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## **SUBMISSION TO INQUIRY INTO THE NATIONAL MARKET DRIVEN ENERGY EFFICIENCY TARGET BILL, 2007**

From

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### Overview

This Bill proposes a very important step forward in the promotion of energy efficiency within Australia. I strongly support it.

### Background

Numerous studies have shown that Australia and its economy will benefit from greater adoption of energy efficiency measures. The benefits include:

- reduced greenhouse gas emissions
- reduced investment in expansion of energy supply infrastructure
- reduced vulnerability to blackouts and energy supply interruptions
- reduced energy bills for households and businesses
- potential to improve equity (subject to how policy is implemented)
- potential to improve quality of life and health of Australians by reducing the risk of heat stress and cold-related illnesses

Recent modelling demonstrates that energy efficiency is good for the economy, as well as the environment. For example a study carried out recently by the Centre for International Economics for the Australian Sustainable Built Environment Council (which includes the building industry, designers and environmental groups) showed that accelerating energy efficiency improvement in the residential and commercial sectors would reduce the cost of CO<sub>2</sub> permits across the economy by 15% and deliver net benefits of many billions of dollars.

This finding creates a rationale for using revenue from sale of emissions permits to provide incentives for energy efficiency, because those who implement the energy efficiency measures are not in a position to capture the benefit gained across other sectors of the economy as a result of their actions. It is consistent with other studies for the National Framework on Energy Efficiency. Indeed, this benefits seems to have been recognised by a number of policy makers. For example, the panel advising the Prime Minister on emissions trading schemes specifically recommended that some of the revenue from the scheme should be used to promote energy efficiency.

Globally, numerous studies have shown that any effective greenhouse response strategy must include a large component of energy efficiency improvement if emissions are to be reduced at a manageable cost.

### Some History

While Australia has implemented a number of useful energy efficiency initiatives, the harsh reality is that interest groups combined with lack of commitment from governments have effectively blocked or delayed and watered-down many energy efficiency initiatives. Examples include:

- the strong lobbying by sections of the building and timber industries to oppose building energy regulation, to the extent that Environment Minister Campbell and Industry Minister MacFarlane publicly opposed introduction of the regulations developed by their own departments in 2005
- the long-enduring failure of energy market reform to incorporate effective incentives for demand management (including energy efficiency) in market mechanisms, and the exclusion of environmental and social considerations. This has been despite the original objectives of the National Grid Management Protocol, commitments under the 1992 National Greenhouse Response Strategy, commitments under the 1998 National Greenhouse Strategy and the findings of the Parer Review of energy markets for COAG in 2002. For example, the Victorian Essential Services Commission has, as an objective, to maintain the viability of the industries it regulates. Since the ESC does not regulate energy efficiency, it follows that if an energy efficiency measure threatens the viability of the existing electricity or gas supply industries, the ESC must not support energy efficiency, even where it is in the overall interests of society.
- appliance energy labelling took from 1979 (when it was government policy in NSW and Victoria) until 1999 or 2000 to become a national mandatory program, and introduction of MEPS is a long and time-consuming process that typically sets fairly weak standards
- vehicle fuel consumption labelling was first discussed with the car industry in 1984, yet it took until a few years ago to introduce it
- development and implementation of a number of National Framework for Energy Efficiency measures is well behind schedule

As a person who has worked in the energy efficiency field for 30 years, I can personally vouch for the effectiveness of the strategies of vested interests. In many cases, they have been supported by industry and development agencies within governments who have acted to support the industries they believe they represent, and by economists (including treasury advisers) who have struggled to come to terms with the possibility that businesses and households might not be optimally efficient, according to the theories they were taught at university.

Energy efficiency improvement is a difficult concept to explain, as it involves using less energy to do more. It is abstract. And many fear that it involves 'freezing in the dark' or 'wearing a hair shirt' or the collapse of the economy as we know it.

Yet, despite these powerful barriers, we have had some successes. Today's refrigerators use two-thirds less energy than those of the mid-1980s, when appliance energy labelling was introduced. Indeed, our appliance efficiency program is avoiding millions of tonnes of greenhouse gas emissions each year at a cost of minus \$23 or less per tonne. Many people, like me, can sit comfortably in their homes in cold or hot weather, while using little or no heating or cooling energy. Many businesses now spend much less on energy than they used to. In the early 1990s, the then publicly owned State Electricity Commission of Victoria ran a \$30 million per annum demand management program that was estimated to be delivering a net benefit of \$10 million each year to Victorians. This program was a casualty of energy market reform and privatisation.

