Chapter 2

The Australian responses to climate change

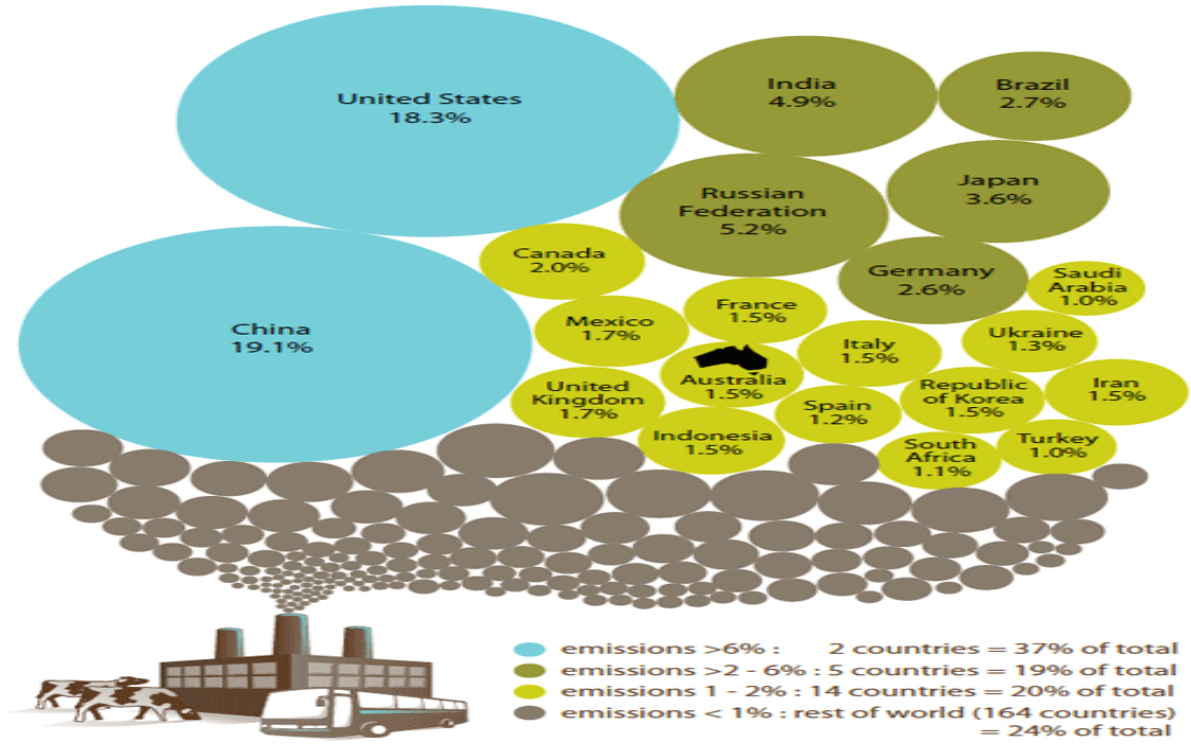
Introduction

2.1 Chapter two provides an overview of the development of Australia's responses to climate change. It charts Australia's domestic actions and gives an account of the involvement in international mechanisms to tackle climate change. This chapter also traces the deeply flawed policy development process that has dogged the development of the carbon tax.

Australia's emissions in context

2.2 According to the Department of Climate Change and Energy Efficiency, Australia represents about 1.5 per cent of anthropogenic global greenhouse gas emissions.[1] Graphic 2.1 puts Australia in an international comparison.

Graphic 2.1: International greenhouse gas emissions[2]

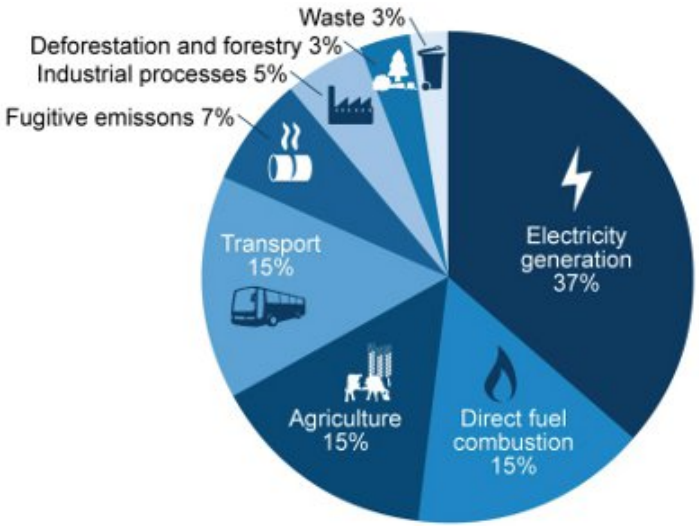


1 Department of Climate Change, *Australia: Part of the Climate problem – Part of the Solution*, Fact Sheet – International Climate Change Action: Module 3, p. 1 and Australian Government, *Clean Energy Future – Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 11.

2 Department of Climate Change, *Australia: part of the Climate problem – Part of the Solution*, Fact Sheet – International Climate Change Action: Module 3, p. 1.

2.3 Australia emitted 565 million tonnes of carbon dioxide emissions in 2009, the last year with available figures.[3] The graphic below highlights the sources of Australia's emissions. It indicates that electricity generation, direct fuel combustion, agriculture and transport are the main sources of emissions.

Graphic 2.2: Australia's carbon pollution profile[4]



2.4 Even taking into account the Renewable Energy Target and the Carbon Farming Initiative, Australia's carbon emissions trajectory is projected to rise to 679 million tonnes in 2020, in the absence of further action to reduce carbon dioxide emissions.[5]

Australia and international agreements on climate change policy

2.5 The international negotiation process to reduce global greenhouse gas emissions is organised around the sessions of the Conference of the Parties to the United Nations Framework on the Convention on Climate Change (UNFCCC). The Conference of the Parties meets every year to review progress and take decisions on the Convention's implementation. Additional negotiation sessions are scheduled between each Conference of the Parties to develop the draft text that will go forward to the Conference for decision. Some of the UNFCCC milestones are outlined below.[6]

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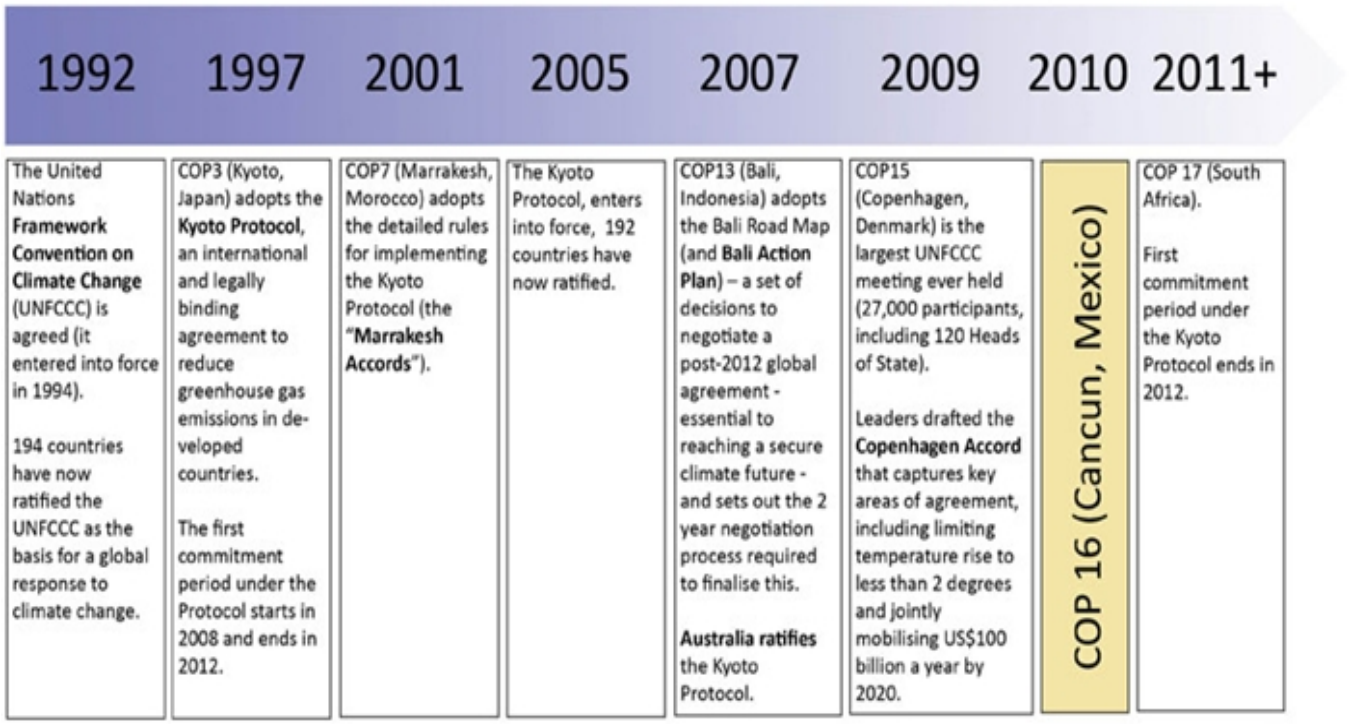
3 Australian Government, *Clean Energy Future – Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 11.

4 Australian Government, *Clean Energy Future – Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 13.

5 Australian Government, *Clean Energy Future – Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 13.

6 http://www.climatechange.gov.au/government/international/international-climate-change-negotiations/cancun/overview.aspx (accessed 13 July 2011).

Graphic 2.3: International meetings to tackle climate change[7]



Kyoto Protocol

2.6 The Kyoto Protocol, an international agreement setting legally binding greenhouse gas emissions reduction targets for developed countries, was adopted on 11 December 1997. It entered into operation on 16 February 2005. While developing countries can sign up to the Protocol, they are not subject to the legally binding targets.[8]

2.7 In 1998 the Australian Government, under then Prime Minister, the Hon. John Howard, established the Australian Greenhouse Office, which at the time was the world's first government agency dedicated to cutting greenhouse gas emissions.

2.8 Australia signed the Kyoto Protocol on 24 April 1998 but did not ratify it until 12 December 2007. Under the Protocol, Australia committed to cutting its average greenhouse gas emissions to 108 per cent of 1990 emissions, over the 2008-12 commitment period.[9] Australia is on track to meet its Kyoto target.[10]

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7 http://www.climatechange.gov.au/government/international/international-climate-change-negotiations/cancun/overview.aspx (accessed 13 July 2011).

8 Senate Select Committee on the Scrutiny of New Taxes, Fuel and Energy, *The CPRS: Economic cost without environmental benefit*, Interim Report (May 2009), p. 2.

