Chapter 8

The carbon tax and the economy

Introduction

8.1 Chapter 8 provides an assessment of the impact and implications of the proposed carbon tax on the economy and the government's budget.

8.2 It will consider the following issues:

- the Commonwealth Budget for the government's climate change plan, as set out in the fiscal tables in the Explanatory Memorandum to the Clean Energy Bill 2011, released on 13 September 2011;
- aspects of the overall scheme not contained in those tables, in particular, the program for 'closure of around 2000 megawatts of highly polluting generation capacity by 2020';[1]
- the effect of the overall scheme on the Commonwealth budget deficit, including its impact on the return to surplus; and
- the impact of the carbon tax on the economies of New South Wales, Victoria, Queensland and Western Australia.

The government's climate change plan and the Commonwealth Budget

8.3 On 21 December 2010 the Multi-Party Climate Change Committee (MPCCC) issued a communiqué, which stated:

> **Budget neutrality:** The overall package of a carbon price mechanism and associated assistance measures should be budget-neutral. This does not preclude other measures to address climate change being funded from the Budget, consistent with the Government’s fiscal strategy.[2]

8.4 Budget neutrality was raised at the Senate Estimates hearing on 25 May 2011:

> **Senator BIRMINGHAM:** The proposal will be developed consistent with the principle that the overall package of a carbon price mechanism and associated assistance measures should be budget-neutral.

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1 Australian Government, *Clean Energy Future - Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 71.

2 Communiqué of the Multi-Party Climate Change Committee, 21 December 2010 http://www.climatechange.gov.au/en/government/initiatives/multi-party-committee/meetings/third-meeting/communique.aspx#attachmenta (accessed 17 August 2011).

> **Mr Tune:** So we would interpret that, in the department of finance, as being budget-neutral over the course of the forward estimates.
>
> **Senator BIRMINGHAM:** There is no commitment from the government, though, as regards to the surpluses that apply in the forward estimates at present, that none of them will be undermined to some extent by a revenue-neutral budget carbon price mechanism.
>
> ...
>
> **Senator Wong:** Our commitment to the surplus remains. In relation to the carbon price, those decisions have not yet been made, and when they are made we will account for them in the usual way.
>
> **Senator BIRMINGHAM:** Has the department of finance provided any advice on budget-neutrality and what the expected approach to the carbon pricing mechanism would be?
>
> **Mr Tune:** No, Senator, no, other than what is stated in the budget papers.[3]

8.5 The carbon tax and budget-neutrality were addressed in the Statement of Risks section of the Commonwealth Budget Papers:

> The Government has proposed that a carbon price mechanism commence on 1 July 2012. The proposal involves a two-stage process starting with a fixed price period for three to five years before transitioning to an emissions trading scheme. As details of the carbon price mechanism are yet to be determined, no financial implications associated with the introduction of a carbon price have been included in the forward estimates. This is consistent with past practice. The proposal will be developed consistent with the principle that the overall package of a carbon price mechanism and associated assistance measures should be budget-neutral.[4]

8.6 Speaking on the 'PM programme' on ABC Radio on 11 July 2011, the Treasurer, the Hon. Wayne Swan MP, stated:

> It is **broadly** budget neutral over the forward estimates. Over the forward estimates, the costs are relatively modest. We will bring the budget back to surplus in 2012/13.[5] **[emphasis added]**

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3 Senator Simon Birmingham and the Minister for Finance and Deregulation Senator the Hon. Penny Wong and Mr David Tune, Secretary, Department of Finance and Deregulation, *Estimates Hansard*, 25 May 2011, pp 180 - 181, http://www.aph.gov.au/hansard/senate/commttee/s59.pdf (accessed 19 September 2011).

4 Australian Government, *2011-12 Australian Government - Budget Paper No. 1: Budget Strategy and Outlook*, pp 8 - 5.

5 ABC Radio http://www.abc.net.au/pm/content/2011/s3266743.htm (accessed 17 August 2011).

8.7 The most recent fiscal tables outlining the anticipated budgetary effect of the government's Clean Energy Plan can be found in the Explanatory Memorandum to the Clean Energy Bill 2011.[6]

8.8 The sale of permits during the fixed-price period is expected to raise $25,620 billion. An additional $1,640 billion should be generated from the application of a carbon price via other measures and fuel tax credit reductions, for total revenue of $27,260 billion.

8.9 According to the costs set out in Fiscal Table 1 of the Explanatory Memorandum to the Clean Energy Bill 2011, the total cost of the climate change plan is, therefore, anticipated to be $31,269 billion.

8.10 The result is an anticipated net cost to the budget of more than $4 billion over the four years to 2014-15. As discussed below, this figure does not include measures that are to be funded outside the government's climate change plan budget, including the contingency reserve.

8.11 Therefore, the government is proposing to plunge the Commonwealth Budget further into deficit while at the same time and based on its own modelling, Australia's domestic emissions will actually rise by around 90 million tonnes in 2020.

Additional government measures not included in the climate change plan budget

8.12 As stated above the budget for the government's climate change plan is set out in Fiscal Table 1 of the Explanatory Memorandum to the Clean Energy Bill 2011. Taken together, the measures in Fiscal Table 1 result in a deficit for the government's climate change plan of $4,008 million. Other, important aspects of the government's overall climate change plan, particularly relating to compensation packages and industry assistance, are budgeted for separately to the plan itself. The bulk of those measures are included in Fiscal Table 3 of the Explanatory Memorandum. They are expected to increase the net cost to the budget to $4,424 million by 2014-15.[7] When those measures not included in the Fiscal Tables (as set out in Table 8.1 below) are added, they increase the net cost of the government's climate change plan to $4,448.8 million by 2014-15.

8.13 The steel and coal industries will be particularly affected by the government's carbon tax and have been promised assistance that is not included in the climate change plan budget. These measures are outlined below.

6 Australian Government, *Explanatory Memorandum to the Clean Energy Bill 2011*, pp 41 - 42.

7 Australian Government, *Explanatory Memorandum to the Clean Energy Bill 2011*, pp 41 - 42.

8.14 Under the Steel Transformation Plan, the government has promised $189 million of assistance to the steel industry over four years[8] 'to encourage investment and innovation in the Australian steel manufacturing industry'.[9]

8.15 The Coal Sector Jobs package will provide $696 million in funding as 'transitional assistance to help the coal industry[10] to implement carbon abatement technologies for the mines that produce the most carbon pollution'.[11]

8.16 A further $41 million is to be used as part of the Coal Mining Abatement Technology Support Package[12] to 'provide support for the development and deployment of technologies to reduce fugitive emissions from coal mines'.[13]

8.17 However, there are additional measures that will form part of the government's implementation of its climate change plan which are not included in the Explanatory Memorandum or in either Appendix C or D to *Securing a clean energy future: The Australian government's climate change plan*. These measures are set out below.

Australian Competition and Consumer Commission funding

8.18 One of these measures is the allocation of $12.8 million over four years to the Australian Competition and Consumer Commission (ACCC) to set-up a team to investigate any misleading or deceptive conduct by businesses about the effect of the carbon tax on prices and educate businesses on their rights and responsibilities under the government's plan.[14]

8.19 It should be noted that, as the permits issued under the Plan are financial products, any misleading or deceptive conduct relating to them comes within the

8 Australian Government, *Explanatory Memorandum to the Clean Energy Bill 2011*, p. 42.

9 Australian Government, *Clean Energy Factsheet – Supporting Jobs and Industry*, http://www.cleanenergyfuture.gov.au/wp-content/uploads/2011/06/012-FS-Supporting-jobs-and-industry.pdf (accessed 10 July 1011).

10 Australian Government, *Explanatory Memorandum to the Clean Energy Bill 2011*, p. 42.

11 Australian Government, *Clean Energy Factsheet – Supporting Jobs and Industry*, http://www.cleanenergyfuture.gov.au/wp-content/uploads/2011/06/012-FS-Supporting-jobs-and-industry.pdf (accessed 10 July 1011).

12 Australian Government, *Explanatory Memorandum to the Clean Energy Bill 2011*, p. 42.

13 Australian Government, *Clean Energy Factsheet – Supporting Jobs and Industry*, http://www.cleanenergyfuture.gov.au/wp-content/uploads/2011/06/012-FS-Supporting-jobs-and-industry.pdf (accessed 10 July 1011).

