

ASBEC SUBMISSION TO THE SENATE SELECT COMMITTEE ON CLIMATE POLICY



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1 INTRODUCTION

The Australian Sustainable Built Environment Council welcomes the opportunity to provide comments to the Senate Select Committee on Climate Policy.

We note that this Senate Select Committee has invited submissions in relation to an inquiry into policies regarding climate change.

The ASBEC believes that greenhouse gas emissions must be reduced significantly to limit the impacts of dangerous climate change. We support the overarching objectives of an emissions trading scheme in reducing Australia's greenhouse gas emissions and the proposed timing for introduction of a carbon price.

The building sector can play a vital role in reducing Australia's greenhouse gas emissions whilst providing the lowest average cost abatement.

Our submission seeks to highlight the key role of the built environment for three of the six aspects detailed in the Senate enquiry. Which are:

- (a) choice of emissions trading as the central policy to reduce Australia's carbon pollution, taking into account the need to:
 - (i) reduce carbon pollution at the lowest economic cost,
 - (ii) put in place long-term incentives for investment in clean energy and low emission technology, and
 - (iii) contribute to a global solution to climate change;
- (b) the relative contributions to overall emission reduction targets from complementary measures such as renewable energy feed-in laws, energy efficiency and the protection or development of terrestrial carbon stores such as native forests and soils;
- (e) whether the design of the proposed scheme will send appropriate investment signals for green collar jobs, research and development, and the manufacturing and service industries, taking into account permit allocation, leakage, compensation mechanisms and additionality issues;

ABOUT ASBEC

The Australian Sustainable Built Environment Council (ASBEC) is the peak body of key organisations committed to a sustainable built environment in Australia. ASBEC members consist of industry and professional associations, non-government organisations and government observers who are involved in the planning, design, delivery and operation of our built environment, and are concerned with the social and environmental impacts of this sector.

ASBEC provides a forum for diverse groups involved in the built environment to gather, find common ground and intelligently discuss contentious issues. Our key strength is the knowledge and diversity of our members who are committed to collaborating and developing strategic input into climate change adaptation, and contributing to relevant and achievable solutions to reduce emissions to meet our Kyoto commitment.

The building sector can play a large role in reducing carbon pollution with no cost/least cost abatement.

The ASBEC Climate Change Task Group research¹ has identified that commercial and domestic buildings are among the major final users of energy in Australia, accounting for 23 percent of Australia's total greenhouse gas (GHG) emissions. This translates to 133 Mt of GHG emissions per annum.

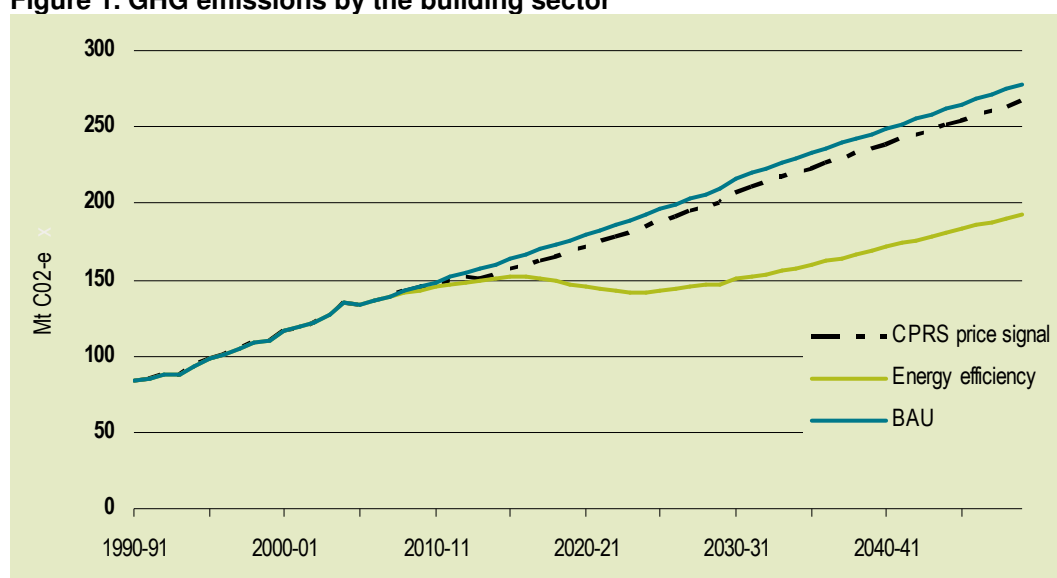
There is substantial untapped potential for greater energy efficiency in the building sector with GHG reductions of between 57 Mt to 66 Mt by 2030.