9 Senate Select Committee on the Scrutiny of New Taxes, Fuel and Energy, *The CPRS: Economic cost without environmental benefit*, Interim Report (May 2009), p. 3.

2.9 On 4 May 2009, the government committed to a new medium term target of emissions reduction of up to 25 per cent relative to 2000 emission levels, subject to action being taken by the rest of the world.[11]

United Nations Climate Conference – Copenhagen, Denmark

2.10 In December 2009, representatives from governments and other organisations met in Copenhagen to map out further measures to reduce global greenhouse gas emissions. There was much expectation that Copenhagen would prove to be the first step on the way to establishing a comprehensive, legally binding agreement to limit carbon dioxide emission in both developed and developing countries. As the (then) Prime Minister said in the lead up to the Conference:

> Let me tell you, the direction in which we are pushing hard, which the Danes are pushing hard and which I believe the Americans are pushing hard, is for an operational framework agreement, capable of giving real guidance to technical negotiators to translate into a legally binding global treaty. [12]

2.11 The Copenhagen Conference was widely recognised as a failure. Participants were unable to reach agreement on a global framework to price carbon, with important players pursuing sectional interests that impeded the progress of negotiations:

> ... at all-day talks between 115 world leaders, it was left to Barack Obama and Wen Jiabao, the Chinese premier, to broker a political agreement. The so-called Copenhagen accord "recognises" the scientific case for keeping temperature rises to no more than 2C but does not contain commitments to emissions reductions to achieve that goal.[13]

2.12 Kevin Rudd at the time agreed that the results of Copenhagen did not meet expectations:

> Did it [Copenhagen] achieve everything that we wanted to achieve? Absolutely not.[14]

2.13 As the World Bank reported six months after Copenhagen:

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10 Clean Energy Future website, http://www.cleanenergyfuture.gov.au/why-we-need-to-act/what-others-are-doing/international-united-nations-negotiations/ (accessed 3 October 2011).

11 Department of Climate Change and Energy Efficiency, *Strengthening Australia's 2020 carbon pollution target*, Fact Sheet, May 2009.

12 ABC News, 'Rudd calls for Copenhagen courage', 18 November 2009, http://www.abc.net.au/news/2009-11-18/rudd-calls-for-copenhagen-courage/1147556 (accessed 5 October 2011).

13 John Vidal, Allegra Stratton and Suzanne Goldenberg, 'Low targets, goals dropped: Copenhagen ends in failure, http://www.guardian.co.uk/environment/2009/dec/18/copenhagen-deal (accessed 3 October 2011).

14 ABC TV, *Q&A*, 8 February 2010, http://www.abc.net.au/tv/qanda/txt/s2811552.htm (accessed 5 October 2011),

> …the Copenhagen climate conference's inconclusive outcome has deepened the sense of uncertainty over the future of the global emission reductions effort and the likelihood that international policymakers will be able to reach a legally binding agreement next December in Cancún.[15]

2.14 The driving force behind the collapse of a meaningful international agreement are complex, but they can be distilled down to:

> Lastly, and perhaps most important, China and India seem unlikely to agree to internationally binding commitments to emissions-cutting actions any time soon. Both countries appear to believe that they are unlikely to receive substantial benefits -- large financial assistance, for instance -- that would, for them, justify adopting such measures, and developed countries do not seem willing to change that calculus. At the same time, the United States would be unwise to push for a deal that requires legally binding commitments while its own domestic efforts remain embroiled in political uncertainty.[16]

2.15 China had clear goals for what it wanted to accomplish at Copenhagen:

> As both the largest greenhouse gas emitter and the country expected to account for the largest percentage of increased emissions between now and 2050, China inevitably played a critical role at Copenhagen. Beijing apparently had three major goals: 1. to maintain the structure of the Kyoto Protocol and the principles of the Bali Roadmap, which placed major responsibility for emissions reductions and contributions to developing countries on the shoulders of the Annex I countries; 2. to avoid all legally binding international commitments in favor of preserving China's own freedom of action in the future; and 3. to avoid becoming the target of criticism should Copenhagen "fail".[17]

2.16 Following the conclusion of Copenhagen:

> Australia submitted information on its 2020 emissions reduction target range to the secretariat on 27 January 2010: 5 per cent unconditional, with up to 15 per cent and 25 per cent both conditional on the extent of action by others, as announced by the Prime Minister on 4 May 2009.[18]

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15 World Bank 2011, *State and Trends of the Carbon Market 2011*, Washington DC, June 2011.

16 Michael Levi, ' Beyond Copenhagen', *Foreign Affairs*, 22 February 2010, http://www.foreignaffairs.com/articles/65985/michael-levi/beyond-copenhagen?page=2 (accessed 3 October 2011).

17 Kenneth G. Lieberthal, 'Climate Change and China's Global Responsibilities', *Brookings*, 23 December 2009, http://www.brookings.edu/opinions/2009/1222_china_climate_lieberthal.aspx (accessed 3 October 2011).

18 Department of Climate Change, 'Australia welcomes the Copenhagen Accord and urges further action', http://www.climatechange.gov.au/government/international/international-climate-change-negotiations/copenhagen-accord.aspx (accessed 13 July 2011).

United Nations Climate Conference - Cancun, Mexico

2.17 At the Cancun Conference between 29 November and 10 December 2010, a range of developed and developing countries made 'pledges' to reduce their national greenhouse gas emissions. However, a legally binding agreement to reduce carbon dioxide emissions remained out of reach.

2.18 Country's pledges were made in different ways. Australia's pledge was made in the form of an absolute reduction, expressed as a percentage below an emissions level in an earlier year. The table below puts Australia's absolute reduction in context with other countries.

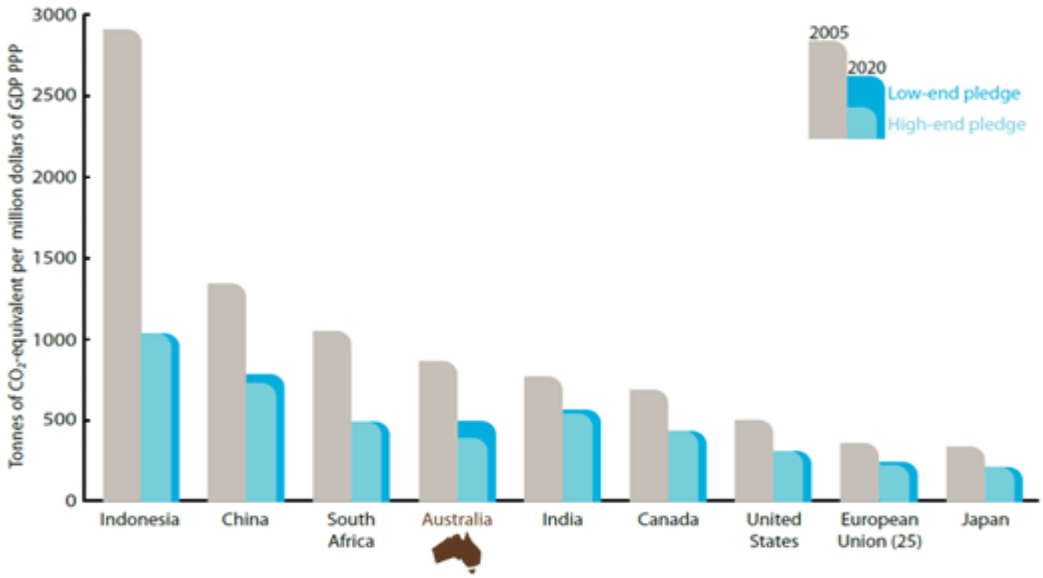
Table 2.1: Absolute greenhouse gas emission reduction made at Cancun[19]

Reduction in	Country	Target (%)	Relative to
Carbon intensity	China	40 to 45	2005
Emissions intensity	India	20 to 25	
Absolute emissions	European Union	20 to 30	1990
	Japan	25	
	Russian Federation	15 to 25	
	Australia	5 to 15 or 25	2000
	Canada	17	2005
	United States	17	
	Brazil	36.1 to 38.9	business as usual
	Indonesia	26	
	Mexico	30	
	South Africa	34	
	Republic of Korea	30	

2.19 Some countries expressed their pledge as a reduction in emission intensity. That is, greenhouse gases produced per unit of economic output. The graphic below, puts Australia's pledge and that of other countries into the scale of emissions intensity reductions.

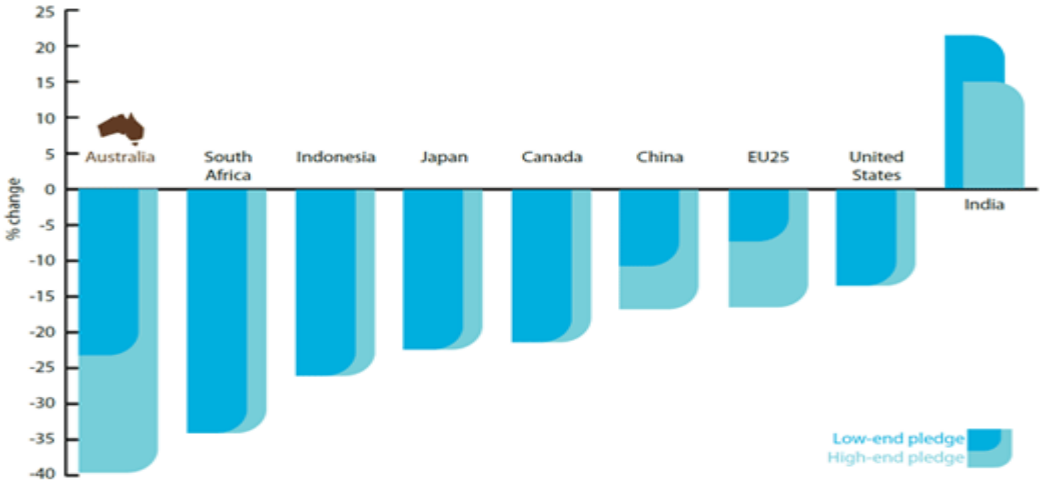
19 Department of Climate Change, *International Pledges on Climate Change Action: the Future*, Fact Sheet – International Climate Change Action: Module 2, p. 1.

Graphic 2.4: Emissions intensity of key economies in 2005 and 2020 (low and high end pledge)[20]



2.20 In addition to the methods of expressing reductions in greenhouse gas emissions as outlined above, a further approach is to express a target as being below a business as usual standard. Graphic 2.5 shows Australia in the context of the business as usual method of examining reductions in greenhouse gas emissions.

Graphic 2.5: Percentage change in emissions under Cancun pledges, relative to business as usual at 2020[21]



20 Department of Climate Change, *International Pledges on Climate Change Action: the Future*, Fact Sheet – International Climate Change Action: Module 2, p. 3.