14 'ACCC to prevent carbon price gouging', *The Age*, 13 July 2011 http://news.theage.com.au/breaking-news-national/accc-to-prevent-carbon-price-gouging-20110713-1hcxv.html, (accessed 19 September 2011).

jurisdiction of the Australian Securities and Investments Commission and not the ACCC.[15]

Advertising and community awareness

8.20 On 16 June 2011, almost a month before it announced its climate change plan, the government announced a national advertising campaign to sell the carbon tax. The Minister for Climate Change and Energy Efficiency, the Hon. Greg Combet AM MP, has stated that the campaign will cost $12 million.[16] This is in addition to an allocation of $8.2 million in the 2011-12 Commonwealth budget for the Climate Change Foundation Campaign, which will fund a $3 million grants program, as well as 'partnerships and other community engagement activities'.[17]

8.21 It has been suggested that the total cost of all government advertising to support its carbon tax is closer to $25 million, when the cost of leaflets and websites is added in.[18]

Table of non-Plan revenues and outlays

8.22 The table below sets out the major revenues and outlays for the carbon tax plan that are not included in the government's climate change plan budget. Cumulatively, it represents a net $440.8 million hit to the government's budget over the next four years. However, to an extent it represents a conservative expression of the total costs of the government's climate change plan, as it does not include the contracts for closure program.

8.23 The figures contained in the table below are sourced from the Explanatory Memorandum to the Clean Energy Bill 2011, unless otherwise cited.

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15 *Australian Securities and Investments Commission Act 2001*, ss12DA - 13DB.

16 The Hon. Greg Combet AM MP, Minister for Climate Change and Energy Efficiency, Climate change public information campaign, Media Release, 16 June 2011 http://www.climatechange.gov.au/minister/greg-combet/2011/media-releases/June/mr20110616.aspx (accessed 18 August 2011).

17 Australian Government, Portfolio Budget Statements 2011-12: Budget Related Paper No. 1.4: Climate Change and Energy Efficiency Portfolio, Commonwealth of Australia, Canberra, 2011, p. 23. http://climatechange.gov.au/en/about/budget/~/media/publications/budget/1112/2011-12-pbs.pdf (accessed 8 September 2011).

18 Ross Peake, 'Gillard, Abbott in campaign cost debate', *Canberra Times*, 18 July 2011, p. 3.

Table 8.1: Revenues and outlays in relation to the carbon tax not included in the fiscal tables, Government stand alone measures (in millions)[19]

Measure	Outlays					Revenue	Net Total
	ACCC	Advertising & Grants Program	Steel Transform'n Plan	Coal Sector Jobs Package	Coal Mining Abatement Package	Fuel-tax reduction (Heavy on-road transport)	
2011-12		-$12±	-$1	-$222	0		-$235
2012-13			-$38	0	-$11		-$49
2013-14			-$75	-$231	-$16		-$322
2014-15	-$12.8*		-$75	-$243	-$15	$510†	$164.2
Total	-$12.8	-$12	-$189	-$696	-$41‡	$510	-$440.8‡

* Funding allocated over the budget years 2011-12 to 2014-15
± The duration of this funding is unclear but is likely to extend beyond the 2011-12 financial year
† This program represents the application of an effective carbon tax to heavy on-road vehicles, commencing in 2014-15. See Australian Government, *Clean Energy Future - Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 133.
‡ Numbers may not add due to rounding.

Combined outlays and revenues under the carbon tax

8.24 The table and graphic below bring together the combined MPCCC and government revenues and outlays to highlight a combined deficit of $4,449.8 million.

Table 8.2: Total revenues and outlays under the carbon tax agreed by the MPCCC and the government's stand alone measures[20]

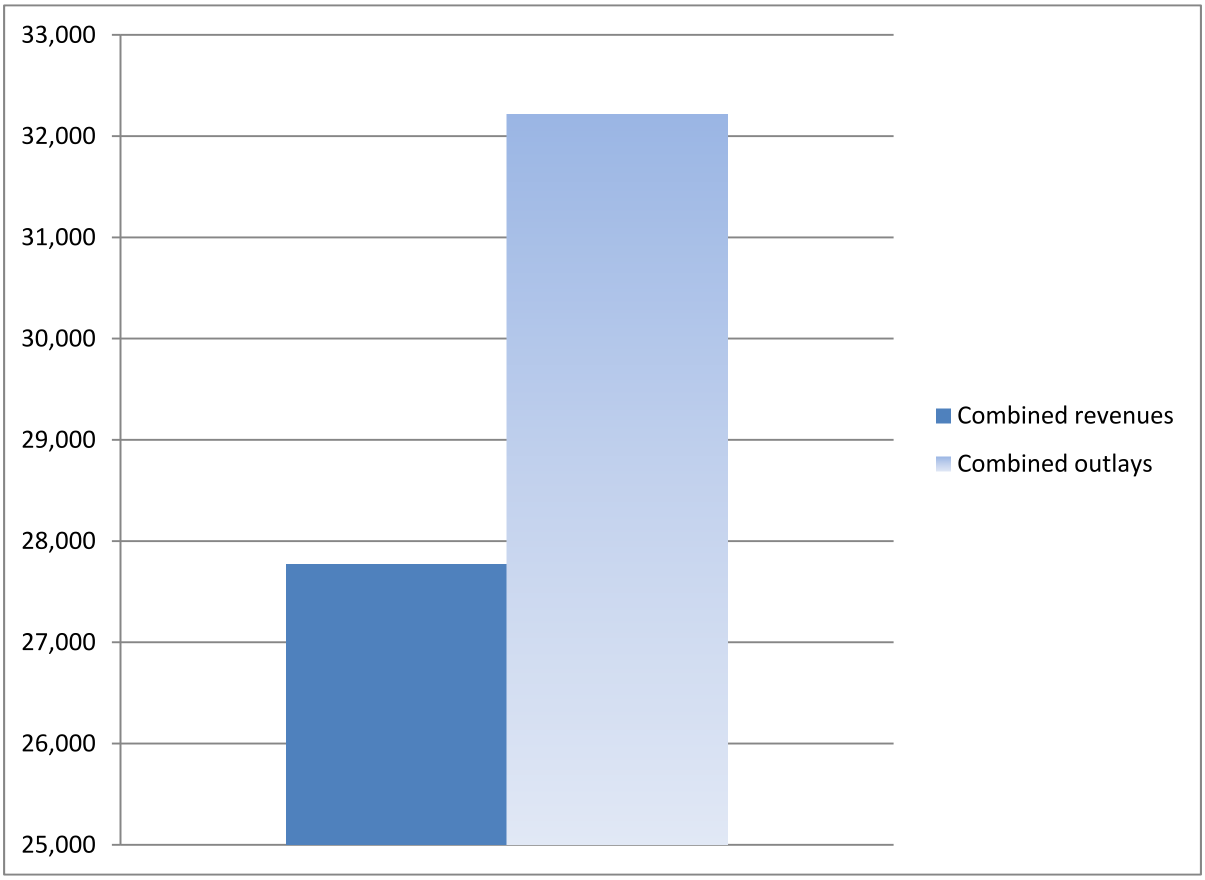
Year	MPCCC and government combined revenues ($m)	MPCCC and government combined outlays ($m)	Difference ($m)
Total	27,770	32,219.8	- 4,449.8[21]

19 Australian Government, *Explanatory Memorandum to the Clean Energy Bill 2011, p.42* and paras: 3.95 – 3.99 of this Report.

20 Australian Government, *Explanatory Memorandum to the Clean Energy Bill 2011*, pp 41 – 42 and paras: 3.95 – 3.99 of this Report.

21 Note: Discrepancies with other figures used in this report are due to rounding.

Graphic 8.1: Total revenues and outlays under the carbon tax agreed by the MPCCC and the government's stand alone measures[22]



Clean Energy Finance Corporation

8.25 The government's carbon tax plan includes the establishment of the Clean Energy Finance Corporation (CEFC). The CEFC is included in the climate change plan budget. Its purpose is to invest in:

> ... businesses seeking funds to get innovative clean energy proposals and technologies off the ground ... the commercialisation and deployment of renewable energy, energy efficiency and low-pollution technologies (and) manufacturing businesses that provide inputs for these sectors'.[23]

8.26 It 'will not invest in carbon capture and storage technology, which is supported through existing programs'.[24]

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22 Australian Government, *Explanatory Memorandum to the Clean Energy Bill 2011*, pp 41 – 42 and paras: 3.95 – 3.99 of this Report.

