

## Chapter 7

### Picking up the cost – the carbon tax on households

7.1 Chapter 7 provides an assessment of the impact that the carbon tax will have on the cost living.

7.2 As detailed in Chapter 3, the government is proposing the introduction of a fixed price carbon tax from 1 July 2012 before transitioning the economy to an emissions trading scheme.

7.3 The government has already announced that the carbon tax will result in increased costs for households and the government budget including:

- (a) a 10 per cent increase in electricity bills in the first year;
- (b) a 9 per cent increase in gas bills in the first year;
- (c) for the first time since the 1980s will see higher marginal tax rates for low and middle income earners; and
- (d) a hit to the Budget bottom line of at least \$4.3 billion in the first few years alone.

7.4 Evidence provided to this committee suggests that the proposed carbon tax will have a damaging effect on the community. The committee is of the view that carbon tax will not lead to reductions in global emissions but will:

- lead to job losses;
- negatively impact the competitiveness of many Australian industries; and
- cause uncertainty for investment.

7.5 The committee believes that such outcomes will make circumstances difficult for consumers.

### The impact of a carbon price on households

7.6 Under the government's design, announced on 10 July 2011, the proposed carbon tax will be directly paid by 500 companies<sup>1</sup> through a requirement to purchase a permit for every tonne of carbon dioxide (CO<sub>2</sub>) emissions they produce.<sup>2</sup> Indirectly,

---

1 This figure of 500 companies does not include those that will pay an effective carbon tax through the proposed changes to the fuel tax credit scheme. The businesses and consumers impacted by those changes are covered in more detail in Chapter 10.

2 Australian Government, *Supporting Australian Households – Helping households move to a clean energy future*, p. 4.

the carbon tax will be paid by all Australians as the tax will change the price households pay for goods and services.

7.7 Professor John Freebairn, an economist who appeared before the committee, takes the view that the cost of acting on climate change, through the introduction of a price on carbon, will be passed on to consumers:

Although the statutory or initial incidence of a higher price on carbon, either a tax or the market price of tradable permits, falls on the about 1000 firms producing petroleum products and electricity, once the economy adjusts most of the new indirect taxes and explicit charges for pollution are passed on to households as higher prices.<sup>3</sup>

7.8 On 10 July 2011, on announcing the details of the tax, the government claimed that modelling had identified the expected impact on the consumer price index (CPI)<sup>4</sup> would be 0.7 per cent:

Some businesses will pass on the carbon price, leading to modest rises in prices. In 2012-13, this is expected to increase the cost of living by 0.7 per cent ... Many prices, particularly food, will hardly be affected. On average food will go up by less than \$1 per week for households.<sup>5</sup>

7.9 The government has since released updated modelling of the impact of the carbon tax on households. This updated modelling, released on 21 September 2011, confirmed the earlier results which identified that the impact of a carbon tax of \$23 per tonne on aggregate consumer prices would be 0.7 per cent in 2012-13.<sup>6</sup> In the updated modelling, the government did, however, identify that the transition to a

---

3 Professor John Freebairn, *Submission 2*, p. 5.

4 The Consumer Price Index (CPI) is 'a measure of changes, over time, in retail prices of a constant basket of goods and services representative of consumption expenditure by resident households in Australian metropolitan areas. ... As prices vary, the total price of this basket will also vary. The CPI is simply a measure of the changes in the price of this basket as the prices of items in it change. The CPI measures price changes relating to the spending pattern of metropolitan private households. ... For practical reasons, the CPI basket cannot include every item bought by households, but it does include all the important kinds of items. ... The total basket is divided into a number of major commodity groups, subgroups and expenditure classes. It covers items such as food, alcohol and tobacco, clothing and footwear, housing, household contents and services, health, transportation, communication, recreation, education and financial and insurance services'. Source: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DSSbyCollectionid/1E564CACF4CBEC32CA256ED8007EF06E?opendocument> (accessed 13 July 2011).

5 Australian Government, *Supporting Australian Households – Helping households move to a clean energy future*, p. 4.

6 Australian Government, *Strong Growth, Low Pollution, Modelling a Carbon Price – Update*, 21 September 2011, p. 2.

---

floating carbon price in 2015-16 would result in a second increase in aggregate consumer prices by a further 0.2 per cent.<sup>7</sup>

7.10 Although the impact on households is considered to be critical, some participants in the policy debate take the view that to be effective, a price on carbon must be high enough to result in a change in behaviour.<sup>8</sup>

7.11 The next section of the report highlights the impact on households: utility bills, groceries, houses and cars. However, before turning to those impacts, it is important to note a major difficulty with the government's estimates of the extent of price increases.

7.12 Contrary to what appears to be the widely held view, those estimates are *not* based on the Treasury modelling used to examine the impacts of the carbon tax on the economy. Rather, they are based on an entirely different model, the Price Revenue Incidence Simulation Model (*PRISMOD*). According to the committee, there is no reason to believe those estimates bear any relation to the estimates of the wider economic effects. Moreover, the *PRISMOD* estimates take no account of the fact that in Treasury's wider modelling, real wages are estimated to decline substantially so as to maintain full employment consistent with the Treasury assumption imposed on its models. No compensation is being provided for those real wage reductions, so even if the price impacts as estimated by *PRISMOD* are offset for particular consumer groups, those groups could still be significantly worse off.

7.13 This was not an issue in respect of the GST (where price estimates were also obtained using *PRISMOD*). The GST was expected to increase real wages in the long run, as it increased the efficiency of the tax system and, with it, Australia's economy. In contrast, the carbon tax will reduce real wages, all the more so if Australia's competitors do not impose a similar burden on their economies.