Even though not directly in the CPRS, the building sector will also obtain a price signal encouraging the sector to reduce its demand for energy and therefore GHG emissions. 'Up stream' producers such as electricity generators will pass on the higher costs resulting from an emissions constraint by increasing prices to their customers. A key question arises about the extent to which the price signal in the CPRS will encourage the building sector to reduce demand for energy consumption and therefore GHG emissions.

This price signal has been translated into expected GHG abatement in the building sector as shown in Figure 1. As a result of the CPRS price signal, the building sector will on average reduce emissions by an estimated 8 Mt of CO₂-e a year (about 3-4 per cent of the sector's total emissions each year in the Business-As-Usual (BAU) or baseline projection).² Figure 1 also plots the reduction in GHG emissions that could be achieved in the building sector from substantial energy efficiency measures. Many of these investments provide an economic return (that is, they have a negative economic net cost) or break even.

With measures to stimulate investment energy efficiency in the built environment could save 60Mt of CO₂-e per annum, on average, by 2030 – compared with just 8 Mt of CO₂-e a year under the CPRS alone. Energy efficiency measures in the building sector have the potential to abate nearly 2 billion tonnes of CO₂-e in total over the period from 2010 to 2049-50. The price signal of the CPRS, as currently configured, will abate less than one fifth of this amount.

Figure 1. GHG emissions by the building sector



Our research has also identified that the proposed Carbon Pollution Reduction Scheme (CPRS) alone will not be the lowest cost way of reducing emissions. Modelling indicates that encouraging substantial investment in energy efficiency in the building sector would make the job of the CPRS easier as the sector

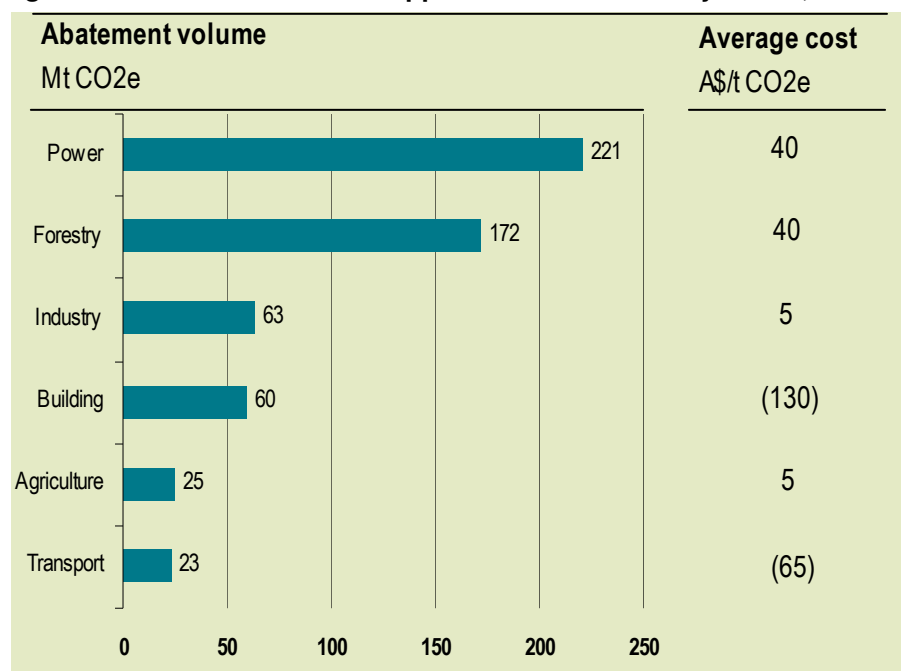
¹ "Capitalising on the Building Sector's Potential to Lessen the Costs of a Broad- Based GHG emissions cut", prepared for Australian Sustainable Built Environment Council by the Centre for International Economics, September 2007.