23 Australian Government, *Clean Energy Future - Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 64.

24 Australian Government, *Clean Energy Future - Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 65.

8.27 The National Generators Forum has been critical of the establishment of the CEFC, arguing that there was not consultation with the power industry about its establishment and that direct government intervention in the system will create investor uncertainty.[25]

8.28 The CEFC is to receive funding of $10 billion over five years from 2013-14. Capital returned from its investments will be reinvested. At the Committee hearing on 10 August 2011, Treasury officials indicated that its loans would be commercial in the sense that they would:

> ... not necessarily mean the market rate or the hurdle rates that that these businesses would need to go through. There are a large number of potential clean energy and renewable projects out there that cannot get finance for a range of reasons and the purpose of the entity, the CEFC, is to leverage private sector investment in this area.[26]

8.29 It is intended that these loans 'will earn a positive return', however, any drop in the value of investments by the CEFC would impact on the government's balance sheet.[27]

8.30 In response to a question taken on notice at the hearing on 10 August 2011 the Treasury has advised that:

> Recipients of commercial loans provided by the CEFC are expected to be charged an interest rate comparable to that offered by lenders in the private sector.
>
> The objective of the CEFC is to remove market barriers that would otherwise hinder the financing of large-scale clean energy and renewable projects. That is, the CEFC will operate in the 'market gap', encouraging projects that wouldn't otherwise proceed by providing an alternative source of debt or equity to underpin a project's financial viability.[28]

8.31 In response to another question taken on notice on 10 August 2011, Treasury's expectation is that around $30 million of the operating expenses of the CEFC will be an allowance for defaults on loans. While this will impact on gross debt, Treasury

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25 National Generators Forum, *Submission 174*, on the Clean Energy Legislative Package at http://www.climatechange.gov.au/government/submissions/clean-energy-legislative-package/~/media/government/submissions/cel/public/CEL-Submission-NationalGeneratorsForum-20110922-PDF.pdf (accessed 22 September 2011) pp 6 - 8.

26 Ms Luise McCulloch, General Manager, Industry, Environment and Defence Division, Department of the Treasury, *Committee Hansard*, 10 August 2011, p. 8.

27 Ms Luise McCulloch, General Manager, Industry, Environment and Defence Division, Department of the Treasury, *Committee Hansard*, 10 August 2011, p. 9.

28 The Treasury, *Response No. 18 to Questions on Notice, Question 3*, http://www.aph.gov.au/Senate/committee/scrutinynewtaxes_ctte/carbontax/submissions.htm, p. 4.

maintains that over times the CEFC will be generate a positive return on its investments, through interest and dividends.[29]

8.32 Another body established by the government as part of its climate change plan is the Australian Renewable Energy Agency. The government has provided for the revenue neutrality of the Agency on the basis that it will receive future funding from dividends paid by the CEFC.[30] No statement has been made by the government on what plans have been put in place should dividends from the CEFC not meet the Agency's costs.

Contracts for closure program and the use of contingency reserve

8.33 Potentially, the aspect of the government's climate change plan not included in the government's climate change plan budget that has the greatest financial impact is the commitment to 'seek to negotiate the closure of around 2000 megawatts of highly polluting electricity generation capacity by 2020'.[31]

8.34 The program is to be implemented by the Department of Resources, Energy and Tourism, which will call for expressions of interest from eligible generators. It has described the measure as a 'modest ... element of the Energy Security Fund' and stated that the government 'has allocated a certain amount in the Contingency Reserve beyond 30 June 2016 to support delivery of contract for closure'.[32]

8.35 On 8 June 2011, the committee heard evidence concerning the cost of closing power stations like Hazelwood, in Victoria's Law Trobe Valley, from the Energy Supply Association of Australia (ESAA):

> I would expect that if we are talking about the closure of whole plants, not individual generation units within them, then it is not going to be in the tens of billions per plant and it is unlikely to be in the hundreds of millions, although it could be in the very high hundreds of millions. I would think it would most likely be in the low single-digit billions of dollars. But, again, there are many different ways that such a scheme could be constructed and a competitive process is going to be the best one to sort out exactly what it does take for these things to close.[33]

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29 The Treasury, *Response No. 18 to Questions on Notice, Question 4*, http://www.aph.gov.au/Senate/committee/scrutinynewtaxes_ctte/carbontax/submissions.htm, p. 5.

30 Australian Government, *Clean Energy Future - Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 122.

31 Australian Government, *Clean Energy Future - Securing a clean energy future: The Australian Government's Climate Change Plan*, p. vii.

32 Australian Government, *Clean Energy Future - Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 65.

33 Mr Brad Page, Chief Executive Officer, Energy Supply Association of Australia, *Committee Hansard*, 8 June 2011, pp 6 - 7.

8.36 In Question Time on 6 July 2011, the Minister for Finance and Deregulation Hon. Senator Penny Wong, was asked about the use of the contingency reserve to fund the closure of power stations. She stated:

> The contingency reserve is not a general policy reserve. It is not a rainy day fund. It is true that no provision was made in the [contingency reserve] CR as at the 2011-12 budget for the carbon price because details of the proposal and financial implications of such were yet to be determined by government. As we said in the budget papers, as we have said since, we will update the figures associated with the carbon price package in the usual way after the policy has been finalised.[34]

8.37 On 11 July 2011, the Prime Minister, the Hon Julia Gillard MP, stated on radio in Perth that the government had 'made provision in the contingency reserve' for the closure of some power stations.[35]

8.38 An article in *The Australian* on 13 July 2011 quoted unnamed industry sources as saying its owners would seek 'close to $3bn' for Hazelwood Power Station.[36] The same article quoted the Deputy Leader of the Australian Greens, Senator Christine Milne, as saying that contracts for closure of power stations would be funded from carbon tax revenues and not from consolidated funds or general revenue raised by taxpayers.[37]

8.39 On 19 July 2011, it was reported that the Minister for Resources, Energy and Tourism, the Hon. Martin Ferguson AM MP, stated 'there is no bottomless pit of taxpayer dollars' to fund the contract for closure program.[38]

8.40 On 22 July 2011, *The Australian Financial Review* reported that:

> Alinta Energy has warned the federal government will have to pay it up to $250 million to close its ageing coal-fired Playford power station in South Australia, more than double the government's estimate. ... Extrapolating from Alinta's estimates, retiring 2000 megawatts would cost about $2 billion.[39]

34 *Senate Hansard*, 6 July 2011, pp 4169 - 70.

35 Annabel Hepworth and Dennis Shanahan, 'Shutting power plants will cost another $3bn', *The Australian*, 13 July 2011, p. 6.

36 Annabel Hepworth and Dennis Shanahan, 'Shutting power plants will cost another $3bn', *The Australian*, 13 July 2011, p. 6.

37 Annabel Hepworth and Dennis Shanahan, 'Shutting power plants will cost another $3bn', *The Australian*, 13 July 2011, p. 6.

38 Annabel Hepworth, 'ALP puts limits on dirty coal compo', *The Australian*, 19 July 2011, p. 1.

39 Mark Ludlow and Peter Kerr, 'Payouts fail to please', *Australian Financial Review*, 22 July 2011, p. 9.

8.41 According to a report in *The Age* on 26 August 2011, the Minister for Climate Change and Energy Efficiency, the Hon. Greg Combet AM MP, has said that 'the government intended to drive a hard bargain to get value for taxpayers from the pay-to-close program'.[40]

8.42 Treasury officers were asked about provisions in the budget for the use of the contingency reserve to fund the closure program at the Committee hearing on 10 August 2011. It is appropriate to quote the exchange at a greater than usual length:

> **CHAIR:** Have provisions been made in the contingency reserve already for the buyout of so-called dirty coal fired power stations?
>
> **Mrs McCulloch:** Yes.
>
> **CHAIR:** And that is within the $4.3 billion?
>
> **Mrs McCulloch:** The $4.3 billion relates to the forward estimates. Some provision is beyond the forward estimates.
>
> **CHAIR:** When you say 'provisions have been made', has that money already been appropriated, or will it have to be appropriated by the parliament?
>
> **Mrs McCulloch:** At the time a decision is made it will be appropriated by the parliament.
>
> ...
>
> **CHAIR:** Has Treasury assessed the fiscal impact of the carbon-pricing package beyond the forward estimates?
>
> **Mrs McCulloch:** No.
>
> **CHAIR:** You have not assessed it?
>
> **Mrs McCulloch:** No.
>
> **Dr Gruen:** What do you mean by assessed? Are we aware of the numbers—is that the question?
>
> **CHAIR:** Are you aware of the numbers?
>
> **Dr Gruen:** Not me personally.