7.14 Consumers will therefore face a 'double whammy' - higher prices and lower incomes, without this being taken into consideration in the compensation they can obtain.

### ***Electricity***

7.15 On announcing the carbon tax, the government stated:

Electricity prices are expected to rise with or without carbon pricing. Carbon pricing is expected to add around 10 per cent to electricity prices in 2012-13 and 9 per cent to gas prices.<sup>9</sup>

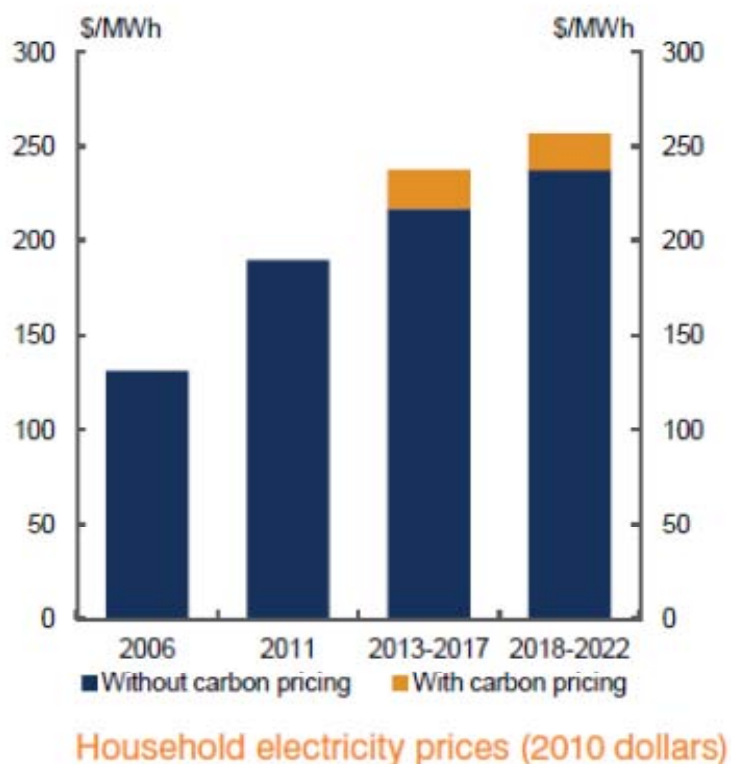
---

7 Australian Government, *Strong Growth, Low Pollution, Modelling a Carbon Price – Update*, 21 September 2011, p. 2.

8 Construction Forestry Mining and Engineering Union, *Submission 9*; The Australia Institute, *Submission 16*; Professor Jack Pezzey, *Submission 18*.

7.16 The government's modelling, also released on 10 July 2011, indicated that the introduction of a carbon tax would lead to only a modest increase in electricity prices of \$3.30 per week.<sup>10</sup> In its updated modelling, released on 21 September 2011, the government confirmed that the aggregate increase in consumer prices of 0.7 per cent included the 10 per cent increase in household electricity prices.

**Graphic 7.1: Household electricity prices (\$ 2010)<sup>11</sup>**



7.17 Regardless of what the effect on the consumer price index (CPI) is, any price increases that result from the new tax will have a negative effect on the purchasing power of households:

Introducing a price on carbon not only raises the relative prices of carbon intensive products and processes to reduce pollution, it also raises the average cost of living.<sup>12</sup>

9 Department of the Treasury, *Strong growth, low pollution – modelling a carbon price: Overview*, at <http://treasury.gov.au/carbonpricemodelling/content/overview/page8.asp> (accessed 3 October 2011).

10 Department of the Treasury, *Strong growth, low pollution – modelling a carbon price: Overview*, p. 8.

11 Department of the Treasury, *Strong growth, low pollution – modelling a carbon price: Overview*, p. 124.

12 Professor John Freebairn, *Submission 2*, p. 8.

7.18 There is no doubt that prices will increase for consumers. In fact, industries affected by the introduction of the proposed tax have informed the committee that they will need to pass on the costs of the tax. The Energy Retailers Association of Australia (ERAA)<sup>13</sup> stated in their submission that:

If a regime of regulated retail tariffs remains across the board in Australia, energy retailers need full pass through of carbon costs through adjusted regulated tariffs allowing sufficient head room to account for the associated risks of uncertainty and wholesale market volatility. The retail component constitutes only a fraction of the final price of energy, with network costs and wholesale electricity costs together contributing approximately 90%. As such, energy retailers face significant risks if a carbon price is implemented without adequate pass through provisions, this risk is further exacerbated due to the added wholesale volatility and uncertainty. It is therefore imperative to maintain retail competition and reduce the risk of retailer default that regulated retail tariffs are set with full pass through of the costs of carbon and the associated added volatility from introducing a carbon price.<sup>14</sup>

7.19 The Australian Gas Light Company (AGL) suggests that the price of electricity will rise under a carbon tax but that any price increase will be higher in an environment of policy uncertainty:

Our analysis indicates that the increase in electricity prices at the residential level is likely to be between 3% and 6% depending upon the demand growth scenario used. These price increases are primarily a “deadweight loss” to the economy associated with the introduction of a sub-optimal capital stock designed to minimise capital costs in an environment of carbon policy uncertainty. It is critical that policy makers note this dilemma and move quickly towards establishing a carbon policy framework that is accepted by all sides of politics. If this does not occur, these price increases are likely to be experienced irrespective of whether a broad based climate change policy is introduced or not.<sup>15</sup>

7.20 However, it needs to be noted that any certainty the carbon tax provides to the electricity industry is simply a risk transfer on to the economy and consumers as a whole. There is, in other words, real uncertainty about the future prospects for global abatement and; the Australian Government cannot eliminate that uncertainty. As a result, any certainty it provides to one industry about future carbon prices is just a

---

13 The ERAA represents those energy retailers who 'collectively provide electricity to over 98% of customers within the National Electricity Market (NEM) and are the first point of contact for end-use energy users'. Source: *Submission 7*, p. 1.

