared the impact of mandatory carbon pricing policies and other climate policies in Australian and other countries. The report noted that Germany and the UK were successful in achieving high levels of emission reductions in the electricity generation sector using a variety of policies including mandatory carbon pricing through the European Union Emissions Trading Scheme (ETS) and incentives for renewable energy and combined heat and power. The report estimated that the level of abatement achieved in the UK from these policies represented 7.5-15.4% of total emissions under a business as usual scenario and the corresponding figures for Germany was 18.3-19.6%.

   The use of a cap and trade ETS with other climate policies that specify targets for renewable energy effectively reserves a part of the emissions cap to come from replacing fossil fuels with these energy sources. The Productivity Commission's report noted that reducing emissions through use of renewable energy technology requires significantly higher costs compared to fuel switching from coal to gas in the electricity generation sector. Hence, renewable energy target policies increase the overall cost to achieve a given level of abatement compared to an ETS only scenario. The ETS raises the average wholesale price of electricity and policies which subsidise renewable technology increases the share of energy production from these sources to the extent that the higher price and subsidy exceed the marginal cost of supply. This would also raise the overall cost of abatement. Gas Energy Australia considers that continuing climate policies which favour particular technologies result in high cost abatement activities being pursued and contradicts the cost effectiveness criteria.

3. **How does mandatory carbon pricing perform against the principles of cost effectiveness, environmental effectiveness and equity? Which type of pricing scheme is likely to be more effective, and why?**

   Gas Energy Australia notes that the Productivity Commission *Emissions Reduction Policies in Key Economies* research report identified the cap and trade ETS as the most cost effective instrument for reducing emissions based on the experiences in other countries.

4. **What lessons can be learned from Australia and overseas on the effectiveness of voluntary carbon pricing, and its interaction with other climate policies?**

   See below.

5. **How does voluntary carbon pricing perform against the principles of cost effectiveness, environmental effectiveness and equity?**

   Gas Energy Australia acknowledges that voluntary carbon pricing measures aim to reward low cost abatement activities. However, in practice, there are high information requirements for operating these programs. Estimates of business as usual emissions need to be verified by the Government to ensure genuine reductions are rewarded. Gas Energy Australia considers that other mechanisms

such as carbon taxes or cap and trade ETS which have lower information needs may present a more cost effective solution.

To the extent that a firm has significantly more private information on their operations, voluntary pricing measures can lead to perverse incentives which could impact on the ability to reach environmental targets. For example, firms could invest in high carbon technology with the aim to receive credits for reducing emissions later if the Government is unaware of their true business as usual level of emissions. Equivalently, the Government could reward emission reductions that would have occurred without additional incentives. Gas Energy Australia considers the information asymmetry problem in energy markets to be significant which could impact on its environmental effectiveness.

6. **What lessons can be learned from Australia and overseas on the effectiveness of renewable energy targets and energy efficiency targets, and their interaction with other climate policies?**

   See below.

7. **How do renewable energy targets and energy efficiency targets perform against the principles of cost effectiveness, environmental effectiveness and equity?**

   The Productivity Commission found that while enforcing renewable energy targets can result in substantial reductions in emissions, the cost of abatement is very high. In other words, the same level of abatement can be achieved with a cap and trade ETS at far lower cost through incentivising fuel switching. The use of renewable energy targets raises energy costs which places a larger burden on vulnerable households which spend a significant proportion of their income on energy.

   An energy efficiency target aims to reduce energy consumption rather than emissions. This could lead to overlap with other climate policies in addition to increasing regulatory burden. A cap and trade ETS operating alone will incentivise lowest cost abatement activities to reach the cap through a carbon price. Imposing an energy efficiency target in conjunction with such an ETS could lower demand for carbon certificates and distort the carbon price and thus optimal investment and abatement decisions. To the extent that complying with regulatory limits on energy consumption is in conflict with these optimal decisions, the cost of abatement increases.