21 Department of Climate Change and Energy Efficiency, *International Pledges on Climate Change Action: the Future*, Fact Sheet – International Climate Change Action: Module 2, p. 4.

2.21 On 19 September 2011, the United States Energy Information Administration released a table showing emission reduction goals announced by selected countries. Table 2.2 is a summary of that table:

Table 2.2: Emissions mitigation goals announced by selected countries (million metric tons carbon dioxide)[22]

Country/region	Reduction goal	Carbon dioxide emissions goal for 2020[a]	Business as usual emissions without action	2008 emissions	Emissions reduction needed to achieve goal
Countries with goals for total emissions reductions					
United States	To 17 percent below 2005 level by 2020	4,977	5,777	5,838	800
OECD Europe[b]	To 20 percent below 1990 level by 2020	3,301	4,147	4,345	846
	To 30 percent below 1990 level by 2020	2,889	4,147	4,345	1,249
Japan	To 25 percent below 1990 level by 2020	785	1,142	1,215	357
Brazil	By 36 to 39 percent relative to projected level in 2020	353-371	579	423	208-226
Russia	To between 15 and 25 percent below 1990 level by 2020	1,776-2,013	1,607	1,663	--
Countries with goals for carbon dioxide intensity reductions					
China	To between 40 and 45 percent below 2005 level by 2020	10,149-11,071[c]	10,128	6,801	--
India	To between 20 and 25 percent below 2005 level by 2020	2,512-2,679[c]	2,056	1,462	--

[a] It is assumed that country goals are applied proportionally to energy-related carbon dioxide emissions and other greenhouse gases.
[b] Because *IEO2011* does not model the European Union as a region, emissions and projections for OECD Europe are used as a proxy. The reduction goal is based on 20 percent of the 1990 level for OECD Europe. Although some countries in OECD Europe are not members of the European Union, the European Union also includes some countries that are not included in the OECD Europe region. On balance, OECD Europe's 1990 emissions were 2 percent higher than the European Union's emissions. In 2005 and 2008, OECD Europe's emissions were about 2 percent and 3 percent lower than the European Union's emissions, respectively. The difference could be more pronounced in future years, depending on emissions from the various countries. Conference of Parties-16 omitted Turkey from the European Union's commitments; *IEO2011* includes Turkey as part of OECD Europe.
[c] Carbon dioxide intensity is defined as emissions per unit of output (as measured by GDP expressed in purchasing power parity). The carbon dioxide emissions goal is calculated by multiplying the 2020 carbon intensity goal by *IEO2011* GDP projections for 2020.

22 U.S. Energy Information Administration, *International Energy Outlook 2011*, *Report Number DOE/EIA-0484 (2011)*, 19 September 2011, http://www.eia.gov/forecasts/ieo/table17.cfm (accessed 28 September 2011).

Source: Reduction goals: United Nations Framework Convention on Climate Change, National Reports, Appendix I—Quantified Economy-wide Emissions Targets for 2020, website http://unfccc.int/home/items/5265.php. Reduction goal targets: Estimated based on announced targets, and EIA, estimates. 2008 emissions: EIA, International Energy Statistics database (as of March 2011), website www.eia.gov/ies. Goal year projected Reference case carbon dioxide emissions: EIA, World Energy Projection System Plus (2011).

2.22 Under the Copenhagen Accord, various developed and developing countries made pledges regarding their actions to reduce emissions. The Copenhagen Accord itself represents the difficulties faced by disparate countries engaging in collective action to solve a common problem: climate change.

2.23 Under the pledge framework, many countries have provided qualitative pledges in terms of a percent reduction either in terms of emissions or emissions intensity from a specific year or a 2020 business as usual projection.

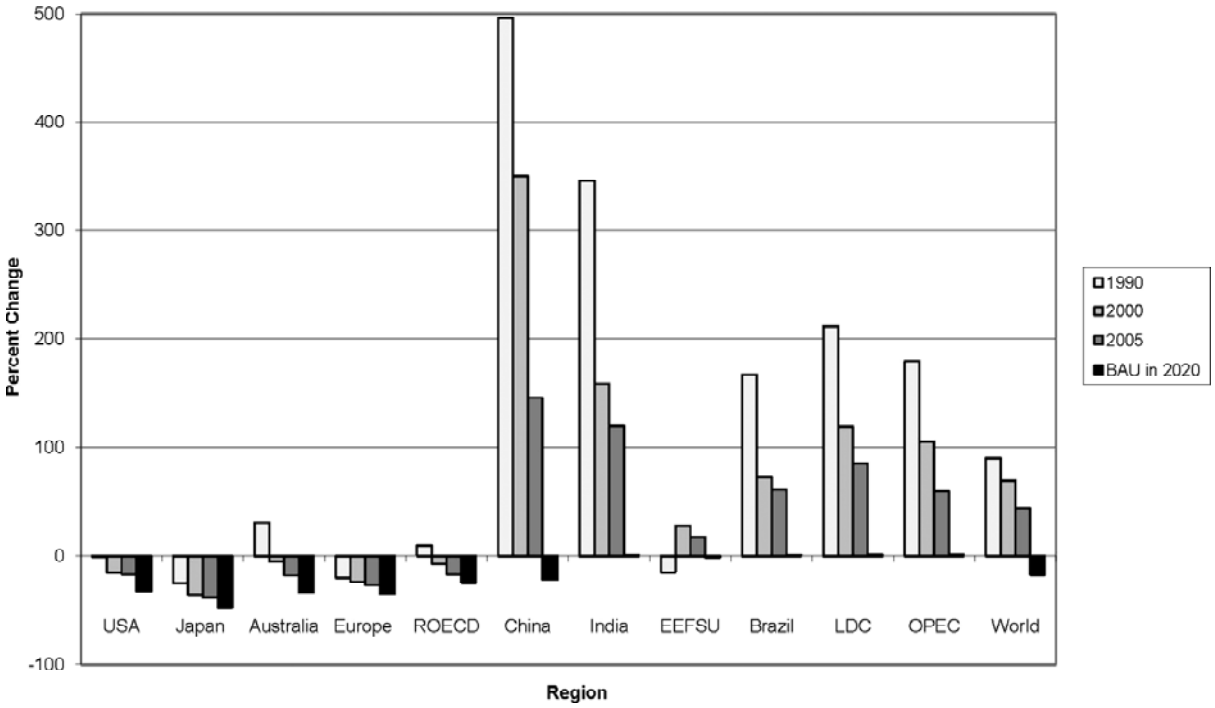
2.24 The difficulty with the pledge framework is that the 'Accord is binding politically, but not legally'.[23] In addition. '[m]any pledges are conditional, and these conditions go to some of the most contentious issues in the international negotiations...'.[24]

2.25 With the underlying difficulties of the Copenhagen Accord set to one side, it is sensible to ask what impact the Accord will have on emissions. As mentioned earlier, different countries have used different approaches for their 'Pledges'. A study led by Australian economist Warwick McKibbin converted the different 'Pledges' to a common value and this has enabled a clearer comparison of the respective efforts by different countries. In essence it is now possible to compare oranges with oranges rather than apples with oranges. Graphic 2.6 shows a cross-section of emitters and their respective action.

23 Institute for 21st Century Energy, *Copenhagen Accord by the Numbers*, p. 1.

24 Institute for 21st Century Energy, *Copenhagen Accord by the Numbers*, p. 5.

Graphic 2.6.: 2020 policy scenario with reductions to selected based years[25]



2.26 The striking feature of graphic 2.6 is that the US, Japan, Europe and Australia all reduce emissions in 2000, 2005 and the Businesses As Usual case in 2020. The emissions of China and India are substantially higher. China's emissions are a staggering 496 per cent above its 1990 levels when compared to the 2020 Business As Usual case while Australia's are 30 per cent above the same benchmark. While climate change policies will be biting hard in some countries, other nations will not be making the same contribution to reduce emissions.

2.27 Treasury has reported the government's expectations of global emissions for some time. An important point to note relates to Treasury modelling about carbon dioxide emissions in China. Current carbon dioxide emissions in China are reported at 10.3 billion tonnes.[26] In 2008 Treasury modelling expected Chinese carbon dioxide emissions in 2020 to reach 16.1 billion tonnes.[27] The most recent Treasury modelling conducted in the context of the carbon tax in 2011 now expects Chinese carbon dioxide emissions in 2020 to reach 17.9 billion tonnes.[28] This is a staggering 1.8 billion tonne increase in expected carbon dioxide emissions per year from China by 2020.

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25 Warwick J. McKibbin, Adele C. Morris, Peter J. Wilcoxen, 'Comparing Climate Commitments: A Model-Based Analysis of the Copenhagen Accord', *Climate Change Economics*, 2011, vol 2, no. 2, p. 90.

26 Australian Government, *Strong Growth, Low Pollution: Modelling a carbon price*, p. 164.

27 Australian Government, *Australia's Low Pollution Future: The Economics of Climate Change Mitigation*, p.31

28 Australian Government, *Strong Growth, Low Pollution: Modelling a carbon price*, p. 164.

2.28 Tables 2.3 to 2.6 provide the source for the afore mentioned material on China's emissions and the revised forecast by the Treasury:

Table 2.3: Treasury modelling 2008 – China and others forecast emissions 2011[29]

Table 3.1: Global emissions

Emissions by region

	2005 Gt CO_2-e	2020 Gt CO_2-e	2050 Gt CO_2-e
United States	7.2	7.7	9.4
EU-25	4.9	5.2	5.5
China	7.2	16.1	31.4
Russia + CIS	3.3	4.7	5.5
Japan	1.4	1.3	1.1
India	1.8	3.7	11.7
Canada	0.8	0.9	1.2
Australia	0.6	0.7	1.0
Indonesia	0.8	1.0	2.2
South Africa	0.5	0.7	1.4
Other South and East Asia	1.7	1.9	3.7
OPEC	1.8	2.9	6.2
Rest of world	7.2	10.2	22.2
Total	39.1	57.2	102.3

Emissions by gas and type

	2005 Gt CO_2-e	2020 Gt CO_2-e	2050 Gt CO_2-e
Carbon dioxide	31.1	45.7	84.5
Combustion	27.0	42.0	78.1
Fugitive/Industrial process	1.2	2.3	5.8
Waste	0.04	0.04	0.03
LUCF	2.8	1.4	0.5
Methane	5.3	7.3	11.0
Combustion	0.4	0.5	0.8
Fugitive/Industrial process	3.6	5.3	8.4
Waste	1.3	1.5	1.8
Nitrous oxide	2.4	3.4	5.6
Combustion	1.4	2.1	3.1
Fugitive/Industrial process	0.9	1.3	2.4
Waste	0.03	0.03	0.03
Other gases	0.4	0.7	1.3
Total	39.1	57.2	102.3

Source: Treasury estimates from GTEM.

