

The Senate

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Environment and Communications  
References Committee

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Direct Action: Paying polluters to halt  
global warming?

March 2014

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# Recommendations

## Recommendation 1

**2.63** The committee recommends that the Australian Government immediately adopt the emissions reduction targets outlined by the Climate Change Authority in its final report released on 27 February 2014. Namely that Australia's 2020 minimum emissions reduction target be set at 15% below 2000 levels and that Australia's carryover from the first commitment period of the Kyoto Protocol be used to raise the 2020 emissions reduction target by 4%, giving a total 2020 target of 19%.

## Recommendation 2

**2.65** The committee recommends that the Australian Government immediately adopt the carbon budgets outlined by the Climate Change Authority in its final report released on 27 February 2014. Namely that Australia set a national carbon budget for the period 2013–2020 of 4,193 Mt CO<sub>2</sub>-e and a carbon budget for the period of 2013–2050 of 101.1 Gt CO<sub>2</sub>-e.

## Recommendation 3

**2.67** The committee recommends that the Australian Government immediately adopt the longer term targets outlined by the Climate Change Authority in its final report released on 27 February 2014. Namely, that beyond 2020 Australia continues to reduce emissions within a trajectory range bounded by the paths to 40% and 60% below 2000 levels in 2030.

## Recommendation 4

**3.142** The committee recommends that the Clean Energy Package not be repealed.

## Recommendation 5

**3.143** The committee recommends that the transition of the fixed carbon price to a fully flexible price under an emissions trading scheme with the price determined by the market occur on 1 July 2014.

## Recommendation 6

**3.144** The committee recommends that the Government adopt stringent legislated caps on carbon emissions, based on the advice of the Climate Change Authority, to ensure that Australia meets its emissions reduction targets.

## Recommendation 7

**4.57** The committee recommends that the Climate Change Authority be retained and that the Government withdraw the Climate Change Authority (Abolition) Bill 2013.

## **Recommendation 8**

**4.60** The committee recommends that the Clean Energy Finance Corporation be retained and that the Government withdraw the Clean Energy Finance Corporation (Abolition) Bill 2013.

## **Recommendation 9**

**4.63** The committee recommends that the funding cuts to the Australian Renewable Energy Agency contained in the Clean Energy Legislation (Carbon Tax Repeal) Bill 2013 not be passed and that funding for the 'One Million Solar Roofs' program be additional and not come out of the Agency's existing funding.

## **Recommendation 10**

**5.129** The committee recommends that the Emissions Reduction Fund not be substituted for the carbon pricing mechanism.

## **Recommendation 11**

**6.87** The committee recommends that the Government not proceed with the Emissions Reduction Fund as it is fundamentally flawed and in doing so notes that:

- there is insufficient funding to be able to secure enough abatement to meet Australia's emissions targets now and into the future;
- there is a lack of a robust safeguard mechanism with stringent baselines and penalties for exceeding baselines;
- there is no legislated limit or 'cap' on Australia's emissions in line with emissions reductions targets;
- there is no access to international emissions credits;
- the maximum terms of contracts for purchasing emissions reductions under the Emissions Reduction Fund need to be increased;
- the use of international permits needs to be limited at 50%, with the maximum caps being 12.5% from Certified Emissions Reductions under the Clean Development Mechanism and 37.5% from European Union permits;
- an increase of staffing will be required within the Department of the Environment to enable the scheme to be designed properly;
- an increase of staffing will be required within the Clean Energy Regulator in order to administer the scheme properly; and
- the maintenance and establishment of a range of complementary measures, including the Renewable Energy Target and fuel emissions standards are required.

## **Recommendation 12**

**7.61** The committee recommends that the Renewable Energy Target be retained in its current format.

### **Recommendation 13**

**7.64** The committee recommends that, once further details are available in relation to the proposed streamlining of the Carbon Farming Initiative, including the changes to permanency rules and the methodologies to be implemented, that the proposals be referred to a Senate Committee for inquiry and report.

### **Recommendation 14**

**7.65** The committee recommends that, in the event the Emissions Reduction Fund proceeds, measures are put in place to ensure the viability of existing projects prior to 1 July 2014 under the Carbon Farming Initiative.

### **Recommendation 15**

**7.67** The committee recommends that the 'One Million Solar Roofs' and the 'Solar Towns and Schools' program focus on helping low-income Australians to access solar PV and solar hot water and not be paid for out of the Australian Renewable Energy Agency's existing budget.

### **Recommendation 16**

**7.69** The committee recommends that the Government provide further details about the proposed Twenty Million Trees program and its implementation.



## Abbreviations and Acronyms

ACCU	Australian Carbon Credit Units
ACF	Australian Conservation Foundation
ACTU	Australian Council of Trade Unions
ADIC	Australian Dairy Industry Council
AFPA	Australia Forest Products Association
AMEC	Association of Mining and Exploration Companies
AMWU	Australian Manufacturing Workers' Union
ANAO	Australian National Audit Office
ARENA	Australian Renewable Energy Agency
ARRCC	Australian Religious Response to Climate Change
AUSTELA	Australian Solar Thermal Energy Association
AYCC	Australian Youth Climate Coalition
CANA	Climate Action Network Australia
CCSA	Conservation Council of South Australia
CCWA	Conservation Council of Western Australia
CEFC	Clean Energy Finance Corporation
CFI	Carbon Farming Initiative
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> -e	carbon dioxide equivalent
CSIRO	Commonwealth Scientific and Industrial Research Organisation
Cth	Commonwealth of Australia
ERF	Emissions Reduction Fund
ESAA	Energy Supply Association of Australia
GDP	gross domestic product
GGAP	Greenhouse Gas Abatement Program

GHG	greenhouse gas
Green Paper	Department of the Environment, <i>Emissions Reduction Fund Green Paper</i> , December 2013
GWh	gigawatt hours
IGCC	Investor Group on Climate Change
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
Kyoto Protocol	<i>Kyoto Protocol to the United Nations Framework Convention on Climate Change</i>
LEPID	Liabile Entities Public Information Database
LNG	liquefied natural gas
LRET	Large Renewable Energy Target
LULUCF	land use, land-use change and forestry
MPCC	Multi-Party Climate Change Committee
Mt	Megaton, a unit of mass equal to million tonnes
NFF	National Farmers' Federation
NGERS	National Greenhouse and Energy Reporting Scheme
OECD	Organisation for Economic Co-operation and Development
PHAA	Public Health Association of Australia
RET	Renewable Energy Target
SRES	Small-Scale Renewable Energy Scheme
UNFCCC	<i>United Nations Framework Convention on Climate Change</i>
Wentworth Group	Wentworth Group of Concerned Scientists



# Chapter 1

## Introduction

### Conduct of the inquiry

1.1 On 10 December 2013, the Senate referred the following matter to the Environment and Communications References Committee (the committee) for inquiry and report by 24 March 2014.<sup>1</sup> On 18 March 2014, this report date was extended to 26 March 2014.<sup>2</sup>

- (a) An inquiry into the Abbott Government's Direct Action Plan and the Abbott Government's failure to systematically address climate change, including:
  - (i) whether the Direct Action Plan has the capacity to deliver greenhouse gas emissions reductions consistent with Australia's fair share of the estimated global emissions budget that would constrain global warming to Australia's agreed goal of less than 2 degrees,
  - (ii) whether the Direct Action Plan has the capacity to reduce greenhouse gas emissions adequately and cost effectively,
  - (iii) the effect of technical issues that arise for measuring abatement under the Direct Action Plan, including additionality and establishing emissions baselines for emitting entities and long-term monitoring and reporting arrangements,
  - (iv) the impact of the absence of policy certainty derived from the Direct Action Plan to encourage long-term business investment in the clean, low carbon economy,
  - (v) the impact of the abolition of the Clean Energy Finance Corporation on the availability of capital for clean technology and industry investment,
  - (vi) the repeal of the Clean Energy Package and the Direct Action Plan's impact on, and interaction with, the Carbon Farming Initiative,
  - (vii) the fiscal and economic impact of the Direct Action Plan,
  - (viii) the impact of repealing the Clean Energy Package on Australia's ability to systemically address climate change,

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1 *Journals of the Senate*, No. 9, 10 December 2013, pp 310–311.

2 *Journals of the Senate*, No. 20, 18 March 2014, p. 634.

- (ix) the impact of repealing the Clean Energy Package on Australia's carbon pollution cap,
  - (x) the impact of repealing the Clean Energy Package on international efforts to reduce carbon pollution,
  - (xi) the impact of abandoning linkage with the European Union on international cooperation to reduce emissions,
  - (xii) the ability of the Government and the Australian people to receive expert independent advice on an appropriate carbon pollution cap for Australia following the abolition of the Climate Change Authority,
  - (xiii) the impact of cuts to funding for the Australian Renewable Energy Agency, and
  - (xiv) any other related matters; and
- (b) in undertaking this inquiry the committee must have regard to the Climate Change Authority's draft report, *Reducing Australia's Greenhouse Gas Emissions – Targets and Progress Review*, dated October 2013.<sup>3</sup>

1.2 In accordance with usual practice, the inquiry was advertised nationally in *The Australian* and on the internet. The committee also wrote to relevant organisations inviting submissions by 20 January 2014. The committee received 106 submissions, listed at Appendix 1.

1.3 The committee held five public hearings as follows:

- Perth on 31 January 2014;
- Melbourne on 5 February 2014; and
- Canberra on 28 February, 7 March and 18 March 2014.

1.4 A list of witnesses appearing at the public hearings is contained in Appendix 2.

## **Acknowledgements**

1.5 The committee would like to thank all the individuals, organisations and Government departments that contributed to the inquiry.

## **Note on references**

1.6 Hansard references in this report are to the proof committee Hansard. Page numbers may vary between the proof and the official Hansard transcript.

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3 *Journals of the Senate*, No. 9, 10 December 2013, pp 310–311.

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## Structure of the report

1.7 This chapter outlines the conduct of the inquiry.

1.8 Chapter 2 provides background to the inquiry, including a brief summary of the need for action on climate change, and Australia's international and domestic commitments to limit greenhouse gas emissions.

1.9 Chapter 3 provides an overview of the Clean Energy Package and discusses the implications of the Government's proposals to repeal key elements of that package.

1.10 Chapter 4 examines the role of three key institutions that form part of Australia's policy response to address climate change: the Climate Change Authority, the Clean Energy Finance Corporation and the Australian Renewable Energy Agency.

1.11 Chapter 5 examines the Direct Action Plan and the proposed Emissions Reduction Fund, and whether they have the capacity to reduce Australia's greenhouse gas emissions adequately and cost-effectively.

1.12 Chapter 6 considers technical issues related to the design of the Emissions Reduction Fund which will impact on its ability to reduce Australia's greenhouse gas emissions.

1.13 Chapter 7 considers related issues, including the Renewable Energy Target, other components of the Direct Action Plan, and interaction with the Carbon Farming Initiative.



# Chapter 2

## The need for action

### A changing climate

2.1 The evidence that the world is getting warmer is unequivocal. Over the later part of the 19<sup>th</sup> century the global mean surface temperature has increased.<sup>1</sup> Each of the past three decades has been warmer than all the previous decades, and the decade of the 2000s has been the warmest.<sup>2</sup> In Australia, average temperatures have increased by 0.9°C since 1950, with significant regional variations.<sup>3</sup>

2.2 It is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20<sup>th</sup> century.<sup>4</sup> Anthropogenic increases in greenhouse gas concentrations (such as carbon dioxide, CO<sub>2</sub>) have largely contributed in the warming of the atmosphere and the ocean.<sup>5</sup> Without action to reduce carbon pollution, the world risks serious effects from climate change.

2.3 If emissions continue to grow at current rates, it is likely that over the next century, global mean surface temperatures will increase by more than 2°C.<sup>6</sup> It is virtually certain that there will be more frequent hot, and fewer cold, temperature extremes over most land areas on daily and seasonal timescales.<sup>7</sup>

2.4 Under a worst-case scenario, by 2100 average temperatures in Australia's north are projected to rise by almost 5°C (and potentially up to 7°C) from a 1986–2005 baseline and by 4°C (to as much as 6°C) in the south.<sup>8</sup> Australia will also

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- 1 Intergovernmental Panel on Climate Change (IPCC), *Working Group I contribution to the IPCC fifth assessment report, Climate change 2013: The physical science basis, Summary for policy makers*, October 2013, p. 3, [http://www.climatechange2013.org/images/uploads/WGI\\_AR5\\_SPM\\_brochure.pdf](http://www.climatechange2013.org/images/uploads/WGI_AR5_SPM_brochure.pdf) (accessed 8 January 2014).
  - 2 IPCC, *Fifth assessment report, Summary for policy makers*, October 2013, p. 3.
  - 3 Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Bureau of Meteorology (BOM), *Climate change in Australia: Technical report 2007*, 2007, p. 6, [http://www.climatechangeinaustralia.gov.au/documents/resources/TR\\_Web\\_FrontmatterExecSumm.pdf](http://www.climatechangeinaustralia.gov.au/documents/resources/TR_Web_FrontmatterExecSumm.pdf) (accessed 8 January 2014).
  - 4 IPCC, *Fifth assessment report, Summary for policy makers*, October 2013, October 2013, p. 15.
  - 5 IPCC, *Fifth assessment report, Summary for policy makers*, October 2013, October 2013, p. 15.
  - 6 IPCC, *Fifth assessment report, Summary for policy makers*, October 2013, October 2013, p. 18.
  - 7 IPCC, *Fifth assessment report, Summary for policy makers*, October 2013, October 2013, p. 18.
  - 8 IPCC, *Working Group I contribution to the IPCC fifth assessment report, Climate change 2013: The physical science basis, Final draft underlying scientific-technical assessment*, 30 September 2013, [http://www.climatechange2013.org/images/uploads/WGIAR5\\_WGI-12Doc2b\\_FinalDraft\\_All.pdf](http://www.climatechange2013.org/images/uploads/WGIAR5_WGI-12Doc2b_FinalDraft_All.pdf) (accessed 10 January 2014). See also A. Talberg and S. Power, 'What the latest IPCC report says about Australia', *FlagPost*, Commonwealth Parliamentary Library, 8 October 2013, [http://www.climatechange2013.org/images/uploads/WGIAR5\\_WGI-12Doc2b\\_FinalDraft\\_All.pdf](http://www.climatechange2013.org/images/uploads/WGIAR5_WGI-12Doc2b_FinalDraft_All.pdf) (accessed 10 January 2013).

experience more warm days and nights and fewer cold ones. Extreme weather events in Australia have become more frequent and/or severe and will continue to do so. Winter rain in southern Australia is likely to decrease and drought will be more common.<sup>9</sup>

2.5 The Climate Change Authority, an independent statutory agency tasked with providing expert advice to the Government on climate change, has underscored the impacts on Australia's climate of inaction in reducing greenhouse gas emissions. In its 2013 draft report, *Reducing Australia's greenhouse gas emissions – Targets and progress review*, the Climate Change Authority warned:

Higher temperatures are projected to bring more severe impacts, including inundation of low-lying coastal areas, climate-induced migration of millions of people, growing risks to human health from many source, and the collapse of many vulnerable ecosystems, including the Great Barrier Reef and the Kakadu wetlands. Temperature increases above 2 degrees also heighten the risk of triggering several highly disruptive climate feedbacks, which could amplify the initial warming caused by greenhouse gases and increase the severity of climate change impacts. These impacts would be highly disruptive, impose a heavy financial burden and, in many cases, would prove to be beyond Australia's capacity to adapt.

Australia has a clear national interest in limiting global warming to no more than 2 degrees.<sup>10</sup>

## **International action**

2.6 Governments around the world have agreed to limit carbon pollution in an attempt to try to hold the average global temperature rise below 2°C above pre-industrial levels. As a signatory to many of these international conventions, Australia has committed to reducing anthropogenic greenhouse gas emissions.

### ***Intergovernmental Panel on Climate Change***

2.7 In 1988 the United Nations Environment Programme and the World Meteorological Organisation established the Intergovernmental Panel on Climate Change (IPCC). The IPCC is a scientific body under the auspices of the United Nations created to 'provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts'.<sup>11</sup> It reviews and assesses the most recent scientific and technical information

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9 A. Talberg and S. Power, 'What the latest IPCC report says about Australia', *FlagPost*, Commonwealth Parliamentary Library, 8 October 2013.

10 Climate Change Authority, *Reducing Australia's greenhouse gas emissions – Targets and progress review*, Draft report, Climate Change Authority, Canberra, October 2013, p. 25, [http://climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/files/Target-Progress-Review/Climate Change Authority-targets-and-progress-report.pdf](http://climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/files/Target-Progress-Review/Climate%20Change%20Authority-targets-and-progress-report.pdf) (accessed 9 January 2014).

11 IPCC, *Organization*, <http://www.ipcc.ch/organization/organization.shtml> (accessed 24 February 2014).

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produced worldwide relevant to the understanding of climate change. It does not conduct any research nor does it monitor climate related data or parameters.

2.8 In 1990, the IPCC released its first assessment report, underlining the importance of climate change as a challenge requiring international cooperation to tackle its consequences.<sup>12</sup> The findings of the IPCC's first report lead to the international community taking coordinated action through the United Nations to combat global warming.

### ***United Nations Framework Convention on Climate Change***

2.9 In 1992, the United Nations General Assembly adopted the *United Nations Framework Convention on Climate Change* (UNFCCC). The UNFCCC provides an overall framework for intergovernmental efforts on climate change. The convention is aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with climate systems.<sup>13</sup> The UNFCCC commits parties to:

- formulate and implement national programs to mitigate climate change;
- report on their emissions and national action through inventories and national communications; and
- provide support to assist developing countries take action to address climate change and adapt to it.<sup>14</sup>

2.10 The UNFCCC came into force on 21 March 1994. There are currently 195 countries, including Australia, that have ratified the convention giving it 'one of the most universal memberships of any international treaty'.<sup>15</sup>

### ***Kyoto Protocol***

2.11 In 1995, the IPCC released its second assessment report which found that greenhouse gas emissions could cause changes to the climate unprecedented in human history and that climate change would be virtually irreversible.<sup>16</sup> The international community realised that emission reductions provisions in the UNFCCC were inadequate. In 1995 the United Nations commenced negotiations to strengthen the

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12 IPCC, *Reports*, [http://www.ipcc.ch/publications\\_and\\_data/publications\\_and\\_data\\_reports.shtml#1](http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml#1) (accessed 24 February 2014).

13 United Nations Framework Convention on Climate Change (UNFCCC), *Background on the UNFCCC: The international response to climate change*, [http://unfccc.int/essential\\_background/items/6031.php](http://unfccc.int/essential_background/items/6031.php) (accessed 9 January 2014).

14 United Nations, *UNFCCC*, 1992, [http://unfccc.int/files/essential\\_background/background\\_publications\\_htmlpdf/application/pdf/conveng.pdf](http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf) (accessed 10 January 2014).

15 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 48.

16 IPCC, *Second assessment report*, 1995, p. 3, <http://www.ipcc.ch/pdf/climate-changes-1995/ipcc-2nd-assessment/2nd-assessment-en.pdf> (accessed 10 January 2014).

global response to climate change, and, two years later, adopted the *Kyoto Protocol to the United Nations Framework Convention on Climate Change* (Kyoto Protocol).<sup>17</sup>

2.12 The Kyoto Protocol legally binds developed countries to emission reduction targets (as opposed to the UNFCCC which only encourages countries to reduce emissions). Overall, emission reduction targets for 37 industrialised countries and the European community added up to an average 5% emissions reduction compared to 1990 levels over the five-year period 2008 to 2012 (the first commitment period).<sup>18</sup> The second commitment period began on 1 January 2013 and will end in 2020.

### **Revising Kyoto Protocol targets**

2.13 In 2007, the IPCC's fourth assessment report concluded that the climate was changing faster than previously predicted.<sup>19</sup> This report was closely followed by the 2007 Bali Action Plan under the UNFCCC, which began a new negotiating process to discuss ways to mitigate greenhouse gas emissions by all countries, including developing countries.

2.14 Negotiations on new targets were expected to be completed at the 2009 Copenhagen Conference of the Parties, however, parties were unable to come to a final agreement, instead noting targets set in the Copenhagen Accord. These new targets were formally agreed by the parties in 2010 at the Cancun Conference.<sup>20</sup> The Cancun Conference also reaffirmed the global pledge to hold the increase in global temperatures below 2°C.

2.15 At the 2012 Doha Conference, amendments were formally adopted to the Kyoto Protocol to create a second commitment period from 2013 to 2020.<sup>21</sup> Thirty-seven parties agreed to take on a target, including Australia.<sup>22</sup>

2.16 Countries are currently reviewing the level of global action, both in the context of increasing the strength of the emissions reduction targets in the Kyoto Protocol and more broadly under the UNFCCC.<sup>23</sup> These reviews, in addition to the

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17 United Nations, *Kyoto Protocol*, 1998, <http://unfccc.int/resource/docs/convkp/kpeng.pdf> (accessed 9 January 2014).