8. **What lessons can be learned from Australia and overseas on the effectiveness of regulation, and its interaction with other climate policies?**

   North America and Europe have introduced regulations to reduce emissions from marine vessels through the use of emission control areas (ECA). This approach involves imposing strict standards on the levels of particular pollutants such as SO_x and NO_x. LNG powered vessels are increasingly being used in ECAs as a cost effective way of meeting the requirements of these regulations which also significantly reduces CO_2 emissions. Adopting consistent regulatory arrangements in Australia would lower the costs of international trade and shipping. In addition, regulations rather than a market based approach may be appropriate for the marine sector where emissions are concentrated from a small number of polluters. In Australia, the NSW EPA is considering stricter fuel standards for marine

vessels to address environmental and health concerns and this is an opportunity to align Australia's regulations with those in other developed countries.

9. **How could various types of regulation perform against the principles of cost effectiveness, environmental effectiveness and equity?**

   See above.

10. **What lessons can be learned from Australia and overseas on the effectiveness of information programs and innovation support, and their interaction with other climate policies?**

    Gas Energy Australia acknowledges the potential for lack of information to result in suboptimal decisions by consumers and businesses. For example, the higher running costs of low efficiency appliances in homes is not often reflected in rental prices. Tenants may become aware of these costs only after long term arrangements are agreed upon and this discourages owners from making energy efficient investments. There may be some scope to reduce emissions from improving the disclosure of energy efficiency performance of homes and appliances. However, Gas Energy Australia notes that even with full information on energy efficiency, consumers and businesses will still undervalue the benefit of reduced emissions in energy efficiency investment decisions without appropriate price signals. Hence, we would encourage information programs to be used in conjunction with some form of market based measure to account for the cost of emissions.

    The use of mechanisms which price emissions such as those discussed in Question 2 would provide incentives for innovation in emission reduction. Gas Energy Australia suggests that innovation support programs are best viewed as a supplement rather than a substitute to policies which price emissions.

11. **How do information programs and innovation support perform against the principles of cost effectiveness, environmental effectiveness and equity?**

    See above.

12. **What policies do you consider are best suited to which sectors and why?**

    Our answer to Question 8 notes that other developed countries have implemented regulations to reduce emissions in marine transport sector. Gas Energy Australia considers that this approach to climate change policy is suitable for this sector in Australia where significant emissions are generated from a small number of visits from vessels. This is a cost effective measure and alignment of regulations will benefit international trade and shipping through lower regulatory costs.

    The 2009 International Transport Forum document *Reducing Transport GHG Emissions – Opportunities and Costs* identifies fuel tax policy as a key instrument for reducing CO2 emissions from the road transport sector. This is through influencing transport demand and the technologies deployed by vehicle manufacturers. The Government has previously committed to charging alternative fuels such as CNG, LNG and LPG an excise rate of not more than 50% of diesel on an energy equivalent basis to reflect their environmental, fuel security and regional development

benefits. Subsequent policies including a freeze on increases to the road user charge has seen this excise rate exceeded. Ensuring that commitments by the Government are adhered to will reduce uncertainty and allow road users to respond appropriately to policies aimed at reducing emissions.

Infrastructure Australia's recently released *Australian Infrastructure Plan* report identified road user charging as a potential mechanism to incentivise efficient use of, maintenance of and investment in the road network. With technology enabling the monitoring of road use by location and time, road user charging could provide appropriate price signals to manage supply and demand. While this could address the negative externalities from road use, environmental and health costs from transport could also be accounted for in road user charges. Charges for these externalities could be based on broad estimates of emissions by vehicle type and distance travelled. Gas Energy Australia considers replacing the existing fuel excise with road user charges as an opportunity for internalising the full range of externalities from transport beyond congestion alone.

Conclusion

Gas Energy Australia supports the efforts by the CCA in addressing how best to address climate change. We are encouraged by the approach suggested by CCA to evaluate climate change policies based on cost effectiveness, environmental effectiveness and equity criteria. This will make the policy development process more transparent and allow a balance between different goals to be achieved. Gas Energy Australia has previously advocated for a technology neutral approach in environmental policies to ensure that the most efficient solutions are employed to meet desired objectives. The experiences in other countries have demonstrated that where this approach has been taken, gaseous fuels take on a major role in reducing carbon emissions. Gas Energy Australia is confident that our gaseous fuels industry can contribute to Australia's climate change objectives and welcomes the opportunity to continue working with the CCA.

For your consideration.

Yours sincerely

John Griffiths
Chief Executive Officer