Table 2.4: Treasury modelling 2008 China and others 2020[30]

Table 5.17: GTEM regional emissions

Change from 2001

	2020				2050			
	CPRS -5	CPRS -15	Garnaut -10	Garnaut -25	CPRS -5	CPRS -15	Garnaut -10	Garnaut -25
	Per cent				Per cent			
United States	-19	-26	-20	-33	-62	-74	-62	-83
European Union	-16	-22	-16	-26	-48	-57	-47	-63
China	120	99	128	89	89	75	91	47
Russia + CIS(a)	11	2	10	-7	-56	-77	-54	-85
Japan	-15	-19	-14	-20	-50	-57	-49	-63
India	38	25	54	30	139	89	145	56
Canada	-5	-12	-4	-16	-36	-53	-35	-63
Australia	3	-8	3	-15	-42	-71	-39	-77
Indonesia	-23	-33	-21	-40	-25	-53	-12	-61
South Africa	26	14	26	5	-4	-32	-7	-56
Other South and East Asia	-43	-54	-39	-63	-95	-136	-76	-142
OPEC	45	36	48	32	106	66	94	0
Rest of world	47	47	2	-17	43	16	52	-2
World	21	12	15	-4	-2	-22	2	-39

Note: (a) Commonwealth of Independent States.
Source: Treasury estimates from GTEM.

29 http://www.treasury.gov.au/lowpollutionfuture/report/table_listing.asp, p. 31, (accessed 4 October 2011).

30 http://www.treasury.gov.au/lowpollutionfuture/report/table_listing.asp , p. 116, (accessed 4 October 2011).

Table 2.5: China's emissions at present[31]

Table B17: Baseline global emissions

Emissions by region

	2010 CO_2-e	2020 CO_2-e	2050 CO_2-e
United States	6.9	6.9	8.2
European Union (25)	4.7	4.5	4.7
China	10.3	17.9	31.0
Former Soviet Union	3.9	4.6	6.2
Japan	1.3	1.2	1.0
India	2.2	3.5	12.6
Canada	0.8	0.8	1.0
Indonesia	0.9	1.0	2.4
South Africa	0.5	0.6	1.2
Other South and East Asia	1.7	1.7	3.1
OPEC	2.1	2.7	5.6
Rest of world	7.8	9.0	16.1
World	43.5	55.0	94.3

Emissions by gas and type

	2010 CO_2-e	2020 CO_2-e	2050 CO_2-e
Carbon dioxide	34.4	43.5	77.1
Combustion	30.6	39.7	70.9
Fugitive/Industrial process	1.5	2.4	5.7
Waste	0.04	0.04	0.04
LUCF	2.2	1.4	0.5
Methane	5.9	7.4	10.6
Combustion	0.5	0.6	0.9
Fugitive/Industrial process	4.1	5.3	7.9
Waste	1.3	1.5	1.8
Nitrous oxide	2.7	3.4	5.3
Combustion	1.6	2.0	3.0
Fugitive/Industrial process	1.0	1.3	2.2
Waste	0.03	0.03	0.04
Other gases	0.5	0.7	1.3
Total	43.5	55.0	94.3

Note: LUCF means land use change and forestry.
Source: Treasury estimates from GTEM.

Table 2.6: Treasury's expectation of China's emissions in 2020[32]

Table 3.9: Regional emissions

	2020		2050	
	Medium global action	Ambitious global action	Medium global action	Ambitious global action
	per cent change from 2001		per cent change from 2001	
United States	-23	-36	-64	-94
European Union (25)	-24	-32	-59	-79
China	171	122	103	41
Former Soviet Union	13	-8	-58	-88
Japan	-18	-25	-56	-72
India	47	24	181	62
Canada	-8	-20	-46	-66
Indonesia	-17	-24	-18	-61
South Africa	9	-9	-8	-58
Other South and East Asia	-43	-55	-105	-152
OPEC	41	24	92	-25
Rest of world	22	15	14	-34
World average	22	5	-4	-49

Source: Treasury estimates from GTEM.

2.29 An increase of 1.8 billion tonnes of carbon dioxide emissions in China for 2020 alone is more than three times the amount of carbon dioxide emissions Australia

31 http://www.treasury.gov.au/carbonpricemodelling/content/report/downloads/Modelling_Report_Consolidated_update.pdf, p. 164, (accessed 4 October 2011).

32 http://www.treasury.gov.au/carbonpricemodelling/content/report/downloads/Modelling_Report_Consolidated_update.pdf, p. 45, (accessed 4 October 2011).

generates in a whole year. Australia emitted 565 million tonnes of carbon pollution in 2009, the last year with available figures.[33]

2.30 Taking the matter of India further, it has an emission intensity based scheme, while Australia has a scheme that is expressed as a target of emissions. While different countries are pursuing different approaches comparing them can lead to confusion:

> **CHAIR:** What assumptions has Treasury made in this modelling about the level of abatement in India up to 2020?
>
> **Ms Quinn:** To 2020, we have also taken their pledges on board. There are two elements here: the pledges they have on the table but also what might happen within their jurisdictions as a result of the opportunity to sell offsets. It is the case at the moment, for instance, that international companies are creating offsets through the international market and providing those abatements to other countries. There is a difference between the amount of emissions reductions happening within a country and the amount that a country gets to own, in a sense, in relation to any international action.
>
> **CHAIR:** But if I look at chart 3.1 [of the initial treasury modelling released on 10 July 2011] and at the footnote, it says that India's mitigation to 2020 will be zero.
>
> **Ms Quinn:** Footnote to chart 3.1—
>
> **CHAIR:** So India does not appear on the chart because its emissions mitigation is zero compared to the baseline.
>
> **Ms Quinn:** That is the international action assumptions. The government has got a reduction in emissions intensity and therefore the translation of their pledge is that they will reduce emissions but reduce emissions relative to the baseline.
>
> **CHAIR:** But its emissions mitigation is zero compared to the baseline.
>
> **Ms Quinn:** That is right.
>
> **CHAIR:** So, when the Treasurer talks about how India is doing all these things to reduce emissions, they are not actually reducing emissions; they are continuing to—
>
> **Ms Quinn:** They are reducing their emissions intensity compared to today. They are reducing the intensity of their economy, which is what their pledge is framed around.
>
> **CHAIR:** I am just quoting your document—
>
> **Ms Quinn:** And I am explaining it. They have got an emissions intensity target rather than an absolute emissions reduction. So, if their economy

33 Australian Government, *Clean Energy Future – Securing a clean energy future: The Australian Government's Climate Change Plan*, p. 11.

were to double—they make the point that they have got a very low income per capita, so they have got an intensity based target.

CHAIR: I totally understand the argument. The point is that the government, in the way they are presenting some of the information, are comparing apples with pears and, when you question them about the pears, they try to compare them with the apples again. This is just another example of that.

Ms Quinn: I can just explain the analysis. The characterisation you put forward was not accurate, so I was correcting that.

CHAIR: But emissions reduction and reductions in emissions intensity are not the same thing. You would agree with that?

Ms Quinn: That is correct.[34]

2.31 The issue of India's attempts at mitigation were further explored in the context of the Joint Parliamentary inquiry into the Clean Energy Future Legislation.

Senator CORMANN: Does Treasury assume that India has already taken strong national action on climate change, as is asserted by the Department of Climate Change and Energy Efficiency in its fact sheets, which were launched by the Prime Minister?

Ms Quinn: For all the countries, we have modelled the pledges that they have put on the table through international negotiations.

Senator CORMANN: But in the footnote to chart 3.1, it says that India does not appear on the left-hand side chart because its emissions mitigation is zero compared to the baseline—that is, you do not expect any further mitigation. How is that consistent?

Ms Quinn: There are two different things here. This is looking at the share of mitigation in terms of the targets put on the table for the Cancun and Copenhagen pledge process. It does not capture the actual reduction in emissions within their borders. What is happening in this analysis is that India's agreement on the table is an emissions intensity target, but they are also contributing to reductions in global emissions through the Clean Development Mechanism. So this chart looks at their pledges, which is what they might be accountable for in any international arrangements. It does not capture the actual reductions in emissions within the Indian economy, which is what is important for the global mitigation effort.[35]

2.32 As indicated by this evasive Treasury response, the Department does not appear to endorse the view that strong action is being taken by India to achieve

34 Senator Mathias Cormann, Chair, Senate Select Committee on the Scrutiny of New Taxes and Ms Meghan Quinn, General Manager, Macroeconomic Group, Department of the Treasury, *Committee Hansard*, 10 August 2011, p. 18.

35 Ms Meghan Quinn, Department of the Treasury, House of Representatives Joint Select Committee on Australia's Clean Energy Future Legislation, *Proof Committee Hansard*, 26 September 2011, p. 6.

emissions reductions and tackle climate change. This should not be surprising given that the Indian Environment Minister, Jairam Ramesh, said in 2009 that:

> India will not accept any emission-reduction target – period. This is a non-negotiable stand.[36]

2.33 An analysis of emissions reduction targets compared to the business as usual scenario was conducted by an American organisation, the Institute for 21st Century Energy. It noted similar results:

Table 2.7: Estimated gross greenhouse gas emissions in 2020, historical emissions, and projected business as usual emissions in 2020 (excluding land use and forestry) (million metric tons CO2 eq.)[37]

Country/ Region	2020 Emissions with minimum reduction	2020 Emissions with maximum reduction	1990 Baseline	2005 Baseline	2020 BAU (business as usual) Baseline
Australia	470	371	416	525	727
Canada	607	607	592	731	937
European Union*	4,451	3,895	5,564	5,108	5,210
Japan	952	952	1,270	1,358	1,170
New Zealand	56	49	62	77	87
Russian Federation	2,821	2,489	3,319	2,118	2,410
USA	5,878	5,878	6,084	7,082	7,492
Brazil	2,180	2,100	1,200	1,860	2,480
China	12,450	11,590	3,910	7,530	12,880
India	4,290	4,080	1,580	2,390	3,650
Indonesia	860	680	620	860	1,320
Republic of Korea	570	640	290	594	813

2.34 The US Energy Information Administration table (Table 2.7) shows that three of the largest emitters of carbon dioxide – Russia, China and India – have 2020 targets that are greater than their projected emissions if they took no policy action to reduce their emissions. That is, the targets that Russia, China and India have set do not require them to take any action to reduce emissions in their economy.