14 Quotation is from Tim Nelson, Head of Economic Policy & Sustainability, AGL Energy Ltd; Simon Kelley, Manager of Energy Policy and Regulation, AGL Energy Ltd; Fiona Orton, Carbon Project Analyst, AGL Energy Ltd; Paul Simshauser, Chief Economist and Group Head of Corporate Affairs, AGL Energy Ltd 'Delayed carbon policy certainty and electricity prices in Australia', provided by Energy Retailers Association of Australia Ltd, *Submission 7*, pp 1 – 2.

15 AGL Energy Ltd, *Submission 19*, p. 15.

transfer of the uncertainty on to other industries and on to the community more widely.

7.21 In their submission to the committee, the New South Wales Treasury explained that their modelling has shown that the most visible impact on households of a carbon tax will be on electricity prices:

The most clearly visible impact of a carbon price is on retail electricity prices.

Energy costs represent approximately forty percent of a residential electricity bill.<sup>16</sup>

7.22 While the Commonwealth Government estimated that the carbon tax would raise retail electricity prices by 10 per cent, the NSW Government estimated that the impact would be higher in New South Wales:

A 38% increase in wholesale electricity prices (Commonwealth estimate for the period 2013-2017 cited in its modelling report) would be expected to result in an increase of around 15% on final retail electricity prices, inclusive of network costs. Further detailed modelling and/or further analysis of the Commonwealth modelling reports (when they are released) would be required to confirm this impact.<sup>17</sup>

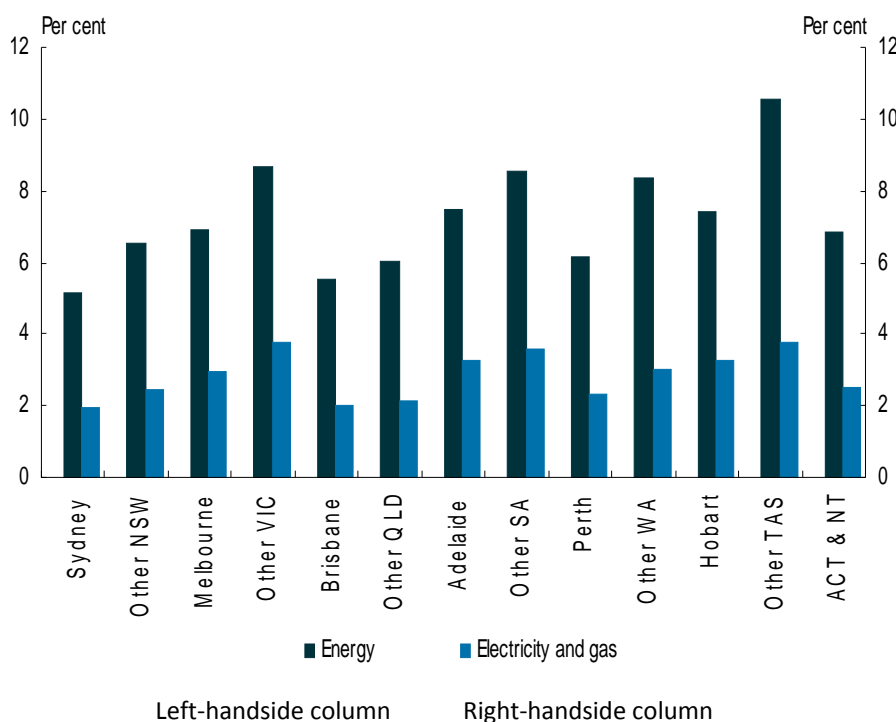
7.23 The NSW Government's finding is not necessarily inconsistent with the Treasury's analysis. The carbon tax may have different impacts on electricity prices in different States or locations. This indicates that while the government may be correct in arguing that households will be 20 cents per week better off *on average*, that will not necessarily be the case for any particular household, as prices and consumption will vary depending on location, household size and a house's energy efficiency characteristics.

7.24 Previous modelling by the Commonwealth Treasury, for the proposed Carbon Pollution Reduction Scheme, showed that electricity consumption in regional areas was higher than those in capital cities. For example, households in regional NSW spent 26 per cent more on electricity than those in Sydney, households in regional Victoria spent 25 per cent more on electricity than those in Melbourne, households in regional Queensland spent 10 per cent more on electricity than those in Brisbane, households in regional Western Australia spent 35 per cent more on electricity than those in Perth, households in regional South Australia spent 14 per cent more on electricity than those in Adelaide and households in regional Tasmania spent 43 per cent more on electricity than those in Hobart.

---

16 New South Wales Treasury, *Submission 81*, p. 10.

17 New South Wales Government, *Evaluation of the impacts of the Commonwealth's carbon price package*, 10 July 2011, p. 2  
[http://www.treasury.nsw.gov.au/\\_data/assets/pdf\\_file/0018/20466/Evaluation\\_of\\_Impacts\\_of\\_Comm\\_Carbon\\_price\\_Package\\_Aug11.pdf](http://www.treasury.nsw.gov.au/_data/assets/pdf_file/0018/20466/Evaluation_of_Impacts_of_Comm_Carbon_price_Package_Aug11.pdf) (accessed 3 October 2011).