40 Tom Arup, 'Tough line on power buyouts', *The Age*, 26 August 2011, p. 8.

> **Mrs McCulloch:** No. We have not assessed the totality of the package beyond the forward estimates.[41]

8.43 The conclusion that can be reached from this is that the funds for the contract for closure program will come from the contingency reserve, contrary to an assurance given by the Minister for Finance and Deregulation on 6 July 2011. However, the government and Treasury have not accounted for it in the budget as any decisions about those payments are expected to be made outside the forward estimates, that is, after 30 June 2016.

Effect of the carbon tax plan on the return of the Commonwealth Budget to surplus

8.44 In its Commonwealth Budget for the fiscal year 2010-11 the government indicated that it intended to return the budget to surplus by 2012-13.

8.45 In Question Time on 16 August 2011, the Treasurer, the Hon. Wayne Swan MP, indicated that the government 'is committed to returning the budget to surplus despite global difficulties'.[42]

8.46 Also on 16 August 2011, the Prime Minister, the Hon. Julia Gillard MP, on the other hand, was slightly less certain of the government's intentions, stating that it is ' determined to return the budget to surplus'.[43]

Effect of the carbon tax plan on state government budgets

8.47 While the Commonwealth government's budget will be affected by its clean energy policy, so too will the budgets of state governments. This is particularly so for those states that are resource rich and/or reliant on coal for their energy security. It is, therefore, not surprising that a number of states have commissioned their own analysis of the effect of the carbon tax on their economies, at both a state-wide and regional level.

8.48 The committee notes that, in its modelling report, Treasury states:

> It is difficult to quantify the impact of carbon pricing at a sub-state regional level due to limitations on the level and quality of data available. Over time,

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41 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Mrs Luise McCulloch, General Manager, Industry, Environment and Defence Division, Department of Treasury, *Committee Hansard*, 10 August 2011, pp 3 - 4.

42 The Hon. Wayne Swan MP, Deputy Prime Minister and Treasurer, *House of Representatives Hansard*, 16 August 2011, p. 13.

43 The Hon. Julia Gillard MP, Prime Minister, *House of Representatives Hansard,* 16 August 2011, p. 17.

> carbon pricing will encourage resources to move between regions, but reliable information on which to project these movements is not available.[44]

8.49 This issue was raised with Treasury officers by the committee on 10 August 2011:

> **Ms Quinn:** We would question all of the results based on subregional information which assumes fixed shares from history and applies it to a dynamic forecast of the future. We think that does not provide balanced results and we do not consider them robust.
>
> **CHAIR:** So you do not think that New South Wales Treasury is better placed to understand the nuances of the New South Wales electricity generation and distribution sector?
>
> **Ms Quinn:** I am not questioning New South Wales Treasury's ability to do analysis; I am questioning results from a set of information that does not take account of behavioural information over time.[45]

8.50 It is worth noting with respect to Ms Quinn's evidence that, as discussed in Chapter 7, Treasury's own estimates of the price impacts of the carbon tax, based on the PRISMOD model, do not take account of behavioural changes. Why such analysis would be appropriate when undertaken by the Commonwealth Treasury, but not when undertaken by others was not explained to the committee.

8.51 Taking all of that that into account, the committee believes that the states' analyses cannot be dismissed. Treasury has not questioned the capacity of the states to do the analysis and they represent the only attempts to examine the effects of the carbon tax at regional levels.

New South Wales

8.52 NSW Treasury has made a submission to the committee that addresses, in part, the effect of the government carbon tax plan on its budget.[46] In summary, based on modelling by Frontier Economics, NSW Treasury concludes that:

> Gross State Product - At 2030, the reduction in NSW GSP is the greatest of any mainland State, at (-)1.53 per cent. In real terms (after adjusting for inflation), the loss of output in NSW is $3.7 billion a year in 2020 rising to $9.1 billion in 2030.

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44 Department of the Treasury, *Strong growth, low pollution - modelling a carbon price*, 2011 p. 121.

45 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Ms Meghan Quinn, Macroeconomic Modelling Division, Macroeconomic Group, Department of Treasury, *Committee Hansard*, 10 August 2011, p. 11.

46 NSW Treasury, *Submission 81*.

> Employment – At 2030, employment is expected to be 31,000 less than in the reference case.[47]

8.53 Based on partial pass-through of the carbon price, NSW Treasury states that the loss to its state budget will be $369 million. Its high estimate, based on full pass-through is $396 million.[48]

8.54 In particular, certain regions of NSW will suffer more than others. Modelling indicates that the Hunter region will be the hardest hit in Australia, with an absolute reduction of 18,500 jobs at 2020. The Central West region is expected to have about 1,000 fewer jobs at 2020 and the Illawarra will experience slower job growth, having 7,000 fewer jobs at 2020.[49] These findings take into account the Jobs and Competitiveness Package announced by the Federal government as part of its clean energy plan, as well as job gains in other sectors and areas and the effects of the renewable energy targets.[50]

8.55 The Hunter region will be particularly affected as its main industries are mining, predominantly coal mining, and electricity generation. The Central West region is mainly prime agricultural land, with some coal mining. The Illawarra region is an agricultural, mining and steel making area. Its already difficult economic position will be further eroded by BlueScope Steel's recent announcement of redundancies at its Port Kembla facility.

8.56 When asked about the basis of the NSW modelling on 10 August 2011, Treasury officials agreed that it was based on a carbon price of $23 per tonne, which was only used by Treasury in it modelling of the household impacts of the tax and that the same general equilibrium model was used by both parties.[51]

8.57 Commonwealth Treasury officers were asked to comment on this regional level analysis on 10 August 2011:

> **CHAIR:** New South Wales Treasury also uses the MMRF-Green model to assess the regional impact of the carbon tax. Their modelling shows an absolute reduction of 18,500 jobs in the Hunter and 7,000 jobs lost through slower jobs growth in the Illawarra. Does Commonwealth Treasury have any evidence to question these findings?
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> **Ms Quinn:** We do find the Hunter Valley estimates very surprising. In the report Frontier identify that there is growth in that region in the order of 30

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47 NSW Treasury, *Submission 81*, p. 1.

48 NSW Treasury, *Submission 81*, p. 3.

49 NSW Treasury, *Submission 81*, p. 1.

50 NSW Treasury, *Submission 81*, p. 10.

51 Ms Meghan Quinn, Macroeconomic Modelling Division, Macroeconomic Group, Department of Treasury, *Committee Hansard*, 10 August 2011, p. 11.

> per cent, yet employment is falling over that period. We find that a very surprising result.
>
> **CHAIR:** So you are not questioning the Illawarra results; you are just questioning the Hunter results?
>
> **Ms Quinn:** We would question all of the results based on subregional information which assumes fixed shares from history and applies it to a dynamic forecast of the future. We think that does not provide balanced results and we do not consider them robust.[52]

8.58 As discussed in chapter 6, however, Treasury has not published the impacts of the carbon tax on regional areas despite the Productivity Commission and ABARES providing such a breakdown in their analysis of policy reforms. Without this information from Treasury it is difficult to assess their claims about State government modelling which does provide such additional information.

8.59 Modelling conducted for NSW Treasury reaches different conclusions to the Commonwealth Treasury's modelling, as set out in the table below:

Table 8.3: Comparison of modelling by Commonwealth Treasury and New South Wales Treasury

	National GDP* at 2020	**NSW GSP# at 2020**
Commonwealth modelling	-0.33% per year	-0.32% per year
NSW modelling	-0.48% per year	-0.8% per year

* Gross Domestic Product and # Gross State Product

8.60 The NSW analysis puts the reduction in New South Wales' Gross State Product by 2030 at -1.53 per cent, the largest decrease of the mainland states.[53]

8.61 NSW Treasury also questioned Commonwealth Treasury's analysis of the projected increase in wholesale electricity prices under the government's carbon tax plan. Commonwealth Treasury modelling predicted an average NSW wholesale electricity price increase of 38 per cent for the period 2013-17, but only a 10 per cent increase in average household electricity prices in that period.

8.62 Beginning with the average 38 per cent wholesale electricity price increase forecast by the Commonwealth Treasury, and making what it described as a

52 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Ms Meghan Quinn, Macroeconomic Modelling Division, Macroeconomic Group, Department of Treasury, *Committee Hansard*, 10 August 2011, p. 11.