² The Second Plank – Building a low carbon economy with energy efficient buildings, Australian Sustainable Built Environment Council Climate Change Task Group, September 2008.

has the lowest average cost of carbon abatement. This has also been supported by numerous international reports including the IPCC, McKinsey & Company, the Stern Review and the Garnaut review, whom have all identified the built environment as offering opportunities for the lowest cost abatement potential in the economy (see figure 2 below).

When coupled with a broad based GHG abatement target and a supportive policy environment, the pay-off from investing in the energy efficiency potential of the building sector would flow through the entire economy, reducing the costs that other sectors would face to achieve their reduction in GHG emissions.

Figure 2. Emissions reduction opportunities and cost by sector, 2030



Transforming our buildings to deliver energy savings, enhances Australia's ability to achieve deep cuts in GHG by 2050. These savings in the building sector could reduce the costs of greenhouse gas abatement across the whole economy by \$ 30 per tonne, or nearly 14 per cent by 2050; and improve GDP by approximately \$ 38 billion dollars per year compared to a deep cuts scenario without these additional building sector savings.

The built environment can play a key role in contributing to overall emission reduction targets from complementary measures

With commercial and domestic buildings accounting for 23 percent of Australia's total greenhouse gas emissions, this sector can play a key role in contributing to reduction targets.

If the built environment effectively delivers these efficiencies, we could reduce the growth in greenhouse gas emissions by 35 per cent by 2050, even if we take into account the expected growth in the overall number of buildings. This can be achieved using today's technology, and with neutral cost, to significantly reduce the energy needed by residential and commercial buildings to perform the same services.

However this abatement will not be realised without adequate investment and an effective policy framework.

Voluntary action is also critically important as a means of galvanising community and business support for Australian abatement activity, to reduce global greenhouse gas emissions. Without proper recognition of voluntary abatement, community and business adoption of other government programs and measures could be lower.

The proposed CPRS scheme needs complementary policy to send appropriate investment signals

There is a range of policies that Government has already deployed that encourage energy efficiency in the building sector, mostly focusing on closing information gaps and raising awareness of opportunities.

The key area where there is a shortfall in the policy mix is in providing greater incentive for those in the building sector to invest financial resources in increased energy efficiency.

The ASBEC proposes adoption of the three keystone policies identified below. These three policies are seen as necessary to motivate the long term structural change and significant level of investment required to achieve greater energy efficiency in the building sector. Greater investment in energy efficiency in the built environment will enable the building sector to improve the effectiveness and reduce the costs of an emissions trading scheme and policies that have already been implemented or are currently being developed.

- a national electricity retailer efficiency requirement or 'white certificate' scheme;
- accelerated depreciation for energy efficiency in buildings or 'green depreciation'; and
- public funding for building retrofit – aimed at both the retail (residential and commercial buildings) and wholesale (energy retailer) sectors.

In addition, specific regulatory measures – including higher standards and enhancement of Minimum Energy Performance Standards (MEPS) and building codes – are also seen as essential.

The ASBEC believes that greenhouse gas emissions must be reduced significantly and that the building sector, a key contributor to Australia's share of emissions, plays a vital role in reducing GHG emissions.

By building a low carbon economy this sector, through effective incentives to invest in energy efficiency, presents the lowest cost abatement technology available in the economy.

For copies of the Australian Sustainable Built Environment Council Climate Change Task Groups reports go to:

<http://www.asbec.asn.au/research>