

ROUNDTABLE Secretariat 4 Elizabeth Street HOBART TAS 7000

19 August 2005

Mr N Byron and Mr M Woods Energy Efficiency Inquiry Productivity Commission Locked Bag, 2 Collins St East MELBOURNE VIC 8003 Australia

**Dear Commissioners** 

Re: Productivity Commission Inquiry into Energy Efficiency Draft Report

I write on behalf of the Renewable and Sustainable Energy ROUNDTABLE (ROUNDTABLE) in response to the recent release of the Productivity Commission's Energy Efficiency Inquiry Draft Report.

The ROUNDTABLE is Australia's federation of renewable and sustainable energy industry associations and organisations comprising a breadth of members from research and development, education and electricity generation. It was formed to represent the industry on policy issues that are critical to the industry as a whole.

The ROUNDTABLE supports the development of renewable and sustainable energy technologies that by their nature underpin the principles of ecologically sustainable development. The ROUNDTABLE believes that renewable and sustainable energy technologies can significantly reduce the nation's greenhouse gas emissions in parallel with economic growth. Energy efficiency plays a crucial role in achieving this outcome.

A number of our members have made substantive submissions in response to the Draft Report and the ROUNDTABLE supports the general principles outlined in those submissions.

In addition to these concerns, the ROUNDTABLE expresses serious concerns about the Draft Report in its current form. These concerns are discussed in broad terms below, and the ROUNDTABLE requests that they be considered and adopted.

The Draft Report focuses on the private benefits of energy efficiency. It is crucial that the broader public benefits of energy efficiency are also acknowledged and ultimately realised through government policy. These benefits are discussed in the following sections.

# **Economic Benefits of energy efficiency**

The ROUNDTABLE believes that the Draft Report states that 'the (energy efficiency) improvements are not as cost effective for individual producers and consumers as they might seem'. Although the extent of the benefits gained through energy efficiency may be debatable, significant economic benefits do exist but they 'have not been' or 'are not being' realized.

The economic benefits of energy efficiency have been widely acknowledged. For example, the Energy White Paper<sup>2</sup> noted that 'increasing the uptake of commercial energy efficiency opportunities could increase GDP by \$975 million a year and significantly reduce greenhouse gas emissions.' In addition, it was stated that 'Energy efficiency is, and will remain, a central element of a costeffective greenhouse abatement strategy, delivering about 40 per cent of expected energy sector abatement in 2010.

A report from the Lawrence Berkeley Laboratories observed that, through adoption of commercially proven cost effective technologies and measures, most industries can reduce their energy intensity by 20 per cent or more.4

The ROUNDTABLE urges the Productivity Commission to acknowledge the economic benefits associated with Energy Efficiency measures and amend the Draft Report accordingly.

#### Role of energy efficiency in reducing cost of infrastructure

The ROUNDTABLE notes that the role of energy efficiency in reducing the cost of infrastructure has not been adequately acknowledged in the Draft Report.

Energy efficiency has a critical role in reducing the costs required to invest in energy infrastructure. Demand for energy in Australia is projected to increase by 50 per cent by 2020, and the energy industry has estimated that at least \$37 billion in energy investments will be required by 2020 to meet the nation's energy needs.5

The NSW Government has realized these opportunities through the establishment of a \$40 million annual Energy Savings Fund over 5 years to support energy savings initiatives by large private sector users, government and the residential sector. By 2010/11 the expected benefits from the fund are a saving of 900,000 megawatt hours per year in electricity consumption, a gross

<sup>3</sup> Ibid Page 105,

Productivity Commission (2005) Energy Efficiency, Draft Report, Melbourne. Overview Page XLIII

<sup>&</sup>lt;sup>2</sup> Commonwealth Government (2004) Securing Australia's Energy Future. Department of the Prime Minister and Cabinet.Page 105,

<sup>&</sup>lt;sup>4</sup> Lynn Price and Ernst Worrell (2004) Improving Industrial Energy Efficiency in the US: Technologies and Policies for 2010 to 2050, from workshop proceedings, the 10-50 Solution: Technologies and Policies for a Low-Carbon Future, The Pew Center on Global Climate Change and the National Commission Energy

<sup>&</sup>lt;sup>5</sup> Commonwealth Government (2004) Securing Australia's Energy Future. Department of the Prime Minister and Cabinet.

saving in consumer energy bills of \$370 million in net present value terms, and a reduction in greenhouse gas emissions by 800,000 tonnes of CO<sub>2</sub> per year.