18 UNFCCC, *Making those first steps count: An introduction to the Kyoto Protocol*, [http://unfccc.int/essential\\_background/kyoto\\_protocol/items/6034.php](http://unfccc.int/essential_background/kyoto_protocol/items/6034.php) (accessed 9 January 2014).

19 IPCC, *Fourth assessment report*, 2007, [http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4\\_wg1\\_full\\_report.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4_wg1_full_report.pdf) (accessed 10 January 2014).

20 UNFCCC, *Cancun Conference – November 2010*, [https://unfccc.int/meetings/cancun\\_nov\\_2010/meeting/6266.php](https://unfccc.int/meetings/cancun_nov_2010/meeting/6266.php) (accessed 24 February 2014).

21 UNFCCC, *Doha Conference – November 2012*, [https://unfccc.int/meetings/doha\\_nov\\_2012/meeting/6815.php](https://unfccc.int/meetings/doha_nov_2012/meeting/6815.php) (accessed 24 February 2014).

22 Department of the Environment, *Kyoto Protocol*, <http://www.climatechange.gov.au/international/negotiations/history-negotiations/kyoto-protocol> (accessed 24 February 2014).

23 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 49.

IPCC's fifth assessment report to be released in October 2014, will form the basis for negotiations to create a post-2020 agreement.

*Table 2.1: Emissions reduction targets of key countries<sup>24</sup>*

Country	International 2020 emissions reduction targets
<b>Australia</b>	5%, up to 15% or 25% relative to 2000.
<b>China</b>	Lower carbon dioxide emissions per unit of GDP by 40–45% relative to 2005.
<b>United States</b>	In the range of 17% relative to 2005.
<b>European Union</b>	20% relative to 1990. Conditional target of 30% relative to 1990.
<b>India</b>	Reduction in emissions intensity (emissions per unit of GDP) by 20-25% relative to 2005 (excluding agriculture).
<b>Japan</b>	25% relative to 1990.
<b>Canada</b>	17% relative to 2005 (Canada has withdrawn from the Kyoto Protocol but maintains this target under the UNFCCC).
<b>Republic of Korea</b>	20% relative to business as usual.
<b>United Kingdom</b>	20% relative to 1990, as part of EU targets.
<b>South Africa</b>	34% relative to business as usual and 42% relative to business as usual by 2025.
<b>New Zealand</b>	Unconditional target of 5% relative to 1990. Conditional target of 10-20% relative to 1990.

### **Australia's commitments under international agreements**

2.17 On 30 December 1992, Australia ratified the UNFCCC, which obliged Australia to:

...adopt national policies and take corresponding measures on the mitigation of climate change, by limiting anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs.<sup>25</sup>

2.18 On 3 December 2007, Australia formally ratified the Kyoto Protocol and the ratification entered into force on 11 March 2008. Under the Kyoto Protocol, Australia

24 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 50.

25 United Nations, *UNFCCC*, 1992, Article 4.2(a), [http://unfccc.int/files/essential\\_background/background\\_publications\\_htmlpdf/application/pdf/conveng.pdf](http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf) (accessed 9 January 2014).

committed to restraining its national emissions to an average of 108% of 1990 levels over the first commencement period (2008 to 2012).<sup>26</sup> Australia's emissions were below this level, averaging 105% of 1990 emissions over the period.<sup>27</sup>

2.19 Australia has made an international undertaking as part of the second commitment period of the Kyoto Protocol (2013 to 2020). Australia has committed to reducing its greenhouse gas emissions by 25% on 2000 levels by 2020 if the world agrees to an ambitious global deal capable of stabilising levels of greenhouse gases in the atmosphere at 450ppm CO<sub>2</sub> equivalent.<sup>28</sup> Australia also committed to unconditionally reducing emissions by 5% below 2000 levels by 2020, and by up to 15% by 2020, if there is a global agreement which falls short of securing atmospheric stabilisation at 450ppm CO<sub>2</sub> equivalent and under which major developing economies commit to substantially restrain emissions and advanced economies take on commitments comparable to Australia's.<sup>29</sup>

### **Australian action in a global context**

2.20 Australia's carbon pollution levels are very high in absolute and per person terms. Australia has the highest emissions per person of all developed countries, and is responsible for about 1.3% of the world's emissions of greenhouse gases.<sup>30</sup> Australia is the 15<sup>th</sup> highest emitter of greenhouse gases in the world.<sup>31</sup> Our annual carbon pollution is roughly the same as that of countries like France, Canada, South Korea and the United Kingdom.<sup>32</sup>

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26 United Nations, *Kyoto Protocol*, 1998, Annex B, p. 20.

27 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 74.

28 UNFCCC, *Report on the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009*, Appendix 1 – Quantified economy-wide emissions targets for 2020, Australia, 2009, [http://unfccc.int/files/meetings/cop\\_15/copenhagen\\_accord/application/pdf/australiacphaccord\\_app1.pdf](http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/australiacphaccord_app1.pdf) (accessed 9 January 2014).

29 UNFCCC, *Report on the Conference of the Parties on its fifteenth session*, Appendix 1 – Quantified economy-wide emissions targets for 2020, Australia, 2009.

30 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 57.

31 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 57.

32 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 47.

Table 2.3: Key countries' emissions and development<sup>33</sup>

Country	Per cent of global emissions (%)	Emissions per person (tCO <sub>2</sub> -e)	Human Development Index (Rank)
Australia	1.3	25.1	2 <sup>nd</sup>
China	22.1	7.1	101 <sup>st</sup>
United States	15.3	21.2	3 <sup>rd</sup>
European Union	10.9	9.2	From 4 <sup>th</sup> (Netherlands) to 57 <sup>th</sup> (Bulgaria)
India	5.5	1.9	136 <sup>th</sup>
Japan	2.8	9.5	10 <sup>th</sup>
Germany	2.1	10.9	5 <sup>th</sup>
Indonesia	1.9	3.3	121 <sup>st</sup>
Canada	1.6	19.9	11 <sup>th</sup>
Republic of Korea	1.4	12.5	12 <sup>th</sup>
United Kingdom	1.4	9.3	26 <sup>th</sup>
South Africa	1.3	11.2	121 <sup>st</sup>
New Zealand	0.2	16.6	6 <sup>th</sup>
Norway	0.1	11.2	1 <sup>st</sup>

2.21 Reflecting the availability of cheap and abundant coal, electricity generation is Australia's largest source of carbon pollution.<sup>34</sup> Electricity generation is responsible for approximately 35% of Australia's total carbon pollution.<sup>35</sup> Direct fuel combustion (the use of gas and other fuels in industry and homes) accounts for another 16%.<sup>36</sup>

33 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 47.

34 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 57.

35 Department of Climate Change and Energy Efficiency (DCCEE), *Stationary energy emissions projections: 2012*, DCEE, Canberra, October 2012, p. 6, <http://www.climatechange.gov.au/sites/climatechange/files/files/climate-change/projections/aep-stationary-energy.pdf> (accessed 10 January 2014).

36 DCCEE, *Stationary energy emissions projections: 2012*, DCEE, Canberra, October 2012, p. 6.

Transport and agriculture each contribute around another 15%.<sup>37</sup> The remaining sources are fugitive emissions (7%)—mainly the methane and carbon dioxide which escapes in to the atmosphere when coal is mined and gas is extracted—along with pollution from industrial processes (5%) and decomposition of waste in landfills and elsewhere (2%).<sup>38</sup>

### **Climate Change Authority's assessment of Australia's targets**

2.22 The Climate Change Authority is required under existing legislation to conduct a review of Australia's greenhouse gas emissions reduction goals. As part of its targets and progress review, the Climate Change Authority released the draft report *Reducing Australia's greenhouse gas emissions* in October 2013. In the draft report the Climate Change Authority noted that 'the scale and pace of international action suggests that Australia should be pursuing a stronger target'.<sup>39</sup> The Climate Change Authority explained that:

Taken as a whole, the Government's own conditions for moving beyond 5 per cent appear to have been met. More broadly, a 5 per cent target would put Australia at the lower end of effort compared with other developed countries. This position sits uncomfortably with Australia's relative prosperity and high per person emissions.<sup>40</sup>

2.23 On 27 February 2014, the Climate Change Authority released its final report and recommendations on reducing Australia's greenhouse gas emissions.<sup>41</sup> The Authority found that the conditions for Australia moving beyond a 5% target have been met and that more ambitious action needs to be taken.<sup>42</sup> According to the Climate Change Authority, in light of the international community making a commitment to limit global warming below 2°C, Australia 'must also be prepared to do its part to meet the global goal'.<sup>43</sup>

2.24 The Climate Change Authority recommended that:

- Australia's minimum 2020 emissions reduction target be set at 15% below 2000 levels;

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37 DCEE, *Australia's emissions projections 2012*, DCEE, Canberra, 2012, p. 3, <http://www.climatechange.gov.au/sites/climatechange/files/files/climate-change/projections/aep-factsheet.pdf> (accessed 10 January 2014).

38 DCEE, *Australia's emissions projections 2012*, DCEE, Canberra, 2012, p. 3.

39 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 11.

40 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 11.

41 Climate Change Authority, *Reducing Australia's greenhouse gas emissions – Targets and progress review*, Final report, February 2014, <http://climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/files/Target-Progress-Review/Targets%20and%20Progress%20Review%20Final%20Report.pdf> (accessed 17 March 2014).

42 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 7.

43 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 7.

- Australia's carryover from the first commitment period of the Kyoto Protocol be used to raise the 2020 emissions reduction target by 4%, giving a 2020 target of 19%; and
- beyond 2020, Australia continue to reduce emissions within a trajectory range bounded by the paths to 40% and 60% below 2000 levels in 2030.<sup>44</sup>

2.25 The Climate Change Authority also adopted a budget approach to 'develop emissions reduction goals for the short, medium and long term'.<sup>45</sup> The Climate Change Authority noted that 'setting a budget for emissions through to 2050 highlights the trade-offs involved between actions taken now and those made necessary later'.<sup>46</sup> The Climate Change Authority argued, 'weaker action now imposes a greater emissions reduction task on future generations'.<sup>47</sup> The Climate Change Authority recommended that:

- Australia commit to a national carbon budget for the period 2013–2020 of 4,193 Mt CO<sub>2</sub>-e; and
- Australia commit to a national carbon budget form the period 2013–2050 of 10.1 Gt CO<sub>2</sub>-e.<sup>48</sup>

2.26 The Climate Change Authority outlined three key reasons for making its recommendations. First, a 5% target for 2020 was not seen to be 'a credible start by Australia towards achieving the below 2 degree goal'. The Climate Change Authority stated:

It would leave an improbably large task for future Australians to make a fair contribution to global efforts.

A target of 15 per cent (plus carryover) represents a more appropriate response to the latest science and a more manageable spread of efforts over the decades ahead.<sup>49</sup>

2.27 Secondly, the Climate Change Authority found that the scale and pace of global action suggests Australia should be moving beyond a 5% target.<sup>50</sup> The Climate Change Authority noted that the world's two largest emitters, China and the United States, are stepping up their efforts on climate change and both countries are investing heavily in renewable energy.<sup>51</sup> Australia's 5% target was viewed as being 'weaker than

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44 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 15.

45 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 9.

46 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 9.

47 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 9.

48 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 15.

49 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 10.

50 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 10.

51 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 10.

many comparable countries' such as the United States, the United Kingdom and Norway.<sup>52</sup>

2.28 Thirdly, the Climate Change Authority believed the costs of meeting the recommended target would be manageable.<sup>53</sup> Economic modelling based on the current legislation estimated that adopting a 2020 target of 15% plus the carryover would 'slow annual growth in average per person by income by 0.02 per cent, compared with meeting the 5% target'.<sup>54</sup> The Climate Change Authority argued that the current policy allows suitable flexibility and international linkages:

One reason why the incremental costs are so low is that the current legislation allows a mix of domestic and international reductions to achieve the target. Australia could meet the whole of the incremental emissions reduction task associated with moving from 5 per cent to the recommended target through the carryover and the use of additional emissions reductions.<sup>55</sup>

### **Assessment of Australia's international targets**

2.29 The current unconditional commitment to reduce greenhouse gas emissions by 5% of 2000 levels by 2020 is supported under the Clean Energy Package, which is currently in place, and the Direct Action Plan which is set to replace it.<sup>56</sup>

2.30 However, many submitters criticised this emissions reductions target as 'far too low'.<sup>57</sup> Given the compelling case for action on climate change, numerous submissions and witnesses expressed support for more ambitious emissions cuts.<sup>58</sup>

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52 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 11.

53 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 11.

54 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 11.

55 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 11.

56 Department of the Environment, *Emissions Reduction Fund Green Paper* (Green Paper), December 2013, p. 1, <http://www.environment.gov.au/topics/cleaner-environment/clean-air/emissions-reduction-fund/green-paper> (accessed 9 February 2014).

57 See, for example, Australian Conservation Foundation (ACF), *Submission 14*, p. 2; Conservation Council of South Australia, *Submission 44*, p. 4; Ms Tania Maxted, *Submission 43*, p. 4.

58 See, for example, Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, pp 1–2; Dr George Crisp, Doctors for the Environment Australia, *Committee Hansard*, 31 January 2014, p. 24; Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 27; Reverend Evan Pederick, Deputy Chair, Anglican EcoCare Commission, *Committee Hansard*, 31 January 2014, p. 60; Doctors for the Environment Australia, *Submission 13*, p. 6; 350 Australia, *Submission 33*, pp 1–2; Sustainable Energy Now, *Submission 34*, pp 1 and 6; Greenpeace Australia, *Submission 85*, p. 4; Friends of the Earth Australia, *Submission 66*, p. 3; Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 34; Ms Kellie Caught, National Manager, Climate Change, WWF-Australia, *Committee Hansard*, 5 February 2014, p. 59; GetUp Action for Australia, *Submission 47*, p. 4; Professor David Karoly, *Submission 72*, p. 2.

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Many suggested a reduction target similar to the Climate Change Authority's recommendation of at least 19% by 2020.<sup>59</sup>

2.31 Submitters also indicated that failure to commit to robust emissions reduction targets would damage Australia's international standing in relation to climate action and limit its influence on other nations to undertake global action.

### ***Weak targets***

2.32 It was argued that Australia's unconditional 5% emissions reduction target relative to 2000 levels was inadequate.<sup>60</sup> WWF-Australia noted that scientific studies have shown that Australia's minimum target 'cannot be considered a credible contribution from Australia towards the global goal of limiting global warming to 2°C'.<sup>61</sup>

2.33 ClimateWorks Australia argued that 'it is likely that, before 2020, the Government's own criteria for increasing our national target to 15% reductions will be met'.<sup>62</sup>

2.34 GetUp! believed that Australia's existing targets 'are insufficient and out-of-line with the pollution cuts that the authoritative science tells us are required if Australia is to play an equitable role in global pollution cuts required to ensure a safe climate future'.<sup>63</sup> GetUp! submitted that of its membership base of 650 000, approximately 97.5% would like to see Australia have a more ambitious target.

2.35 It was also argued that Australia's history as an industrialised polluter and current high per capita emissions means that a stronger national carbon reduction target should be set. For example, Friends of the Earth urged that Australia do more to make up for past emissions:

It is imperative that the wealthy nations, with long histories of high per capita emissions and those whose economy has benefitted from prolonged use of fossil fuels, demonstrate leadership in terms of reducing emissions. In spite of our relatively small gross contribution to global emissions, leadership by Australia is essential in terms of other (developing) nations being prepared to commit to reducing their emissions through international agreements. The demand that the "Rich go first" has long been a narrative

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59 Doctors for the Environment Australia, *Submission 13*, p. 6; Ms Anna Skarbek, Executive Director, ClimateWorks Australia, *Committee Hansard*, 5 February 2014, p. 25; Ms Kellie Caught, National Manager, Climate Change, WWF-Australia, *Committee Hansard*, 5 February 2014, p. 59; Climate Action Network Australia, *Submission 73*, p. 2.

60 See, for example, ClimateWorks Australia, *Submission 14*, p. 6; GetUp!, *Submission 47*, p. 4; and WWF-Australia, *Submission 67*, p. 9.

61 WWF-Australia, *Submission 67*, p. 9.

62 ClimateWorks Australia, *Submission 14*, p. 6.

63 GetUp!, *Submission 47*, p. 4.

in the international climate negotiations. Accordingly, our climate change policies must commit us to deep emission reduction targets.<sup>64</sup>

2.36 350 Australia, an organisation dedicated to reducing CO<sub>2</sub> emissions in the atmosphere to below 350ppm, likewise stated that the 5% target for emissions reductions is 'set far too low' and declared that:

Australia is currently an irresponsible laggard in global climate change efforts and is increasingly becoming an international embarrassment and obstruction. Our historical emissions mean that we are more responsible for climate change than 94% of all the countries in the world and our per-capita CO<sub>2</sub> emissions are still enormous.<sup>65</sup>

2.37 The Australian Religious Response to Climate Change (ARRCC), a multi-faith network concerned about climate change, reasoned that 'Australia has contributed disproportionately to the global problem of carbon pollution' and, as one of the world's most economically prosperous countries and a world leader in relevant technologies, 'has a moral responsibility to make a more robust contribution to the solution'.<sup>66</sup>

### ***Recommended targets***

2.38 Submitters recommended that Australia should adopt a more rigorous target to reduce carbon emissions.<sup>67</sup> Support was given to the work and recommendations undertaken by the Climate Change Authority in the area of emissions targets.<sup>68</sup>

2.39 ClimateWorks Australia argued that 'the least cost approach is to aim for a 25 per cent target for 2020', and that 'the less you achieve this decade means the more you have left for a later decade', which would involve higher costs and more disruption 'because of investments that might be locked in this decade'.<sup>69</sup>

2.40 WWF-Australia, using recent modelling data, suggested that Australia should increase its targets to 25% of 2000 levels by 2020 to better share the burden of reducing carbon emissions.<sup>70</sup> WWF-Australia stated:

Recent analysis by European consultants, Ecofys, and the Climate Change Authority shows that if Australia's response is to be credible, Australia

64 Friends of the Earth, *Submission 66*, p. 2.

65 350 Australia, *Submission 33*, p. 5.

66 Australian Religious Response to Climate Change (ARRCC), *Submission 21*, p. 1.

67 See, for example, ClimateWorks Australia, *Submission 24*, pp 1–2; WWF-Australia, *Submission 67*, p. 2; ACF, *Submission 14*, p. 1; and Greenbank Environmental, *Submission 63*, p. 3.

68 See, for example, Wentworth Group of Concerned Scientists, *Submission 95*, p. 3; ACF, *Submission 14*, pp 6–7, Climate Action Network Australia, *Submission 73*, p. 3; Sunshine Coast Environment Council, *Submission 78*, p. 2.

69 Ms Anna Skarbek, Executive Director, ClimateWorks Australia, *Committee Hansard*, 5 February 2014, pp 25 and 28; see also ClimateWorks Australia, *Submission 24*, pp 1–2.

70 WWF-Australia, *Submission 67*, p. 2.

should increase its unconditional 5 per cent emission reduction target and commit to a target of at least 25 per cent off 2000 levels by 2020. A shift to 25 per cent is consistent with many of our trading partners. For example, China's 2020 target is consistent with the conditions for Australia moving to its 25 per cent target and the US 2020 target is equivalent to Australia taking a 21 per cent target for 2020.<sup>71</sup>

2.41 The Climate Action Network Australia (CANA) urged Australia to increase its target to 25% by 2020 'to encourage action by other countries'.<sup>72</sup> Such a target, according to CANA, would ensure Australia contributes to its fair share of global reductions and ensure transformation of the entire economy.<sup>73</sup>

2.42 Others proposed even more ambitious targets, such as a reduction of 40% by 2020.<sup>74</sup> The Australian Youth Climate Coalition (AYCC) suggested this target 'is both achievable and in line with our fair share of the global carbon budget'.<sup>75</sup>

2.43 Many submissions also indicated that targets are needed beyond 2020, and some of these suggested that an overall target of zero emissions by 2050 should be the aim.<sup>76</sup> For example, 350 Australia submitted that:

Targets closer to 30-40% reductions in total climate pollutants emitted in Australia based on pre-2000 levels by 2020 are required in order to transition the nation to the low-carbon economy required. By 2030 this target would need to be raised to 50-60% reduction in emissions, and to 100% by 2050 in order to reach a zero emission economy in time if we are to have any chance of preventing catastrophic and irreversible Climate Change.<sup>77</sup>

2.44 The Australian Conservation Foundation (ACF) similarly recommended that Australia aim for pollution reduction targets of 40% below 1990 levels by 2020, 60% by 2030, with net zero pollution achieved by 2050.<sup>78</sup>

### **Carbon budgets**

2.45 Submitters also expressed support for Australia adopting a carbon budget approach to climate action.<sup>79</sup> A carbon budget would establish the amount of

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71 WWF-Australia, *Submission 67*, p. 2.