2.35 For instance, for Russia, its minimum emission reduction in 2020 is 2,821 million metric tonnes, while its business as usual baseline is 2,410 million metric tonnes. In the case of China, its minimum reduction target is 12,450 but is 2020 business as usual emission is 12,880 million metric tonnes. In respect of India, its

36 Bloomberg, 'India Rejects Any Greenhouse-Gas Cuts Under New Climate Treaty', 30 June 2009, http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aWs0Pts2Kxes

37 Source: Institute for 21st Century Energy, *Copenhagen Accord by-the-Numbers*, p. 7, http://www.energyxxi.org/reports/CopenhagenAccordbytheNumbers.pdf (accessed 28 September 2011).

minimum emission reduction target for 2020 of 4,290 million metric tonnes while is business as usual 2020 emissions are 3,650 million metric tonnes.

2.36 Indeed, if these numbers were a true target, not a ceiling, Russia, China and India, would need to subsidise the emission of carbon dioxide to meet them. Together, Russia, China and India represent 35 per cent of the world's carbon dioxide emissions.[38]

2.37 One of two things can be concluded from these figures. Either Russia, China and India do not intend to take action to reduce their emissions or any action they will take will not result in an overall reduction in world carbon dioxide levels.

2.38 It is worth exploring what China will do in the future given its economic size and its emissions potential:

> The facts on China are simple and irrefutable. It has a coal-fired system equal to more than 13 times our entire electricity generation. Between now and 2020, it is going to add between 400GW and 500GW to its existing 670GW of coal-fired power generation.
>
> That's its projections. And that's net. So if they close, say, 200GW of really dirty old stations, they will be building 600GW to 700GW of new ones, all pumping out carbon dioxide, if hopefully not also grit.
>
> Total power generation in Australia is about 50GW.
>
> Yes, China might be aiming for 150GW of wind and 20GW of solar by 2020. But that's installed capacity. When the wind don't . . . and the sun don't . . . Real capacity of the two combined will be closer to 50GW by 2020, as against an extra 400GW at least of additional coal-fired generation.
>
> Despite those clean coal-fired stations that exist only in the deeper and increasingly darker recesses of Garnaut's mind, by 2020 China will be emitting something like 25 times the entire emissions of Australia today. Rendering utterly ineffective the 5 per cent cut we will purport to achieve at such huge and permanent cost.[39]

2.39 More importantly for any consideration of the government's carbon tax, these analyses call into question Treasury's decision to assume, for the purposes of its modelling, that countries will meet their carbon reduction pledges. The assumptions made by the Treasury in its modelling, including international action on carbon reduction pledges, are examined in greater detail in Chapter 10.

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38 Institute for 21st Century Energy, *Copenhagen Accord by-the-Numbers*, p. 3, http://www.energyxxi.org/reports/CopenhagenAccordbytheNumbers.pdf (accessed 28 September 2011).

39 Terry McCrann, 'Why we should be afraid – very afraid- of Julia Gillard's fantasies, The Australian, http://www.theaustralian.com.au/business/opinion/why-we-should-be-afraid-very-afraid-of-julia-gillards-fantasies/story-e6frg9if-1226024297693 (accessed 3 October 2011).

2.40 Furthermore, in the United States, seven states including Arizona, California, Montana, New Mexico, Oregon, Washington and Utah were implementing a regional emissions trading scheme, but it now seems that only California remains officially committed to implementing one next year.

2.41 New Jersey and New Hampshire had regional greenhouse gas initiatives in place and are now in the process of abandoning those schemes.

2.42 The Chicago Climate Exchange wound down in late 2010.[40]

2.43 A robust and effective international scheme is essential to the operation of the government's scheme. Around $650 billion worth of permits will be needed to be purchased from overseas to enable Australia to meet its emission reduction targets.

2.44 Specifically:

> The $650 billion that captures both the Government's insanity and Treasury's disgrace is the rough amount that Australian emitters will pay for foreign CO2 permits, between 2020 and 2050, indicated by the Treasury modelling.
>
> The critical question is WHY does Treasury factor in these foreign permits? Why won't we just cut our emissions in line with the local permits issued by the Government?
>
> Because the foreign permits are critical to squaring the insane circle. Without them, the emission cut targets would be literally impossible.
>
> To cut by "just" 5 per cent by 2020 - just, it's important to note, nine years away - we have to actually cut by something like 25 per cent from our present emission levels as against the 2000 reference point.
>
> To get all those cuts domestically would be to run a chainsaw through the Australian economy. We would have to close power stations and literally turn off the lights.
>
> So Treasury's model felicitously comes up with the conclusion that we will cut our emissions by only 58 million tonnes by 2020. We'll buy permits from foreigners covering the bigger portion of 94 million tonnes.[41]

No harmonised global climate change mitigation action scheme

2.45 The earlier section of the report highlighted some of the limited efforts being taken by Australia's international counterparts to tackle climate change. This next section of the report explores the issue in more details and highlights the lack of

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40 Ed Barnes, 'Collapse of Chicago Climate Exchange means a strategy shift on global warming curbs', *Foxnews.com*, http://www.foxnews.com/politics/2010/11/09/collapse-chicago-climate-exchange-means-strategy-shift-global-warming-curbs/ (accessed 3 October 2011).

41 Terry McCrann, 'Carbon dioxide insanity continues', *The Herald Sun*, http://www.heraldsun.com.au/business/terry-mccranns-column/carbon-dioxide-insanity-continues/story-e6frfig6-1226122415509 (accessed 3 October 2011).

coordinated global action to tackle climate despite claims being made to the contrary about coordinated global action.

2.46 The assumptions that underpin the government position and the carbon tax are as follows:

> **CHAIR:** ...Your assumptions have been criticised, as they appear to assume that many countries that do not currently impose a carbon price and that are not showing any signs of implementing one are assumed to change their minds by 2016. Can you give us some detail on your assumptions as to what action you believe the US, Canada, Japan, China, South Korea, Brazil, South Africa and India will take by 2016?
>
> **Ms Quinn:** The analysis we have undertaken relating to international action on climate change indicates that countries that have made pledges at either Cancun or Copenhagen conventions through the UNFCCC process implement policies to achieve those pledges. For example, the United States has pledged to reduce its emissions by 17 per cent of its 1990 levels by 2020, and that is the assumption that we have modelled in the 550 parts per million scenario. Where countries have identified a range in their pledges, we have taken the low-end pledges over the period to 2020. They are the international action assumptions that are embodied in the modelling.
>
> For the more ambitious international action, we have assumed that countries have to achieve the highest of their pledges between now and 2016 and then countries have to take greater action than is currently on the table, because there is a mismatch between the pledges that are currently on the table and the stated agreement or aim of parties to the UNFCCC of achieving a two degrees or less warming of the world. There is a bit of an inconsistency at the moment between those two pledges.[42]

2.47 While the Treasury suggested that general catch-all assumptions are appropriate for its modelling, a look at the actual level of past and current commitment by countries to tackling climate change is instructive and puts the Treasury view in a very different context:

> **CHAIR:** Canada recently had an election where the Harper government was re-elected on a specific pledge of no carbon tax. What are your Canada assumptions?
>
> **Ms Quinn:** It is also the case that British Columbia has a carbon tax in place, which is a significant proportion of the Canadian economy, and it is set at higher than the Australian rate.
>
> **CHAIR:** Are you extrapolating the British Columbia circumstance across the whole of the Canadian economy?

42 Senator Mathias Cormann, Chair Senate Select Committee on the Scrutiny of New Taxes and Ms Meghan Quinn, Department of the Treasury, *Committee Hansard*, 10 August 2011, p. 14.

Ms Quinn: No, I am simply saying that you made the observation that, at a federal level, there was a change in policy frameworks but, at a provincial level, that has not been the case, so you have to—

CHAIR: You have not adjusted your assumptions around Canada as a result of—

Ms Quinn: The Canadian government has still maintained its commitment to achieve its pledge of similar reductions to the United States, and so we take governments at their word when they make international pledges and pledges to their electorates that those reductions will be achieved.

CHAIR: Has the US met Kyoto targets in the past?

Ms Quinn: As you know, the United States was not a signatory to the Kyoto protocol, and there has been significant abatement activity in the United States through various mechanisms.

CHAIR: Have they met the theoretical Kyoto targets?

Ms Quinn: They have not met the Kyoto targets.

CHAIR: Has Canada met the Kyoto targets?

Ms Quinn: No, Canada has not met the Kyoto targets either.[43]

2.48 The evidence provided to the committee appears contradictory and unstable, especially when it is considered that it has formed the basis of a policy that is intended to reshape the Australian economy.

2.49 In the context of the differing approaches being undertaken overseas, a variety of approaches can be deployed to tackle climate change. Australia has chosen the carbon tax route but the United States has taken the direct action path: This naturally raises the question about the efficacy of the carbon tax itself:

CHAIR: Lenore Taylor wrote in a recent article—and I think this is similar to what you just said:

The government says it is not assuming countries such as the US actually have an emissions trading scheme, but rather that they would try to reach their emission reduction targets at a cost no higher than the international price.

Do you agree with that?

Ms Quinn: Yes.

CHAIR: That is what Treasury is assuming? That is a fair reflection of your assumption?

Ms Quinn: What we are assuming is that there are mechanisms in countries to achieve emissions that result in an implicit or explicit carbon price based on those economies. It does not mean it specifically has to be an emissions

43 Senator Mathias Cormann, Chair Senate Select Committee on the Scrutiny of New Taxes and Ms Meghan Quinn, Department of the Treasury, *Committee Hansard*, 10 August 2011, p. 15.

trading scheme within all countries. It is the case that we are assuming that there is a continuation of the international offset market which exists now in order for Australia to be able to purchase permits from overseas. So we are assuming that there is an arrangement, either through an international framework or through bilateral trades, such that Australian liable entities are able to purchase offsets overseas. That is not the same as saying that all countries have to sign up to an international binding agreement, and it would be inaccurate to make that statement.

CHAIR: Are you saying, then, that countries like the US can achieve abatement at a world price without a carbon tax?

Ms Quinn: The United States has an abundance of abatement opportunities. It is a relatively low-cost abatement country. It is our expectation that, at a prevailing world price we modelled, it would be able to sell abatement overseas. Therefore, we do believe it is possible for the United States to achieve abatement within its own borders at below the international prices that we modelled.

CHAIR: So abatement in the US would be comparatively cheaper than abatement in Australia?

Ms Quinn: On average, that is what our modelling finds, yes.

CHAIR: So on average abatement in the US would be cheaper than in Australia, yet we think that Australia has to go ahead of the US in its effort.[44]

2.50 The modelling places great weight on coordinated global action and makes great assumptions about a range of countries:

Senator CORMANN: … In the medium global action scenario Treasury assumes that OPEC countries enter coordinated global action on carbon pricing from 2021—that is, that they are effectively going to have ETSs in place. Look at the second paragraph below table 3.1 of the main modelling document. How plausible is it really that countries like Iran, Qatar, Saudi Arabia, Venezuela, Syria and Yemen will have operational and internationally linked ETSs within 10 years?