53 NSW Treasury, Submission 81, p. 8.

'reasonable' assumption that 'wholesale electricity prices for small consumers will rise approximately in proportion to average wholesale electricity prices', NSW Treasury concluded that the expected increase in final electricity prices would be 15 per cent.[54] The average effect on New South Wales households would be around $240 to $300 per year, up to $500 for a high-usage household.

8.63 NSW Treasury also noted a discrepancy between analysis by the NSW Independent Pricing and Regulatory Tribunal (IPART) of the effect of the proposed CPRS price of $26 per tonne on electricity prices in New South Wales and the Commonwealth Treasury's calculation, based on a carbon price of $23 per tonne. IPART estimated that annual average household electricity bills would increase by 15-22 per cent in 2012-13, whereas the Commonwealth Treasury calculated the increase to be only 10 per cent.

8.64 This was put to Commonwealth Treasury officers by the committee on 10 August 2011:

> **CHAIR:** They find that in New South Wales retail electricity price increases will be 15 per cent, not 10 per cent.
>
> **Ms Quinn:** It is not clear that that number is from the Frontier Economics analysis. That is a combination of taking assumptions from an IPART report produced in relation to the Carbon Pollution Reduction Scheme and then using that analysis combined with some elements of the Frontier analysis. My understanding of the information in the New South Wales report is that this is a combination analysis. It does not actually report the Frontier increase in retail electricity prices.
>
> **CHAIR:** So you do not think that New South Wales Treasury is better placed to understand the nuances of the New South Wales electricity generation and distribution sector?
>
> **Ms Quinn:** I am not questioning New South Wales Treasury's ability to do analysis; I am questioning results from a set of information that does not take account of behavioural information over time.[55]

8.65 IPART will be responsible for determining to what extent electricity providers in New South Wales can increase their prices. As such its analysis of the impact of a carbon price holds significant weight.

8.66 Of possibly the greatest significance in NSW Treasury's submission was its prediction of a net impact on operating balance of the state of either -$369 million (based on low carbon price pass-through) or -$396 million (based on full carbon price

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54 NSW Treasury, Submission 81, p. 11.

55 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Ms Meghan Quinn, Macroeconomic Modelling Division, Macroeconomic Group, Department of Treasury, *Committee Hansard*, 10 August 2011, p. 11.

pass-through). Its conclusion are illustrated in the following table from its submission:

Table 8.4: Fiscal Impact of the Commonwealth Government Carbon Tax policy on New South Wales[56]

($ MILLIONS)				
	2011-12	**2012-13**	**2013-14**	**2014-15**
Revenue:	**-45**	**-152**	**-113**	**-275**
Generator dividends and tax equivalents	-45	-215	-150	-290
Other budget revenue:				
Payroll tax		-23	-32	-42
GST revenue		86	69	57
Recurrent expenditure:				
Low estimate (partial carbon price pass-through)		**-94**	**-94**	**-94**
High estimate (full carbon price pass-through)		**-121**	**-121**	**-121**
Direct electricity cost impacts:				
Low estimate (partial carbon price pass-through)		-44	-44	-44
High estimate (full carbon price pass-through)		-71	-71	-71
Other agency costs (indirect)		-50	-50	-50
Impact on each of Operating Balance and Net Lending:				
Low estimate	**-45**	**-246**	**-207**	**-369**
High estimate	**-45**	**-273**	**-234**	**-396**

NOTE:
While NSW has no legal liability to compensate Greenhouse Gas Reduction Scheme (GGAS) and Energy Savings Scheme (ESS) participants upon closure of these schemes, in the event they make compensation claims, these could amount to $94m in 2012-13 on current estimates (up to $80m for GGAS and up to $14m for ESS).

8.67 The importance of this is that it is likely that the discrepancies highlighted by this analysis also apply to other states, not just New South Wales.

8.68 In its report, Frontier Economics states:

> Even taking into account the [Commonwealth] Government's proposed shielding and compensation measures, this modelling exercise finds that the costs of introducing the Carbon Price Mechanism will be unevenly distributed across Australian regions. In particular, sectors and regions that rely on using large amounts of energy and produce large amounts of greenhouse gases will bear the majority of the burden of reducing Australia's greenhouse gas emissions. The effects on these sectors and regions are markedly more dramatic than the overall negative effect on the economy. These modelling results are based on the same assumptions adopted by Commonwealth Treasury to enable easy comparisons between studies.[57]

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56 NSW Treasury, *Submission 81*, p. 3.

57 Frontier Economics, *Carbon price modelling: A report prepared for the NSW government*, August 2011, p. 1.

> ...
>
> The carbon price policy generates limited adverse macroeconomic effects in aggregate partly because the model assumes a high degree of macro-economic flexibility.
>
> ...
>
> This *aggregate* employment result [that the effects on employment are expected to be only modestly adverse] masks the underlying structural adjustment necessary for the economy to achieve this moderate result, which requires employment and other resources to flow freely between sectors and/or regions. To a degree, the creation of new jobs in some sectors and regions is outweighed by the reduction in jobs in other sectors and regions. However, the *change* in regional and sectoral results – which are not reflected in the Commonwealth Treasury's aggregated numbers – is also significant for assessing transitional costs. Transitional costs are ignored in both models. To a large degree these transitional adjustment costs will be borne by the States.[58]

Victoria

8.69 On 20 September 2011, the Victorian Treasurer, Hon. Kim Wells MP, issued a media release concerning modelling the Victorian Government commissioned from Deloitte Access Economics (DAE) on the effects of the proposed carbon tax on the state.[59]

8.70 That DAE modelling showed the following effect on the Victorian economy of the government's carbon tax:[60]

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58 Frontier Economics, *Carbon price modelling: A report prepared for the NSW government*, August 2011, p. 5.

59 Treasurer of Victoria, the Hon. Kim Wells MP, *Gillard Government carbon tax to devastate Victorian families and businesses*, Media Release, 20 September 2011, http://www.premier.vic.gov.au/images/stories/documents/mediareleases/2011/110920_Wells_-_Gillard_Govt_carbon_tax_to_devastate_Vic_families_and_businesses.pdf (accessed 22 September 2011).

60 Premier of Victoria, the Hon. Ted Baillieu MP, *Gillard Government carbon tax to choke Victorian Economy, new modelling shows*, Media Release, 18 August 2011, http://www.premier.vic.gov.au/media-centre/media-releases/1732-gillard-government-carbon-tax-to-choke-victorian-economy-new-modelling-shows-.html (accessed 18 August 2011).

Table 8.4: Deloitte Access Economics modelling of effect of carbon tax on Victoria[61]

	Med. Global Action	Core Policy	Difference	(%)
2015				
GSP, $A million	345,118	338,978	-6,141	-1.78
GNI per capita, $A/person	60,504	59,445	-1,059	-1.75
Employment, '000 FTE	3,011	2,976	-35	-1.16
Investment, $A million	95,029	88,733	-6,296	-6.63
Emissions, Mt	135.7	109.7	-26	-19.11
2020				
GSP, $A million	393,707	386,027	-7,680	-1.95
GNI per capita, $A/person	67,729	66,716	-1,013	-1.50
Employment, '000 FTE	3,206	3,188	-18	-0.55
Investment, $A million	112,599	107,588	-5,011	-4.45
Emissions, Mt	143.2	107.4	-36	-25.02
2030				
GSP, $A million	505,965	492,803	-13,162	-2.60
GNI per capita, $A/person	84,050	82,565	-1,485	-1.77
Employment, '000 FTE	3,603	3,584	-18	-0.51
Investment, $A million	160,070	152,562	-7,507	-4.69
Emissions, Mt	166.1	112.6	-54	-32.20

Note: Dollar values are in Australian dollars at 2010 prices.

8.71 While DAE's modelling found that Victoria would not be the state hit hardest by the carbon tax, it would suffer considerably compared to the scenario without a carbon tax.[62]

8.72 Mr Wells' Media Release stated that the modelling showed that:

- 'there will be 35,000 fewer jobs than would have been the case without a carbon tax;
- investment will be down almost $6.3 billion, or 6.6 per cent;
- per capita income will be more than $1,050 lower; and

61 Deloitte Access Economics report, at http://www.premier.vic.gov.au/images/stories/documents/mediareleases/2011/0_DAE_report.pdf, p. iii (accessed 22 September 2011).

62 Deloitte Access Economics report, at http://www.premier.vic.gov.au/images/stories/documents/mediareleases/2011/0_DAE_report.pdf, p. iii (accessed 22 September 2011).

- the Victorian State Budget is predicted to be almost $660 million worse off'[63].