72 CANA, *Submission 73*, p. 3.

73 CANA, *Submission 73*, p. 3.

74 ACF, *Submission 14*, p. 1; Anglican EcoCare Commission, *Submission 40*, pp 2 and 4; ARRCC, *Submission 21*, p. 5; Alliance for Future Health, *Submission 26*, p. 1; Australian Youth Climate Coalition (AYCC), *Submission 32*, p. 3; Oxfam Australia, *Submission 31*, p. 5.

75 AYCC, *Submission 32*, p. 3.

76 ClimateWorks Australia, *Submission 24*, pp 1–2; see also GetUp Action for Australia, *Submission 47*, p. 7.

77 350 Australia, *Submission 33*, p. 7.

78 ACF, *Submission 14*, p. 1.

greenhouse gas emission Australia could emit over a specified period of time. Such an approach was seen to be a logical and equitable way for Australia to reduce its fair share of global carbon emissions.<sup>80</sup>

2.46 Using a carbon budget approach to emissions reductions, the Wentworth Group of Concerned Scientists observed that if global warming is to be limited to less than a 2°C rise in temperature, the global emissions budget is being quickly consumed:

For the world to have a 67 per cent chance of reaching this target and thus avoiding dangerous climate change, the global carbon budget is 1,700,000 million tonnes of carbon dioxide equivalent (Mt CO<sub>2</sub>-e) between 2000 and 2050. Approximately 35 per cent of this budget has already been used between 2000 and 2012.<sup>81</sup>

2.47 Noting the evidence and targets set by the Climate Change Authority, the Wentworth Group declared that 'Australia's contribution to such a target would require a reduction of well in excess of 80 per cent by 2050'.<sup>82</sup>

2.48 The Climate Institute were also supportive of establishing an Australia carbon budget:

Carbon budgets are an important concept in climate policy. The magnitude of climate change is not determined by emissions in any given year, but the cumulative total level of emissions released over time.

The word "budget" is used deliberately. If we save less now we have to save more later and vice versa. The longer you delay action the more you pay to catch up.

...

The principal strength of setting a long-term carbon budget to 2050 for Australia is that it provides a transparent and direct link to a desired climate outcome such as avoiding a 2°C increase in global temperature.<sup>83</sup>

2.49 In analysing a carbon budget for Australia, WWF-Australia found that Australia's 'fair share' of the global carbon budget is 18 billion tonnes.<sup>84</sup> WWF-Australia further observed that of this budget, Australia has already used between 66% and 84%, depending on the effort sharing approach applied.<sup>85</sup>

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79 See, for example, The Climate Institute, *Submission 2*, p. 2; WWF-Australia, *Submission 67*, p. 8; and Wentworth Group of Concerned Scientists, *Submission 95*, p. 3.

80 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 15.

81 Wentworth Group of Concerned Scientists, *Submission 95*, p. 3.

82 Wentworth Group of Concerned Scientists, *Submission 95*, p. 3.

83 The Climate Institute, *Submission 2*, p. 2.

84 WWF-Australia, *Submission 67*, p. 8.

85 WWF-Australia, *Submission 67*, p. 8.

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### ***A greater contribution to international action***

2.50 In light of comprehensive international action of carbon emissions, it was argued that Australia must do more to contribute to the global effort. For example, the ACF argued that Australia is falling behind international targets:

A very recent example of a very large economic bloc that has made significantly more ambitious commitments than Australia's is the EU. Just last week they announced a 2030 target of 40 per cent emissions reduction with the potential to scale it up to 55 per cent based on international action. I think that that places Australia's commitments in a fairly harsh light.<sup>86</sup>

2.51 The Australian Council of Trade Unions (ACTU) noted that 'Australia's top 5 trading partners (China, Japan, the United States, South Korea and Singapore) and another 8 of our top 20 trading partners (New Zealand, the United Kingdom, Germany, Italy, France, Netherlands, Switzerland and Canada) have implemented or a piloting carbon trading or taxation schemes at varying levels of their economy'.<sup>87</sup>

2.52 CANA similarly stated that Australia's 'most important trading partners will expect Australia to do our fair share of a successful effort to tackle climate change'.<sup>88</sup>

2.53 It was also noted by Professor Ray Wills that China, the world's largest emitter is undertaking significant action to stem its carbon pollution.<sup>89</sup> Professor Wills observed:

China is huge, and whenever you talk about figures for China they are enormous, but they are turning on a dime. Citigroup, a very respected global financial forecasting group, have indicated that China will have a peak in its coal use in 2015. From that point forward China will reduce its coal use. The projections we have from the International Energy Agency and other agencies that suggest that coal growth in China will continue on past 2020 are nonsense. You see that they are nonsense when you look at the technology adoption rates that are going on. China adds about 80 gigawatts of energy generation capacity each year. To put that into perspective, Australia's total energy generation capacity is about 60 gigawatts. But last year, 30 gigawatts of the 80 gigawatts China added, was in renewables. For the first time, the growth in energy generation from renewables is exceeding the growth in energy generation from coal.<sup>90</sup>

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86 Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 34.

87 Australian Council of Trade Unions (ACTU), *Submission 30*, p. 3.

88 CANA, *Submission 73*, p. 2.

89 Professor Ray Wills, *Committee Hansard*, 31 January 2014, p. 46.

90 Professor Ray Wills, *Committee Hansard*, 31 January 2014, p. 46.

2.54 It was also argued that failure on Australia's behalf to implement a genuine and responsible emissions reduction target would impact on our ability to influence the future design of international agreements that address climate change.<sup>91</sup>

2.55 Professor Frank Jotzo informed the committee that as a developed economy, Australia should set an example for other countries to follow on address climate change. Professor Jotzo stated:

In terms of the signalling effect that it has for the broader decarbonisation objective...the sense is that Australia needs to pull its weight in the global effort. There is great visibility on what Australia does, because we are one of a relatively small number of identifiable, developed, rich countries and of course we are seen as one of the highest per-capita emitters in the world as well. Observers in other countries are keenly aware of our position as a fossil fuel exporter, and so the previous policy, with a country with a very large coal base taking the road of economically sensible and reasonably ambitious climate change policy action, was generally regarded as a very positive signal. We are at risk of losing this positive international signalling altogether, and we as a nation are at risk of being perceived to be sitting on the brake as far as global climate change action goes.<sup>92</sup>

2.56 The ACF further stated that Australia is at risk of being left out of influential international negotiations which form the basis of future international action:

...Australia is currently engaging the international community on these issues. There are frequent talks internationally. Ban Ki-moon has spent a great deal of his personal capital pulling together leaders at a summit at the end of this year. There will be another meeting towards the end of this year, in which international leaders will attempt to lay the foundations for an agreement in 2015. The way in which Australia is acting at the moment means that we simply cannot constructively contribute to that process. We have set an inflexible target, five per cent, which is too low. It undercuts commitments we have made internationally. We are very concerned that the position that the Australian government has taken actually undermines the ability of Australia to contribute to those processes and in fact may actively undermine negotiations internationally.<sup>93</sup>

2.57 ClimateWorks Australia argued that 'Australia has an important role in international negotiations on emissions reductions'.<sup>94</sup> It warned policy makers that

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91 See, for example, Professor Frank Jotzo, *Committee Hansard*, 28 February 2014, p. 34 and Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 36.

92 Professor Frank Jotzo, *Committee Hansard*, 28 February 2014, p. 34.

93 Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 36.

94 ClimateWorks Australia, *Submission 24*, p. 3.

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retreating from robust action on climate change will impact on Australia's reputation and ability to influence other nations regarding future emission reduction goals.<sup>95</sup>

2.58 Oxfam likewise advised that Australia has a significant role to play in designing international agreements as a middle power:

In addition to being a significant source of emissions in our own right, Australia is an important 'middle power' that enjoys close relationships with many of the world's largest economies, and a major action in the Pacific region. Australia has the ability to be a positive force in international negotiations, and equally the potential to become an unwelcome drag on progress towards a fair and effective outcome, thereby jeopardizing our own national interest.<sup>96</sup>

### **Committee comment**

2.59 There is overwhelming evidence indicating that the world must act now, and act urgently, to address the catastrophic consequences of climate change. A global average temperature rise beyond 2°C will have calamitous effects for the world. Alarming, Australia is acutely vulnerable to climatic changes. As so many reports have indicated, extreme weather events will become more frequent and severe. Australia will have more intense warmer periods and fewer cold periods. Winter rain in southern Australia will decrease and drought will be more common. Climate change poses a real and significant threat to all aspects of Australian life: the health of Australians; the Australian environment; and the Australian economy.

2.60 The international community is moving towards reducing carbon emissions. The United States and China, the world's two largest emitters, are taking action to reduce their carbon pollution. Australia's top trading partners including New Zealand, the United Kingdom, Germany, Italy, France, South Korea and South Africa are all taking robust action to address climate change and capitalising on the emergent clean energy sector.

2.61 Australia has a responsibility as the world's highest per capita emitter to contribute its fair share of the global effort. The committee agrees with the evidence provided by academics, climate experts, the independent Climate Change Authority, environmental organisations and industry that Australia must substantially reduce its carbon emissions. Failure by Australia to undertake meaningful action will reduce our ability to influence other countries to take action. Furthermore, any recalcitrance on Australia's behalf to meaningfully engage with the international community to reduce emissions will limit our ability to have input into any future international agreements.

2.62 The Climate Change Authority, an independent, expert advisory body, has conducted a thorough review of Australia's level of commitment to address climate change. The committee agrees with the Climate Change Authority's assessment that Australia's 5% target is inadequate and a stronger emissions reduction target is necessary. The committee recommends that the Australian Government immediately

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95 ClimateWorks Australia, *Submission 24*, p. 3.

96 Oxfam Australia, *Submission 31*, p. 6.

adopt the new targets set out by the Climate Change Authority that Australia reduces its carbon emissions by 19% below 2000 levels by 2020, comprising an emissions reduction target of 15% and 4% carryover from the first commitment period of the Kyoto Protocol.

### **Recommendation 1**

**2.63 The committee recommends that the Australian Government immediately adopt the emissions reduction targets outlined by the Climate Change Authority in its final report released on 27 February 2014. Namely that Australia's 2020 minimum emissions reduction target be set at 15% below 2000 levels and that Australia's carryover from the first commitment period of the Kyoto Protocol be used to raise the 2020 emissions reduction target by 4%, giving a total 2020 target of 19%.**

2.64 The committee acknowledges the Climate Change Authority's further recommendation that Australia adopt a carbon budget for short, medium and long-term planning. A carbon budget will help communicate to policy makers, industry and the public that early action on abating carbon emissions will be cheaper and more effective than delayed action. The longer Australia delays responsible action on climate change the more it will cost in the future. The committee recommends that the Australian Government immediately adopt the carbon budgets outlined by the Climate Change Authority.

### **Recommendation 2**

**2.65 The committee recommends that the Australian Government immediately adopt the carbon budgets outlined by the Climate Change Authority in its final report released on 27 February 2014. Namely that Australia set a national carbon budget for the period 2013–2020 of 4,193 Mt CO<sub>2</sub>-e and a carbon budget for the period of 2013–2050 of 101.1 Gt CO<sub>2</sub>-e.**

2.66 The committee also welcomes the Climate Change Authority's recommendation for long term emissions reductions. The challenge of climate change is not a short-term problem. Australia needs to commit to a long term strategy to reduce carbon emissions that will give businesses certainty and move the economy towards clean energy. The committee recommends that the Australian Government immediately adopt the Climate Change Authority's findings for longer term planning to reduce carbon emissions and set an emissions reduction target within a trajectory range bounded by the paths of 40% to 60% below 2000 levels in 2030.

### **Recommendation 3**

**2.67 The committee recommends that the Australian Government immediately adopt the longer term targets outlined by the Climate Change Authority in its final report released on 27 February 2014. Namely, that beyond 2020 Australia continues to reduce emissions within a trajectory range bounded by the paths to 40% and 60% below 2000 levels in 2030.**

## Chapter 3

# The Clean Energy Package and the impact of its proposed repeal

### Policy background

3.1 On 27 September 2010, Prime Minister the Hon Julia Gillard announced that a Multi-Party Climate Change Committee (MPCC) would be established to explore options for implementing a carbon price and to build consensus on how Australia will tackle the challenge of climate change.<sup>1</sup>

3.2 The MPCC was chaired by the Prime Minister and was comprised of members of the Australian Labor Party, the Australian Greens and independent members of the House of Representatives, Mr Tony Windsor and Mr Rob Oakeshott. The committee was assisted by a panel of expert advisers including Ms Patricia Faulkner AO, Professor Ross Garnaut AO, Mr Rod Sims and Professor Will Steffen.<sup>2</sup>

3.3 On 10 July 2011, the MPCC released the *Clean Energy Agreement* (the Agreement) to reduce carbon pollution.<sup>3</sup> In the Agreement the MPCC recognised that 'cuts in global pollution are necessary to reduce the risks posed by unmitigated climate change'.<sup>4</sup> It noted that for Australia, 'these risks are large, threatening our economy, our natural heritage (including icons such as the World Heritage listed Great Barrier Reef), food security, and our way of life'.<sup>5</sup>

3.4 The Agreement recommended that a broad based carbon price be introduced into Australia commencing from 1 July 2012 with a fixed price before transitioning to

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1 Department of Environment, *Feature: Multi-Party Climate Change Committee*, <http://www.climatechange.gov.au/about-us/annual-reports/annual-report-2010-11/feature-multi-party-climate-change-committee> (accessed 24 February 2014).

2 Department of Environment, *Feature: Multi-Party Climate Change Committee*, <http://www.climatechange.gov.au/about-us/annual-reports/annual-report-2010-11/feature-multi-party-climate-change-committee> (accessed 24 February 2014).

3 Multi-Party Climate Change Committee (MPCC), *Multi-Party Climate Change Committee*, p. 1, [http://www.climatechange.gov.au/sites/climatechange/files/documents/04\\_2013/MPCCC\\_Clean-energy\\_agreement-20110710-PDF.pdf](http://www.climatechange.gov.au/sites/climatechange/files/documents/04_2013/MPCCC_Clean-energy_agreement-20110710-PDF.pdf) (accessed 21 November 2013).

4 MPCC, *Multi-Party Climate Change Committee*, p. 1, [http://www.climatechange.gov.au/sites/climatechange/files/documents/04\\_2013/MPCCC\\_Clean-energy\\_agreement-20110710-PDF.pdf](http://www.climatechange.gov.au/sites/climatechange/files/documents/04_2013/MPCCC_Clean-energy_agreement-20110710-PDF.pdf) (accessed 21 November 2013).

5 MPCC, *Multi-Party Climate Change Committee*, p. 1, [http://www.climatechange.gov.au/sites/climatechange/files/documents/04\\_2013/MPCCC\\_Clean-energy\\_agreement-20110710-PDF.pdf](http://www.climatechange.gov.au/sites/climatechange/files/documents/04_2013/MPCCC_Clean-energy_agreement-20110710-PDF.pdf) (accessed 21 November 2013).

a fully flexible cap-and-trade carbon pricing mechanism on 1 July 2015.<sup>6</sup> It also recommended, amongst other things, the provision of industry and household assistance to reduce energy costs and the creation of new independent bodies to provide advice to government and to administer the carbon price.<sup>7</sup>

3.5 On 24 February 2011, the Prime Minister announced that the Government intended to implement the MPCC's recommendations and create a carbon price mechanism to commence on 1 July 2012.<sup>8</sup> On 10 July 2011, the Government released the policy document *Securing a clean energy future: The Australian government's climate change plan* that detailed its plans for a price on carbon.<sup>9</sup> The Clean Energy Futures Plan aimed to cut 159 million tonnes a year of carbon pollution from the atmosphere by 2020.<sup>10</sup>

3.6 A legislative package of 18 bills (the Clean Energy Package) to implement the Government's plan was introduced into the Parliament on 13 September 2011 and passed on 8 November 2011.<sup>11</sup>

### Clean Energy Package

3.7 The Labor Government's Clean Energy Package implemented a number of initiatives to cut carbon pollution by 2020. The initiatives included:

- introducing a carbon pricing mechanism;<sup>12</sup>

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6 MPCC, *Clean Energy Agreement*, July 2011, p. 1, [http://www.climatechange.gov.au/sites/climatechange/files/documents/04\\_2013/MPCCC\\_Clean-energy\\_agreement-20110710-PDF.pdf](http://www.climatechange.gov.au/sites/climatechange/files/documents/04_2013/MPCCC_Clean-energy_agreement-20110710-PDF.pdf) (accessed 25 November 2013).

7 MPCC, *Clean Energy Agreement*, July 2011, [http://www.climatechange.gov.au/sites/climatechange/files/documents/04\\_2013/MPCCC\\_Clean-energy\\_agreement-20110710-PDF.pdf](http://www.climatechange.gov.au/sites/climatechange/files/documents/04_2013/MPCCC_Clean-energy_agreement-20110710-PDF.pdf) (accessed 21 November 2013).

8 The Hon Julia Gillard, Prime Minister, 'Climate change framework announced', *Media release*, 24 February 2011, [http://parlinfo.aph.gov.au/parlInfo/download/media/pressrel/577310/upload\\_binary/577310.pdf;fileType=application/pdf#search=%22clean%20energy%20future%20%202011%2002%2024%22](http://parlinfo.aph.gov.au/parlInfo/download/media/pressrel/577310/upload_binary/577310.pdf;fileType=application/pdf#search=%22clean%20energy%20future%20%202011%2002%2024%22) (accessed 21 November 2013).

9 The Hon Julia Gillard, Prime Minister, 'Securing a clean energy future for Australia', *Media release*, 10 July 2011, [http://parlinfo.aph.gov.au/parlInfo/download/media/pressrel/915157/upload\\_binary/915157.pdf;fileType=application/pdf#search=%22clean%20energy%20%202011%2007%2010%20prime%20minister%22](http://parlinfo.aph.gov.au/parlInfo/download/media/pressrel/915157/upload_binary/915157.pdf;fileType=application/pdf#search=%22clean%20energy%20%202011%2007%2010%20prime%20minister%22) (accessed 21 November 2013).

10 The Hon Julia Gillard, Prime Minister, 'Securing a clean energy future for Australia', *Media release*, 10 July 2011.

11 *Votes and Proceedings of the House of Representatives*, No. 65, 13 September 2011, pp 875–878; *Journals of the Senate*, No. 65, 8 November 2011, p. 1793.

12 The terms 'carbon pricing mechanism' and 'carbon tax' are often used interchangeably. This report uses the terminology 'carbon pricing mechanism'. For an analysis of the two terms see Parliamentary Library, 'Clean Energy Legislation (Carbon Tax Repeal) Bill 2013 [and] True-Up Shortfall Levy (General) (Carbon Tax Repeal) Bill 2013 [and] True-up Shortfall Levy (Excise) (Carbon Tax Repeal) Bill 2013', *Bills Digest*, No. 16, 2013–14, 29 November 2013, pp 18–22.

- setting a legislated cap on carbon emissions;
- establishing industry assistance to help emissions-intensive trade-exposed industries;
- providing household assistance to help with forecast increased living costs;
- creating the Carbon Farming Initiative (CFI); and
- establishing a number of bodies to advise government and administer the carbon pricing mechanism.<sup>13</sup>

### **Carbon pricing mechanism**

3.8 The *Clean Energy Act 2011* (Cth) establishes a carbon pricing mechanism that places a price tag on carbon pollution and creates a cap on carbon pollution.

3.9 Any facility that emits above an annual threshold of greenhouse gas emissions is liable to pay for each tonne of carbon pollution it emits above the threshold.<sup>14</sup> The current threshold is 25 000 tonnes of CO<sub>2</sub> equivalent emissions per year.<sup>15</sup> At the end of each year, the entity will surrender the number of carbon units which represents its total emissions to the Clean Energy Regulator or pay a charge. Liable entities can either buy units or acquire them through industry assistance measures.<sup>16</sup> Emitters may also purchase credits through the CFI, a framework within which farmers and landholders can undertake, monitor, and receive financial benefits for greenhouse gas emissions projects.<sup>17</sup>

3.10 The carbon pricing mechanism commenced on 1 July 2012 with a fixed price on carbon of \$23 per tonne.<sup>18</sup> On 1 July 2015, the carbon price is to transition to a fully flexible price under an emissions trading scheme (ETS) with the price determined by the market. Annual caps will be placed on emissions covered by the carbon pricing mechanism.