Ms Quinn: The assumption does not rely on the characterisation that you have just put on the table. The assumption—once again, it is the same for the United States and all other countries—is that they have got some mechanism for putting an implicit or explicit price on carbon. Some of the countries you have just mentioned are already part of the Clean Development Mechanism. They are already contributing to emissions reductions at a global level through that mechanism, which is an international trading arrangement where countries can purchase abatement from overseas or sell abatement to overseas. So given that some of those countries in the OPEC region are already within that scheme it seems plausible that that scheme could expand over time, given appropriate

44 Senator Mathias Cormann, Chair Senate Select Committee on the Scrutiny of New Taxes and Ms Meghan Quinn, Department of the Treasury, *Committee Hansard*, 10 August 2011, p. 15.

> regulatory frameworks, to bring all countries into a global pricing mechanism.
>
> **Senator CORMANN:** Except that your modelling in table 3.7 shows that even for the medium global action scenario the GDP per person cost for OPEC countries will be around eight per cent in 2050, which is more than 20 times the estimated cost for the US or the EU. Given that, how can you be so confident that countries like Qatar and Saudi Arabia—or, for that matter, China and India, where the GDP per person costs in 2050 are projected to be over 10 times as large as in the US and Europe—will choose to join globally coordinated action on carbon pricing by 2021?
>
> **Ms Quinn:** It is a global issue that needs a global solution and so the expectation is that, over time, countries will play a role, depending on their view of timing et cetera. So it is the case that some countries are going to face higher economic costs relative to what they otherwise would experience. [45].

2.51 The Treasury assumptions do not appear to be supported when questioned.

2.52 The effectiveness of other countries undertaking effective climate change action is central and integral to the efficacy of the Treasury modelling of the carbon tax. As outlined in this chapter, various assumptions about the conduct of other countries are heroic. To further illustrate this point, consider the action to be taken by the economic bloc known as the Organisation of Petroleum Exporting Countries (OPEC). While this organisation is well known for its cartel arrangements with respect to petroleum, it is an important bloc in the context of Treasury's climate change modelling:

> **Senator CORMANN:** We were talking about the action taken by countries like Iran, Syria and Venezuela in your assumptions then. Looking at table 3.8, it says that by 2050 Treasury is expecting that the OPEC bloc will be purchasing 1.5 billion tonnes of abatement per year from other countries, which is far more than the US, Europe and Japan combined. Does it seem plausible to Treasury that this is what countries like Iran, Syria and Venezuela will be doing—collectively spending around US$150 billion a year, in real 2010 US dollars, to buy carbon credits from other nations?
>
> **Ms Quinn:** The modelling we have undertaken is to achieve an environmental target. You are talking about a 550 parts per million scenario. To 2020 we have modelled the pledges that countries have put on the table through the international negotiations. After that we have looked at a scheme where countries make the same emission reductions as each other relative to their 'business as usual' path. So the analysis is that OPEC would reduce its emissions relative to its business as usual path by the same amount as Australia. That is the allocation framework. It is a combination of the carbon price and what countries find efficient to do within their

45 Ms Meghan Quinn, Department of the Treasury, House of Representatives Joint Select Committee on Australia's Clean Energy Future Legislation, *Joint Committee Hansard*, 26 September 2011, p. 6.

> borders, and then the allocation that results in how much they purchase from overseas. It is entirely plausible, at the carbon prices that we are looking at, given the comparative advantage of the OPEC nations in producing oil and gas, that they may well find it profitable to continue to produce oil and gas while achieving their allocated abatement by sourcing abatement from other countries.[46]

2.53 In addition to there being legitimate questions about the future efficacy of actions by China, India, Russia and OPEC, there are also legitimate questions being asked about the rest of the world:

> **Senator CORMANN:** I want to go a bit further down that same table, 3.8, and question the plausibility of Treasury assumptions. That table also says that, under the medium global action scenario, by 2020 the 'rest of the world' bloc will be purchasing more than 800 million tonnes of CO_2 abatement per annum from other countries—more than the total abatement being purchased that year by the US, Europe, Japan and Canada combined. How can it be considered plausible? By a process of elimination, the rest of the world includes countries like PNG, Somalia, Malawi, Pakistan, Mongolia and others. Do you really see those countries purchasing more than Europe, the US, Japan and Canada combined on an international market by 2020?
>
> **Ms Quinn:** I would be happy to take that question on notice and provide you the breakdown of countries that are in the rest of the world, but it is certainly more than just the very poor nations. There are countries in there such as Brazil and other members of the G20. I would certainly be happy to take that question on notice.[47]

2.54 At the time of finalising this report, Treasury had still not provided a reply to the question taken on notice.

2.55 Another important bloc of countries covers the south and east Asia region. In this part of the world, Treasury has once again made some heroic assumptions about what can be done:

> **Senator CORMANN:** In the same vein, let us go to table 3.9, where the Treasury modelling envisages that the bloc of 'other south and east Asia' will reduce its emissions by around twice as much by 2020 in percentage terms from 2001 levels as either the US or the EU. That bloc consists of Brunei, Cambodia, Laos, Malaysia, the Maldives, the Philippines, Korea, Singapore, Thailand, East Timor and Vietnam. How plausible does that

46 Ms Meghan Quinn, Department of the Treasury, House of Representatives Joint Select Committee on Australia's Clean Energy Future Legislation, *Proof Committee Hansard*, 26 September 2011, p. 9.

47 Ms Meghan Quinn, Department of the Treasury, House of Representatives Joint Select Committee on Australia's Clean Energy Future Legislation, *Proof Committee Hansard*, 26 September 2011, p. 9.

> seem, and can you tell us where this bloc's emissions stand currently, at the halfway mark between 2001 and 2020?
>
> **Ms Quinn:** Most of the emission reductions in that bloc occur through land use change and forestry analysis, and that information was provided by the Berkeley laboratory of analysis in the United States, using their global land use change and forestry analysis. So it is the case that a very reputable international organisation used by many other international organisations has provided that information. They have looked at the detailed availability of abatement in those countries from the land use change and forestry sector, and that is what we have incorporated into the analysis. Most people looking at international abatement opportunities recognise the potential for fairly low-cost abatement through land use change and forestry mechanisms. The other elements of your question I am happy to take on notice.[48]

2.56 At the time of finalising this report, Treasury had not provided a reply to the question taken on notice.

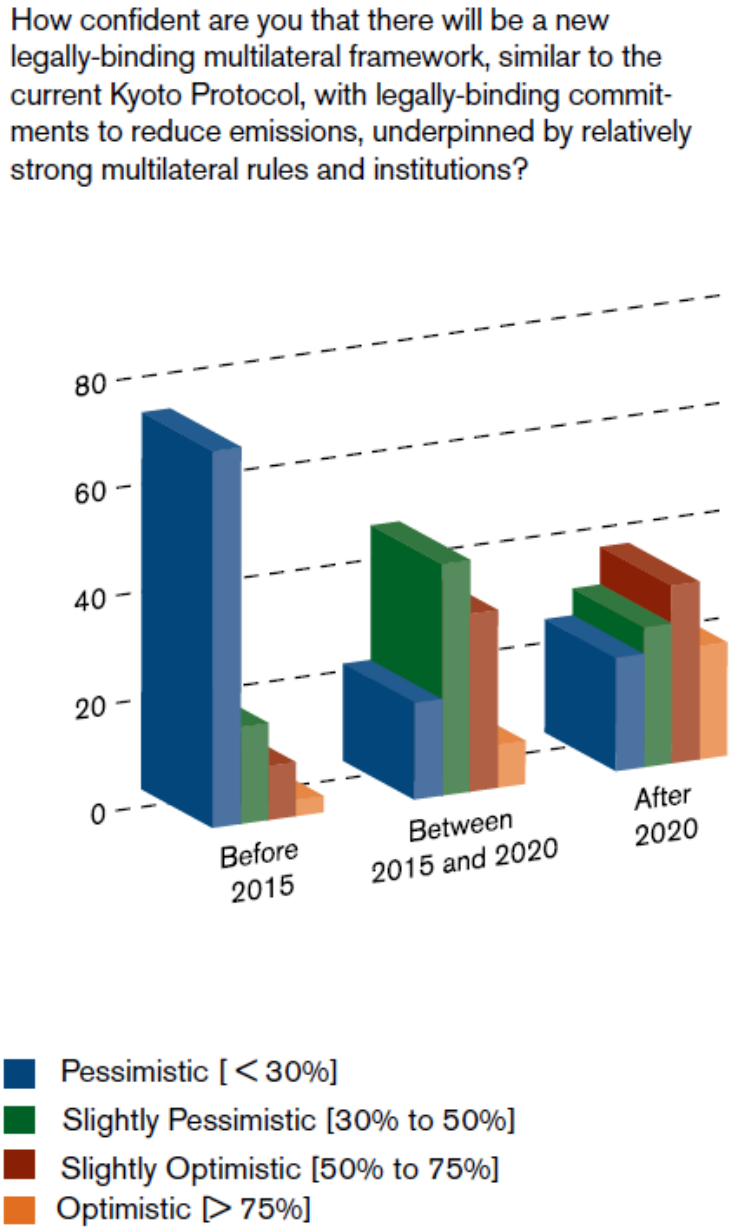
Pessimism over future prospects for a binding international agreement

2.57 At the heart of international negotiations on climate change responses, there is a fundamental gap between the views of developed and developing countries. Developed countries believe that any Kyoto successor agreement must extend legally binding reductions, from the business as usual case, for developing countries. Whereas developing countries want the Kyoto arrangements to continue, whereby legally binding reductions in emissions are imposed on developed, but not developing, countries. The evidence presented above on the increasing importance of carbon emissions in China and India demonstrate that no tangible reductions in global emissions can be achieved without those major emitters being part of a global binding framework.

2.58 It is not surprising then that a World Bank survey of participants in carbon trading markets are sceptical about any new legally binding agreement soon. Indeed, according to this survey, released in June 2011, less than 50 per cent of participants are confident that there will be a legally binding agreement in place before 2020 (see Graphic 2.7 below)–

48 Senator Mathias Cormann. Member, House of Representatives Joint Select Committee on Australia's Clean Energy Future Legislation, and Ms Meghan Quinn, Department of the Treasury, *Proof Committee Hansard*, 26 September 2011, p. 9.

Graphic 2.7: Levels of confidence concerning success of Kyoto[49]



2.59 These views would appear to be inconsistent with the assumptions made in Treasury's modelling which assumes that large cuts in carbon emissions are made in both developed and developing countries by 2020.

