

Chapter 6

The committee's view

The importance of an economy-wide cap on carbon emissions

6.1 The committee believes that the challenge of reducing Australia's greenhouse gas emissions requires a suite of policy measures, of which a price on carbon and an absolute cap on emissions are key components. The federal government's Carbon Pollution Reduction Scheme (CPRS) sets an economy-wide price on carbon. The trade of carbon permits among the nation's largest 1000 (or so) emitters will filter through the economy and set clear market-based incentives for producers and consumers to reduce their reliance on carbon-intensive goods and services.

6.2 The committee is supportive of the bill's intent to establish a price signal for the build and retrofit of non-residential buildings in Australia. It agrees with WSP Lincolne Scott that 'it is much more appropriate to provide a clear market mechanism and let the market work out the best answers than to try and decide and pick winners in grant allocation'.¹ A price signal should be the primary mechanism to reduce greenhouse gas emissions; targeted grants could be a complementary measure.

6.3 A market-based mechanism would provide the least cost solution to abating greenhouse gas emissions. The 2007 Task Group on Emissions Trading noted that 'trading allows market forces to find least-cost ways of reducing emissions by providing incentives for firms to reduce emissions where this would be cheapest, while allowing continuation of emissions where they are most costly to reduce'.² This may or may not involve large reductions in emissions in the non-residential building sector. Accordingly, the committee believes that a price signal must be set across the economy as a whole, consistent with the objective of setting an overall cap on pollution. This is how the CPRS is designed.

6.4 The bill, on the other hand, is sector-specific and would not necessarily set a cap on emissions in the non-residential building sector. Large inefficient building owners will have the ability (and incentive) to pay the financial penalty for failing to surrender adequate certificates. Further, the bill's measures will only cover the owners of non-residential buildings, not the tenants. On some estimates, tenants account for 40–50 per cent of greenhouse gas emissions from non-residential buildings in Australia.

1 Mr Ché Wall, *Proof Committee Hansard*, 12 February 2010, p. 6.

2 Prime Ministerial Task Group on Emissions Trading, *Report*, 2007, p. 3, http://www.resourcesmart.vic.gov.au/documents/PMs_emissions_trading_report.pdf (accessed 3 March 2010).

6.5 The committee believes that the CPRS will act as an effective price signal for the non-residential building sector given that the carbon price will be embodied in the electricity and gas paid for by building owners.

Complementary measures

6.6 The committee believes that energy efficiency measures have, and will continue to play an important role in mitigating carbon emissions. The committee supports the federal government's initiatives on energy efficiency outlined in chapter 2 of this report.

6.7 By themselves, however, energy efficiency measures are inadequate. For energy efficiency measures to work well, they need to operate within the context of an overall cap on greenhouse gas emissions. As Mr Barry Sterland of the Department of Climate Change explained to the committee:

One of the well-known empirical observations is that energy efficiency measures by themselves without an overall cap on carbon give what is called a bounce-back. You provide energy efficiency measures and, say, people improve lighting efficiency. Whereas before they might have been a bit more diligent in turning the switch off because they knew they had less efficient lighting, now they are told that their lighting is much more efficient and lights are left on. There is a bounce-back in consumption that can partially, at least, offset some of the improvements made in energy efficiency by themselves.

Without an overall cap on pollution, partial measures can produce various secondary effects that frustrate the primary purpose. Countries that have relied only on those after a time I think have recognised that there are limits to how much they can achieve on their own. It is true that you can implement appliance efficiency standards, building efficiency standards and grant based funding, but in Australia's case—and the US has implemented a lot of these measures as well—emissions have kept going...³

The CPRS & the bill—'double counting' the non-residential building sector

6.8 A related point of concern is that a CPRS operating in conjunction with the bill's scheme would in effect impose a double carbon price for emissions from the non-residential building sector. To avoid this, the effect of the CPRS on the sector—from electricity and gas retailers selling to the sector—would have to be calculated and deducted from the cost of the bill's scheme certificates. As Mr Sterland told the committee, 'you would have a very complex apportionment...to avoid that double count'.⁴

3 Mr Barry Sterland, *Proof Committee Hansard*, 12 February 2010, p. 25.

4 Mr Barry Sterland, *Proof Committee Hansard*, 12 February 2010, p. 22.

Definitional issues

6.9 The committee believes that a fundamental problem with the design of the bill's scheme is how, precisely, different types of buildings will be identified. The Explanatory Memorandum notes that at the start of the scheme, the Minister must determine through regulations which types or sizes of buildings the Act will apply to. Buildings of different types and sizes will have different intensity caps.