But our successes have been piecemeal and modest. If energy efficiency is to make a significant contribution to Australia's future, we need to 'mainstream' it. To do this, we need to acknowledge the

barriers to action, and provide effective incentives that will not just encourage individuals and businesses to act, but which will also build an energy efficiency services industry.

In 2006, the Victorian Parliament's Environment and Natural Resources Committee conducted an Inquiry into the energy efficiency services industry. It proposed (among other things) a scheme that provided incentives for energy efficiency, similar to that proposed in this Bill, based on a scheme that has been running in the UK for several years. The Victorian Government is developing the Victorian Energy Efficiency Target as a partial response to this recommendation. However, VEET will be very limited – again reflecting the power of a variety of interest groups who would rather such incentives (and obligations on energy retailers) did not exist. The NSW Greenhouse Gas Abatement Scheme has included energy efficiency improvement in addition to a variety of other options. Substantial low cost abatement has been captured through end-use energy efficiency improvement.

This Bill proposes a more comprehensive national scheme.

### Why is an Energy Efficiency Trading Scheme Needed?

The panel advising the Prime Minister on emissions trading, as well as the States-proposed NETS both place a threshold on the minimum size of an emitter to be liable under any emissions trading scheme. For example, the PM's panel proposes a minimum of 25,000 tonnes of CO<sub>2</sub> for an entity. Smaller emitters will not actively participate in emissions trading, and will be expected to respond to flow-on price signals due to the compliance costs of upstream emitters.

A high proportion of the emissions from small emitters are in fact indirect emissions associated with consumption of electricity: over 80% of emissions from the Australian residential and commercial sectors are from electricity use. So a scheme that focuses on on-site emissions will not address them appropriately. Further, energy is a small proportion of costs for most small businesses and households (less than 1% for many services businesses and 2.4% on average for households), so the price signal will not be large. At the same time, the impact of emissions trading on the prices of goods and services may be more significant, but will be a very small proportion (on average 1.6% for households according to a recent National Institute of Economic and Industry Research study for the Brotherhood of St Laurence) of expenditure in these areas – so again it will have little impact on behaviour.

A critical issue for small to medium greenhouse emitters is that the actions of agents who do not pay the ongoing costs of CO<sub>2</sub> emission and energy bills often heavily influence their emissions. Developers and builders, tradespeople, manufacturers of appliances and cars, designers, retail sales staff, advertising agencies and many others influence which appliances, housing, cars and equipment people purchase, and hence the ongoing emissions from these items. Emissions trading has little impact on these agents because they don't pay the ongoing energy bills associated with operation of appliances, equipment, buildings or vehicles. At the same time, other programs such as Minimum Energy Performance Standards, while important, only remove the worst performers within a limited range of product types.

What is needed is an incentive mechanism that can influence all the agents who influence energy use and greenhouse gas emissions, not just the final user of the energy. This Bill proposes such a scheme.

### A Caveat

An essential element of the proposed scheme is the setting of a target for energy efficiency improvement. It is critical that a mechanism be included that automatically increases the stringency of the target as the amount of accredited energy efficiency delivered increases towards the initial target.

Experience with both the Mandatory Renewable Energy Target and the NSW Greenhouse Gas Abatement Scheme has shown that initial targets tend to be set too low. This reflects the fears of both energy retailers and governments that the target businesses will not mobilise sufficiently quickly to deliver the intended outcomes, as well as attempts to limit the impacts on costs. The end result with

both MRET and GGAS has been the creation of ‘boom and bust’ cycles, with certificate prices crashing as targets are approached. In the case of MRET, this was overcome by the introduction of separate and additional targets by Victoria, NSW and Western Australia. The GGAS crisis has only just occurred, so it is not clear how it will be managed.

The reality is that, if energy efficiency measures are delivering more abatement than expected at under \$10-15/tonne of CO2 avoided, this will be reducing the overall cost of emission abatement in a context where carbon prices are expected to exceed \$15/tonne and possibly go far higher. So adjusting the energy efficiency target upwards in these circumstances will benefit the economy and avoid the risk of ‘boom and bust’ in a growing business sector.

I would be pleased to provide further input to the Inquiry if that would be of assistance.

Alan Pears