## THE UNIVERSITY OF NEW SOUTH WALES





18<sup>th</sup> April 2008

## Inquiry into the National Market Driven Energy Efficiency Target Bill 2007

Committee Secretary
Senate Economics Committee
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600
Australia

Email: economics.sen@aph.gov.au

Dear Sir/Madam,

We appreciate the opportunity to make a submission to the *Inquiry into the National Market Driven Energy Efficiency Target Bill 2007*. While governments should certainly provide significantly more policy support for energy efficiency than seen at present, we question whether measures based on imputed energy <u>savings</u> are likely to be effective. They also have questionable economic efficiency and equity outcomes.

All schemes that focus on driving energy savings have an underlying design flaw because they require a 'baseline and credit' mechanism that estimates savings associated with a particular 'energy efficiency' activity with respect to a hypothetical future baseline. This is inherently counterfactual and cannot be independently measured or verified. As a result, it is very difficult to ensure additionality - at the project level (has the activity reduced energy use as much as claimed, and if it has, would this have happened anyway because of business-as-usual technical progress or policy drivers), and at the wider level (has this activity resulted in other activities increasing energy use). It is also very difficult to account for the rebound effect – where extra cashflow from energy savings is spent on either activities that increase energy use by that individual/organisation, or on goods and services which increase energy use elsewhere.

Because these problems are common to all such schemes, the bulk of this submission is contained in:

- 1. Our submission to the South Australian Residential Energy Efficiency Scheme,
- 2. The Executive Summary of a recent CEEM report commissioned by the NSW Department of Environment and Climate Change, "A Review of Market Based Schemes to Drive Energy Efficiency".

Web: www.ceem.unsw.edu.au ABN 57 195 873 179

It is clear that driving uptake of energy efficiency will require a comprehensive and coherent policy framework that includes: support mechanisms such as the provision of information; control or regulatory mechanisms including minimum performance standards and license conditions; and financially-based mechanisms, such as that proposed in this Inquiry, that change the energy 'price' seen by decision-makers for different energy options. It is highly unlikely that use of a financially-based mechanism as the primary driver for uptake of energy efficiency will be effective, especially in the residential sector.

If an energy-savings mechanism is to be used, one possible approach to address some of the problems relating to a lack of physical additionality and the rebound effect is to have energy efficiency targets linked to a physically measurable outcome such as actual energy consumption. Thus, if the previous year's energy efficiency activities resulted in energy use being decreased by less than expected, then the required 'savings' target for the following year could be increased proportionately.

Alternatively, a better approach may be to tie the scheme <u>directly</u> to a measurable outcome, as per the proposed Energy Sales Targets discussed in the attached.

This is an area of ongoing work for CEEM and we are actively seeking feedback and comments on this submission, and on related work.

Regards,

Dr Robert Passey

Senior Research Associate CEEM

r.passey@unsw.edu.au 02 9385 4061