49 World Bank 2011, *State and Trends of the Carbon Market 2011*, Washington DC, May, p. 18.

The evolution of Australia's recent climate change policy

The Carbon Pollution Reduction Scheme

2.60 On 30 September 2008, Professor Ross Garnaut presented the *Garnaut Climate Change Review: Final Report*, which was commissioned by the then federal Australian Labor Party (ALP) opposition and ALP state and territory governments in 2007. The review was undertaken to investigate the likely economic and environmental impact of climate change and possible strategies to cut greenhouse gas emissions.[50]

2.61 The Department of the Treasury modelling report, *Australia's Low Pollution Future: The Economics of Climate Change Mitigation*, was released on 30 October 2008. It explored the possible impacts of policies to cut domestic greenhouse gas emissions on the Australian economy.[51]

2.62 On 12 February 2009, the Treasurer, the Hon. Wayne Swan MP, asked the House of Representatives Standing Committee on Economics to inquire into 'the choice of an emissions trading scheme as the central policy to reduce Australia's carbon pollution'. The inquiry was cancelled a week later by the Treasurer.[52]

2.63 On 10 March 2009, the Australian Government released the exposure draft of the Carbon Pollution Reduction Scheme Bill 2009 and associated legislation. The exposure draft of the Bill was referred to the Senate Standing Committee on Economics on 11 March 2009 for inquiry. The committee report was presented on 16 April 2009.

2.64 Shortly after the release of the exposure draft of the Bill, the then Prime Minister, the Hon. Kevin Rudd MP, announced some additional changes to the proposed Carbon Pollution Reduction Scheme (CPRS). The changes included a one year delay in the implementation of the CPRS, a one year fixed price period and a revised 25 per cent emissions reduction target by 2020 'if the world agrees to an ambitious global deal to stabilise levels of CO2 equivalent at 450 parts per million or lower'.[53]

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50 Senate Select Committee on the Scrutiny of New Taxes, Fuel and Energy, *The CPRS: Economic cost without environmental benefit*, Interim Report (May 2009), p. 7.

51 Senate Select Committee on the Scrutiny of New Taxes, Fuel and Energy, *The CPRS: Economic cost without environmental benefit*, Interim Report (May 2009), p. 7.

52 Senate Select Committee on the Scrutiny of New Taxes, Fuel and Energy, *The CPRS: Economic cost without environmental benefit*, Interim Report (May 2009), p. 7.

53 Australian Labor Party, *A new target for reducing Australia's carbon pollution*, media statement, 4 May 2009.

2.65 Legislation to implement the CPRS from 2011 was rejected in the Australian Senate twice, on 13 August and 2 December 2009.[54] The legislation was re-introduced into Parliament with amendments on 2 February 2010. On 27 April 2010, Mr Rudd announced that implementation of the CPRS would be deferred.[55]

2.66 On 17 July 2010, the Prime Minister, the Hon. Julia Gillard MP, called an election for the Commonwealth Parliament. On 16 August 2010, during the election campaign, the Prime Minister made the following commitment:

> There will be no carbon tax under the government I lead.[56]

2.67 The Prime Minister made further comments ruling out a carbon tax:

> There will be no carbon tax under the Government I lead.[57]
>
> I rule out a carbon tax.[58]

2.68 The Deputy Prime Minister and Treasurer made comments ruling out a carbon tax:

> We have made our position very clear. We have ruled it out.[59]
>
> JOURNALIST: Can you tell us exactly when Labor will apply a price to carbon?
>
> WAYNE SWAN: Well, certainly what we rejected is this hysterical allegation somehow that we are moving towards a carbon tax…we certainly reject that.[60]

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54 Department of Climate Change, *Carbon Pollution Reduction Scheme*, http://www.climatechange.gov.au/government/initiatives/cprs.aspx (accessed 6 June 2011) and Department of Climate Change, *CPRS Progress*, http://www.climatechange.gov.au/government/initiatives/cprs/cprs-progress.aspx (accessed 6 June 2011).

55 Department of Climate Change, *Carbon Pollution Reduction Scheme*, http://www.climatechange.gov.au/government/initiatives/cprs.aspx (accessed 6 June 2011) and Department of Climate Change, *CPRS Progress*, http://www.climatechange.gov.au/government/initiatives/cprs/cprs-progress.aspx (accessed 6 June 2011).

56 ABC News, *Julia Gillard's year in quotes*, http://www.abc.net.au/news/stories/2011/06/24/3252198.htm (accessed 7 June 2011).

57 The Hon. Julia Gillard MP, Prime Minister, Channel Ten News, 16 August 2010, http://www.theaustralian.com.au/national-affairs/julia-gillards-carbon-price-promise/story-fn59niix-1225907522983 (accessed 5 October 2011).

58 Paul Kelly and Dennis Shanahan, 'Julia Gillard's carbon price promise', *The Australian*, 20 August 2010.

59 The Hon. Wayne Swan MP, Treasurer, *7:30 Report*, ABC, 12 August 2010.

60 The Hon. Wayne Swan MP, Treasurer, *Meet the Press*, Channel Ten, 15 August 2010.

The carbon tax

2.69 Following the 2010 Commonwealth Election, the returned Labor Government to put a price on carbon, a tax, even though the ruled one out before the election.

2.70 On 27 September 2010, the Prime Minister, the Hon. Julia Gillard MP, the Deputy Prime Minister and Treasurer, the Hon. Wayne Swan MP and the Minister for Climate Change and Energy Efficiency, the Hon. Greg Combet AM MP, announced the establishment of the Multi-Party Climate Change Committee (MPCCC). The MPCCC's terms of reference are at Appendix 3. The Opposition declined an offer of membership to the MPCCC.

2.71 Table 2.8 lists the membership of the MPCCC:

Table 2.8: Membership of the Multi-party Climate Change Committee[61]

The Hon. Julia Gillard MP	Prime Minister	Chair
The Hon. Wayne Swan MP	Deputy Prime Minister	
The Hon. Greg Combet AM MP	Minister for Climate Change and Energy Efficiency	Co-Deputy Chair
Senator Bob Brown	Leader, Australian Greens (Tasmania)	
Senator Christine Milne	Deputy Leader, Australian Greens (Tasmania)	Co-Deputy Chair
Mr Tony Windsor MP	Independent (Member for New England)	
Mr Rob Oakeshott MP	Independent (Member for Lyne)	

2.72 The Committee was advised by a panel of four independent experts - Professor Ross Garnaut, Professor Will Steffen, Mr Rod Sims and Ms Patricia Faulkner.[62]

2.73 On 27 September 2010, the government also announced that it would establish two roundtables to advise it on climate change reform. The two roundtables

61 The Multi-Party Climate Change Committee held its first meeting on Thursday, 7 October 2010 in Canberra.

62 Department of Climate Change, *Multi-party Climate Change Committee*, http://www.climatechange.gov.au/media/whats-new/climate-change-committee.aspx (accessed 6 June 2011).

are the Business Roundtable and the Environment and Non-Governmental Organisation Roundtable.[63]

2.74 On 28 April 2011, the Department of Climate Change and Energy Efficiency called for submissions to assist the work of the MPCCC. Submissions closed on 10 May 2011.[64]

Carbon tax

2.75 Prior to the 2010 election, the Prime Minister, the Hon Julia Gillard MP, declared that "there will be no carbon tax under a Government I lead'. On 24 February 2011, the Prime Minister, reversed this promise and announced what her government's intentions were in relation to tackling climate change:

> ... the Government's plan (is) to cut pollution, tackle climate change and deliver the economic reform Australia needs to move to a clean energy future.
>
> This is an essential economic reform, and it is the right thing to do.
>
> The two-stage plan for a carbon price mechanism will start with a fixed price period [a carbon tax] for three to five years before transitioning to an emissions trading scheme.
>
> The Government will propose that the carbon price commences on 1 July 2012, subject to the ability to negotiate agreement with a majority in both houses of Parliament and pass legislation this year.[65]

The architecture of the carbon tax

2.76 On the 24 February 2011, the MPCCC released the 'Carbon Price Mechanism' document. It set out:

> ... a proposed carbon price mechanism that has been discussed by members of the Multi-Party Climate Change Committee (MPCCC). The proposal has been agreed by the Government and Greens members of the Committee.

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63 Joint media release, The Hon. Wayne Swan MP, Deputy Prime Minister and Treasurer; the Hon. Martin Ferguson AM MP, Minister for Resources and Energy; the Hon. Tony Burke MP, Minister for Sustainability, Environment, Water, Population & Communities; Senator the Hon. Joe Ludwig, Minister for Agriculture, Fisheries and Forestry, *Government to seek business, environment and non-Government organisations' views on climate change*, 27 September 2010 http://www.climatechange.gov.au/minister/greg-combet/2010/media-releases/September/mr20100927a.aspx (accessed 6 July 2011).

64 Department of Climate Change, *Consultation on carbon pricing mechanism*, *http://www.climatechange.gov.au/media/whats-new/consultation-carbon-pricing.aspx* (accessed 6 June 2011).

65 Joint media release, the Hon. Julia Gillard MP, Prime Minister and the Hon. Greg Combet AM MP, Minister for Climate Change and Energy Efficiency, *Climate change framework announced*, http://www.pm.gov.au/press-office/climate-change-framework-announced (accessed 7 July 2011).

> Mr Windsor and Mr Oakeshott have agreed that the proposal be released to enable consideration by the community and to demonstrate the progress that has been made.[66]

2.77 The details surrounding the cost, impact, scope and operation of the carbon tax were not disclosed at the time of the government's announcement that it would seek to introduce a carbon tax despite emphatic promises before the election not to.

2.78 The 'Carbon Price Mechanism' document outlined some of the known features of the government's proposed carbon tax and emissions trading scheme. Given the absence of detail surrounding the operation of the proposed scheme, the known features were crucial for stakeholders in terms of their engagement with the policy development process and critical for the Senate in its role as a house of review.

2.79 The little information that was available clearly showed that the government intended to shift consumer behaviour at a domestic and commercial level by substantially increasing the cost of electricity.

2.80 According to the 'Carbon Pricing Mechanism' document, the known features of the government's carbon tax were to be:

> *Start date*
>
> The mechanism could commence as early as 1 July 2012, subject to the ability to negotiate agreement with a majority in both houses of Parliament and pass legislation this year.
>
> *Length of fixed price period*
>
> The fixed price phase could be of between three and five years, with the price increasing annually at a pre-determined rate. The initial fixed price could begin to drive economic transformation and investment in low emission technologies, and ensure greenhouse gas emission reductions.
>
> *Transition arrangements*
>
> At the end of the fixed price period, the clear intent would be that the scheme convert to a flexible price cap-and-trade emissions trading scheme. In relation to the transition to a flexible price, it would be important to design the arrangements so as to promote business certainty and a smooth transition from the fixed to flexible price.
>
> ...