6.10 However, there are definitional problems in establishing which types of buildings should have different thresholds. A neat division between 'office' and 'retail' buildings would often not be possible given that many buildings incorporate a mix of both office and retail space. Further, in setting intensity caps or thresholds for buildings of a certain size (2000 and 5000 square metre office buildings, for example) there will be many buildings that fall outside these classifications. If there are too few buildings within a given category, it may be difficult to identify a meaningful average.

6.11 The design of the CPRS offers a solution to these problems by focussing on comprehensive coverage of the upstream market. As the Department of Climate Change told the committee:

The solution in the CPRS is to decide on a coverage technique which makes them less important because of the comprehensive coverage upstream. That upstream coverage is not possible in this case because it is explicitly aimed at the liable facilities themselves.⁵

Setting the baseline

6.12 The other issue of concern for the committee is how the emission intensity baselines will be set. The impact of the scheme will be greater if a single emissions intensity baseline is set and if buildings' emissions around this baseline are significant.

6.13 For example, if the scheme establishes a single emissions baseline for all office buildings, the owners of old buildings that emit well above the baseline would be forced to purchase many certificates from the owners of new buildings which emit well below. On the other hand, if the scheme incorporated different baselines for buildings of different ages and for cities in different climates, the distributional impact would be less.

6.14 This point was made to the committee by the Department of Climate Change told the committee:

The baselines in this scheme reflect the ambition of the scheme and also how you distribute the impact of the scheme within the sector. So, to the extent that those variations are very wide between very old buildings and very new buildings, for example, this will have quite a differential effect on

5 Mr Barry Sterland, *Proof Committee Hansard*, 12 February 2010, p. 21.

the wealth of the different owners and on the clients and all the people who use the services of a building.

...

You can mitigate that to some extent by having multiple baselines...You might create a separate baseline for buildings that are of a certain age class. That will mitigate the distributional impacts.⁶

The lack of data

6.15 The committee is concerned that the proponents of this bill have not provided better data on how the age of non-residential building correlates with its carbon footprint. If the bill's scheme is to be considered, it is imperative that better data is made available to test the benefits of adopting baselines based on different criteria.

6.16 The committee received from the PCA as tabled evidence a scatter plot which showed little—if any—correlation between the net lettable area of 'investment grade' buildings in the Sydney CBD and North Sydney and their carbon emissions (kilograms of CO_{2e} per square metre per annum).⁷ Put another way, there is nothing in the scatter plot to suggest that smaller buildings are higher carbon emitters than larger buildings. Further, the information does not explain why some buildings are higher emitters than others. It is not clear whether high emitters perform poorly because their owners are 'lazy', because their building is old with outdated technology and/or whether the building is in use for more hours of the day than other buildings.

6.17 A detailed quantitative analysis of these issues—for each Australian capital city—is a prerequisite for considering the measures contained in the bill. It would give a sense of whether a building's age, intensity of use, size and location are significant determinants of a given building's carbon emissions.

Recommendation 1

6.18 The committee recommends that through its mandatory disclosure initiative, the federal government collect and analyse data to identify those factors that correlate with the emissions intensity of non-residential buildings. This information should be collated by location and made publicly available.

6.19 While this analysis is important, the committee does not support the legislation. Rather, the CPRS must be the priority, supported by the range of complementary energy efficiency measures currently being pursued by the federal government. Even if the data recommended above is made available, the committee

6 Mr Barry Sterland, *Proof Committee Hansard*, 12 February 2010, p. 22.

7 See Appendix 4. It should be noted that the data presented is based on NABERS which is a voluntary system of disclosure and may therefore under-represent highly emissions intensive buildings. This was noted by Mr Peter Verwer, Chief Executive Officer of the PCA: 'These are the most efficient buildings that the investors have...'. *Proof Committee Hansard*, 25 February 2010, p. 4.

considers that the decision-making process for setting the baselines in the scheme would be highly complex and contentious. The CPRS provides a simpler design and, through transmitting the carbon price, will provide a single and clear signal to all sectors of the economy.

Recommendation 2

6.20 The committee notes the CPRS legislation and recommends that in preparation for the full implementation of the scheme, steps be undertaken to analyse the data referred to in recommendation 1 and formulate an appropriate scheme to enforce energy efficiency for commercial buildings.

**Senator Annette Hurley
Chair**