**Graphic 7.2: Spending on energy as a percentage of all spending 2010 - 11<sup>18</sup>**

7.25 The Treasury has not published comparable figures in its modelling report for the carbon tax, however, if these disparities in spending on electricity between regional Australia and the capital cities were of the same order, it would mean that households in regional Australia would be worse off under the carbon tax on average. The government estimated that the price impact of the carbon tax on electricity, gas and water charges would be \$3.30 per week.<sup>19</sup> Even taking the Queensland difference between capital city and regional spending (where the disparity is the lowest at 10 per cent), regional Queenslanders would be 33 cents per week worse off than persons in Brisbane under the carbon tax. This would mean that the average 20 cents a week better off that the government estimates, would not be enough to compensate a person living in regional Queensland, on average.

7.26 Regional Australians will also likely be hurt the worst from the eventual inclusion of transport fuel under the carbon tax regime. The cost of groceries and other essentials will generally have a greater proportion of transport costs embodied in their price in many regional areas. For regional Australians, the greater the distance, the greater the cost.

18 Department of the Treasury, *Australia's Low Pollution Future*, 2008, Chart 3.42.

19 Department of the Treasury, *Strong growth, low pollution – modelling a carbon price: Overview*, <http://treasury.gov.au/carbonpricemodelling/content/overview/page8.asp>, (accessed 3 October 2011).

## Committee comment

7.27 Australian households are already struggling with constantly increasing cost of living pressures. They should not be asked to absorb further increases in costs for their daily household necessities just to pay for a carbon tax which will make no difference to the environment.

7.28 Whilst the committee acknowledges that Treasury modelling claims that a portion of households will be overcompensated, the Treasury has only allowed for a 20 cent overcompensation buffer. This 20 cent buffer will disappear very quickly once businesses start to pass on the cost of the carbon tax down the supply chain – with households ultimately wearing the full financial cost of the carbon tax. What seems certain is that households will be out of pocket under the carbon tax.

### *Slugging first home buyers*

7.29 In addition to rising electricity prices, building material manufacturers have cited that they will be forced to raise the cost of building materials as a result of the introduction of the proposed carbon tax.

7.30 Brickworks and CSR have warned of:

... serious cost pressures across the building sector after the government elected not to offer free carbon permits to key building materials businesses under the proposed carbon tax.<sup>20</sup>

7.31 As a result of the proposed \$23 per tonne carbon price, Brickworks have said that they will be forced to raise prices by 6 per cent.<sup>21</sup> CSR has also confirmed that it would raise prices:

... across its non-trade exposed divisions, which includes its brick, roof tile and plasterboard manufacturing divisions.<sup>22</sup>

7.32 The Master Builders Association expects that the increased cost of building materials will add at least an extra \$5,000 to the price of a new home.<sup>23</sup> This does not include the costs of insulation which are also expected to increase. As a trade exposed

---

20 Dan Hall, 'Brickworks, CSR warn of increases', *Australian Financial Review*, 12 July 2011, p. 13.

21 Dan Hall, 'Brickworks, CSR warn of increases', *Australian Financial Review*, 12 July 2011, p. 13.

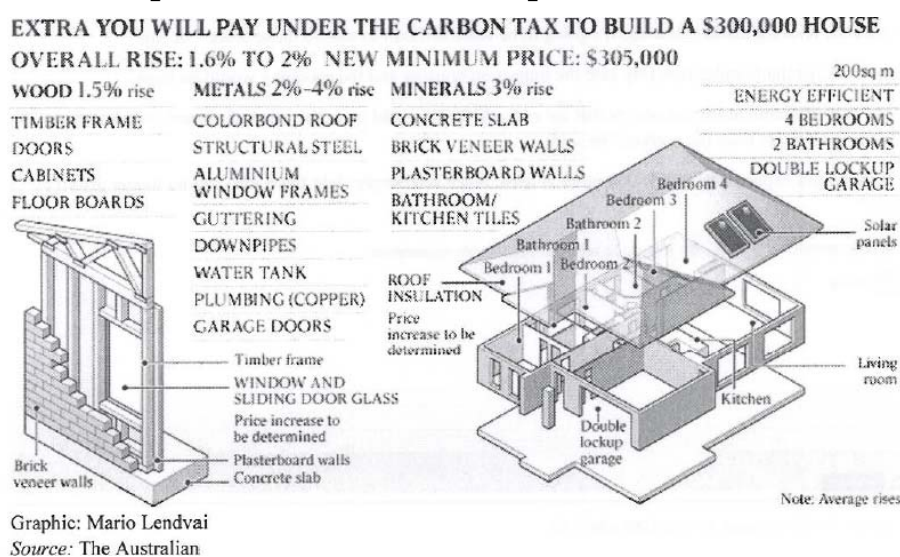
22 Dan Hall, 'Brickworks, CSR warn of increases', *Australian Financial Review*, 12 July 2011, p. 13.