3.11 Linking to credible international carbon markets and emissions trading schemes will be allowed from the commencement of the flexible price period.<sup>19</sup> At

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13 Australian Government, Clean Energy Futures, *An overview of the Clean Energy Legislative Package*, p. 2, [http://pandora.nla.gov.au/pan/127961/20130809-0002/www.cleanenergyfuture.gov.au/wp-content/uploads/2012/05/CEF-overview\\_Apr2012.pdf](http://pandora.nla.gov.au/pan/127961/20130809-0002/www.cleanenergyfuture.gov.au/wp-content/uploads/2012/05/CEF-overview_Apr2012.pdf) (accessed 22 November 2013).

14 *Clean Energy Act 2011*, ss. 22(4).

15 Clean Energy Regulator, *Who is liable?*, <http://www.cleanenergyregulator.gov.au/Carbon-Pricing-Mechanism/Liable-entities/Pages/default.aspx> (accessed 11 March 2014).

16 Australian Government, Clean Energy Futures, *An overview of the Clean Energy Legislative Package*, p. 2.

17 Anita Talberg and Kai Swoboda, *Emissions trading schemes around the world*, Background Note, 6 June 2013, Parliamentary Library, Canberra, p. 11, [http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/2501441/upload\\_binary/2501441.pdf;fileType=application/pdf](http://parlinfo.aph.gov.au/parlInfo/download/library/prspub/2501441/upload_binary/2501441.pdf;fileType=application/pdf) (accessed 22 November 2013).

18 *Clean Energy Act 2011*, s. 4.

19 Clean Energy Bill 2011, *Revised Explanatory Memorandum*, p. 12.

least half of a liable entity's compliance obligation must be met through the use of domestic units or credits.

3.12 The carbon price is applicable to a number of industry sectors, including the stationary energy sector, industrial processing sector, non-legacy waste sector and fugitive emissions sector.<sup>20</sup> Landfill facilities with direct emissions of 25 000 tonnes of CO<sub>2</sub> emissions a year or more are also liable under the carbon price mechanism.

3.13 The carbon price does not apply to household transport fuels, light vehicle business transport and off-road fuel use by the agriculture, forestry and fishing industries.<sup>21</sup>

3.14 The Liable Entities Public Information Database (LEPID) maintained by the Clean Energy Regulator indicates that there are 348 entities that may be liable to the carbon tax in the 2012–13 financial year.<sup>22</sup>

### **Industry assistance**

3.15 The legislation created a range of targeted industry, and sector-specific, assistance programs as well as general assistance programs available to most businesses that are subject to the carbon pricing mechanism.<sup>23</sup> These assistance measures take a number of forms, including tax incentives, free and discounted emissions permits, matched grants programs and information and advisory services.

### ***Jobs and Competitiveness Program***

3.16 The Jobs and Competitiveness Program provides \$9.2 billion over the period 2012–13 to 2014–15 in the form of free carbon permit allocations for companies primarily in emissions-intensive trade-exposed industries, such as steel, aluminium, glass and chemicals manufacturing.<sup>24</sup> Eligibility for the assistance is based on industry thresholds of trade exposure and emissions intensity.

3.17 The value of the permits available under the program was proposed to decline by 1.3% per year. The Productivity Commission is scheduled to undertake a review of the program in 2014–15.

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20 Australian Government, Clean Energy Futures, *An overview of the Clean Energy Legislative Package*, p. 2.

21 Australian Government, Clean Energy Futures, *An overview of the Clean Energy Legislative Package*, p. 2.

22 Clean Energy Regulator, *LEPID for 2012–13 financial year*, <http://www.cleanenergyregulator.gov.au/Carbon-Pricing-Mechanism/Liable-Entities-Public-Information-Database/LEPID-for-2012-13-Financial-year/Pages/default.aspx> (accessed 25 November 2013).

23 Kai Swoboda, Julie Tomaras and Alan Payne, *Clean Energy Bill 2011*, Bills Digest No. 68, 2011–12, Parliamentary Library, Canberra, p. 27, [http://parlinfo.aph.gov.au/parlInfo/download/legislation/billsdgs/1185490/upload\\_binary/1185490.pdf;fileType=application%2Fpdf](http://parlinfo.aph.gov.au/parlInfo/download/legislation/billsdgs/1185490/upload_binary/1185490.pdf;fileType=application%2Fpdf) (accessed 22 November 2013).

24 Kai Swoboda, Julie Tomaras and Alan Payne, *Clean Energy Bill 2011*, Bills Digest No. 68, 2011–12, Parliamentary Library, Canberra, p. 28.

3.18 The Jobs and Competitiveness Program specifically excludes the extraction of coal as an emissions-intensive trade-exposed activity.

### ***Energy Security Fund***

3.19 The Energy Security Fund, which provides \$3 billion over the period to the 2014–15 financial year, provides for the allocation of cash and/or free permits to pay for the closure of inefficient coal-fired generators.<sup>25</sup> The Fund also issues free carbon permits to electricity generators if they meet the requirement of a power system reliability test and submit a Clean Energy Investment Plan to the Government for publication.

### ***Other assistance programs***

3.20 The Clean Technology Program provides \$1.2 billion over seven years from 2011–12 to provide support to the manufacturing industry.<sup>26</sup> The Program supports improvements in energy efficiency and research and development in low pollution technologies.

3.21 The Steel Transformation Plan provides \$300 million over five years to encourage investment in the Australian steel manufacturing industry.<sup>27</sup>

3.22 The Coal Sector Jobs Package makes available \$1.3 billion over six years for certain coal mines to implement carbon abatement technologies.<sup>28</sup>

### **Household assistance**

3.23 To assist households with the introduction of the carbon price, the Clean Energy Package provides compensation through a mix of changes to income tax arrangements, one-off direct payments to eligible households and increases in pensions and allowances.

### **Carbon Farming Initiative**

3.24 The CFI is a voluntary carbon offset scheme established with the purpose of creating incentives for carbon abatement or avoidance projects in land-use sectors.<sup>29</sup> The CFI allows approved carbon reduction projects to generate carbon units called Australian Carbon Credits Units (ACCU). These units can be sold to liable parties

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25 Australian Government, Clean Energy Futures, *An overview of the Clean Energy Legislative Package*, p. 2.

26 Australian Government, Clean Energy Futures, *An overview of the Clean Energy Legislative Package*, p. 2.

27 Australian Government, Clean Energy Futures, *An overview of the Clean Energy Legislative Package*, p. 2.

28 Kai Swoboda, Julie Tomaras and Alan Payne, *Clean Energy Bill 2011*, Bills Digest No. 68, 2011–12, Parliamentary Library, Canberra, p. 28.

29 Anita Talberg, John Gardiner-Garden and Julie Tomaras, *Carbon Credits (Carbon Farming Initiative) Bill 2011*, Bills Digest No. 5, 2011–12, Parliamentary Library, Canberra, p. 4.

under the carbon pricing mechanism, or to individuals and organisations wishing to voluntarily offset their emissions.<sup>30</sup>

3.25 The scheme is targeted at farmers and landholders who can undertake eligible offset projects.<sup>31</sup> Sectors eligible for the CFI are not covered by the carbon pricing mechanism and include agriculture, forestry and landfills.

3.26 Offset projects are defined as either sequestration offsets or an emissions avoidance offset project. For offsets to be deemed genuine and credible, the abatement projects must be defined by certain rules that ensure scientific and administrative integrity. The Domestic Offset Integrity Committee is an independent expert group tasked with assessing methodologies. Approved methodologies are set in regulations by the Minister.<sup>32</sup>

3.27 For a project to deliver genuine carbon abatement, it must result in a reduction in atmospheric greenhouse gas that is additional to what would have occurred in the absence of the project. This is known as additionality. For the credibility of ACCUs, a sequestration project must be permanent, meaning it must be maintained on a net basis for around 100 years.<sup>33</sup> This is known as permanence.

3.28 Activities that have earned ACCUs under the CFI include:

- reduction of emissions from the waste sector;
- management of savannah burning in the Northern Territory; and
- capture of methane generated from manure at a piggery.<sup>34</sup>

3.29 Projects have differing ACCU crediting periods based on the relevant science and depending on the project type.<sup>35</sup> For most agricultural projects, the ACCUs generated are issued immediately after a reporting period as a lump sum. For native forest projects, the ACCUs generated are issued over a longer period (usually 20 years). All sequestration projects have a small percentage of ACCUs deducted from their total to insure against temporary carbon losses caused by natural or human-

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30 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 72.

31 Anita Talberg, John Gardiner-Garden and Julie Tomaras, *Carbon Credits (Carbon Farming Initiative) Bill 2011*, Bills Digest No. 5, 2011–12, Parliamentary Library, Canberra, p. 9.

32 Department of the Environment, *Domestic Offset Integrity Committee*, <http://www.climatechange.gov.au/reducing-carbon/carbon-farming-initiative/domestic-offsets-integrity-committee> (accessed 12 March 2014).

33 Anita Talberg, John Gardiner-Garden and Julie Tomaras, *Carbon Credits (Carbon Farming Initiative) Bill 2011*, Bills Digest No. 5, 2011–12, Parliamentary Library, Canberra, p. 10.

34 Department of the Environment, *Methodology determinations*, <http://www.climatechange.gov.au/reducing-carbon/carbon-farming-initiative/methodologies/methodology-determinations> (accessed 25 March 2014).

35 Anita Talberg, John Gardiner-Garden and Julie Tomaras, *Carbon Credits (Carbon Farming Initiative) Bill 2011*, Bills Digest No. 5, 2011–12, Parliamentary Library, Canberra, p. 10.

induced events.<sup>36</sup> ACCU records are held in the Australian National Registry of Emissions Units.<sup>37</sup>

## Governance

3.30 As part of the Clean Energy Package two new Commonwealth agencies were created to advise on, and regulate, the operation of the carbon price mechanism. The Clean Energy Finance Corporation (CEFC) was also established to assist in the development of renewable and low-emissions technology and infrastructure.

### *Climate Change Authority*

3.31 The Climate Change Authority is an independent statutory agency established by the *Climate Change Authority Act 2011* (Cth). Its function is to provide expert advice on Australian climate change policy, including through a scheduled series of reviews of climate programs and legislation.<sup>38</sup> The Climate Change Authority is responsible for:

- providing recommendations to the Government on future pollution caps;
- making recommendations on the indicative national trajectories and long-term emissions budgets;
- providing independent advice to the Government on the progress that is being made to reduce Australia's emissions to meet national targets;
- conducting regular reviews on the carbon pricing mechanism; and
- conducting reviews of and making recommendations on the National Greenhouse and Energy Reporting System (NGERS), the Renewable Energy Target (RET) and the CFI.<sup>39</sup>

3.32 In the 2012–13 financial year the Climate Change Authority had a budget of \$6.3 million and a staff of 32 employees.<sup>40</sup>

3.33 As part of its Targets and Progress Review, the Climate Change Authority released a draft report on 30 October 2014 and a final report on 27 February 2014 (see Chapter 4).<sup>41</sup>

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36 Anita Talberg, John Gardiner-Garden and Julie Tomaras, *Carbon Credits (Carbon Farming Initiative) Bill 2011*, Bills Digest No. 5, 2011–12, Parliamentary Library, Canberra, p. 10.

37 Clean Energy Regulator, *Australian National Registry of Emissions Units*, <http://www.cleanenergyregulator.gov.au/ANREU/Pages/default.aspx> (12 March 2014).

38 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 19.

39 *Climate Change Authority Act 2011*, s. 11.

40 Climate Change Authority, *Annual Report 2012–13*, pp 20 and 22.

41 Climate Change Authority, *Targets and Progress Review*, <http://climatechangeauthority.gov.au/caps> (accessed 26 February 2014).

### ***Clean Energy Regulator***

3.34 The Clean Energy Regulator is established by the *Clean Energy Regulator Act 2011* (Cth) and is responsible for administering the carbon pricing mechanism, the NGERs, the RET and the CFI.<sup>42</sup> The Clean Energy Regulator is required to:

- provide education on the carbon pricing mechanism;
- assess emissions data to determine an entity's carbon liability;
- operate the emissions registry for emissions units;
- monitor, facilitate and enforce compliance with the carbon pricing mechanism;
- allocate permits;
- determine whether an entity is eligible for assistance in the form of permits to be allocated administratively; and
- accredit auditors for the CFI and the NGERs.

3.35 In 2012–13, the Clean Energy Regulator received revenue from government totalling \$78.99 million and recognised own-source income of \$1.610 million.<sup>43</sup> It had a total staff of 372.<sup>44</sup>

### ***Clean Energy Finance Corporation***

3.36 The *Clean Energy Finance Corporation Act 2012* (Cth), part of the Clean Energy Package, established the CEFC. The CEFC has the power to invest in financial assets for the development of Australian-based renewable energy technologies, low-emission technologies and energy efficiency projects. The Corporation has the power to enter into investment agreements itself, and make investments through subsidiaries.

3.37 The CEFC operates with a \$10 billion fund, with \$2 billion provided per annum for five years. The first instalment was paid on 1 July 2013.

3.38 As at 20 August 2013, the CEFC portfolio of investments consists of 12 transactions to a value of \$482 million and \$54 million worth of investments transferred from Low Carbon Australia.<sup>45</sup> Of the combined \$536 million investment, 56% has been spent on renewables, 30% has been spent on energy efficiency and 14% has been spent on low emission technology.<sup>46</sup> The fund has attracted \$1.55 billion in

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42 *Clean Energy Regulator Act 2011*, s. 12.

43 Clean Energy Regulator, *Annual Report 2012–13*, p. 80.

44 Clean Energy Regulator, *Annual Report 2012–13*, p. 70.

45 Low Carbon Australia was a Government-owned corporation tasked with managing a small pilot energy investment fund since 2010. Low Carbon Australia's investment function was transferred to the Clean Energy Finance Corporation (CEFC) on its establishment. See CEFC, *Annual Report 2013–13*, p. 60.

46 CEFC, *Annual Report 2012–13*, p. 14.

private sector co-financing and facilitated over \$2.2 billion in projects delivering approximately 4 million tonnes of abatement.<sup>47</sup>

3.39 The CEFC received operational funding of \$18.3 million in the 2012–13 financial year and had a staff of 45 employees.<sup>48</sup>

### **Repeal of the Clean Energy Package**

3.40 A key policy of the Coalition during the 2013 Federal election was to repeal the carbon tax if elected.<sup>49</sup> The Coalition's *Policy to scrap the carbon tax and reduce the cost of living* stated:

The Coalition will abolish the carbon tax.

The carbon tax indisputably adds to the cost of living, it makes households and families pay more for electricity and gas, it costs business more to operate, and it makes everything in our economy more expensive.<sup>50</sup>

3.41 The policy indicated that once the carbon tax has been repealed, the Coalition would implement its Direct Action Plan on climate change and carbon emissions (see Chapters 5–7).

3.42 On 13 November 2013, Prime Minister the Hon Tony Abbott introduced a suite of bills into the House of Representatives to repeal elements of the Clean Energy Package.<sup>51</sup> The Clean Energy Legislation (Carbon Tax Repeal) Bill 2013 and seven related bills were introduced to repeal the carbon pricing mechanism and associated industry assistance. Separate bills to abolish the Climate Change Authority and the CEFC were also introduced. The bills passed the House of Representatives on 21 November 2013 without amendment.<sup>52</sup>

3.43 The bills were introduced into the Senate on 2 December 2013.<sup>53</sup> On 10 December 2013 the Senate voted against the Clean Energy Finance Corporation (Abolition) Bill 2013.<sup>54</sup> On 3 March 2014 the Senate voted against the Climate Change Authority (Abolition) Bill 2013.<sup>55</sup> All other bills from the Carbon Tax Repeal Package were defeated in the Senate on 20 March 2014.<sup>56</sup>

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47 CEFC, *Submission 75*, p. 7.

48 CEFC, *Annual Report 2012–13*, pp 24 and 82.

49 The Coalition, *The Coalition's policy to scrap the carbon tax and reduce the cost of living*, August 2013, p. 2.

50 The Coalition, *The Coalition's policy to scrap the carbon tax and reduce the cost of living*, August 2013, p. 2.

51 *Votes and Proceedings of the House of Representatives*, No. 2, 13 November 2013, pp 44–46.

52 *Votes and Proceedings of the House of Representatives*, No. 7, 21 November 2013, p. 138.

53 *Journals of the Senate*, No. 4, 2 December 2013, p. 171.

54 *Journals of the Senate*, No. 9, 10 December 2013, p. 296.

55 *Journals of the Senate*, No. 15, 3 March 2014, p. 498.

56 *Journals of the Senate*, No. 22, 20 March 2014, p. 678.

3.44 On 20 March 2014 the Government reintroduced the Clean Energy Finance Corporation (Abolition) Bill 2013 [No. 2] into the House of Representatives for debate.<sup>57</sup>

### **Effectiveness of the Clean Energy Package**

3.45 A substantial number of submitters to the inquiry advised that a carbon pollution cap combined with some form of carbon pricing mechanism is the most effective way of reducing Australia's greenhouse gas emissions.<sup>58</sup>

3.46 Australia's system of carbon pollution reduction enacted through the Clean Energy Package—a carbon pricing mechanism with a legislated transition to an emissions trading scheme in 2015—was considered by many submitters to be the most efficient and cost effective way for Australia to meet its international commitments to reduce carbon pollution.<sup>59</sup>

### ***Benefits of a market mechanism to reduce carbon pollution***

3.47 The committee received evidence from economic and environmental experts indicating that a market mechanism is the most cost effective and efficient way of reducing carbon emissions.<sup>60</sup> It was argued that a market mechanism, such as that created by the Clean Energy Package, provides economy-wide incentives to reduce emissions with minimal intervention.

3.48 The Grattan Institute, an independent research organisation, outlined that of all the measures it has analysed, market mechanisms have delivered the greatest emissions reductions and have met targets ahead of time.<sup>61</sup> This was primarily the case because market mechanisms minimise the need for government to predict the future, provide long-term predictability enabling business to invest with greater confidence and provide flexibility by devolving decision making to businesses and individuals.<sup>62</sup> Furthermore, the Grattan Institute noted that market mechanisms work best where they include the broadest range of abatement options and stay administratively simple.<sup>63</sup>

3.49 The Grattan Institute submitted to the committee that:

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57 *Votes and Proceedings of the House of Representatives*, No. 30, 20 March 2014, p. 399.

58 See, for example, Dr Justin Wood, *Submission 28*, p. 1; AMWU, *Submission 50*, p. 3; WWF-Australia, *Submission 67*, p. 3; and Mr David Rossiter, *Submission 70*, p. 3.

59 See, for example, UnitingCare Australia, *Submission 10*, p. 1; Grattan Institute, *Submission 22*, p. 1; Sustainable Energy Now, *Submission 34*, p. 5; The Australia Institute, *Submission 38*, p. 5; Greenbank Environmental, *Submission 63*, p. 2; and Professor Frank Jotzo, *Submission 86*, p. 1.

60 See, for example, The Australia Institute, *Submission 38*, p. 5; and Greenbank Environment, *Submission 63*, p. 2.

61 Grattan Institute, *Submission 22*, p. 1.

62 Grattan Institute, *Submission 22*, p. 1.

63 Grattan Institute, *Submission 22*, p. 1.

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Based on experience, only an economy-wide carbon price (a type of market mechanism) can achieve the scale and speed of reductions required for Australia to meet its 2020 commitments without excessive cost to the economy or taxpayer.<sup>64</sup>

3.50 Professor Frank Jotzo similarly highlighted that market mechanisms are the least interventionist form of regulation and allow market players to decide the most cost effective form of action.<sup>65</sup> According to Professor Jotzo, the benefits of such a system are that it is cost effective and creates a fiscal revenue stream:

Carbon pricing provides a consistent framework of price-based incentives for greenhouse gas emitters as well as the businesses and consumers who use their products to reduce emissions up to the same marginal cost. It also can create significant amounts of fiscal revenue, available to assist households with higher energy costs. Carbon pricing can become a source of net fiscal revenue, replacing other—and potentially more economically distortionary—forms of taxation.<sup>66</sup>

3.51 Sustainable Energy Now, a not-for-profit body promoting the use of renewable technologies, identified that a market mechanisms provides industry with 'incentives to reduce emissions and switch to renewable energy'.<sup>67</sup> UnitingCare Australia similarly argued that a market mechanism is 'an important tool for the necessary transformation towards a sustainable economy and is an essential component of effective action to address climate change'.<sup>68</sup>

3.52 The Environmental Farmers Network, an organisation representing farmers in south-east Australia, argued that 'the most efficient way to achieve greenhouse gas emission reductions is with a market system paid for by users—not the general taxpayer'.<sup>69</sup> The Conservation Council of Western Australia (CCWA) likewise submitted that a market mechanism 'is the cheapest form of emissions abatement'.<sup>70</sup>

3.53 It was also emphasised by a number of submitters that economic analysis unambiguously shows that a market mechanism in the form of a carbon price or emissions trading scheme is the most efficient and cost effective climate change mitigation policy.<sup>71</sup> For example, Professor Jotzo outlined that the desirable features

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64 Grattan Institute, *Submission 22*, p. 1.