Queensland

8.73 An analysis of the effect of the carbon tax on the Queensland economy was conducted by Queensland Treasury and released on 22 August 2011. It found that:

> ... (the) introduction of a carbon price is estimated to have a relatively small economic impact for Queensland over the next decade, although impacts will increase over the longer term to 2049-50. Fiscal and Genco value [the value of Queensland state owned electricity generators] impacts, however, will be material.[64]

8.74 The Queensland Government found that the carbon tax would hit Queensland the hardest of any state, reducing gross state product by 3.5 per cent by 2050. The modelling found that there would be 12,000 fewer jobs in Queensland under the carbon tax by 2020, and 21,000 fewer jobs by 2050.[65] The net cost to the Queensland state budget was estimated at $1.2 billion and the reduction in the net economic value of the State owned coal-fired electricity generation assets was estimated at an additional $1.1 billion.

8.75 Queensland Treasury also commissioned analysis from Deloitte Access Economics. Deloitte's used a different model and made different assumptions to those made by the Commonwealth Treasury, in particular about:

- less flexible technological adjustment;
- slower labour market adjustment;
- greater impacts on the international competitiveness of Australian EITEs; and
- fewer international permits purchased in the shorter term (meaning more domestic abatement occurs, but at higher cost).

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63 Treasurer of Victoria, the Hon. Kim Wells MP, *Gillard Government carbon tax to devastate Victorian families and businesses*, Media Release, 20 September 2011, http://www.premier.vic.gov.au/images/stories/documents/mediareleases/2011/110920_Wells_-_Gillard_Govt_carbon_tax_to_devastate_Vic_families_and_businesses.pdf (accessed 22 September 2011).

64 Queensland Treasury *Carbon Price Impacts for Queensland*, August 2011, p. 5, http://www.treasury.qld.gov.au/knowledge/docs/carbon-price-impact-assessment/index.shtml (accessed 24 August 2011).

65 Queensland Treasury *Carbon Price Impacts for Queensland*, August 2011, p. 19, http://www.treasury.qld.gov.au/knowledge/docs/carbon-price-impact-assessment/index.shtml (accessed 24 August 2011).

8.76 The DAE modelling shows that:

- '... short-term economic impacts are higher, however, over the long term, the results of the two models tend to converge';

- '... over the longer term, Queensland Treasury projects GSP will grow by an average of 2.8 per cent per year to 2049-50 with carbon pricing, while Deloitte Access Economics projects GSP growth of 2.9 per cent per year for the same period'.[66]

Western Australia

8.77 On 21 August 2011 the Western Australian Department of Treasury released its *Preliminary Assessment of the Impact of the Proposed Carbon Tax on Western Australia*. It described the report as a 'preliminary assessment' as 'only limited information is available at the State level, and some details of the package are still to be finalised',[67] though a revised paper may be released when further information is available.

8.78 According to the report, the government's carbon tax will have the following effects on Western Australia:[68]

- if a global market for emissions is established, which the report describes as 'very optimistic', an estimated $56.9 billion in 2050 will be transferred from Australia to other countries;
- on the other hand, if no such market is created, then 'the domestic cost of emissions abatement could be much higher than the Commonwealth estimates';
- the carbon tax 'will have a more significant impact on certain industries and regions, such as Western Australia's LNG industry and the emerging magnetite iron ore industry' than other industries nationally;
- State Government-owned energy-sector companies will have a combined, direct tax liability under the carbon tax of between $230 million and $280 million per year;

66 Queensland Treasury *Carbon Price Impacts for Queensland*, August 2011, p.7, http://www.treasury.qld.gov.au/knowledge/docs/carbon-price-impact-assessment/index.shtml (accessed 24 August 2011).

67 Department of the Treasury, Western Australian Government, *Preliminary Assessment of the Impact of the Proposed Carbon Tax on Western Australia*, 21 August 2011, p. 1, http://www.treasury.wa.gov.au/cms/uploadedFiles/_Treasury/Publications/Preliminary_Assessment_Impact_Proposed_Carbon_Tax_on_WA_August2011.pdf (accessed 22 August 2011).

68 Department of the Treasury, Western Australian Government, *Preliminary Assessment of the Impact of the Proposed Carbon Tax on Western Australia*, 21 August 2011, pp 3 - 4, http://www.treasury.wa.gov.au/cms/uploadedFiles/_Treasury/Publications/Preliminary_Assessment_Impact_Proposed_Carbon_Tax_on_WA_August2011.pdf (accessed 22 August 2011).

- it will have a combined estimated cost impact of around $50 million to $60 million per year on other State Government operations, in areas such as water, public transport, health and education;
- the carbon tax will cause an expected increase in State Government tariffs, fees and charges to the 'representative' Western Australian household of $144.11 in 2012-13, including 'a $111.36 (or 7.0 per cent) increase in electricity charges, a $19.50 (or 1.9 per cent) increase in public transport fares, and a $13.25 (or 1.0 per cent) increase in water charges'; and
- the government compensation to West Australian households 'will not be sufficient to offset (that) impact'.

Council of Australian Governments

8.79 The carbon tax was raised by Premiers at the meeting of the Council of Australian Governments on 19 August 2011. Newspaper reports stated that the Premiers of New South Wales, Victoria and Western Australia demanded that the Prime Minister either not proceed with the tax or increase compensation to consumers and that they be provided with Treasury's modelling of the impact of the carbon tax at a state level. The Prime Minister declined to scrap the tax or provide the modelling, but it is reported that she did offer to allow Commonwealth Treasury officials to brief their state counterparts.[69]

8.80 Reactions from State Premiers after the hearing included:

> The Hon. Colin Barnett, Premier of West Australia: The Australian economy is fragile and the shock of a carbon tax could be very damaging ... If there is to be a carbon tax, I would prefer a lot slower, more gradual introduction then what's proposed so the economy can at least cope with it.[70]

> The Hon. Anna Bligh, Premier of Queensland: There's no doubt there are some parts of this package, particularly in relation to generation, that fall disproportionately on states that have a high level of state public ownership of coal-fired generators.[71]

> The Hon. Barry O'Farrell, Premier of New South Wales: The carbon tax will have a significant negative impact on gross state product for NSW in the

69 Ross Peake, 'Leaders get a hearing, no concessions;, *Canberra Times*, 20 August 2011, p. 4; Matthew Franklin, Imre Salusinszky 'PM snubs states on carbon', *The Weekend Australian*, 20 August 2011, p. 6; Andrew Probyn and Andrew Tillett, 'PM digs in heels on carbon tax push', *Weekend West*, 20 August 2011, p. 18.

70 Andrew Probyn and Andrew Tillett, 'PM digs in heels on carbon tax push', *Weekend West*, 20 August 2011, p. 18.

71 Matthew Franklin, Imre Salusinszky 'PM snubs states on carbon', *The Weekend Australian*, 20 August 2011, p. 6.

short, medium and longer term. It will also have a significant impact on the state budget estimated to be at least $867 million over four years. The Commonwealth has so far failed to address these impacts.[72]

Delay in the implementation of the carbon tax

8.81 On 10 August 2011, Treasury officials told the committee that they had not been asked to provide advice on whether the government's climate change plan should be delayed given the current economic circumstances.[73]

8.82 The following exchange then took place between Senator Cormann, Chair of the Committee and Treasury officials:

> **CHAIR:** In the context of this line of questioning, the Australian dollar being where it is, is of course having an impact on our international competitiveness and with economic and financial market conditions where they are, has the government set itself a framework? Is there a set of scenarios in terms of the way the market and the economy could develop into the future under which there would be a reconsideration of the starting time line?
>
> This is not a hypothetical question now. We have a circumstance now in which the Australian dollar is having an impact on our international competitiveness. As this committee travels around the country, manufacturing exporters around Australia are telling us how current international trade and conditions are very difficult for them and that they are already on the edge in terms of international competitiveness. Their concern is, of course, that the carbon tax and the pricing mechanism moving forward will put them, potentially, over that edge.
>
> So my question is this: depending on how all of these parameters develop into the future, is there a scenario already established by the government in which it will reassess the desirability of the starting date of this carbon pricing package in the context of the sorts of tensions I have just mentioned?
>
> **...**
>
> **Mr Heferen:** As Dr Gruen said, the documentation—as far as I have seen—includes no discussion about a shift of starting date. It seems to me pretty clear that the intention is to have this commence when the documentation says it will. It is not qualified.[74]

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72 Andrew Clennell, '$867m cost of new tax', *The Daily Telegraph*, 22 August 2011, p. 2.