23 Sarah Danckert, 'Materials hike will add \$5000 to home price', *The Australian*, 12 July 2011, p. 7.



industry, insulation manufacturer CSR expects that increased costs will be harder to pass on to consumers and the tax will hit that part of their business hard.<sup>24</sup>

### Graphic 7.3: Impact of carbon tax on the price of a new house<sup>25</sup>



7.33 Although it is difficult to measure the impact on the housing market, HomesAustralia suggests that:

The rule of thumb in the industry is that for every \$1000 you add on to the price of a home, you knock out 20 first-home buyers ... With homes expected to cost \$5000 more at least, that's 100 people right there who can no longer afford to buy.<sup>26</sup>

7.34 Master Builders Australia (MBA) has also criticised the proposed tax, labelling it as a 'negative' for the building industry and a policy that will hurt homebuyers and small business without any upside for the construction industry.<sup>27</sup>

7.35 In addition to those concerns, the MBA, in their submission to the committee, detailed that the industry, which currently accounts for more than 9 per cent of employment in Australia,<sup>28</sup> will be negatively affected at all levels by the introduction of a carbon tax. The MBA engaged the Centre for International Economics (CIE) to undertake a rigorous analysis of the impact of a carbon tax on their industry. The CIE has provided the MBA with the following preliminary findings:

24 Dan Hall, 'Brickworks, CSR warn of increases', *Australian Financial Review*, 12 July 2011, p. 13.

25 Sarah Danckert, 'Materials hike will add \$5000 to home price', *The Australian*, 12 July 2011, p. 7.

26 Sarah Danckert, 'Materials hike will add \$5000 to home price', *The Australian*, 12 July 2011, p. 7.

27 Wilhelm Harnisch, *Master Builders Australia News*, Home Buyers and Small Business – Carbon tax losers, Media Release, 10 July 2011.

28 Mater Builders Australia, *Submission 97*, p. 3.

costs: raising the absolute costs of materials (eg steel, cement, glass) and other inputs (eg energy and labour) used in building and construction;

production processes: changing the relative price shift in research and development practices and technical possibilities; and

demand: by slower-than-otherwise economic and income growth and potentially driving a change in consumer preference for different types of buildings.<sup>29</sup>

7.36 Mr Wilhelm Harnisch, Chief Executive Officer of MBA, is concerned that the design of the tax will not achieve the government's policy objective:

The need to address climate change is recognised but the focus must not be on compensation but the policy fundamentals. ... The fundamental issue for the building and construction industry is the integrity of a carbon tax policy framework which has been driven more by the circumstances of a minority government rather than good public policy principles of efficiency, equity and simplicity.<sup>30</sup>

7.37 The MBA take the view that the proposed carbon tax will have a cascading effect, adding costs at each point in the supply chain and therefore adding costs pressures to home buyers, small businesses and renters.<sup>31</sup> They suggest that the government consider compensating first home buyers for the expected costs of a carbon price as a result of not only the carbon price but the concurrent requirement to build houses to a 'six star' energy rating.<sup>32</sup> The MBA cited research which suggests that without compensation housing affordability in Australia will continue to worsen:

Economic research has estimated the national housing affordability ratio (the median house price divided by median income) at 7.3 in March 2011 (that is, the median house price was 7.3 times median income in that period), well ahead of the ratio of 4.7 recorded a decade earlier.

A housing affordability ratio below 5.0 is regarded by Natsem as "affordable" while a ratio between 6.0 and 7.0 is seen to be "not affordable" and a ratio above 7.0 is considered "severely unaffordable".<sup>33</sup>

### ***Grocery prices***

7.38 According to Treasury, the government's modelled 0.7 per cent increase in the CPI is expected to translate into an 80 cent per week increase in food prices for

---

29 Master Builders Australia, *Submission 97*, p. 11.

30 Wilhelm Harnisch, *Master Builders Australia News*, Home Buyers and Small Business – Carbon tax losers, Media Release, 10 July 2011.

31 Wilhelm Harnisch, *Master Builders Australia News*, Home Buyers and Small Business – Carbon tax losers, 10 July 2011.

32 Master Builders Australia, *Submission 97*, p. 13.

33 Master Builders Australia, *Submission 97*, p. 14.

families.<sup>34</sup> This increase accounts for around 0.5 per cent of the 0.7 per cent consumer price impact that introduction of the tax will have on households.<sup>35</sup>

7.39 The Australian Food and Grocery Council (AFGC), however, doubt the accuracy of the government's modelling. They take the view that the cost of groceries for families will increase under a carbon tax and question the modest increase that the government has modelled:

AFGC Chief Executive Kate Carnell said there's no doubt that costs will increase right across Australia's supply chain, predominantly due to the increased costs of power... AFGC is perplexed by Treasury figures announced today by the Prime Minister, regarding the price rises of food and grocery products on supermarket shelves. The Treasury modelling appears not [to] have been released – we urge them to release these figures.<sup>36</sup>

7.40 The National Association of Retail Grocers of Australia (NARGA) has also questioned the accuracy of the government's modelling of the impact of a carbon tax on grocery prices:

It is unlikely that the complex nature of the grocery supply chain has been modelled effectively to determine the impact on grocery prices of the carbon (dioxide) tax and associated changes to the fuel excise system.<sup>37</sup>

7.41 In their submission to the committee NARGA stated that supermarkets would either decrease their staffing levels or increase their grocery prices to recoup the additional operating costs incurred as a result of the imposition of a carbon tax:

The first year's price increase will cost the average supermarket an average of \$15,000 which would need to be recouped through higher retail prices or reduced staffing levels.<sup>38</sup>

7.42 The government has acknowledged the negative effects that the introduction of a carbon tax will have on everyday consumers, announcing that compensation would be paid to households to offset the impact of the tax's introduction.