65 Professor Frank Jotzo, *Submission 86*, p. 1.

66 Professor Frank Jotzo, *Submission 86*, p. 4.

67 Sustainable Energy Now, *Submission 34*, p. 5.

68 UnitingCare Australia, *Submission 10*, p. 1.

69 Environmental Farmers Network, *Submission 9*, p. 1.

70 Conservation Council Western Australia (CCWA), *Submission 29*, p. 1.

71 For example see Professor Ray Wills, *Submission 41*, p. 2; and Professor Frank Jotzo, *Submission 86*, p. 1.

of carbon pricing have 'led the OECD, IMF and World Bank to recommend carbon pricing to the world's governments'.<sup>72</sup>

3.54 Professor Ray Wills similarly highlighted that world economists have repeatedly contended that market-based mechanisms are 'the most effective and efficient means to create change, and that an emissions trading scheme is the best tool for dealing with emissions'.<sup>73</sup>

### ***The carbon pricing mechanism***

3.55 The carbon pricing mechanism put in place by the Clean Energy Package was recognised by submitters as being a sound embodiment of the market mechanism principle.<sup>74</sup>

3.56 WWF-Australia identified that the core elements of the current carbon price mechanism:

- deliver least cost abatement in sectors covered by the scheme, providing a financial incentive to find the lowest cost forms of abatement;
- enable the market to determine where pollution reduction will occur to drive innovation and efficiency throughout the economy;
- enable Australia to confidently increase its unconditional 2020 emissions reduction target;
- provide a revenue flow that can be reinvested in the economy to support the demonstration and commercialisation of clean technology;
- provide international finance for clean technology to developing countries; and
- provide targeted assistance to households and energy intensive trade exposed industries.<sup>75</sup>

3.57 350 Australia argued that the threat of climate change is an audacious task and 'only our current Clean Energy Package places us on the front foot in addressing this task'.<sup>76</sup> 350 Australia further informed the committee that:

...it is really clear at the moment that, since the change of government, there is quite a lot of disrespect internationally for the stand that we are taking on climate. I know that the clean energy package, and the

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72 Professor Frank Jotzo, *Submission 86*, p. 4.

73 Professor Ray Wills, *Submission 41*, p. 2.

74 See, for example, UnitingCare Australia, *Submission 10*, p. 1; Grattan Institute, *Submission 22*, p. 1; Sustainable Energy Now, *Submission 34*, p. 5; The Australia Institute, *Submission 38*, p. 5; Greenbank Environmental, *Submission 63*, p. 2.

75 WWF-Australia, *Submission 67*, p. 4.

76 350 Australia, *Submission 33*, p. 4.

tremendous amount of work that was done in that, is actually seen as world leading.<sup>77</sup>

3.58 Sustainable Energy Now argued that the existing carbon pricing mechanism is simple and easily applied to a range of emissions intensive operations.<sup>78</sup> The Tasmanian Government also gave its support to the Clean Energy Package as 'the most effective and efficient way to reduce Australia's greenhouse gas emissions'.<sup>79</sup>

### *Emissions reductions under the Clean Energy Package*

3.59 Submitters indicated that the Clean Energy Package has been effective in reducing Australia's carbon pollution and transitioning towards a clean technology economy.<sup>80</sup> It was noted that Australia's emissions trajectory has declined since the implementation of the Clean Energy Package.<sup>81</sup>

3.60 The Climate Institute, using a modelling analysis undertaken by SKM-MMA and Monash University's Centre of Policy Studies, found that the current Clean Energy Package 'drives substantially more domestic emission reductions than the Government's [Direct Action] policy scenarios'.<sup>82</sup> Specifically their modelling showed that:

...to 2020, the domestic emission reductions achieved under the current carbon and clean energy laws are around 40 per cent greater than those achieved under the Government's scenarios. The Government's policy achieves around 200 million tonnes of domestic emission reductions. This compares to around 290 million tonnes under the current legislation.<sup>83</sup>

3.61 Likewise ClimateWorks Australia, an independent, non-profit research-based organisation, claimed that their analysis has shown that 'if optimally implemented, the Clean Energy Package, had the potential to unlock a significant amount of Australia's carbon emissions:

...the Clean Energy Future package, if optimally implemented, had the potential to unlock over three quarters of the additional emissions reductions (above business-as-usual) required to meet the bipartisan minimum 5 per cent national emissions reduction target annually by 2020

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77 Ms Jamie Yallup Farrant, Perth Coordinator, 350 Australia, *Committee Hansard*, 31 January 2014, p. 37.

78 Sustainable Energy Now, *Submission 34*, p. 4.

79 Tasmanian Climate Change Office, *Submission 46*, p. 1.

80 See, for example, The Climate Institute, *Submission 2*, p. 6; Australian Religious Response to Climate Change (ARRCC), *Submission 21*, p. 1; and ClimateWorks Australia, *Submission 24*, p. 3.

81 The Climate Institute, *Submission 2*, p. 6.

82 The Climate Institute, *Submission 2*, p. 6.

83 The Climate Institute, *Submission 2*, p. 6.

in Australia, and almost half what was required to meet the 25 per cent target.<sup>84</sup>

3.62 The ARRCC outlined that the Clean Energy Package has 'been proven to be modestly effective and includes mechanisms which can be strengthened to achieve deeper emissions reductions'.<sup>85</sup> The ARRCC also noted that 'the legislation currently in place has been reducing emissions from those sectors that have been covered'.<sup>86</sup> The ARRCC therefore strongly recommended that 'the current system be retained'.<sup>87</sup>

*Australian National Greenhouse Accounts update*

3.63 Figures released under the Australian National Greenhouse Accounts updates show that Australia's total emissions increased by 1.5% between 2012 and 2013, with the economy growing 2.7% over the same period.<sup>88</sup> Excluding land use, land-use change and forestry (LULUCF), emissions decreased 0.1% over the period.<sup>89</sup>

3.64 In aggregate, electricity, direct combustion, fugitive and industrial process emissions (sectors covered by the carbon pricing mechanism) fell by 1.5% in 2013, mostly due to a 6% fall in electricity emissions.<sup>90</sup> Emissions from transport, agriculture, waste and LULUCF rose by 6.5%.<sup>91</sup>

3.65 The Climate Change Authority, in the final report of its targets and progress review, noted that:

Australia's emissions were broadly the same in 2012 as in 1990, despite a doubling in the size of the economy over this period. This means that the emissions intensity of the economy (emissions per dollar of GDP) has halved.<sup>92</sup>

3.66 In analysing the reductions in emissions made under the Clean Energy Package, the Climate Change Authority also stressed that 'the effect of the carbon pricing mechanism must be calculated relative to a counterfactual scenario, rather than

84 ClimateWorks Australia, *Submission 24*, p. 3.

85 ARRCC, *Submission 21*, p. 1.

86 ARRCC, *Submission 21*, p. 3.

87 ARRCC, *Submission 21*, p. 4.

88 Department of the Environment, *Australian National Greenhouse Accounts: Quarterly update of Australia's greenhouse gas inventory*, June Quarter 2013, Canberra, p. 2, <http://www.environment.gov.au/system/files/resources/ef4a14b1-9ec8-48d5-b776-70a3795c7bfc/files/quarterly-update-june-2013.pdf> (accessed 11 March 2014). See also Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 92.

89 Department of the Environment, *Australian National Greenhouse Accounts: Quarterly update of Australia's greenhouse gas inventory*, June Quarter 2013, Canberra, p. 2.

90 Department of the Environment, *Australian National Greenhouse Accounts: Quarterly update of Australia's greenhouse gas inventory*, June Quarter 2013, Canberra, p. 2.

91 Department of the Environment, *Australian National Greenhouse Accounts: Quarterly update of Australia's greenhouse gas inventory*, June Quarter 2013, Canberra, p. 2.

92 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 85.

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year-on-year change'.<sup>93</sup> The Climate Change Authority noted that Government modelling projected that Australia's emissions in 2012–13 would have been 2.8% higher in the absence of the carbon pricing mechanism.<sup>94</sup>

#### *Difficulty in evaluating effectiveness*

3.67 The Climate Change Authority emphasised the difficulty in assessing the effectiveness of the carbon pricing mechanism on emissions reductions after only 12 months.<sup>95</sup> In interpreting the emissions reduction figures, the Climate Change Authority outlined a number of issues that must be taking into consideration:

- Comparing emissions over time can identify trends and, in doing so, allow the effect of measures such as the carbon pricing mechanism to be assessed. A single year's emissions data cannot establish a trend.
- Preparation by parties affected by the carbon pricing mechanism may have influenced emissions prior to its start.
- Uncertainty over the longevity of the carbon pricing mechanism may have influenced investment decisions.<sup>96</sup>

3.68 The Sustainable Energy Association similarly lamented the short period of time within which an evaluation of the effectiveness of the Clean Energy Package can be made:

...the carbon price was only just beginning to become effective. It has helped reduce our emissions intensity, and it is the beginning of what was going to be a much longer program that would absolutely bring that cost down over time.<sup>97</sup>

#### *Limited success of the Clean Energy Package*

3.69 Mr Anthony Wood from the Grattan Institute informed the committee that his analysis of the carbon pricing mechanism was that it 'has not had much effect on Australia at all'. He explained that:

I do not think the carbon tax has had much effect at all on Australia because there was so much uncertainty about (a) whether it was going to be around, (b) where the price would be after 2014 or 2015 and (c), with a fixed price, what you can get for the \$23. There were many projects that simply would not have been viable when you knew you were only going to get a fixed

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93 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 96.

94 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 96.

95 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 95.

96 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 96.

97 Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 2.

price for one or two years. My suspicion is that, so far, the carbon tax has done very little in terms of reducing emissions.<sup>98</sup>

### **Impact of the repeal of the Clean Energy Package**

3.70 A number of submitters to the inquiry advised against the repeal of the Clean Energy Package without there being an equally effective method to reduce greenhouse gas emissions in place.<sup>99</sup> In particular, submitters were concerned that the Direct Action Plan was an inadequate substitute for the carbon pricing mechanism and future emissions trading scheme (see Chapters 5–7).<sup>100</sup>

3.71 Submitters warned that the repeal of the Clean Energy Package will be the first time in the world a country has dismantled a fully functioning carbon pricing scheme.<sup>101</sup> It was warned that the repeal of the legislation, and with it a cap on carbon pollution, would impact on Australia's ability to systemically address climate change and affect Australia's international obligations to reduce carbon emissions.<sup>102</sup>

3.72 Concerns were also raised over the impact that repeal of the Clean Energy Package would have on policy certainty and investor confidence.<sup>103</sup> The lack of bipartisan support for a national climate change strategy was also seen to be undermining Australia's efforts to reduce carbon emissions and investment in clean technology industries.<sup>104</sup>

3.73 There were a number of submitters who were supportive of the repeal of the Clean Energy Package in favour of the Direct Action Plan.<sup>105</sup> Industry groups with

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98 Mr Anthony Wood, Program Director—Energy, Grattan Institute, *Committee Hansard*, 5 February 2014.

99 See, for example, CCWA, *Submission 29*, p. 1; The Australia Institute, *Submission 38*, p. 5; South East Councils Climate Change Alliance, *Submission 39*, p. 2; Anglican EcoCare Commission, *Submission 40*, p. 2; Conservation Council South Australia (CCSA), *Submission 44*, p. 9; and WWF-Australia, *Submission 67*, p. 4.

100 See, for example, Anglican EcoCare Commission, *Submission 40*, p. 2; CCSA, *Submission 44*, p. 9.

101 See, for example, Friends of the Earth, *Submission 66*, p. 5; and Professor Frank Jotzo, *Submission 86*, p. 5.

102 See, for example, WWF-Australia, *Submission 67*, p. 20; and ACF, *Submission 14*, p. 4.

103 See, for example, Mr Tim Buckley, *Committee Hansard*, 7 March 2014, p. 12; ACF, *Submission 14*, p. 8; Grattan Institute, *Submission 22*, p. 4; ACTU, *Submission 30*, p. 5; Australian Solar Thermal Energy Association (AUSTELA), *Submission 76*, p. 1; The Australian Industry Group, *Submission 92*, p. 6; and Investor Group on Climate Change, *Submission 93*, p. 1.

104 See, for example, ACF, *Submission 14*, p. 3; Energetics, *Submission 59*, p. 6; and Mr Tennant Reed, Principal National Adviser, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, pp 52–53.

105 See, for example, Australian Forest Products Association (AFPA), *Submission 15*, p. 1; Cement Industry Federation, *Submission 49*, p. 2; and Association of Mining and Exploration Companies (AMEC), *Submission 74*, p. 2.

trade exposed businesses argued that the carbon pricing mechanism impacts significantly on their operations.

### ***Opposition to the repeal of the Clean Energy Package***

3.74 It was argued by submitters that repeal of the Clean Energy Package would limit Australia's ability to responsibly address climate change.<sup>106</sup>

3.75 The Conservation Council of South Australia (CCSA) considered that 'repealing all elements of the Clean Energy Package, particularly the carbon pricing mechanism, will absolutely extinguish Australia's ability to systemically address climate change'.<sup>107</sup> The Conservation Council stated:

The repeal of the Clean Energy Package eliminates the continuous funding mechanism that would be necessary to fund low carbon projects at the necessary scale. The Conservation Council SA considers that this decision is based on political motives rather than good policy.<sup>108</sup>

3.76 Similarly Sustainable Energy Now was concerned that repeal of the legislation would limit Australia's attempts to limit carbon emissions in the future.<sup>109</sup> The organisation argued that the Clean Energy Package 'currently applies a carbon price to the largest polluting industries accounting for more than 50 per cent of Australia's emissions' and removing their obligations reduces Australia's ability to address climate action.<sup>110</sup> Sustainable Energy Now went on to state that a carbon price 'can raise the cost of polluting activities...thus making cleaner alternatives relatively more cost effective'.<sup>111</sup>

3.77 ClimateWorks Australia argued that:

...repealing the Clean Energy Package would 'delay implementation of emissions reductions, and thus increase the cost of achieving national emissions reduction targets'.<sup>112</sup>

3.78 Furthermore they noted that the package created an extensive framework to help transition the Australian economy towards a clean energy future. ClimateWorks remarked that:

...the Clean Energy Future package led to the creation of architecture and institutions of the kind that will be required to achieve a cost-effective

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106 See, for example, CCWA, *Submission 29*, p. 1; The Australia Institute, *Submission 38*, p. 5; South East Councils Climate Change Alliance, *Submission 39*, p. 2; Anglican EcoCare Commission, *Submission 40*, p. 2; CCSA, *Submission 44*, p. 9; and WWF-Australia, *Submission 67*, p. 4.

107 CCSA, *Submission 44*, p. 9.

108 CCSA, *Submission 44*, p. 9.

109 Sustainable Energy Now, *Submission 34*, p. 4.

110 Sustainable Energy Now, *Submission 34*, p. 4.

111 Sustainable Energy Now, *Submission 34*, p. 4.

112 ClimateWorks Australia, *Submission 24*, p. 3.

transition to a low carbon economy—removing and remaking these institutions will add unnecessary cost to the task.<sup>113</sup>

3.79 The ACTU made a similar argument, describing the repeal of the Clean Energy Package as 'irresponsible policy making'.<sup>114</sup> The ACTU stated:

Abandoning a carbon pricing mechanism also relinquishes an opportunity to provide incentives for the adoption of low carbon and energy efficient technologies.<sup>115</sup>

3.80 The ACTU explained that repealing the package 'discards a fair and inclusive approach to tackling climate change that protects jobs through the provision of assistance to households and communities while driving emissions reductions'.<sup>116</sup> The peak union body considered that removing the carbon pricing mechanism would remove industry support, 'resulting in little assistance to industry to remain competitive in the current global shift towards a low carbon economy'.<sup>117</sup>

3.81 The Australian Solar Thermal Energy Association (AUSTELA), the peak body for Australia's solar thermal energy industry, highlighted that the impacts of repeal of the Clean Energy Package could make the task of risk assessment and investment decision-making more difficult and would reinforce perceptions in the investment community that Australia's energy sector is exposed to greater sovereign risk.<sup>118</sup>

*No repeal without an equally effective scheme in place*

3.82 It was argued that the Clean Energy Package should not be repealed unless there is an equally effective carbon reduction scheme in place.

3.83 WWF-Australia strongly urged that the wholesale repeal of the Clean Energy Act be delayed until there is an effective alternative mechanism—that includes a price and limit on pollution—in place to reduce greenhouse gas emissions:

WWF Australia is also strongly urging the government to delay wholesale repeal of the Clean Energy Act until there is an effective alternative mechanism that includes a price and a limit on pollution in place to reduce greenhouse gas emissions. This is important for good governance, sound economic management, business certainty and, most importantly, to ensure Australia is not left without a climate mechanism to meet our international obligations of cutting carbon pollution by between five and 25 per cent by 2020.<sup>119</sup>

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113 ClimateWorks Australia, *Submission 24*, p. 3.

114 ACTU, *Submission 30*, p. 5.

115 ACTU, *Submission 30*, p. 6.

116 ACTU, *Submission 30*, p. 6.

117 ACTU, *Submission 30*, p. 6.

118 AUSTELA, *Submission 76*, p. 8.

119 Ms Kellie Caught, National Manager, Climate Change, WWF-Australia, *Committee Hansard*, 5 February 2014, p. 60.

3.84 UnitingCare Australia declared that it 'does not support the repeal of the Clean Energy Legislative Package, particularly in the absence of a replacement mechanism for pricing emissions and other matters'.<sup>120</sup> Likewise the South East Councils Climate Change Alliance indicated that it would support the abolition of the carbon pricing mechanism if there was confidence that a more effective mechanism to drive emission reductions was available.<sup>121</sup>

3.85 The view of the Anglican EcoCare Commission was that the existing carbon pollution legislation should 'be retained until a credible alternative can be presented that will transition the economy from carbon-intensive energy sources to low or no-carbon renewable sources'.<sup>122</sup>

3.86 It was also suggested by the CCSA that both the carbon pricing mechanism and the proposed Direct Action Plan could work together.<sup>123</sup> The Conservation Council stated:

The rate of the carbon price could instead simply be set at zero dollars whilst the \$2.6 billion carbon reduction fund is administered. If the fund proves to be inadequate to achieve between 5 and 20% reductions by 2020 (as most credible scientists and economists believe that it will be inadequate), then the fall back mechanism of carbon pricing will be in place.<sup>124</sup>

3.87 This view was held by a number of organisations including the Australia Institute who believed that 'the ERF could be effectively used to fund abatement in areas not covered by the carbon price or in areas where a carbon price is not able to tap into low cost abatement or where transaction costs are low'.<sup>125</sup>

3.88 The CCWA informed the committee that it is 'not opposed to direct action per se, however this instrument must be deployed in concert with other policy instruments which must include an economy-wide pricing mechanism as well as a cap on total carbon pollution'.<sup>126</sup>

### ***Carbon pollution cap***

3.89 Under the *Clean Energy Act 2011* (Cth) the carbon pollution cap is a specified number of tonnes of greenhouse gas emissions permitted each year.<sup>127</sup> In effect the carbon pollution cap sets the sum total of annually auctioned carbon units, plus the

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120 UnitingCare Australia, *Submission 10*, p. 1.

121 South East Councils Climate Change Alliance, *Submission 39*, p. 2.

122 Anglican EcoCare Commission, *Submission 40*, p. 2.

123 CCSA, *Submission 44*, p. 9.

124 CCSA, *Submission 44*, p. 9.

125 The Australia Institute, *Submission 38*, p. 5.

126 CCWA, *Submission 29*, p. 1. See also the discussion in Chapter 5 on complementary measures to the Emissions Reduction Fund.