73 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Dr David Gruen, Executive Director, Macroeconomic Group, Department of the Treasury *Committee Hansard*, 10 August 2011, p. 2.

74 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Mr Rob Heferen, Executive Director, Revenue Group, Department of the Treasury, *Committee Hansard*, 10 August 2011, pp 2 - 3.

8.83 Prof. John Quiggin, at his appearance before the committee on 10 August 2011, addressed the economic impact of the tax:

> I endorse the Treasury's modelling and also the general thrust of the Treasury's report, which is that the impact of a carbon price will be very small relative to the growth we can expect in the general economy. Variations in household income will be very small relative to the kinds of variations that we expect from year to year from various factors, such as, for example, macroeconomic fluctuations.[75]

8.84 In relation to its impact, taking into account other factors affecting the economy, he stated:

> It seems pretty clear that the variations in the exchange rate, even those we have observed over the last week, are going to be more significant in terms of determining the competitiveness of Australian exports than is the carbon price. I would make the point that, if we expected exchange rates of $1.10 against the US dollar to continue indefinitely, we would have a big problem.
>
> ...
>
> My general point would be that the economy is a very volatile and changeable place and a lot of the discussion is predicated on the notion that there are no other variables that firms have to adjust to other than carbon prices.[76]

8.85 The difficulty of introducing a carbon tax at this point in time was raised by Prof. Henry Ergas, also on 10 August:

> The issue, to my mind, and the one I want to focus on, is not whether a carbon tax is a good idea or a poor idea in theory; it is whether it makes sense for Australia to implement such a tax, followed in short order by a move to an emissions trading scheme, at a time of great uncertainty both about the global economic outlook and about the extent and nature of the international abatement effort. These questions are especially acute for Australia because our prosperity is based on a resource endowment that is highly carbon intensive both in terms of minerals and in our agricultural sector. Moreover, and importantly, much of that carbon intensity is not amenable to technological quick fixes.[77]

8.86 A similar point was made by the Australian Chamber of Commerce and Industry:

> On the economy-wide front, as Treasury indicated this morning, it will be negative for the growth in real wages and also for productivity. It will

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75 *Committee Hansard*, 10 August 2011, p. 53.

76 *Committee Hansard*, 10 August 2011, p. 54.

77 *Committee Hansard*, 10 August 2011, p. 60.

> substantially add to the inflationary pressures on top of the price impact of other mitigation measures currently in place. The carbon tax has also played a significant role in derailing business and consumer confidence. In the context of heightened international economic uncertainty, now is the time to shore up our economic position; it is not the time to weaken our economy with the imposition of a productivity-sapping carbon tax that will be harmful to our competitiveness. In light of these circumstances, the government should recalibrate its approach and link action to confirmed international agreement.[78]

8.87 Since the announcement by the government of its carbon tax plan on 10 July 2011:

- world share markets have fallen significantly and are marked by continuing uncertainty;
- that uncertainty is driven by the ongoing bleak economic picture in the United States and concerns about the capacity of the European Union to deal with its own economic crises;
- the International Monetary Fund's best-case scenario for Australia forecasts growth in 2011 will be a mere 1.8 per cent, after it previously had predicted growth of 3 per cent;[79]
- the Reserve Bank has downgraded the forecast growth for 2011;
- more recently, it has noted that 'markets do seem to have reached a pessimistic assessment and this appears to be based mainly on the assumption that weakness in the US and Europe will flow through to Australia';[80] and
- consumer confidence continues at low-levels.

8.88 The committee is of the view that, in the light of these factors and their probable effect on the Budget and Australia’s economy, the government should revise its commitment to proceed with its carbon tax.

The economic impact of higher electricity prices

8.89 A large part of the economic reform effort over the past 30 years has focused on improving the productivity and performance of the electricity, gas and water sectors. Some states began this process in the late 1980s, though efforts gathered pace with the Hilmer Review of 1993. Subsequently, reform of the electricity industry

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78 Mr Greg Evans, Director, Economic and Industrial Policy, *Committee Hansard*, 10 August 2011, p. 69.

79 Peter Martin 'RBA and IMF agree: it's all gloomy', *The Age*, 21 September 2011, p. 5.

80 Ric Battellino, Deputy Governor, Reserve Bank of Australia, 'Will Australia catch a US cold?', Speech to the Euromoney Forum, 21 September 2011, http://www.rba.gov.au/speeches/2011/sp-dg-210911.html (accessed 22 September 2011).

(along with other infrastructure reforms) became a key element of National Competition Policy (NCP). Lower electricity prices, particularly for businesses, was one of the major benefits of the NCP reforms.

8.90 The Productivity Commission conducted a review of progress under National Competition Policy in 2005, stating in this review that:

> … it is telling that in a number of areas targeted by NCP and related reforms there have been significant price reductions. For example in the electricity sector, notwithstanding variation across and within jurisdictions, average real prices Australia-wide have fallen by 19 per cent since the early 1990s.[81]

8.91 The Productivity Commission went on to explain the impact of the NCP reforms in more detail:

> Although the effect of such NCP-related reforms on electricity prices is difficult to quantify, it is broadly accepted that their impact has been significant and that the reforms have stimulated other changes which have also had beneficial effects. In this context, Origin Energy stated that:
>
>> … the dramatic effect of competition on energy market outcomes since NCP was introduced, in terms of improved labour and capital productivity in generation, lower wholesale prices and substantial new investment in transmission and generation, is irrefutable. Other factors, such as technological change and general improvement in education and training across the economy, undoubtedly played a role in these outcomes, but to a far lesser extent. (sub. 89, p. 3) [82]

8.92 It is notable that since this review was undertaken, the trend of decreasing prices has reversed. Since 2007 electricity prices for businesses have almost doubled, from 6 cents per kWh to 10 cents per kWh.[83]

8.93 Nonetheless, the Productivity Commission see potential for further downward pressure on electricity prices from additional infrastructure reforms. In the Productivity Commission's view:

> NRA electricity reform could potentially lower retail electricity prices by around an average of 2 per cent, from levels that would otherwise apply. If productivity improvements contributing to these changes could be

81 Productivity Commission, *Review of National Competition Policy Reforms*, 2005, Report No. 33, Canberra, p. xix.

82 Productivity Commission, *Review of National Competition Policy Reforms*, 2005, Report No. 33, Canberra, p. 62.

83 ABARES 2011, *Energy in Australia 2011*, produced for the Department of Resources, Energy and Tourism, p. 26 and ABARES 2009, Energy in Australia 2009, produced for the Department of Resources, Energy and Tourism, p. 29.

> achieved, potential resource savings of up to $270 million (2005-06 dollars) would be available.[84]

8.94 According to the Productivity Commission these benefits would be the result of increased generator competition, transmission reform and demand-side management.

8.95 In contrast, according to Treasury, the carbon tax would increase electricity prices by 10 per cent, five times the potential reduction that the Productivity Commission identified in its assessment of the national reform agenda. Taking the Productivity Commission's estimates of the resource costs as a rough linear guide, these increased electricity prices alone could impose resource costs on the economy of at least $1.3 billion.

Is the impact of the carbon tax modest?

8.96 In its update to the carbon tax modelling released on 21 September 2011, Treasury states that:

> The costs of cutting pollution and transforming the Australian economy to clean energy sources through carbon pricing are modest.

8.97 The Treasury estimates that the carbon tax will reduce Australia's GDP by 2.8 per cent by 2050 than it would otherwise be.

8.98 In a submission to the Senate economics committee inquiry into the impact of supermarket price decisions on the dairy industry, the Treasury stated that the broader national competition policy reforms have resulted in substantial benefits to the Australian community and increased the economy's resilience to economic shocks.

8.99 Under that point, Treasury supports its conclusion by pointing to Productivity Commission analysis which shows that those reforms have 'served to permanently increase Australia's GDP by 2.5 per cent'.

8.100 It is not clear to the committee how a 2.8 per cent reduction in GDP could be described as modest but a 2.5 per cent increase in GDP could be described as substantial.

The potential for a carbon tax to undermine wider reforms

8.101 The reforms that Treasury rightly describe as having a substantial impact on the Australian economy over the last 30 years have not been easy to achieve. Although they delivered broad benefits for Australia, they imposed large transitional costs on certain towns and communities. Nonetheless, these reforms succeeded in part because they were broad-based. Although some Australians were worse off as a result

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84 Productivity Commission, *Potential Benefits of the National Reform Agenda, Report to the Council of Australian Governments*, 2006, Canberra p. 59.

of some aspects of the changes, benefits from other aspects (such as lower electricity prices) accrued broadly to all.