### ***More expensive cars***

7.43 While its exclusion will ensure that households and small businesses do not pay the tax on the fuel used in their cars,<sup>39</sup> the cost of cars is expected to rise.

---

34 Department of the Treasury, *Strong growth, low pollution – modelling a carbon price: Overview*, <http://treasury.gov.au/carbonpricemodelling/content/overview/page8.asp>.

35 Department of the Treasury, *Strong growth, low pollution – modelling a carbon price: Overview*, <http://treasury.gov.au/carbonpricemodelling/content/overview/page8.asp>.

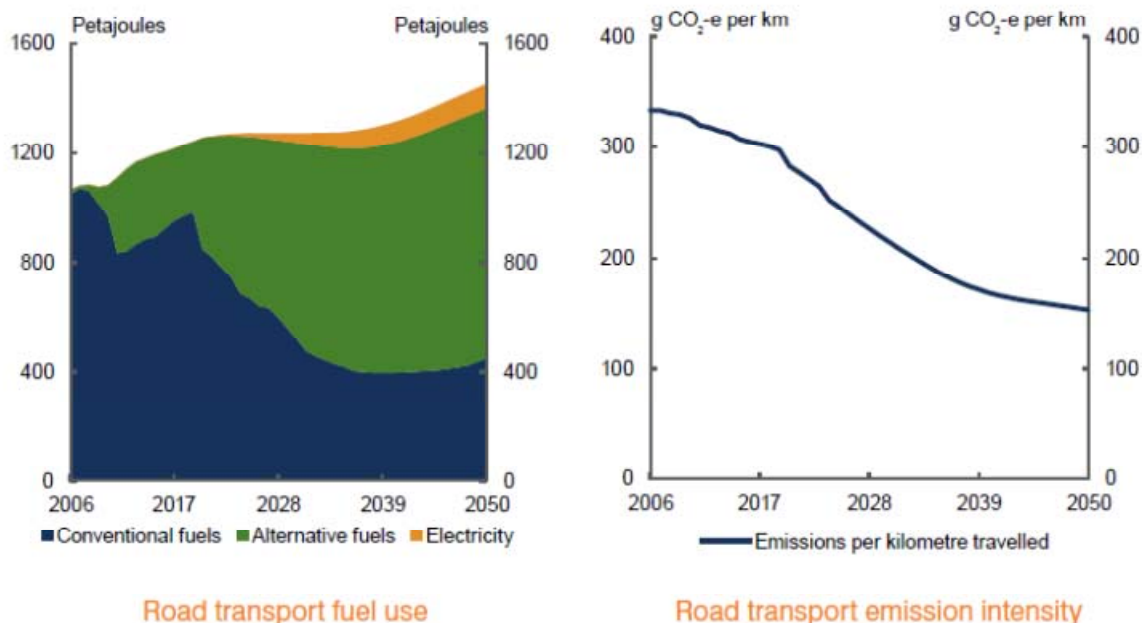
36 Australian Food and Grocery Council, Carbon tax still impacts Australian food and grocery costs, Media Release, 10 July 2011.

37 National Association of Retail Grocers of Australia, *Submission 91*, p. 3.

38 National Association of Retail Grocers of Australia, *Submission 91*, p. 2.

7.44 Government modelling suggests that by 2050 not only will emissions per kilometre travelled nearly be half the level they are today, but the reliance on conventional fuels will also have substantially declined.

**Graphic 7.4.: Forecast vehicle emissions (to 2050) per kilometre travelled<sup>40</sup>**



7.45 In hearings the committee heard evidence from the Federal Chamber of Automotive Industries and the Federation of Automotive Products Manufacturers, who noted that their industries will be severely impacted by the changes. They cited research conducted by PriceWaterhouseCoopers into the potential impact of a carbon price on the automotive industry:

The cost to the domestic automotive industry is likely to be in the order of \$30 million to \$84 million per year depending on various factors including compensation.<sup>41</sup>

7.46 The increase in manufacturing costs as a result of the carbon tax will flow through to consumers so, although household fuel consumption will be not be subject to the carbon tax, the incidence of a carbon tax will translate into higher vehicle

39 Department of the Treasury, *Strong growth, low pollution – modelling a carbon price: Overview*, p.11

40 Department of the Treasury, *Strong growth, low pollution – modelling a carbon price: Overview*, p. 11

41 PriceWaterhouseCoopers, *Potential impact of a carbon price on the Australian automotive industry*, May 2011, p. 8.

---

prices. Research conducted suggests that without compensation, new vehicles could increase by between \$222 and \$412.<sup>42</sup>

### **Australian Households under a carbon tax**

7.47 The introduction of the carbon tax is going to hurt families. The government's compensation package for households is insufficient. It will not cover the cumulative increase in the costs of a basket of goods – when pressed on this point, Treasury revealed that they have not publicly released the basket of goods used in their analysis of the price impact on consumers of the proposed carbon tax:

**CHAIR:** Has Treasury been asked by industry associations or others for details on the basket of goods that is used to calculate the cost-of-living impact?

**Mr Robinson:** Yes, we have had inquiries from industry associations on the composition of price changes by different commodity groupings.

**CHAIR:** Did you provide that information?

**Mr Robinson:** At this stage we have been talking to government about the release of such information.

**CHAIR:** So the answer is that so far you have not released that information?

**Mr Robinson:** Not at this stage, Senator.<sup>43</sup>

7.48 On further questioning as to the basket of goods used in modelling the impact of a carbon tax on consumers, Treasury explained that they relied on information used in the 2003–04 household expenditure survey?