127 *Clean Energy Act 2011*, s. 13.

total annual number of free carbon units issued in accordance with the Jobs and Competitiveness Program plus the total annual number of free carbon units issued to coal-fired electricity generators.<sup>128</sup>

3.90 The carbon pollution cap is made through government regulations. In deciding on a carbon pollution cap, the Minister must have regard to, amongst other things, Australia's international obligations under international climate change agreements and advice from the Climate Change Authority.<sup>129</sup> If the Minister fails to set a cap through regulations, or the regulations are disallowed, the legislation provides for a default cap which would decline annually by 12 Mt less than the previous compliance year.<sup>130</sup>

3.91 In the final report of its targets and progress review, the Climate Change Authority explained how the cap fits within Australia's broader carbon reduction policy:

Under the existing legislation, the carbon pricing mechanism has a three-year fixed-price period from 1 July 2012 to 30 June 2015. When the fixed-price period ends, the legislation provides for annual caps on emissions covered by the carbon pricing mechanism ('covered emissions'). The gap between the national emissions trajectory and cap allows room in the national emissions budget for emissions from sources outside the carbon pricing mechanism ('uncovered emissions'). The cap determines the total number of Australian carbon units for a particular year to be issued by the government. These units would be provided to entities as a free allocation or sold at auction, generating government revenue.

If covered emissions exceed the caps, liable entities can purchase international units or domestic offsets to make up the difference. Approved international units can be surrendered to meet up to 50 per cent of an entity's carbon liability; these units include EUAs [European Union Emission Allowances] and Kyoto units (units generated under the Kyoto Protocol). A sub-limit of 12.5 per cent applies to Kyoto units. Domestic offsets or ACCUs are generated under the CFI.<sup>131</sup>

3.92 Repeal of the Clean Energy Package, including the *Clean Energy Act 2011*, would remove Australia's carbon pollution cap. It was argued by some submitters that the removal of the cap would undermine action to reduce carbon emissions.<sup>132</sup>

3.93 WWF-Australia outlined that a cap-and-trade ETS puts an annual cap on pollution and restricts the number of pollution permits in the system and that can be

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128 *Clean Energy Act 2011*, s. 13.

129 *Clean Energy Act 2011*, s. 13.

130 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 191.

131 Climate Change Authority, *Targets and progress review*, Final report, February 2014, pp 190–191.

132 See, for example, Anglican EcoCare Commission, *Submission 40*, p. 2.; CCSA, *Submission 44*, p. 11; GetUp, *Submission 47*, p. 7.

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traded. This way the Government can be confident that they can meet their desired and/or internationally agreed targets.<sup>133</sup> The ACF likewise recognised that if the repeal of the Clean Energy Package occurs, it 'will remove Australia's legislated cap on pollution'.<sup>134</sup>

3.94 The AYCC explained that by removing the cap, the Government would not be able to ensure that Australia's overall emissions are reducing.<sup>135</sup> The AYCC expressed concern that removal of the Clean Energy Package means 'that there is no clear legal mechanism' to ensure that Australia achieves its stated emissions reduction target.<sup>136</sup>

3.95 Sustainable Energy Now similarly argued for a carbon limitation scheme to have any effectiveness it 'must include downward-moving caps and penalties for exceeding caps that are sufficiently high to ensure that industries will abide by them'.<sup>137</sup>

3.96 Energetics argued that Australia's climate change response must consist of several complementary measures, including a carbon pollution cap.<sup>138</sup> According to Energetics, such a cap on pollution would enable flexibility to ensure that Australia can meet its current and future obligations cost effectively.<sup>139</sup> Energetics further remarked that 'the existence of a carbon pollution cap is the most simple approach to meeting Australia's 5% emissions reduction target'.<sup>140</sup>

3.97 Friends of the Earth Australia were also critical of the intended repeal of the pollution cap put in place by the Clean Energy Package, noting that 'it will be impossible to move towards consuming only a fair share of the global carbon budget if the cap is removed'.<sup>141</sup>

3.98 In the final report of its targets and progress review, the Climate Change Authority made recommendations for Australia's future pollution caps. In analysing Australia's available emissions budget, the Climate Change Authority recommended that Australia adopted the following carbon pollution caps:

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133 WWF-Australia, *Submission 67*, p. 20.

134 ACF, *Submission 14*, p. 4.

135 AYCC, *Submission 32*, p. 4.

136 AYCC, *Submission 32*, p. 4.

137 Sustainable Energy Now, *Submission 34*, p. 5.

138 Energetics, *Submission 59*, p. 2.

139 Energetics, *Submission 59*, p. 2.

140 Energetics, *Submission 59*, p. 6.

141 Friends of the Earth, *Submission 66*, p. 5.

*Table 3.1: Climate Change Authority recommended carbon pollution caps for the first five years of the flexible price period of the carbon pricing mechanism<sup>142</sup>*

<b>Year</b>	<b>Cap (Mt CO<sub>2</sub>-e)</b>
2015–16	234
2016–17	228
2017–18	222
2018–19	215
2019–20	209

### ***Damage to Australia's international reputation***

3.99 Evidence was presented to the committee indicating that repeal of the Clean Energy Package would have a significant impact on Australia's international standing on climate action.

3.100 Professor Jotzo warned that Australia's policymakers need to 'be mindful of the signalling effect that Australian policy choices have internationally'.<sup>143</sup> Professor Jotzo explained that:

Major countries have carbon pricing in place or are introducing it. If Australia were to replace carbon pricing with a subsidy approach, this would be against global trends and waste an opportunity for positive influence on international policy making.<sup>144</sup>

3.101 Professor Jotzo observed that as a significant contributor to global emissions, Australia has an opportunity to lead by example on climate action:

The development of climate policy over recent years has been keenly observed by governments all over the world. The Carbon Pricing Mechanism—along with related policies and institutions such as the Clean Energy Finance Corporation and Climate Change Authority—are well known internationally. Elements of these have been seen as possible models for new policy in many other countries. Australia has the opportunity to positively influence other countries by setting an example of sound economic policy for emissions reductions, just as Australia has done in other areas, such as trade liberalisation. The proposed rollback of carbon pricing and introduction of a subsidy scheme however would serve as a negative example.<sup>145</sup>

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142 Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 199.

143 Professor Frank Jotzo, *Submission 86*, p. 5.

144 Professor Frank Jotzo, *Submission 86*, p. 1.

145 Professor Frank Jotzo, *Submission 86*, p. 5.

3.102 Professor Frank Jotzo further stated that:

I have spent a lot of time over the last six months talking to colleagues in Europe as well as in China, and the overriding reaction that we get to recent policy developments around the carbon pricing mechanism in Australia is people being perplexed as to why Australia, with a relatively well designed carbon pricing scheme and having gone through a lot of pain in developing this scheme and finally implementing it, would now go completely the other way and get rid of the whole thing again. So the question that I am often being asked in that respect is: what is wrong with the scheme? My answer usually is that there is nothing much intrinsically wrong with the scheme; it is an issue of politics.<sup>146</sup>

3.103 Sustainable Energy Now remarked that after making progress in addressing the causes of climate change, Australia is in danger of being seen as a barrier to effective global action.<sup>147</sup> The organisation stated:

Australia has been criticised at the COP talks in Poland as being the first nation to repeal its legislated price on carbon, in the face of other developed states such as Korea, California and some Chinese provinces introducing carbon pricing schemes'.<sup>148</sup> It can only hinder international efforts if Australia, in the top 3 of the world's per capita emitters, repeals a carbon pricing scheme that has proven efficient in reducing electricity and industrial emissions with negligible negative effect on the economy or industry competitiveness'.<sup>149</sup>

3.104 The Climate Institute similarly argued that 'the credibility and ambition of Australia's domestic policy settings will become more important' as the world negotiates new agreements from 2014 onwards.<sup>150</sup> The Climate Institute stated:

Our credibility comes into sharp relief in 2014 as international processes – including a world leader gathering – will focus on building the pre-2020 emission reduction ambitions of all major emitters. A policy that can meet stated international targets is central to strengthening the emerging architecture, building global ambition, and avoiding negative responses from other major economies. Policies that cannot demonstrably meet such goals risk institutionalising a return to an obstructionist or unhelpful climate diplomacy.<sup>151</sup>

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146 Professor Frank Jotzo, *Proof Committee Hansard*, 28 February 2014, p. 34.

147 Sustainable Energy Now, *Submission 34*, p. 4.

148 Sustainable Energy Now, *Submission 34*, p. 4.

149 Sustainable Energy Now, *Submission 34*, p. 4.

150 The Climate Institute, *Submission 2*, p. 6.

151 The Climate Institute, *Submission 2*, pp 6–7.

3.105 Greenbank Environmental noted that Australia is not a first mover on climate action and that 'many countries have market based emissions trading schemes, with "cap and trade" being by far the most used'.<sup>152</sup>

3.106 Mr Tim Buckley, a financial analyst with the Institute for Energy Economics and Financial Analysis also indicated that 'Australia's policy threatens to make us a laggard on the global platform'.<sup>153</sup>

### ***Policy uncertainty***

3.107 One of the major issues raised by submitters concerning the repeal of the Clean Energy Package was the policy uncertainty that is created.<sup>154</sup> Businesses and investment organisations expressed concern that the change in direction by the Government undermines investment in the clean energy industry. A lack of bipartisan political support of climate action was also concerning to submitters.<sup>155</sup>

3.108 The Grattan Institute asserted that 'the absence of long-term policy certainty is a central challenge of climate change policy across the world'.<sup>156</sup> The Grattan Institute explained that:

A conclusion that applies across all governments is that policy on climate change and energy is inherently not reliable and continues to shift. Regardless of the relative strengths and weaknesses of the existing Australian policy and its proposed replacement, the very decision to make a change adds to this challenge.<sup>157</sup>

3.109 According to the Grattan Institute, governments have a responsibility for creating the right conditions to allow for long-term investment to encourage a low-emissions economy:

Demand for low-emissions technology is created by government policy in order to price the environmental impact of carbon emissions. But there is significant uncertainty about the long-term credibility of the policy commitment, when energy infrastructure investment needs a high level of predictability.

Electricity sector investments are subject to many risks and uncertainties, including over climate change policy. This uncertainty encourages firms to delay investment to keep options open in the short term in the expectation

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152 Greenbank Environmental, *Submission 63*, p. 2.

153 Mr Tim Buckley, *Committee Hansard*, 7 March 2014, p. 11.

154 See, for example, ClimateWorks, *Submission 24*, p. 3 and Mr Andrew Dillon, General Manager, Corporate Affairs, Energy Supply Association of Australia, *Committee Hansard*, 5 February 2014, p. 40.

155 See, for example, ACF, *Submission 14*, p. 3; Energetics, *Submission 59*, p. 6; and Mr Tennant Reed, Principal National Adviser, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, pp 52–53.

156 Grattan Institute, *Submission 22*, p. 4.

157 Grattan Institute, *Submission 22*, p. 4.

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that they can make better informed decisions later. As a result there is less investment in the technologies needed than is socially desirable.<sup>158</sup>

3.110 The Grattan Institute described that 'in an ideal world government would legislate emissions constraints over several decades'.<sup>159</sup> This would allow the private sector to confidently form a view about the likely path of the carbon price over time and allow speculators to emerge to carry the investment risk between carbon prices today and those likely in the future.<sup>160</sup>

3.111 Mr Buckley informed the committee that investment in clean technology in Australia is stalling due to policy uncertainty:

...Australian industry is actually regressing domestically because of the lack of clarity on policy. We are worse than stalling; we are actually investing in assets that I think will become stranded as a result. Internationally, companies and economies are building industry capacity to transition for the long term.<sup>161</sup>

3.112 Mr Buckley argued that the energy sector, in particular, needs policy certainty to meet the challenges of climate change:

Australia...needs a clear, long-term carbon policy commitment. It needs to encourage and build a sustained transition to a low-carbon economy. Our energy policy needs transparency, longevity and certainty. When you are looking at the energy policy, you are talking about a sector that has very long-life assets—on general, 20-, 30-, 40-, 50-year life assets. We need a policy that matches the time frame. Energy policy needs to recognise the issue of the scale of the investment going in. It is a very significant sector. There is no doubt in my mind that Australia has the financial resources to deal with climate change and to transition to a low-carbon economy if we have the right policy.<sup>162</sup>

3.113 The Investor Group on Climate Change (IGCC), an organisation representing institutional investors, identified that reducing Australia's emissions is a long-term project that 'requires a policy framework that is stable and that is capable of being scaled up to deliver more ambitious reductions over time'.<sup>163</sup> The IGCC informed the committee that:

Without a central, long-term policy framework, there is significant uncertainty for investors in all assets—emissions-intensive, emissions-reducing technologies and low-carbon activities alike. The consequences of this is that the cost of private capital for achieving emissions reductions

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158 Grattan Institute, *Submission 22*, p. 4.

159 Grattan Institute, *Submission 22*, p. 4.

160 Grattan Institute, *Submission 22*, p. 4.

161 Mr Tim Buckley, *Committee Hansard*, 7 March 2014, p. 12.

162 Mr Tim Buckley, *Committee Hansard*, 7 March 2014, p. 11. See also Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 5.

163 Investor Group on Climate Change (IGCC), *Submission 93*, p. 1.

would increase and the cost of achieving those reductions would also increase.<sup>164</sup>

3.114 The ACTU advised that with policy uncertainty around climate action, 'the shift to a low carbon economy will be delayed'.<sup>165</sup> The ACTU argued that the absence of a strong climate policy will ultimately affect in lost investment and lost jobs. The ACTU stated that a delayed move to a low carbon economy:

...will increase the cost and create greater uncertainty for industry and workers as the economy responds to the global carbon constrained environment. Finally it will result in missed opportunities. Innovation in low carbon and energy efficiency technologies presents new opportunities for industry, creating jobs for the future. Without a credible policy we will miss the opportunity to develop domestic industry capabilities.<sup>166</sup>

3.115 The Australian Industry Group, recognised that 'supporting efficient long-term investment is an important principle for climate policy'.<sup>167</sup> The group remarked that 'while industry is used to dealing with risk and change, a clear, stable policy framework with broad political support would make sound investment much easier'.<sup>168</sup>

3.116 AUSTELA informed the committee that a lack of regulatory structures around climate action will 'not provide long term clarity in the energy sector' and are 'likely, in the medium and longer term, to increase energy costs in the economy, and in so doing to undermine national efficiency and productivity'.<sup>169</sup> AUSTELA outlined that:

In the absence of clarity as to long term institutional arrangements and market structures affecting carbon emission regulation in Australia's energy sector, risk premiums are applied to energy investments and business operations, and energy investments are deferred in the hope that such clarity will emerge, adversely affecting productivity and further exacerbating risk. the resulting high costs are either passed on to consumers, or reduce earnings available for shareholder distributions. This impact negatively on the returns of investors such as superannuation funds over the medium and long term.<sup>170</sup>

3.117 AUSTELA was also concerned that 'repeal of a major suite of economic reforms must, of its nature cause significant uncertainty in affected markets'.<sup>171</sup> AUSTELA argued that investors and market participants will be unsettled and will take time to reconfigure their decision-making and risk assessment processes 'to

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164 Mr Nathan Fabian, Chief Executive Officer, IGCC, *Committee Hansard*, 7 March 2014, p. 11.

165 ACTU, *Submission 30*, p. 5.

166 ACTU, *Submission 30*, p. 5.

167 The Australian Industry Group, *Submission 92*, p. 6.

168 The Australian Industry Group, *Submission 92*, p. 6.

169 AUSTELA, *Submission 76*, p. 1.

170 AUSTELA, *Submission 76*, p. 1.

171 AUSTELA, *Submission 76*, p. 1.

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reflect the changes resulting from the repeal, and this process of reassessment will retard investment and confidence and activity'.<sup>172</sup>

3.118 Greenbank Environmental noted that:

As a developer and financier of CFI projects, we require policy that is Long, Loud and Legal, or put another way, Transparent, Long-living and Clear (TLC Policy) to have a degree of certainty with our investment of capital and resources in assisting Australia meet its GHG Emission reduction targets. The market has been in a holding pattern for all of 2013 and it is likely to remain so due to a complete about face from a policy perspective, which we feel has impacted productivity and buy-in to any future scheme.<sup>173</sup>

3.119 Other industry bodies that are in favour of repeal of the Clean Energy Package also requested policy certainty. The Australian Dairy Industry Council (ADIC) were concerned that repeal of the legislation has, amongst other things, put funding for continued research under the CFI in doubt.<sup>174</sup> The ADIC noted that 'the timing lag between the Clean Energy Package and the details of the Direct Action policy creates investment uncertainty'.<sup>175</sup> They further explained that:

Australian agriculture needs continued investment in developing methodologies and discovering novel carbon sequestration or abatement opportunities. Without this investment, we risk missing opportunities for cost-effective abatement measures, and our international reputation and competitive advantage as a sector takes climate change seriously.<sup>176</sup>

3.120 The ADIC requested that consideration should be given to 'interim programs being made available to support emissions reduction and energy efficiency projects while maintaining the interest and momentum of the previous Government policy'.<sup>177</sup>

3.121 The Australian Forest Products Association (AFPA), the peak national body for Australia's forest wood and paper products industry, also encouraged the Government to act with certainty in the area of climate action, noting that it 'is in our national interest that businesses have policy certainty and clarity, as well as a level playing field with our major trading partners'.<sup>178</sup>

*Bipartisan political support*

3.122 Some submitters urged for Australia's political parties to arrive at a consensus on climate action to support long-term policy certainty.

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172 AUSTELA, *Submission 76*, pp 8–9.

173 Greenbank Environmental, *Submission 63*, p. 11.

174 Australian Dairy Industry Council (ADIC), *Submission 11*, p. 3.

175 ADIC, *Submission 11*, p. 4.

176 ADIC, *Submission 11*, p. 3.

177 ADIC, *Submission 11*, p. 4.

178 AFPA, *Submission 15*, p. 1.

3.123 The ACF noted that 'Australian climate policy has been politicised in recent years, leading to poor environmental outcomes, while policy instability has also undermined investor confidence'.<sup>179</sup>

3.124 Energetics observed that whilst the Australian Labor Party and the Coalition agree on the science of climate change, and in principle that a market based mechanism is the best way to address the risk of climate change, without bipartisan policy 'it is unlikely that Australian domestic climate change policy will advance beyond uncertain rhetoric to drive wholesale behavioural changes'.<sup>180</sup>

3.125 The Australian Industry Group noted that:

The absence of bipartisan, stable, long-term policy at this point would be an inhibitor for long-term investments that are closely affected by climate policy of one sort or another, but many of those investment decisions are not being taken at the moment and we have something of a breathing space for the next several years to arrive at some degree of bipartisan policy.<sup>181</sup>

3.126 The Public Health Association of Australia (PHAA), noting the significant impact of climate change on public health, requested that a consensus approach is needed by Australia's leaders. The PHAA stated:

The politicised nature of the current discussion about this subject in Australia is seriously impeding a rational and reasoned response. The PHAA considers that this pressing policy challenge requires a cross-parliamentary approach to match the urgency of this serious common threat to Australian prosperity and health.<sup>182</sup>

### ***Support for repeal of the Clean Energy Package***

3.127 Some submitters to the inquiry were supportive of the repeal of the Clean Energy Package.<sup>183</sup> A number of industry bodies argued that the legislative package, including the carbon pricing mechanism, imposed unnecessary costs on their businesses and placed them at an unfair advantage compared to their international competitors.<sup>184</sup>

3.128 AFPA strongly supported the quick repeal of the carbon pricing mechanism.<sup>185</sup> The Association reasoned that 'it is in our national interest that

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179 ACF, *Submission 14*, p. 3.

180 Energetics, *Submission 59*, p. 6.

181 Mr Tennant Reed, Principal National Adviser, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, pp 52–53.

182 PHAA, *Submission 4*, p. 9.

183 AFPA, *Submission 15*, p. 1.

184 See, for example, AFPA, *Submission 15*, p. 1; Cement Industry Federation, *Submission 49*, p. 2; and Association of Mining and Exploration Companies (AMEC), *Submission 74*, p. 2.

185 AFPA, *Submission 15*, p. 1.

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businesses have policy certainty and clarity, as well as a level playing field with our major trading partners'.<sup>186</sup>

3.129 The Cement Industry Federation likewise supported the repeal of the Clean Energy Package.<sup>187</sup> The Federation stated that it:

...supports climate change policy that does not expose cement manufacturing operations in Australia to costs not faced by our competitors in other countries. The Clean Energy Future policy did not address this issue adequately, with only part of the cement manufacturing production process being recognised as being emissions intensive and trade exposed. This is inconsistent with the cement activity definitions of emissions trading schemes in New Zealand and California where all components of the cement manufacturing process are included.<sup>188</sup>

3.130 The Association of Mining and Exploration Companies (AMEC) asserted that the 'Clean Energy Package placed Australian mining and exploration industries at a significant disadvantage to our competitors'.<sup>189</sup> For the exploration and mining industry 'it was a financial penalty without any meaningful opportunity to contribute to Australia's response to climate change'.<sup>190</sup>

3.131 AMEC explained that as the major carbon emissions relating to mining are those associated with diesel use, miners are constrained by the manufacturers of vehicles and power plants in their ability to reduce their carbon emissions. Furthermore they stated that upgrades of mining equipment would more than likely be classed as actions that would have already occurred and not be eligible for funding under the Emissions Reduction Fund.<sup>191</sup>

3.132 The National Farmers' Federation (NFF) indicated that it 'does not support the carbon tax due to the significant flow-on impacts to agriculture'.<sup>192</sup>

### **Committee comment**

3.133 The implementation of the Clean Energy Package in 2011 represented a major shift in Australia's response to climate change. It presented a comprehensive set of policy instruments to reduce Australia's carbon emissions, invest in renewable energy and provide assistance for businesses and households to transition to a clean energy economy. The package was the result of extensive consultation between policy makers, scientific experts and industry groups. A significant amount of time and effort

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186 AFPA, *Submission 15*, p. 1.