8.102 These reforms were very traumatic for certain communities. Some of the hardest hit towns were in regional Australia, such as the electricity industry in the La Trobe, the textiles industry in Ballarat and Bendigo, the automotive industry in Geelong and Adelaide and the steel industry in Whyalla, the Illawarra and Newcastle.

8.103 Unfortunately, the carbon tax is set to have its biggest impact on some of these same communities in regional Australia (see chapter 6). There is only so much ‘reform’ that individual communities can take without there being a broader rejection of the policy setting in Canberra. Accordingly, the carbon tax may serve as a lightning rod for the justified complaints and frustrations of these communities.

8.104 Such a reaction can already be seen in the calls for renewed industry assistance to the steel and manufacturing industries. Large scale renewal of the industry assistance that once existed in Australia would be a retrograde step.

8.105 These communities are often at the frontline of the so-called “two-speed” or “patchwork” economy. After becoming more internationally competitive and resourceful from the opening up of the Australian economy, they are seeing hard won markets disappear due to a higher dollar and higher input costs, partly exacerbated by a mining boom. Imposing a carbon tax on top of these pressures threatens to kindle an already smouldering situation.

8.106 In the committee’s view, the carbon tax has the potential to undermine the hard-fought acceptance of the economic reforms that have broadly benefited the Australian economy over the past 30 years. In the committee’s view there is no corresponding benefit of the carbon tax which could justify taking such a risk.

The overall impact on the economy

8.107 Moreover, unlike previous reforms there is no broad economic bounty from a carbon tax that can be redistributed to offset the disproportionate costs imposed.

8.108 In total, under the government’s own modelling, the carbon tax is likely to impose a $1 trillion cost on the Australian economy. As economist, Prof. Henry Ergas explained to the committee:

> Even with all those assumptions, and especially the assumption that the industrial countries will abate at a uniform price by 2016, the costs Treasury estimates are anything but trivial. Indeed, discounted at the Garnaut discount rate, they have a present value equal to $1 trillion—that is, one year of Australia's GDP. That, as I said, relies on numerous assumptions, not least the assumption of global concerted action.
>
> …
>
> In the calculation that I set out, I used a discount rate—that is, the assumed time value of money, as it were, that is used in the Garnaut report. When

> you do that, you get a GDP loss that is in the order of somewhere between $890 billion and $1.345 trillion for the core policy scenario. I rounded it to about $1 trillion.[85]

8.109 This $1 trillion figure is about equal to the total output of the Australian economy in one year. Or to put it in other terms, the carbon tax will cost every Australian, $40,000 on average.

8.110 This estimate is likely to be an underestimate given that Treasury's modelling relies on the assumption that other countries will act in concert with Australia to reduce emissions. While there is disagreement on whether or not other countries will act, no one could deny that it is at least likely that many other countries will either fail to take substantial action on climate change, or at least take action commensurate with that included in Treasury's modelling.

8.111 As an economy reliant on the use of cheap, carbon-intensive fossil fuels, unilateral action by Australia to reduce its emissions ahead of those of other countries is likely to be significantly more costly than the multilateral scenario. As the Productivity Commission stated in its submission to the Prime Ministerial Task Group on Emissions Trading in 2007:

> Independent action by Australia to substantially reduce [greenhouse gases] GHG emissions, in itself, would deliver barely discernible climate benefits, but could be nationally very costly. Such action would therefore need to rest on other rationales.[86]

8.112 The Productivity Commission goes on to explain this conclusion in more detail:

> independent action would not, in itself, achieve discernible climate benefits because, despite its relatively high per capita emissions, Australia contributes only around 1.4 per cent of global GHG emissions. To put this in perspective, Australia's total annual GHG emissions constitute less than the United States and China each emit in a month;
>
> Australia's high living standards derive in part from the largely efficient use of an abundance of low cost fossil fuels, reflected in relatively high per capita emission levels. As a result, substantially reducing GHG emissions would be costly for the Australian community, with costs borne mainly by consumers and the owners (and employees) of businesses that directly or indirectly rely on the intensive use of GHG producing energy sources.[87]

8.113 The Productivity Commission concluded that:

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85 Professor Henry Ergas, *Committee Hansard*, 10 August 2011, p. 16

86 Productivity Commission, *Productivity Commission Submission to the Prime Ministerial Task Group on Emissions Trading*, 2007 March, p. viii.

87 Productivity Commission, *Productivity Commission Submission to the Prime Ministerial Task Group on Emissions Trading*, March 2007, pp. 8-9.

> Overall, the Commission's view is that it is unlikely that major new initiatives could be justified solely on the grounds that this would enhance Australia's standing as a good world citizen, or be influential in persuading other countries to take similar measures.[88]

8.114 Furthermore, under the government's own modelling, even with its assumption of coordinated multilateral action, the carbon tax leads to lower economic output, lower wages and therefore lower revenue from income and other broad-based economy wide taxes. There is no "reform dividend" equivalent to that of previous reforms, which helped fund transitional assistance or competition payments to the states.

8.115 The government will be exposed to substantial "carbon revenue leakage" as the carbon tax changes into the Emissions Trading Scheme. During the carbon tax period, the government will be paid for all emission permits (except those issued under the Carbon Farming Initiative) as the scheme operates as a tax. However, under an emissions trading scheme, Australians will purchase substantial carbon credits from overseas, denying the Australian government the revenue from carbon credits. This will leave the government with decreasing revenue with which to compensate households and businesses for costs which will continue to increase.

Committee comment

8.116 In the committee's view, the government's carbon tax policy provides no cogent rationale for imposing a $1 trillion cost on the Australian economy. In fact, this may well be a conservative estimate of its impact on the economy, as Treasury's modelling relies on the assumption that other countries will act in concert with Australia to reduce emissions, an assumption that remains unsupported and is highly unlikely.

8.117 The committee believes that the evidence it has received shows that the cost to the Australian people in lower wages, restricted job opportunities, heightened risk to the fiscal budgetary position, higher electricity prices and a less competitive business sector is simply not worth the illusory climate benefits that the government claims the carbon tax will present.

8.118 In addition, the carbon tax will impose disproportionate costs on sections of the Australian economy that have already faced pressures throughout Australia's economic reform period and continue to face similar pressures from the higher costs and exchange rate created by the mining boom. Instead of being an example of economic reform as the government maintains, the carbon tax is a threat to those reforms, as it gives new potency to claims for industry assistance and economic rent-seeking.

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88 Productivity Commission, *Productivity Commission Submission to the Prime Ministerial Task Group on Emissions Trading*, March 2007, p. 31.

8.119 The committee believes that the government's carbon tax would be an extremely inefficient form of taxation. On one view it will impact economic activity to a greater degree than any other tax currently being imposed.

8.120 This inefficiency is made more obvious given that it is based on two inter-related but highly questionable assumptions – firstly, that a credible international agreement on emissions reduction will be achieved relatively soon and, secondly, that some mechanism will be established to allow for the trade of abatement internationally.

8.121 The evidence taken by the committee shows that, unlike previous major economic reforms, there is no broad bounty from a carbon tax that can be redistributed to offset disproportionate costs imposed upon just a few sectors of the economy and regions. Indeed the opposite is the case.

8.122 In addition to its $1 trillion impost on the economy referred to above, the carbon tax will not be revenue neutral, as originally proposed. When all the currently known measures entailed in its implementation are considered it has a combined deficit of $4,449.8 million. This does not include the cost of the contracts for closure program.

8.123 As a result, in the committee’s view, the government should not proceed with a carbon tax. The current global economic environment is a particularly fraught one for an Australian government to be imposing new costs on Australian businesses. As such, it is likely to disadvantage Australian the ability of businesses to compete in global markets.

8.124 The committee recommends again (as per Recommendation 3, below) that if the Parliament believes that it should proceed with the carbon tax that it does so once current global economic circumstances have improved and there is a legally binding global agreement on tackling climate change.

8.125 Nonetheless, if the government persists with imposing a carbon tax, the committee considers that the government should instruct the Productivity Commission to undertake a cost-benefit analysis of the proposed carbon tax before it is implemented.

Recommendation 3

8.126 The committee recommends that if the Parliament believes that it should proceed with the carbon tax, that it does so once current global economic circumstances have improved and there is a legally binding global agreement on tackling climate change.