**Mr Robinson:** The modelling that we have undertaken uses PRISM, which was the same model that was used to undertake analysis of the impact of the introduction of the GST back in 2000. The distributional component of that PRISM modelling has underlying it the household expenditure survey.

**CHAIR:** Is that the 2003-04 household expenditure survey?

**Mr Robinson:** That is correct. That information from the 2003-04 household expenditure survey has been comprehensively updated to reflect our best estimates of what the world would look like in 2012-13. So, for example, it takes account of historical price changes for different commodity classes—say, for example, historical electricity price changes.

---

42 PriceWaterhouseCoopers, *Potential impact of a carbon price on the Australian automotive industry*, May 2011, p. 8.  
[http://www.fcail.com.au/library/publication//final\\_pwc\\_automotive\\_industry\\_report\\_11\\_may\\_2011pwc.pdf](http://www.fcail.com.au/library/publication//final_pwc_automotive_industry_report_11_may_2011pwc.pdf) (Accessed 16 September 2011).

43 Senator Mathias Cormann, Chair of the Senate Select Committee on the Scrutiny of New Taxes and Mr Marty Robinson, Manager, Household Modelling and Analysis Unit, Department of the Treasury, *Committee Hansard*, 10 August 2011, p. 12.

Then we have also incorporated future projections of price growth out to 2012-13. The modelling then goes through the process of looking at what the impact of the price changes will be on specific groups of commodities underlying the CPI. That is what leads us to an estimate of the overall impact of the CPI, built up from underlying commodity group estimates.

**CHAIR:** So, if it is based on the 2003-04 household expenditure survey, what is the sensitivity? Why is there an issue with providing that information to industry associations and others, for that matter, so that it can be properly scrutinised?

**Mr Robinson:** The government has published in the reports the headline increases. The majority of the price impacts are actually driven by changes in electricity prices. So the key drivers of impacts for households are actually electricity prices, which are estimated to go up by about 10 per cent, and gas prices, going up by about nine per cent. The majority of the other goods and services that households typically consume—food was one of the examples given—would typically rise by less than half of one per cent.<sup>44</sup>

7.49 Treasury have not explained the sensitivity associated with releasing the information concerning the basket of goods used to model the impacts of the carbon tax on households and although the Household Expenditure Survey examines average expenditure on health services, the general nature of the government's modelling on the estimated impact on health costs suggests that the basket of goods used to model the impact of the carbon price should be released:

Treasury estimate that households will face a price impact on health services of around 0.3 per cent in 2012-13 under a \$23 carbon price. Health services include hospital and medical services, optical and dental services, and pharmaceuticals. Estimating the impact on household goods and services has been undertaken across broad product categories and the estimates represent the average price impacts across each category. Within each category there will be a range of goods with different levels of direct and indirect emissions intensity. Some items may have higher price impacts than the average while other items may be lower.<sup>45</sup>

7.50 The reticence on the part of government to release this information raises further questions around the veracity of their modelling.

7.51 Indeed, when questioned as to the accuracy details of the numbers of families and households in each income bracket that will be impacted by the carbon tax, Treasury was unable to provide specific detail:

---

44 Senator Mathias Cormann, Chair of the Senate Select Committee on the Scrutiny of New Taxes and Mr Marty Robinson, Manager, Household Modelling and Analysis Unit, Department of the Treasury, *Committee Hansard*, 10 August 2011, p. 12.

45 Department of the Treasury, Answer to question taken on notice on 10 August 2011, question 8, received between 29 August and 26 September.

---

The individual characteristics of households and families are detailed and varied. The survey data underlying the models used to develop distributional estimates contains a comprehensive cross-section of different household types and income levels, which underpins the estimates that nine out of ten households will receive assistance, almost six million households will receive assistance that covers all of their average expected price impact and over four million households will receive assistance that is at least 20 per cent more than their average expected price impact. However, it is not possible to accurately estimate the number of households represented at each income point for each household cameo included in the Supporting Australian households publication. Recognising this, the publication seeks to provide information about the elements of the household assistance package most applicable to a selection of different household types at different income levels, as well as distributional information about the broader Clean Energy Future policy.<sup>46</sup>

7.52 In announcing the compensation package for households the government has boasted that many Australian families will be better off as a result of the changes to the marginal tax rates. However, as Treasury acknowledge, it is not possible to identify accurately the number of households in each income bracket as income brackets do not reflect effective marginal tax rates. Furthermore, Treasury have acknowledged that effective marginal tax rates will be impacted by the changes contained in the government's legislative package.

**CHAIR:** The Prime Minister and the Treasurer have made much of the lower effective marginal tax rate in the \$16,000 to \$20,000 range. Can you just confirm that effective marginal tax rates are higher for incomes above \$20,500?

...

**Mr Robinson:** There are a few changes in effective marginal tax rates through those income ranges. As a result of a very large increase in the tax-free threshold there have been some adjustments to the marginal rates such that the 15 per cent rate increases to 19 per cent, **which has increased the effective marginal tax rate between \$20,542 and \$30,000.** [emphasis added] Beyond that point, the old effective marginal tax rate of 15 per cent plus the four per cent withdrawal of the low-income tax offset means that there has been no change to the effective tax rate between \$30,000 and \$37,000.

**CHAIR:** So it increases between \$20,500 and—

**Mr Robinson:** And \$30,000.

...

**CHAIR:** And you have just confirmed that people earning incomes between \$20,500 and \$30,000 will pay a higher effective marginal tax rate.