In addition, through reducing demand and energy bills, the market can more readily absorb a greater proportion of renewable energy.

#### Role of energy efficiency in reducing greenhouse gas emissions

The ROUNDTABLE is of the opinion that the draft Report does not adequately discuss the contribution of energy efficiency in achieving greenhouse gas abatement. These benefits have been acknowledged in the recent European Communities Green Paper on Energy Efficiency:

'Energy savings is without the doubt the quickest, more effective and most costeffective manner for reducing greenhouse gas emissions, as well as improving air quality, in particular in densely populated areas.'6

The ROUNDTABLE supports this view that the promotion of energy efficiency is an effective and cost efficient approach to realizing greenhouse gas abatement, with minimal impact on consumers, and urges the Productivity Commission to promote greater discussion regarding this matter within the Draft Report.

## Use of price signals

The ROUNDTABLE believes that Price signals alone will not ensure the uptake of energy efficiency. Energy use has a low price elasticity and energy consumption is not highly price sensitive, which means that any given increase in energy price will only cause a small reduction in energy demand.

A report to the Australian Greenhouse Office has explicitly stated that increasing the price of energy to consumers is unlikely to increase uptake of energy efficiency measures. The report states: 'Energy rate pricing is fairly *unlikely to be successful* in Australia at present'<sup>8</sup> (original emphasis).

Therefore, government intervention is essential if we are to instigate energy efficiency measures to reduce our energy demand and ultimately our greenhouse gas emissions. The Productivity Commission needs to acknowledge that a combination of measures is required to achieve a reduction of energy demand

## Barriers to the uptake of energy efficiency

The Draft Report noted that the most important barriers to the uptake of energy efficiency were:

- A failure in the provision of information; and
- The different incentives facing those who take decisions about installing energy-efficient products and those who might benefit from using them.

<sup>&</sup>lt;sup>6</sup> Commission of the European Communities (2005) *Green Paper on Energy Efficiency or Doing More with Less.* Brussells COM p.265

<sup>&</sup>lt;sup>7</sup> Department of Public Enterprise, Ireland. *Green Paper On Sustainable Energy*. Annex 4 http://www.dcmnr.gov.ie/Energy/Sustainable+Energy+Division/Green+Paper+on+Sustainable+Energy/Green+Paper+on+Sustainable+Energy.htm

<sup>&</sup>lt;sup>8</sup> Shipworth, M. for the Australian Greenhouse Office (2000) *Motivating Home Energy Action – A handbook of what works* p.91

The ROUNDTABLE believes that there are other barriers to the uptake of energy efficiency which the Draft Report does not address, including:

- full costs not included in conventional energy prices (eg, GHG costs are not factored in);
- weak price signals (eg, half hourly metering would allow for charges and incentives for load management; and better profiles enable improved understanding of cost consumption patterns);
- end-user preferences for simplicity and comfort (eg, cost is not the only factor considered by users, and perfect information might not convert a user — education is a long term behaviour-changing agent).

The ROUNDTABLE is of the opinion that the Productivity Commission needs to include these additional barriers to the uptake of energy efficiency in any revised reports.

## **Policy Measures**

The use of regulation such as Minimum Energy Performance Standards (MEPS) is a key mechanism to improving the energy efficiency of appliances and equipment. MEPS set the minimal level of energy efficiency a product must meet for it to be sold in the Australian workplace. Through focusing on technically achievable energy efficiency it addresses the barrier, as identified by the Productivity Commission, of the different incentives facing those who take decisions about installing energy-efficient products and those who might benefit from using them. MEPS ensure a high certainty of delivering energy savings with minimal fiscal impact.

There is substantial evidence to demonstrate that the introduction of MEPS has provided energy savings that have far outweighed the costs. For example, the introduction of MEPS for family sized refrigerators has reduced sales weighted energy consumption by around 70% between 1980 and 2005.<sup>9</sup> The ROUNDTABLE believes that the Productivity Commission needs to consider advocating such policy measures in the promotion of Energy Efficiency program.

The ROUNDTABLE would be very happy to discuss the issues raised in this correspondence in greater detail. For further information, please contact ROUNDTABLE's Executive Officer, Mr. Josh Bradshaw, on (03) 6230 5862, or email josh.bradshaw@hydro.com.au.

Yours sincerely

Hon Peter Rae AO

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Chairman

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<sup>&</sup>lt;sup>9</sup> Australian Greenhouse Office, *Minimum Energy Performance Standards*. Energy Efficiency: Policy in Practice – UNSW Workshop 4 March 2004