66 Multi-Party Climate Change Committee, *Carbon Price Mechanism*, 24 February 2011, (http://www.climatechange.gov.au/en/government/initiatives/~/media/publications/mpccc/mpccc-carbon-price-mechanism.pdf) (accessed 31 May 2011).

Coverage

A carbon price mechanism could cover all six greenhouse gases counted under the Kyoto Protocol and have broad coverage of other emissions sources encompassing:

- the stationary energy sector
- transport sector
- industrial processes sector
- fugitive emissions (other than from decommissioned coal mines)
- emissions from non-legacy waste.

Emissions from sources covered under the proposed Carbon Farming Initiative, such as agricultural emissions sources, would be excluded from coverage under the carbon pricing mechanism.

...

International linking

During the fixed price phase, liable parties may not be entitled to use international emissions units for compliance.

In the flexible price phase, international emissions units (offsets) meeting appropriate criteria concerning their quality could be able to be used for compliance. In advance of a move to emissions trading, a decision could be made on any restrictions on the quantity and any other criteria for the use of international emission units.

Assistance and other matters still to be determined

Ways to promote the environmental effectiveness of the scheme, to support technological innovation, and ways to manage the impacts of the scheme on households, communities and business are to be developed

...

Further consideration could also be given to reviewing existing Commonwealth, State and Territory policies so that they are complementary to the mechanism. Such complementary measures may support research, development and commercialisation of clean technologies. [67]

2.81 On 10 July 2011, the Prime Minister finally announced the key features, costs, scope, impact and operational features of the carbon tax. The key features of the carbon tax are set out in the next section of Chapter 2.

67 Multi-Party Climate Change Committee, *Carbon Price Mechanism*, 24 February 2011, (http://www.climatechange.gov.au/en/government/initiatives/~/media/publications/mpccc/mpccc-carbon-price-mechanism.pdf) (accessed 31 May 2011).

The carbon tax legislation

2.82 On 28 July 2011, the Treasurer and Deputy Prime Minister, the Hon. Wayne Swan MP, and the Minister for Climate Change and Energy Efficiency, the Hon. Greg Combet AM MP, jointly released the Clean Energy Legislation for public comment. Stakeholders were asked to put their views to government by 22 August 2011.[68]

2.83 The submissions made to the Department of Climate Change and Energy Efficiency are not available on the agency's website. However, the Prime Minister, the Hon, Julia Gillard MP, has stated that 300 submissions were received.[69]

2.84 On 13 September 2011, the Clean Energy Legislation Package was introduced into Parliament. The Joint Select Committee on Australia's Clean Energy Future Legislation was established under a resolution of appointment passed by the House of Representatives on 14 September 2011 and the Senate on 15 September 2011 to inquire into and report on the provisions of 19 Bills.[70]

1. Clean Energy Bill 2011
2. Clean Energy (Consequential Amendments) Bill 2011
3. Clean Energy (Income Tax Rates Amendments) Bill 2011
4. Clean Energy (Household Assistance Amendments) Bill 2011
5. Clean Energy (Tax Laws Amendments) Bill 2011
6. Clean Energy (Fuel Tax Legislation Amendment) Bill 2011
7. Clean Energy (Customs Tariff Amendment) Bill 2011
8. Clean Energy (Excise Tariff Legislation Amendment) Bill 2011
9. Ozone Protection and Synthetic Greenhouse Gas (Manufacture Levy) Amendment Bill 2011
10. Ozone Protection and Synthetic Greenhouse Gas (Import Levy) Amendment Bill 2011
11. Clean Energy (Unit Shortfall Charge—General) Bill 2011
12. Clean Energy (Unit Issue Charge—Auctions) Bill 2011

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68 Joint Media Release, the Treasurer and Deputy Prime Minister, the Hon Wayne Swan MP and with the Minister for Climate Change and Energy Efficiency, Hon Greg Combet AM MP, 'Clean Energy Future Draft Legislation Released', http://ministers.treasury.gov.au/DisplayDocs.aspx?doc=pressreleases/2011/090.htm&pageID=003&min=wms&Year=&DocType=0 (accessed 19 September 2011).

69 The Hon Julia Gillard MP, Prime Minister, *House of Representatives Hansard*, 13 September 2011, p. 1.

70 Parliament of Australia, Joint Select Committee on Australia's Clean Energy Future Legislation: Inquiry into Australia's Clean Energy Future, http://www.aph.gov.au/house/committee/jscacefl/index.htm (accessed 19 September 2011).

13. Clean Energy (Unit Issue Charge—Fixed Charge) Bill 2011
14. Clean Energy (International Unit Surrender Charge) Bill 2011
15. Clean Energy (Charges—Customs) Bill 2011
16. Clean Energy (Charges—Excise) Bill 2011
17. Clean Energy Regulator Bill 2011
18. Climate Change Authority Bill 2011
19. Steel Transformation Plan Bill 2011

2.85 The Joint Select Committee on Australia's Clean Energy Future Legislation called for submissions by 22 September 2011, that is, seven days after the media release requesting submissions was issued.

2.86 The Joint Select Committee on Australia's Clean Energy Future Legislation will report on or before 7 October 2011.

2.87 The Clean Energy Bills so far released in either draft or final form have not included legislation covering the Australian Renewable Energy Agency or the Clean Energy Finance Corporation announced as part of the government's carbon tax package on 10 July 2011.[71]

Fallout from the carbon tax policy development process

2.88 The Senate Select Committee on the Scrutiny of New Taxes started on 30 September 2010. The committee conducted five public hearings on the carbon tax between March and June 2011. For a large part of the time of the committee's operation, insufficient detail was available for stakeholders to make comment on the proposed carbon tax.[72] The detail was released on 10 July 2011.

2.89 The absence of detail has had an impact on the capacity of witnesses to provide evidence to the inquiry. For example, even the Treasury were unsure of the carbon tax rate:

> **CHAIR:** Does Treasury know what the initial carbon tax price will be?
>
> **Dr Parkinson:** That is a matter that the government and the Independents and the Greens, and the parliament more generally, will have to decide.[73]

71 Combet, G. 2011, Legislating for Australia's Clean Energy Future, Media Release, 13 September, http://climatechange.gov.au/minister/greg-combet/2011/media-releases/September/mr20110913A.aspx

72 Mr David Harrison, General Manager, Advocacy, Chamber of Commerce and Industry Western Australia, *Committee Hansard*, 29 April 2011, p. 14.

73 Dr Martin Parkinson, Secretary to the Treasury, *Committee Hansard*, 24 March 2011, p. 7.

2.90 According to the National Farmers Federation the absence of detail is an issue:

> We have pretty scant detail out there at the moment about that system.[74]

2.91 The Association of Mining and Exploration Companies has also expressed frustration with the lack of information:

> AMEC is not represented on that [Multi-Party Climate Change] Committee and is therefore not aware of any policy details or costing models and is therefore opposed to the introduction of a tax on carbon...[75]

2.92 The Chamber of Commerce and Industry of Western Australia also expressed the view that the lack of detail regarding the government's position was not helpful:

> The questions you are asking us are difficult to answer because it comes back to detail. We cannot at the moment assess or model the impact that the proposed carbon price will have on our members because we do not know what the environment, the parameters will be that will be faced. ... We still do not have that detail, so it is very difficult, almost impossible, for our members to plan and to ponder what implications it will have for them and what they can do to adjust their business operations when there are all those questions in the air.[76]

2.93 The Magnetite Network made the point that:

> Indeed, at the moment we are not sure of any of the detail of the proposed carbon tax. We have been told that it is $20 per tonne, but who it applies to, what level of industry assistance there will be and what that will mean for the price of electricity we do not know. What it will mean for the purchase of gas for some of us who may have a combination of gas or solely gas we just do not know.[77]

A need for Australians to have their say

2.94 Following the government's announcement of the details of its carbon plans, the committee resolved to conduct a further eight public hearing into the carbon tax. These hearings and the hearings that occurred prior to the announcement of the carbon tax form the basis of the evidence that underpins this report.

2.95 The carbon tax is one element of the government's overall Clean Energy Plan announced on 10 July 2011. The program covers a broad range of measures aside

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74 Mr Charles McElhone, Chief Executive Officer, National Farmers Federation, *Committee Hansard*, 17 May 2011, p. 4.

75 Association of Mining and Exploration Companies, *Submission 20*, p. 1.

76 Mr Matthew Harrison, General Manager – Advocacy, Chamber of Commerce and Industry – Western Australia, *Committee Hansard*, 29 April 2011, p. 14.

77 Mr Bill McKenzie, Chairman, Magnetite Network, *Committee Hansard*, 29 April 2011, p. 60.

from the introduction of a carbon tax. This report is focussed on the carbon tax and its associated compensation mechanisms.

2.96 Australians should be given the opportunity to have their say about the government's proposed carbon tax, given:

- The government has no mandate to introduce a carbon tax – in fact it has a mandate not to;
- The prolonged lack of transparency and the resulting limits on consultation, with no consultation for example through the Council of Australian Governments even though the carbon tax has significant implications for states and territories, especially those that own electricity generation assets;
- No release of sufficient details of the economic modelling to allow third-party scrutiny of the parameters and assumptions used in the modelling to assess the economic consequences of the carbon tax.

Committee comment

2.97 Pressing ahead with a carbon tax in Australia outside of an appropriately comprehensive and binding global framework to price emissions is not effective action on climate change but rather is just an irresponsible act of economic self harm.

2.98 The committee is of the view that in the absence of an appropriately comprehensive global agreement to price emissions, the carbon tax will push up the cost of everything, reduce Australia's international trade competitiveness, cost jobs, put small business under more pressure, hurt regional Australia and all without doing anything to help reduce global greenhouse gas emissions.

2.99 Making overseas businesses more competitive than Australian businesses and helping overseas emitters take market share away from even the most environmentally efficient equivalent business in Australia will do nothing to reduce global greenhouse gas emissions – it will just shift emissions overseas.

2.100 The failure of Copenhagen had serious implications for Australia's policy response to climate change.

2.101 Given there is now no foreseeable prospect of an appropriately comprehensive global agreement to price carbon dioxide emissions, Australia should change its policy approach to reducing global greenhouse gas emissions: away from a carbon tax and an emissions trading scheme towards direct action initiatives.

2.102 Australians were entitled to believe that the Gillard Government had reached the same conclusion in the lead up to the last election.

2.103 Why else did the Prime Minister and the Treasurer promise before the last election that there would be no carbon tax under a Gillard Government after the election?

2.104 After three years of debate in the last Parliament and after the failure of Copenhagen it seemed that even the Gillard Labor Government had recognised that pursuing a carbon tax in the absence of an appropriately comprehensive global agreement to price emissions was not in the national interest.