---

46 Department of the Treasury, Answer to question taken on notice on 10 August 2011, question 7, received between 29 August and 26 September.

Then everybody earning more than \$37,000 will also pay a higher effective marginal tax rate, won't they?

**Mr Robinson:** That is not correct. The effective marginal tax rate beyond \$30,000 up to about \$66,600 is still the same. That is basically through rebalancing. Under that current tax scales, if you like, there is a 30 per cent marginal rate which kicks in from \$37,000. There is also the four per cent withdrawal of the low-income tax offset on that.

**CHAIR:** Sure.

**Mr Robinson:** So the effective rate is 34 per cent. Effectively, what the government has done is to reduce the withdrawal of the low-income tax offset to 1½ per cent and to put an extra 2½ per cent into the statutory marginal rate. So the 32½ plus 1½ still adds up to 34, leaving the effective rate unchanged between—

**CHAIR:** At what income level does the effective marginal tax rate increase again compared to the status quo?

**Mr Robinson:** **Between \$67,500 and \$80,000 the effective rate will have increased by 2½ per cent.** [emphasis added]

**CHAIR:** What is going to be the increase in the effective marginal tax rate for people on incomes between \$20,500 and \$30,000, in percentage terms?

**Mr Robinson:** Four per cent.

**CHAIR:** Four per cent.

**Mr Heferen:** Bear in mind that the average tax rate for those people still goes down.

**CHAIR:** Sure. But I do not have time to go through that; I will focus on what I want to ask questions about. Clearly, on page 10, in your tax reform discussion paper you found it important enough to focus on effective marginal tax rates and to present that information in chart 2. People earning between \$20,500 and \$30,000 will now have a four per cent higher effective marginal tax rate and people earning between \$67,500 and \$80,000 will have a 2½ per cent higher effective marginal tax rate. What modelling have you done on account of participation effects of these lower and higher effective marginal tax rates?

**Mr Heferen:** We have done no modelling. Clearly, a 2½ point effective marginal tax rate, which is further obscured by the fact of that low-income tax offset itself—part of that comes in a person's pay and part of it has to be done on assessment. So you would have to be very careful about the judgment of a person where they take on an extra amount of work, with that fine level of distinction and at that level of income.<sup>47</sup>

---

47 Senator Mathias Cormann, Chair of the Senate Select Committee on the Scrutiny of New Taxes; Mr Marty Robinson, Manager, Household Modelling and Analysis Unit, Department of the Treasury, Department of the Treasury and Mr Rob Heferen, Executive Director, Revenue group, Department of the Treasury, *Committee Hansard*, 10 August 2011, pp 13–14.



7.53 There is. However, some question about the extent to which the number of households impacted by an increased effective marginal tax rate has been modelled as, although information has been released that there are approximately 450,000 people who earn between \$16,000 and \$20,500 and who will therefore receive a tax cut, Treasury have been unable to provide advice as to the number of people who earn between \$67,500 and \$80,000 and who therefore, will face an effective marginal tax rate 2.5 per cent higher than is currently the case.<sup>48</sup>

### **Reaction to the compensation package**

7.54 The Australian Council of Social Service raised concerns about the government's compensation package. In particular, with the way in which compensation levels have been determined, citing a concern that the method used entrenches existing inequities in the social welfare system:

... we are disappointed that compensation levels have been determined based on household income and not expenditure. This means that existing inequities in Australia's income support system will continue through the carbon price mechanism as those on lower allowances receive the lowest levels of compensation.

For example someone on Aged Pension, Carers of Disability Support Pension will receive an increase of \$338 per year compared to \$218 for someone on the unemployment Newstart Allowance. This is unfair and brings a level of inequity into the compensation aspects of the scheme.

...

It should also be noted that allowance recipients are not eligible for the Utilities Allowance of \$10 per week, which adds to the inequity in the face of surging electricity and gas prices.<sup>49</sup>

### **Committee comment**

7.55 The evidence the committee has received clearly shows that the introduction of a carbon tax will increase prices across all consumer goods, including electricity, gas and groceries, and lead to increased prices in other goods and services across the economy.

7.56 The committee is of the view that the Treasury modelling has underestimated the impact of the carbon tax on the cost of living. The committee's views about the flaws in the Treasury modelling are discussed in more detail in chapter 10.

---

48 Department of the Treasury, *Committee Hansard*, 10 August 2011, pp 13–14.

49 Australian Council of Social Service, *ACOSS welcomes agreement on carbon price mechanism*, Media Release, 10 July 2011, [http://www.acoss.org.au/media/release/acoss\\_welcomes\\_agreement\\_on\\_carbon\\_price\\_mechanism](http://www.acoss.org.au/media/release/acoss_welcomes_agreement_on_carbon_price_mechanism) (accessed 16 September 2011).

7.57 The committee is concerned about the impact that higher costs, particularly higher prices for food and energy, will have for low and middle income families and draws attention to the fact that, although households can be compensated for any initial price increases, due to the second round effects, the cost to these families of the introduction of a carbon tax can never be accurately calculated or compensated.

7.58 The committee finds that households in regional Australia are likely to be worse off under a carbon tax. For regional Australians, the greater the distance, the greater the cost. Treasury figures reveal that regional Australians pay anywhere from 10 per cent to 43 per cent more for electricity than those in capital cities. This disparity alone would wipe out the estimated 20 cents per week that Treasury estimates the average Australian would be better off. In addition, regional Australians will be hit again once the eventual inclusion of transport fuel is added to the cost of groceries and other essential items.