



30 September 2009

Premier of Victoria  
Climate Change Submission  
GPO Box 4912  
Melbourne VIC 3001

Via email: [climatechange@dpc.vic.gov.au](mailto:climatechange@dpc.vic.gov.au)

Dear Premier

#### **VICTORIAN CLIMATE CHANGE GREEN PAPER**

The Australian Pipeline Industry Association welcomes the opportunity to comment on the Victorian Government's Climate Change Green Paper.

APIA is the peak national body representing the interests of Australia's transmission pipeline sector. APIA's membership is predominantly involved in high-pressure gas transmission. APIA's members include contractors, owners, operators, advisers and engineering companies and suppliers of pipeline products and services.

APIA considers one of the most effective emissions reduction measures the Victorian Government can pursue is to promote the widespread use of natural gas in the Victorian economy. The role natural gas can play in reducing the emissions of Victorian households and businesses and, in particular, Victoria's stationary energy sector should not be underestimated.

Victoria has significant reserves of natural gas, located mainly in the Otway and Gippsland basins. The Australian Energy Market Operator puts the most recent 2P reserves figure in excess of 10,000PJ. In addition, significant exploration work is underway and this is likely to substantially increase the estimated reserves figure.

One of APIA's concerns regarding climate change policy direction is the attention governments in all jurisdictions give to all energy sources other than gas. The only gas-specific policy in Australia is the Queensland Government's Gas Scheme, which has a target for natural gas to comprise 13% of the fuels used for electricity generation (increasing to 15% in 2010).

As detailed on page 33 of the Green Paper, in the stationary energy sector the Victorian Government has policies and initiatives covering:

- Coal drying;
- Coal gasification;
- Solar power;
- Electricity from renewable sources, including feed in tariffs for distributed generation;
- A support fund to assist with the installation of renewable energy technologies; and
- Carbon capture and storage.

**APIA considers the extensive Government policy focus on technologies for renewable energy and “clean coal” will reduce the impetus to invest in natural gas, the clear and obvious alternative – and cleaner – fuel, and the most efficient way to reduce Australia’s carbon emissions.**

The increased use of natural gas in Victoria, instead of coal for production of energy, would see a significant reduction in national greenhouse gas emissions. Natural gas is a viable, abundant, low cost, low emission option already in use in every sector of the Victorian economy.

It is vital for the Australian economy that emissions reduction is achieved at as low an economic cost as possible. The stationary energy sector is the largest contributor to Australia’s carbon emissions and natural gas is the lowest cost method to achieve emissions reduction. This is particularly true in the Victorian stationary energy sector.

### **Role of Natural Gas in Emissions Reduction in the Stationary Energy Sector**

In the short to medium term, natural gas can play a vital role in reducing Australia’s greenhouse gas emissions. Emissions from Australia’s stationary energy sector totalled 287.4 million tonnes of carbon dioxide equivalent in 2006<sup>1</sup>, which is 52.3% of the total national emissions of 549.9 million tonnes of carbon dioxide equivalent. The vast majority of these emissions result from coal fired electricity generation. Natural gas fired electricity generation is significantly cleaner than coal fired electricity generation, and it is estimated that every coal fired power station replaced with a gas fired power station would save millions of tonnes of carbon dioxide equivalent emissions (exact figures are not available, as every power station is different).

In Victoria’s case, a switch from brown coal to gas as the primary fuel for electricity generation could reduce Victoria’s total greenhouse gas emissions by over 25%.

Indeed, Environment Victoria stated, in its November 2008 paper *Turning it around: environment solutions for Victoria*, that:

*“The most significant early impact (in the stationary energy sector) comes from the use of gas as early as possible to deliver early reductions in greenhouse gas emissions. Indeed, possible uncertainty in short term investment in coal-fired generation presents an early opportunity for a greater reliance on Gas Powered Generation (GPG) to meet Victoria’s base-load energy requirements. Whether coal-*

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<sup>1</sup> National Greenhouse Gas Inventory 2006, *Australian Greenhouse Office, Department of the Environment and Water Resources, June 2008.*

*fired generation completely goes off-line, or even just varies its generation activities in the interim period until CCS comes on-line, there is certainly an opportunity to move to a greater reliance on GPG. However, it is stressed that this wedge would require urgent and major energy infrastructure investment in Victoria.”*

Natural gas fired power stations also enjoy an economic advantage over many other types of electricity generation because of their significantly lower construction costs. Natural gas compares favourably to most base load electricity generation options and, when an emissions trading scheme places an economic value on emissions, will increase its comparative advantage to coal generation.

### **Role of Natural Gas in Emissions Reduction in Households**

The advantages of using gas appliances in the home are well known; gas can heat more quickly and more efficiently, and it offers greater control than provided by equivalent electrical appliances. In addition to these advantages, using natural gas in the home in place of electricity results in significantly fewer greenhouse gas emissions.

On average, using 3.6MJ of gas produces 75% fewer emissions of 1kwh of electricity, despite it having the same energy content. Combined with the fact that gas appliances are more efficient, most estimates consider gas appliances to result in around 1/6<sup>th</sup> the emissions of their electric counterparts. APIA estimates that by switching to gas appliances for cooking, space heating and water heating, householders could reduce their home energy related emissions by over 40%.

Clearly, switching to gas for home appliances would see households significantly reduce their carbon footprint while, at the same time, improving the efficiency and performance of heating, cooling and cooking appliances.

APIA commends the Victorian Government for seeking to develop comprehensive policies to address climate change issues and suggests the increased use of natural gas in the Victorian economy, particularly in the stationary energy sector, is one of the lowest cost, most immediate solutions the Victorian Government can implement.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Cheryl Cartwright', with a long horizontal line extending to the right.

CHERYL CARTWRIGHT  
Chief Executive