

GAS ENERGY AUSTRALIA

SUBMISSION

**GAS ENERGY AUSTRALIA
SUBMISSION IN RESPONSE TO
THE SOUTH AUSTRALIAN DEPARTMENT FOR
MANUFACTURING, INNOVATION, TRADE, RESOURCES
AND ENERGY'S
NATIONAL ENERGY EFFICIENT BUILDING PROJECT**

This page has been left blank

13 December 2013

Ms Sabina Douglas-Hill

Project Officer – National Energy Efficient Building Project
South Australian Department for Manufacturing,
Innovation, Trade, Resources and Energy
Level 8, 11 Waymouth Street
ADELAIDE SA 5000

Via email: consultation@pittsh.com.au

See Distribution

**GAS ENERGY AUSTRALIA SUBMISSION TO THE SOUTH AUSTRALIAN DEPARTMENT FOR
MANUFACTURING, INNOVATION, TRADE, RESOURCES AND ENERGY**

National Energy Efficient Building Project

Dear Ms Douglas-Hill,

Gas Energy Australia is pleased to provide this submission in response to the request by yourself and Pitt & Sherry for interested parties to provide a submission on the National Energy Efficient Building Project dated November 2013.

Gas Energy Australia commends the South Australian Department for Manufacturing, Innovation, Trade, Resources and Energy (DMITRE) efforts to improve energy efficiency outcomes in residential and commercial buildings. Gas Energy Australia also commends efforts to effectively reduce greenhouse gas (GHG) emissions, which it considers should be the primary focus of the project, as owners of buildings do not have an economic incentive to reduce such emissions.

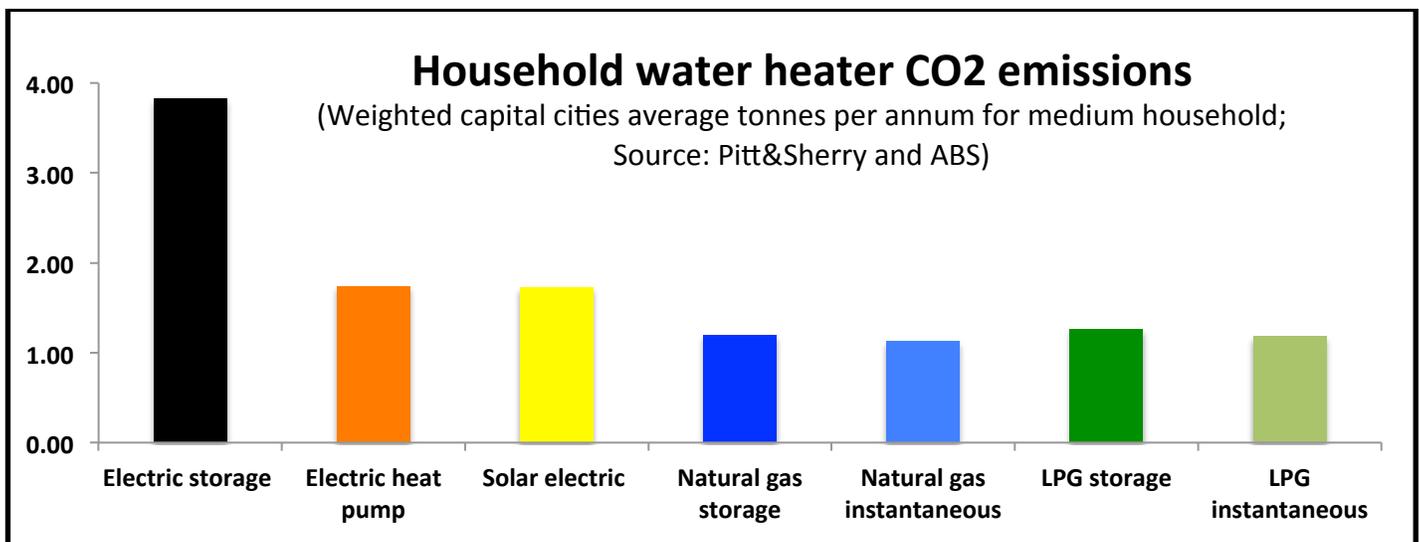
Gas Energy Australia is the national peak body, which represents the bulk of the downstream alternative gaseous fuels industry, which covers Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG). The industry comprises of major companies and small to medium businesses in the alternative gaseous fuels supply chain; refiners, fuel marketers, equipment manufacturers, LPG and CNG vehicle converters, LNG vehicle manufacturers, consultants and other providers of services to the industry.

A key finding of Gas Energy Australia's 2013-14 Budget Submission is that increased use of gaseous fuels provides a least cost pathway to the realisation of greenhouse gas (GHG) emissions reductions from transport and non-transport energy use. The research undertaken by Rare Consulting (a division of engineering and economic consultancy firm Pitt & Sherry) that underpinned the Submission concluded that while gaseous fuels do not necessarily provide the greatest level of abatement, they do provide significant GHG reductions for a low cost relative to alternatives such as electric vehicles in transportation or photovoltaics for residential energy consumption.

The principal means by which greater use of alternative gaseous fuels reduces GHG and other emissions is fuel switching – converting existing vehicles and appliances to run on gas or purchasing new vehicles and appliances that run on gas. This stems from the fact that the combustion of gas produces significantly lower emissions than the dominant fuel sources in the transport and non-transport sectors, which are petrol and diesel, and coal respectively.

There are costs associated with converting existing vehicles and appliances to run on gas and gas powered new vehicles and appliances can, at times, cost more than those powered by the dominant fuel source. But the cost of gaseous fuels is frequently less than that of the dominant fuel, especially in the transport sector, which offsets higher capital costs. As a result, switching to gas powered vehicles and appliances can be a very cost effective form of abatement.

In terms of household water heating, gas (or solar-gas) hot water provides numerous benefits over electric or solar-electric hot water in terms of emissions. Assumptions regarding emissions reduction of solar-electric hot water have been seriously challenged by research undertaken by Pitt & Sherry on behalf of Gas Energy Australia. Emissions comparison shows LPG and Natural Gas water heaters outperform solar-electric as well as other forms of electric hot water heaters.



Conclusion

Gas Energy Australia supports the key design principles underpinning energy efficiency and emissions reduction schemes including technology neutrality. This would represent a considerable advance on the many federal, state and territory government policies and programs implemented over recent years focussed solely on renewable energy. These policies and programs have often excluded the lower cost abatement that could be achieved through switching to gaseous fuels to the disadvantage of energy consumers and taxpayers. Gas Energy Australia would be concerned if the same approach was replicated in the building code.

Recommendations

Gas Energy Australia requests that to achieve low cost emissions reduction, the DMITRE and the National Energy Efficient Buildings Project should:

- a. recognise gaseous fuels as a low cost and sustainable option to both renewable and conventional energy sources in the context of building energy efficiency; and
- b. adopt the principle of technology neutrality i.e. not favouring one form of technology over another so that efforts to improve building energy efficiency do not disadvantage the use of gas for heating, cooking or other stationary energy applications.

Gas Energy Australia looks forward to working with you in relation to the National Energy Efficient Building Project.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Mike Carmody".

Mike Carmody
Director and Chief Executive Officer