187 Cement Industry Federation, *Submission 49*, p. 2.

188 Cement Industry Federation, *Submission 49*, p. 3.

189 AMEC, *Submission 74*, p. 2

190 AMEC, *Submission 74*, p. 2

191 AMEC, *Submission 74*, p. 2.

192 National Farmers' Federation (NFF), *Submission 37*, p. 1.

was spent on ensuring that Australia adopted an effective and credible way to address climate change in the long term.

3.134 The centrepiece of the Clean Energy Package, the carbon pricing mechanism and future emissions trading scheme, has been shown by submitters to be the most effective and least interventionist way to reduce carbon emissions. Market mechanisms reduce the need for government to predict the future, provide long-term certainty and give businesses the flexibility to achieve desired outcomes. The concept of a market mechanism also accurately reflects the 'polluter pays' principle and apportions responsibility for emissions with emitters.

3.135 Despite the short period of time since the implementation of the Clean Energy Package, it has been effective at reducing carbon emissions. Figures from the Australian National Greenhouse Accounts have shown that emissions decreased by 0.1% in just one year between 2012 and 2013, with modelling suggesting that emissions over the same period would have been 2.8% higher without the Clean Energy Package. The Clean Energy Package has been successful at turning around Australia's emissions trajectory.

3.136 However, the instruments put in place under the Clean Energy Package are designed to effect long-term change and an analysis of the success of the policy after such a short period of time is limited in its usefulness. The Clean Energy Package is designed to modify polluter behaviour and over time will produce stronger gains in emissions reductions.

3.137 Submitters have shown that the Australian Government's intention to repeal the Clean Energy Package will have a significant impact on Australia's ability to address climate change. Repeal of the package would remove an essential incentive, through the carbon pricing mechanism, for polluters to reduce their emissions. The energy sector is the largest contributor to Australia's greenhouse gas emissions through the burning of fossil fuels. Without a mechanism to make these major polluters pay for their emissions, there will be little incentive for them to change their business as usual approach.

3.138 The Clean Energy Package provided a carrot and stick approach to emissions reductions by charging a price on emissions while offering financial assistance through industry packages and the Clean Energy Finance Corporation to modify behaviour. Combined with a legislated cap on emissions, the package created a comprehensive response to climate change. The committee acknowledges the comprehensive evidence from submitters that the Clean Energy Package was an effective set of policy measures to address average global temperature increases. The committee also recognises submitters concerns that delaying emissions reduction measures will only serve to increase the costs of achieving targets in the future.

3.139 Repeal would also serve to undermine Australia's international reputation and responsibility as a highly developed economy which takes the critical issue of climate change seriously. Australia would be the first country in the world to move backwards and remove a carbon pricing scheme.

3.140 Most significantly, repeal of the Clean Energy Package will result in policy uncertainty for Australian businesses and industry. Academics, policy experts, industry groups and environmental groups all requested policy certainty be achieved in the area of climate change. The Australian economy needs to be prepared to meet the challenges of a clean energy future with business and industry having certainty to allow for long term investment. As noted by the Grattan Institute, certainty would allow the private sector to confidently form a view about the likely path of the carbon price over time.

3.141 The committee recommends that Australia undertakes effective action to reduce carbon pollution and provide a long-term framework that instils policy certainty. As such the Clean Energy Package should not be repealed. Furthermore, the committee believes that to recognise the full advantages of a market mechanism to limit carbon pollution, the Clean Energy Package should transition to the planned flexible price period on 1 July 2014. The committee also recommends that the Government adopt stringent legislated caps on carbon emissions, based on the advice of the Climate Change Authority, to ensure Australia meets its emissions reduction targets.

#### **Recommendation 4**

**3.142 The committee recommends that the Clean Energy Package not be repealed.**

#### **Recommendation 5**

**3.143 The committee recommends that the transition of the fixed carbon price to a fully flexible price under an emissions trading scheme with the price determined by the market occur on 1 July 2014.**

#### **Recommendation 6**

**3.144 The committee recommends that the Government adopt stringent legislated caps on carbon emissions, based on the advice of the Climate Change Authority, to ensure that Australia meets its emissions reduction targets.**



## Chapter 4

### Institutions under the Clean Energy Package

4.1 There a number of important institutions operating under the Clean Energy Package that are designed to advise on, and work towards, achieving Australia's carbon pollution reduction goals. As part of the Government's proposal to repeal the Clean Energy Package, two institutions—the Climate Change Authority and Clean Energy Finance Corporation (CEFC)—have been earmarked for abolition and a third—the Australian Renewable Energy Agency (ARENA)—will have its funding substantially reduced. This Chapter examines the impact that these changes will have on Australia's ability to comprehensively address climate change.

#### Importance of the Climate Change Authority

4.2 As noted in Chapter 3, the Climate Change Authority is an independent statutory agency, established by the *Climate Change Authority Act 2011* (Cth). It provides expert advice on Australian climate change policy, including through a scheduled series of reviews of climate programs and legislation.<sup>1</sup>

4.3 Since it commenced operation on 1 July 2013, the Climate Change Authority has completed a comprehensive review of the Renewable Energy Target,<sup>2</sup> as well as a review of Australia's targets for, and progress toward, reducing Australia's greenhouse gas emissions.<sup>3</sup> The committee notes that the Climate Change Authority's budget was just \$6.3 million in the 2012-13 financial year.<sup>4</sup>

4.4 The Climate Change Authority (Abolition) Bill 2013 proposes to abolish the Climate Change Authority and relevant functions would be transferred to the Department of the Environment.<sup>5</sup> The bill was passed by the House of Representatives on 21 November 2013, but the Senate rejected the bill on 3 March 2014.<sup>6</sup>

4.5 Submissions expressed concern about the abolition of the Climate Change Authority, taking the view that it needs to be retained as an important source of transparent, independent analysis and advice on Australia's key climate change

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<sup>1</sup> Climate Change Authority, *Targets and progress review*, Final report, February 2014, p. 19; see also *Climate Change Authority Act 2011*, s. 11.

<sup>2</sup> Climate Change Authority, *Renewable Energy Target Review Final Report*, December 2012, and see also <http://climatechangeauthority.gov.au/ret/overview> (accessed 27 February 2014).

<sup>3</sup> Climate Change Authority, *Targets and progress review*, Final report, February 2014.

<sup>4</sup> Climate Change Authority, *Annual Report 2012–13*, p. 20.

<sup>5</sup> Climate Change Authority (Abolition) Bill 2013, *Explanatory Memorandum*, p. 3.

<sup>6</sup> *House of Representatives Votes and Proceedings No. 7*, 21 November 2013, pp 137–138; and *Journals of the Senate No. 15*, 3 March 2014, pp 497–498.

policies.<sup>7</sup> Many pointed to the politicised nature of climate policy in Australia in recent years. For example, Mr Hanson from the ACF commented that:

The Climate Change Authority has a vital role to play in Australian climate policy and it should be retained. Australian climate policy has been politicised in recent years, leading to poor environmental outcomes. Policy instability has also undermined environmental confidence. Stable long-term policy will require an agreement to respect the evidence and listen to independent advice. The Climate Change Authority, modelled on a central bank, is tailored precisely to provide rigorous, transparent advice on the interface between climate science, international affairs and domestic climate policy.<sup>8</sup>

#### 4.6 The Climate Institute agreed:

Australia has a track record of highly politicized approaches to climate policy...Australia needs its climate policies to be based on a sound foundation of evidence rather than a political agenda. As an independent statutory authority, the CCA [Climate Change Authority] is a cornerstone of this policy foundation. Its role as a rigorous review of existing policies, along with the government's legislated requirement to respond publicly to the CCA's recommendations, ensure that the process of climate policy development and adjustment maintains a level of impartiality and transparency that would not otherwise be present if these functions were brought within a federal department.<sup>9</sup>

#### 4.7 Ms Kirsten Rose from the Sustainable Energy Association described the abolition of the Climate Change Authority as 'one of the greatest potential losses':

...the Climate Change Authority is not only independent of any politics but also multidisciplinary. It takes all of those—the Department of Environment, the CSIRO [Commonwealth Scientific and Industrial Research Organisation] and scientific organisations of other countries—and puts them all together, and synthesises it. So, that synthesis is incredibly important, and I think that is where an enormous amount of the value comes. And if you are taking advice in each ear, from different entities, you miss that synthesis. I think it is important.<sup>10</sup>

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7 See, for example, The Climate Institute, *Submission 2*, p. 7; Mr Erwin Jackson, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 12; Reverend Evan Pederick, Deputy Chair, Anglican EcoCare Commission, *Committee Hansard*, 31 January 2014, p. 62; CCSA, *Submission 44*, p. 13; Professor David Karoly, *Submission 72*, p. 2; Environment Victoria, *Submission 25*, p. 3; Wentworth Group, *Submission 95*, p. 6; WWF-Australia, *Submission 67*, p. 22; ACF, *Submission 14*, pp 2–3; Mr Jamie Hanson, ACF, *Committee Hansard*, 5 February 2014, pp 32–33, 37; GetUp! Action for Australia, *Submission 47*, pp 3–4.

8 Mr Jamie Hanson, ACF, *Committee Hansard*, 5 February 2014, pp 32–33.

9 The Climate Institute, *Submission 2*, p. 7.

10 Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 9.

4.8 Mr Nathan Fabian from the IGCC told the committee that this independent advice was also important from an investment perspective:

Governments changing their minds on climate policy or successive governments changing policies is an unfortunate reality that we are dealing with as long-term investors. The benefit of an institution like the Climate Change Authority is that it looks to the fundamental risks of what is happening on climate change and provides well-researched advice on the long-term emissions reduction trajectory that we should consider. So it is a way for us to see through policy volatility, understand the underlying risks we are dealing with and try to factor those in...you need an independent voice that is doing good research. That is important for those of us in the business and investment community that need to make long-term decisions.<sup>11</sup>

4.9 In its submission, the Climate Change Authority itself described the Government's decision to abolish the Authority as 'puzzling':

...particularly given the complexities and far-reaching ramifications of climate change—that any government should choose to deny itself access to informed and balanced advice from an independent body like the Climate Change Authority.<sup>12</sup>

4.10 Mr Bernie Fraser, Chair of the Climate Change Authority, elaborated on this at the committee's hearing:

The opportunity to assemble a group of people, assuming they are good people, independent people and expert people, and ask them to cover particular climate issues from all those different perspectives, weigh up the different science, environment, economic and social consequences and put some advice to government seems to me to be an obvious thing for any government to want to do in its own interests rather than to cut off that potentially useful source of advice.<sup>13</sup>

4.11 The Climate Change Authority noted suggestions that its work could be conducted by a government department, but argued that:

...well constituted and resourced bodies – I believe the Climate Change Authority is of that ilk – can augment that 'official' advice in ways which add value to any government interested in getting the best possible spread of considered and independent views. First, and as hard as official bodies might strive to provide independent advice, their being part of the everyday government process can be, in practice, a real constraint – certainly compared with a statutory body whose independence is explicitly acknowledged (and required) in legislation. Secondly, departments and other official bodies reporting to Ministers and caught up in the demands

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11 Mr Nathan Fabian, IGCC, *Committee Hansard*, 7 March 2014, p. 17; see also IGCC, *Submission 93*, p. 2.

12 Climate Change Authority, *Submission 51*, p. 2.

13 Mr Bernie Fraser, Chair, Climate Change Authority, *Committee Hansard*, 7 March 2014, p. 34.

and timetables of on-going government business have less opportunity and flexibility than good statutory bodies to conduct the depth of research and consultation which is critical to providing informed and balanced advice.<sup>14</sup>

4.12 In response to questioning from the committee as to whether the Climate Change Authority's work could be conducted, for example, by a government department, Mr Fraser reiterated the above points and also noted that:

I know this from firsthand experience. I went from the Treasury to the Reserve Bank. In Treasury I was very much caught up with budgetary processes and meeting ministerial requests. I tried very hard to be responsive on all sorts of things. To then go to the Reserve Bank, to a statutory body with independence in legislation and no sort of entanglement in day-to-day matters, gave me an opportunity to sit back, do research and think about things. The change was quite dramatic. The quality of the work and the advice that comes forward is very different.<sup>15</sup>

4.13 Mr Fraser further expressed concern that the independence of the public service may be being threatened by staff cuts and growth in ministerial staff. As such:

That traditional source of strong, independent advice from the bureaucracy is under threat. I say I suspect this is happening because I cannot be sure. No-one can be sure because, unlike an independent body like this, which releases its reports—the reports are public and transparent—it is not very often that the public is aware of what departments are advising their ministers on. There is not the same transparency...I do not believe governments in their own interests would want to rely—just on advice from the Public Service or the bureaus, as good as they might be around the place, when they are confronted with something so challenging and so complicated as climate change.<sup>16</sup>

### **Importance of the Clean Energy Finance Corporation**

4.14 As noted in Chapter 3, the CEFC is an integral institution under the Clean Energy Package. It is established by the *Clean Energy Finance Corporation Act 2012* (Cth) and has the power to invest in financial assets for the development of Australian-based renewable energy technologies, low-emission technologies and energy efficiency projects. The Corporation has the power to enter into investment agreements itself, and make investments through subsidiaries.

4.15 The CEFC has defined its mission as accelerating Australia's transformation towards a more competitive economy:

The CEFC increases the flow of funding to the commercialisation and deployment of Australian-based renewable energy, low emissions and energy efficiency technologies by mobilising public and private sector

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14 Climate Change Authority, *Submission 51*, p. 2.

15 Mr Bernie Fraser, Chair, Climate Change Authority, *Committee Hansard*, 7 March 2014, p. 34.

16 Mr Bernie Fraser, Chair, Climate Change Authority, *Committee Hansard*, 7 March 2014, p. 34.

capital and skills, so preparing and positioning the Australian economy and industry for a carbon-constrained world.<sup>17</sup>

4.16 The CEFC operates with a \$10 billion fund from the Government, with \$2 billion provided per annum for five years. The first instalment was paid on 1 July 2013.

4.17 The CEFC received operational funding of \$18.3 million in the 2012–13 financial year and had a staff of 45 employees.<sup>18</sup>

4.18 As at 20 August 2013, the CEFC portfolio of investments consists of 12 transactions to a value of \$482 million and \$54 million worth of investments transferred from Low Carbon Australia.<sup>19</sup> Of the combined \$536 million investment, 56% has been spent on renewables, 30% has been spent on energy efficiency and 14% has been spent on low emission technology.<sup>20</sup> The fund has attracted \$1.55 billion in private sector co-financing and facilitated over \$2.2 billion in projects delivering approximately 4 million tonnes of abatement.<sup>21</sup>

4.19 The Clean Energy Finance Corporation (Abolition) Bill 2013 proposes to abolish the CEFC.<sup>22</sup> The bill was passed by the House of Representatives on 21 November 2013, but the Senate rejected the bill 10 December 2013.<sup>23</sup> On 20 March 2014 the Government reintroduced the Clean Energy Finance Corporation (Abolition) Bill 2013 [No. 2] into the House of Representatives for debate.<sup>24</sup>

4.20 The committee received considerable evidence from submitters advising against abolishing the CEFC due to its positive investment in renewable and clean energy technology and returning a profit to the Government.<sup>25</sup>

### ***Support for the Clean Energy Finance Corporation***

4.21 There was general submitter support for the CEFC.<sup>26</sup> For example, the ARRCC indicated that they are 'strongly in favour' of retaining the CEFC and that it

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17 CEFC, *Submission 75*, p. 6.

18 CEFC, *Annual Report 2012–13*, pp 24 and 82.

19 Low Carbon Australia was a Government-owned corporation tasked with managing a small pilot energy investment fund since 2010. Low Carbon Australia's investment function was transferred to the CEFC on its establishment. See CEFC, *Annual Report 2013–13*, p. 60.

20 CEFC, *Annual Report 2012–13*, p. 14.

21 CEFC, *Submission 75*, p. 7.

22 Climate Change Authority (Abolition) Bill 2013, *Explanatory Memorandum*, p. 3.

23 *House of Representatives Votes and Proceedings No. 7*, 21 November 2013, pp 137–138; and *Journals of the Senate No. 15*, 3 March 2014, pp 497–498.

24 *Votes and Proceedings of the House of Representatives*, No. 30, 20 March 2014, p. 399.

25 See, for example, 350 Australia, *Submission 33*, p. 2; Consecration Council of South Australia, *Submission 44* p. 3.

26 See, for example, Mr John Hawkins, *Submission 7*, p. 15; ARRCC, *Submission 21*, p. 5; Energetics, *Submission 59*, p. 2; WWF-Australia, *Submission 67*, p. 15; AUSTELA, *Submission 76*, p. 6; and Mr Tim Buckley, *Committee Hansard*, 7 March 2014, pp 18–19.

must remain well funded.<sup>27</sup> Energetics likewise found that the CEFC 'has provided an effective body to support business and should be continued'.<sup>28</sup>

4.22 AUSTELA declared that the 'CEFC has performed its intended and mandated functions effectively and is needed to address key market failures and barriers to investment...'.<sup>29</sup>

4.23 Environment Victoria urged that the CEFC be retained, noting that it drives decarbonisation of Australia's energy supply while returning a profit.<sup>30</sup>

4.24 Mr John Hawkins commented that the CEFC is worthwhile as it 'is both able and willing to fund or co-fund projects unattractive to the private sector alone'.<sup>31</sup> Mr Hawkins noted that the CEFC is successful due to its lower cost of funds, singular focus, expertise in assessing projects and long term objective.<sup>32</sup>

4.25 Mr Buckley from the Institute for Energy Economics and Financial Analysis told the committee that the function the CEFC performs in the market is unique and necessary for Australia to reduce its carbon emissions:

...the CEFC is meant to lead the way, to pave for new technologies for deployment in the Australian market to show that they are financially viable. In a regulatory framework that works, that makes entire sense. The domestic institutions will learn by that process and then follow. They will probably invest in deal 3, 4, 5, or 6 and then fund 100 per cent of those thereafter. You need the CEFC to pave the way to show that this can be done economically and viably with the right policy.<sup>33</sup>

4.26 WWF-Australia outlined the importance of the CEFC's mission in helping the energy sector, the largest contributor to Australia's greenhouse gas emissions, transition to clean technology and equipment. WWF-Australia stated:

The energy sector is the major contributor of Australia's greenhouse gas emissions and will also need to do more of the heavy lifting as some sectors like agriculture struggle to meet required emissions reduction targets. This means the energy sector will need to undergo massive transformation over the coming decades if we are to meet our global and domestic targets.<sup>34</sup>

4.27 Dr Justin Wood argued that shutting down the CEFC would be an act of 'hubris' and will leave Australia 'manifestly unprepared to compete in the carbon

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27 ARRCC, *Submission 21*, p. 5.

28 Energetics, *Submission 59*, p. 2.

29 AUSTELA, *Submission 76*, p. 6.

30 Environment Victoria, *Submission 25*, p. 4.

31 Mr John Hawkins, *Submission 7*, p. 15.

32 Mr John Hawkins, *Submission 7*, p. 15.

33 Mr Tim Buckley, *Committee Hansard*, 7 March 2014, pp 18–19.

34 WWF-Australia, *Submission 67*, p. 15.

constrained twenty-first century'.<sup>35</sup> Dr Wood noted that other countries have developed similar institutions that are operating effectively at reducing carbon emissions:

...similar green banks have proved their worth in countries such as Germany and Brazil and the CEFC projects profitable returns through its vital role as a 'patient capital' investor...<sup>36</sup>

4.28 The CCWA suggested that the CEFC performs a unique function and does not duplicate other funding bodies as it is specifically focused on the low emissions sector.<sup>37</sup> The Council therefore rationalised that any decision to abandon the CEFC 'could only be based on ideological grounds rather than consideration of the financial and investment merits of the fund'.<sup>38</sup>

### ***Contributing to Australia's energy targets***

4.29 It was noted by submitters that the CEFC has made significant contributions to Australia's energy targets.<sup>39</sup> For example, the ARRCC observed that due to the work of the CEFC, 'the level of power generation from coal has been declining, while power generation from sources such as wind, solar, hydro and bio-energy has been increasing'.<sup>40</sup>

4.30 The AYCC expressed their concern at the Government's intention to abolish the CEFC when it 'has played a critical role in providing investment in renewable technologies'.<sup>41</sup>

4.31 Indeed, the CEFC submitted to the inquiry that within a short period of time (between August 2012 and August 2013), it has funded projects that have contributed over 500 MW of clean electricity generation, delivered abatement at a negative cost of \$2.40 per tonne of CO<sub>2</sub> abated and invested in wind, solar, energy efficiency and low emissions technology.<sup>42</sup>

### ***Return on investment***

4.32 In addition to the positive effect that the CEFC has on helping Australia meet its international targets on emissions reduction, submitters also noted its positive return on investment for the Government. For example, Sustainable Energy Now highlighted the absurd position of abolishing the CEFC while it is achieving its target and making a return on investment:

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35 Dr Justin Wood, *Submission 28*, p. 2.

36 Dr Justin Wood, *Submission 28*, p. 2.

37 Consecration Council of South Australia, *Submission 44* p. 8.

38 Consecration Council of South Australia, *Submission 44* p. 8.

39 See, for example, ARRCC, *Submission 21*, p. 5; and AYCC, *Submission 32*, p. 5.

40 ARRCC, *Submission 21*, p. 5.

41 AYCC, *Submission 32*, p. 5.

42 CEFC, *Submission 75*, p. 30.

The CEFC provides significant commercial funding capital to projects that achieve carbon abatement at very low or zero cost and in some cases even significant economic savings. It claims it can deliver half the abatement targeted by the federal government, and still turn a profit to the government. It will add rather than subtract to the budget balance, and ensure that tens billions of dollars of private capital is invested in Australia. Clearly the CEFC is needed or else the private sector would already have funded such projects. It is simply not logical to wind up an agency with this capacity.<sup>43</sup>

4.33 Doctors for the Environment remarked that even without accounting for health externalities, 'the CEFC has proven economically successful and pays dividends to the government'.<sup>44</sup> The organisation also suggested that the role and scope of the CEFC be expanded to facilitate investment in aspects of public health policy impacted by the effects of climate change. Doctors for the Environment considered that this would 'optimise decision making and give the maximum reduction in externality health costs'.<sup>45</sup>

4.34 350 Australia similarly questioned the rationale for abolishing the CEFC while it makes a return on investment and contributes to emissions reduction:

The Clean Energy Finance Corporation must remain as an essential and commercially viable part of moving Australia to a low carbon and ultimately zero emission economy. The CEFC is already growing long term business investment and jobs in clean, low carbon technologies.<sup>46</sup>

4.35 Ms Gillian Broadbent, Chair of the CEFC, told the committee that:

The CEFC is effective in catalysing private capital expenditure into emissions reduction and energy productivity, and private capital expenditure is critical to improving Australia's productivity...If the CEFC is able to continue to invest in the same form that it has to date, it will be making a positive contribution 2014–15 budget.<sup>47</sup>

4.36 The CEFC indicated to the committee that its abolition will 'cause an annual fiscal balance loss of between \$125 million and \$186 million per annum once the Corporation reaches an investment base of \$5 billion'.<sup>48</sup>

### ***Opposition to the CEFC***

4.37 The Grattan Institute argued against retaining the CEFC stating that 'since its inception, there has been a problem with the rationale for the CEFC and a definition of

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43 Sustainable Energy Now, *Submission 34*, p. 3.

44 Doctors for the Environment Australia, *Submission 13*, p. 4.

45 Doctors for the Environment Australia, *Submission 13*, p. 4.

46 350 Australia, *Submission 33*, p. 10.

47 Ms Gillian Broadbent AO, Chair, CEFC, *Committee Hansard*, 7 March 2014, p. 20.

48 CEFC, *Submission 75*, p. 27.

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the problem that its existence is intended to solve'.<sup>49</sup> The Grattan Institute commented that:

We are not aware of any evidence-based analysis that demonstrates the Australian financial market is systematically failing to fund attractive investments in clean energy....

A thorough and logical analysis of the market failures and financial barriers that confront clean energy technologies considerably constrains the justifiable role for the CEFC.<sup>50</sup>

4.38 The Grattan Institute recommended the Government should instead create a system of raising capital by issuing bonds. The Grattan Institute explained:

The creation of a liquid market for clean energy infrastructure bonds could potentially mobilise sources of finance from superannuation funds or institutional investors with an appetite for this appetite class. Having catalysed such a market as both a buyer and seller, the CEFC could then withdraw when sufficient market liquidity had been established.<sup>51</sup>

4.39 The Grattan Institute also sought to downplay arguments that the CEFC is a worthwhile endeavour due to its financial return to the Government. The Grattan Institute explained that:

Arguments that it is profitable or contributing to emission reduction are not relevant and the fact that substantial public funds have been deployed to refinance existing wind farms suggests a distraction from a role that addresses financial market barriers to deliver lower cost, clean energy outcomes.<sup>52</sup>

4.40 The CEFC explained why no other agencies or financial institutions are currently capable of fulfilling the role that it undertakes:

The CEFC operates as a sector-focused financial institution that provides market based support and long-term financing. The CEFC is a professional and functional operation with a flexible, high performing team of 44 staff with extensive experience in investments, portfolio management, finance, corporate treasury, legal, risk management, governance, corporate affairs, human resources, marketing and communications and government.

The CEFC has added to the expertise and shared learning across the finance sector to build Australia's capacity to fund clean energy projects. The CEFC's legislative framework, funding and commercial approach for a public good outcome enable it to invest more time, effort and resources in transactions which have the public policy benefits it is charged to deliver. Such transactions might take more than a year to reach financial close because, for example, they are small, yet still complex; or, are remote and

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49 Grattan Institute, *Submission 22*, p. 5.

50 Grattan Institute, *Submission 22*, p. 5.

51 Grattan Institute, *Submission 22*, p. 5.

52 Grattan Institute, *Submission 22*, p. 5.

involve special challenges like transmission issues; or, are first in-kind technology that involves a range of skill sets that are not easily assembled in larger financial institutions.<sup>53</sup>

4.41 Ms Gillian Broadbent AO, Chair of the CEFC, further advised that:

...there are financial barriers just be virtue of the lack of experience and risk appetite in the existing financial system. Our focus is working with whatever initiatives the government takes in this area to try and facilitate the financing around those initiatives. We are not a stand-alone entity. We can work with an ERF [Emissions Reduction Fund]; we can work with an emissions trading scheme. All of those initiatives change the financial parameters of each investment transaction, and we work to make them commercial and persuade other financial institutions about the commerciality of those investments.<sup>54</sup>

### **Cuts to the Australian Renewable Energy Agency**

4.42 ARENA is an independent statutory authority established by the Commonwealth government on 1 July 2012 under the *Australian Renewable Energy Act 2011* (Cth). It has two objectives:

- to improve the competitiveness of renewable energy technologies; and
- to increase the supply of renewable energy in Australia.<sup>55</sup>

4.43 ARENA was established with a budget of \$3.2 billion until 2020 to:

- fund renewable energy projects;
- support research and development activities; and
- support activities to capture and share knowledge.<sup>56</sup>

4.44 Since it was established ARENA has successfully launched four new programs and manages 181 projects which account for committed funds of approximately \$960 million.<sup>57</sup>

4.45 During the recent Additional Estimates hearings, ARENA advised that:

53 CEFC, *Submission 75*, p. 7.

54 Ms Gillian Broadbent AO, Chair, CEFC, *Committee Hansard*, 7 March 2014, p. 23.

55 *Australian Renewable Energy Act 2011*, s. 3; see also Australian Renewable Energy Agency (ARENA), *About ARENA*, <http://arena.gov.au/about-arena/> (accessed 20 January 2014); ARENA, *Annual Report 2012-13*, p. 10. Note that ARENA assumed responsibility for a number of projects from the former Australian Centre for Renewable Energy (ACRE), the Department of Resources, Energy and Tourism, and the Australian Solar Institute: ARENA, *History*, <http://arena.gov.au/about-arena/history/> (accessed 20 January 2014).

56 ARENA, *About ARENA*, <http://arena.gov.au/about-arena/> (accessed 20 January 2014); ARENA, *Annual Report 2012-13*, pp 10 and 18.

57 ARENA, *Changes to ARENA's funding*, <http://arena.gov.au/news/changes-to-arenas-funding/> (accessed 20 January 2014). For more information on relevant projects, see: [www.arena.gov.au](http://www.arena.gov.au) and ARENA, *Annual Report 2012-13*.

We span the entire innovation chain from desktop research through to demonstration projects—that are typically innovative technology—all the way to near-commercial deployments. Some examples of those might be university research, first ocean deployments of wave technologies and large-scale solar farms....<sup>58</sup>

4.46 In terms of its relationship with the CEFC, ARENA stated that:

By and large the CEFC is a debt provider and we are an equity provider in the form of grants...We cover the whole spectrum,...whereas the CEFC is very much at the commercial or near commercial end. We have a good productive working relationship with the CEFC in the sense that we share information about projects so that there is limited duplication of effort.<sup>59</sup>

### ***Proposed funding changes***

4.47 The Clean Energy Legislation (Carbon Tax Repeal) Bill 2013 proposes to amend the *Australian Renewable Energy Act 2011* (Cth) to change ARENA's funding to 'partially offset the costs associated with repealing the carbon tax'.<sup>60</sup> The changes would:

- 're-profile' \$370 million in funding for the ARENA over the forward estimates (2014–15 to 2016–17) to later years (2019–20 to 2021–22);<sup>61</sup> and
- reduce funding for the ARENA by \$434.9 million over the forward estimates (2014–15 to 2016–17).<sup>62</sup>

4.48 Several submissions expressed concerns about the proposed cuts to ARENA's funding.<sup>63</sup> Indeed, some suggested that ARENA's budget needs to be increased rather than decreased.<sup>64</sup> As Professor Garnaut identified:

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58 Mr Frischknecht, ARENA, *Estimates Hansard*, Economics Legislation Committee, 27 February 2014, p. 8.

59 Mr Frischknecht, ARENA, *Estimates Hansard*, Economics Legislation Committee, 27 February 2014, pp 8–9.

60 Clean Energy Legislation (Carbon Tax Repeal) Bill 2013, Schedule 5 and *Explanatory Memorandum*, p. 76.

61 This aspect was announced by the previous Labor Government in the 2013 Budget.

62 Clean Energy Legislation (Carbon Tax Repeal) Bill 2013, Schedule 5 and *Explanatory Memorandum*, p. 76.

63 See, for example, Doctors for the Environment Australia, *Submission 13*, p. 5; Sustainable Energy Now, *Submission 34*, p. 6; Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 7; Climate Action Newcastle, *Submission 48*, p. 4; Recurrent Energy, *Submission 71*, p. 2; Sunshine Coast Environment Council, *Submission 78*, p. 6; AUSTELA, *Submission 76*, p. 9; UnitingJustice Australia, *Submission 68*, p. 8; Greenbank Environmental, *Submission 63*, p. 12; Dr Barry Naughten, *Submission 96*, p. 2; Recurrent Energy, *Submission 71*, p. 4.

64 Sustainable Energy Now, *Submission 34*, p. 6; CCSA, *Submission 44*, p. 3.

The main question about the future of ARENA relates to whether adequate financial resources will be provided through the budget for it to function effectively in its contribution to reduce greenhouse gas emissions.<sup>65</sup>

4.49 Evidence to the committee emphasised the important role of ARENA in research and development in the renewable energy industry in Australia and therefore greenhouse gas emissions reductions.<sup>66</sup> The committee heard that ARENA has a different role compared to, for example, the CEFC, because ARENA 'is focussed more on developing more on technologies that are in earlier stages'.<sup>67</sup>

4.50 Indeed, the CEFC itself was highly supportive of ARENA's work, noting that ARENA 'can support earlier stage technologies and research that is non-financeable to the CEFC'.<sup>68</sup> The CEFC further noted that, if it were not abolished, revenues received by the CEFC could be a potential revenue stream to ARENA under the Clean Energy Finance Corporation Act.<sup>69</sup>

4.51 Similarly, Mr Fabian from the IGCC told the committee that ARENA 'fills a really critical gap':

We have traditionally had a problem of ventures moving from early scale—from the CSIRO stage—to a venture that is investable by institutions.<sup>70</sup>

#### *ARENA's response*

4.52 On 13 November 2013, the ARENA released a statement acknowledging the Government's intention to reduce ARENA's funding, but noted that 'ARENA still has more than \$2.5 billion in funding to manage until the year 2022'. ARENA stated that:

This announcement does not affect ARENA's funding for the current year, nor the funding for those projects that have a signed funding agreement with ARENA. ARENA's total funding envelope, including committed (and spent) funds remains substantial at around \$2.5 billion...<sup>71</sup>

4.53 ARENA further stated that it:

...is currently evaluating the impact the intended change will have on its existing programs and those projects in the pipeline. However, applications for funding through the Emerging Renewables Program, the Accelerated Step Change Initiative, the Community and Regional Renewable Energy

65 Professor Ross Garnaut, *Submission 105*, p. 1.

66 Sustainable Energy Now, *Submission 34*, p. 6; WWF-Australia, *Submission 67*, p. 23; Clean Energy Council, *Submission 16*, pp 6–7.

67 Mr Stephen Gates and Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 29.

68 CEFC, *Submission 75*, p. 42.

69 CEFC, *Submission 75*, p. 43.

70 Mr Nathan Fabian, CEO, IGCC, *Committee Hansard*, 7 March 2014, p. 13.

71 ARENA, *Changes to ARENA's funding*, <http://arena.gov.au/news/changes-to-arenas-funding/> (accessed 20 January 2014); see also Mr Frischknecht, ARENA, *Estimates Hansard*, Economics Legislation Committee, 27 February 2014, p. 5.

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Program and the Regional Australia's Renewables – Industry Program are still being accepted.<sup>72</sup>

4.54 During Additional Estimates, ARENA advised that:

The board has been examining what impact the proposed budget reductions have on ARENA's projects and programs. Any existing commitments, be they contractual commitments or board commitments, are unaffected.<sup>73</sup>

4.55 ARENA further advised that, in relation to open programs, such as the Regional Australia's Renewable program:

...the board's view is that there is sufficient funding available to follow through on the majority of the program envelope that had been planned for that program.<sup>74</sup>

### **Committee comment**

4.56 The committee agrees with evidence that the Climate Change Authority plays an important role in providing *independent and transparent* expert advice and analysis to government on Australia's climate change policies. It is vital that the review of, and advice on, the targets and policies that underpin our response to climate change are conducted by an expert, multi-disciplinary agency independent of government. The committee urges the government to retain the Climate Change Authority. The committee supports the recent decision of the Senate to reject the Climate Change Authority (Abolition) Bill 2013 and recommends that the bill be withdrawn.

### **Recommendation 7**

**4.57 The committee recommends that the Climate Change Authority be retained and that the Government withdraw the Climate Change Authority (Abolition) Bill 2013.**

4.58 The Clean Energy Finance Corporation (CEFC) undertakes important work to help Australia reach its emissions reduction targets and assist businesses and industry to move towards a clean energy economy. In only a relatively short period of time, the CEFC has increased the flow of funding to help in the development of renewable energy projects and low emissions and energy efficiency technologies. Through its work the CEFC has also been responsible for creating jobs and growing Australian businesses. Remarkably, while facilitating all of this action the CEFC is expected to make a substantial average return to the Government. The committee agrees with submitter comments that removal of the CEFC is based purely on ideology and is not based on a rational examination of its policy objectives.

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72 ARENA, *Changes to ARENA's funding*, <http://arena.gov.au/news/changes-to-arenas-funding/> (accessed 20 January 2014).

73 Mr Frischknecht, ARENA, *Estimates Hansard*, Economics Legislation Committee, 27 February 2014, p. 5.

74 Mr Frischknecht, ARENA, *Estimates Hansard*, Economics Legislation Committee, 27 February 2014, p. 8.

4.59 The committee acknowledges the work that the CEFC undertakes and its importance as part of a range of policy measures to help Australia reduce carbon emissions. The committee supports the recent decision of the Senate to reject the Clean Energy Finance Corporation (Abolition) Bill 2013 and recommends that the bill be withdrawn.

### **Recommendation 8**

**4.60 The committee recommends that the Clean Energy Finance Corporation be retained and that the Government withdraw the Clean Energy Finance Corporation (Abolition) Bill 2013.**

4.61 The committee is concerned about the proposed cuts to funding for the Australian Renewable Energy Agency (ARENA). Clearly ARENA plays a crucial role in research and development in the renewable energy industry, particularly in relation to technologies that are in early development stages. The committee notes ARENA's statements that existing programs will not be affected. However, the committee is concerned that there is the potential for the cuts to affect new initiatives into the future.

4.62 The committee notes that the cuts to ARENA are contained in the Clean Energy Legislation (Carbon Tax Repeal) Bill 2013 and one of the reasons for the cuts is to 'partially offset the costs associated with repealing the carbon tax'. The committee does not consider that the carbon pricing mechanisms should be repealed, and therefore the cuts are clearly unnecessary.

### **Recommendation 9**

**4.63 The committee recommends that the funding cuts to the Australian Renewable Energy Agency contained in the Clean Energy Legislation (Carbon Tax Repeal) Bill 2013 not be passed and that funding for the 'One Million Solar Roofs' program be additional and not come out of the Agency's existing funding.**

# Chapter 5

## Direct Action Plan

5.1 This chapter outlines the Direct Action Plan, and the proposed Emissions Reduction Fund (ERF), and examines the evidence received as to whether they have the capacity to reduce Australia's greenhouse gas emissions adequately and cost-effectively.

### Background: What is the Direct Action Plan?

5.2 The 'Direct Action Plan' refers to a climate change policy to reduce Australia's greenhouse gas emissions released in 2010 while the Coalition was in Opposition.<sup>1</sup> The Direct Action Plan states that:

Australia needs a scheme that will provide the incentive for firms to reduce their carbon emissions and, at the same time, minimise the costs to industry and the Australian economy.<sup>2</sup>

5.3 The Direct Action Plan has a number of components. The ERF is the 'centrepiece' of the Direct Action Plan. The Direct Action Plan states that the ERF will 'directly support CO<sub>2</sub> emissions reduction activities by business and industry'.<sup>3</sup> The original idea behind the ERF was that the Government will pay for projects that will reduce CO<sub>2</sub> emissions 'at least cost'. Funding allocations from the ERF would be made through a reverse auction<sup>4</sup> starting with the lowest-cost projects. The Direct Action Plan identifies a range of possible opportunities for CO<sub>2</sub> abatement,<sup>5</sup> such as energy efficiency projects, cleaning up power stations, reforestation and revegetation projects or improvement of soil carbon.<sup>6</sup>

5.4 The Direct Action Plan also contained a number of other components and commitments, including 'One Million Solar Roofs', 'Solar Towns and Solar Schools', 'Twenty Million Trees', 'Clean Energy Employments Hubs', 'Geothermal and Tidal Towns', 'Renewable Fuels' and 'Greenhouse Friendly Program'. The table in Appendix

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1 *The Coalition's Direct Action Plan* (Direct Action Plan), <http://www.greghunt.com.au/Portals/0/PDF/TheCoalitionsDirectActionPlanPolicy2010.pdf> (accessed 17 December 2013).

2 Direct Action Plan, p. 13.

3 Direct Action Plan, p. 13.

4 That is, unlike an ordinary auction, where buyers compete to obtain a good or service by offering increasingly higher prices, in a reverse auction, the sellers compete to obtain business from the buyer and prices will typically decrease as the sellers undercut each other.

5 To 'abate' greenhouse gas emissions, either less CO<sub>2</sub> (and other greenhouse gases) is released into the air from burning fossil fuels; or more CO<sub>2</sub> needs to be absorbed or retained in other ways – for example, carbon is absorbed into plants by photosynthesis, and it can also be stored in soil.

6 Direct Action Plan, pp 13–21. Soil carbon is discussed further in Chapter 7 of this report.

4 sets out the original commitments under the Direct Action Plan in further detail and the current status of each commitment.

### **Targets**

5.5 The stated aim of the original 2010 Direct Action Plan was to reduce Australia's emissions by 5% by 2020 compared to the 1990 levels. This target has been reiterated by the Government in the recent ERF Green Paper, which states that the Government has committed to reduce Australia's greenhouse gas emissions by 5% below 2000 levels by 2020 and to:

...review our position in 2015 as part of the global negotiations regarding international commitments both pre- and post-2020.<sup>7</sup>

5.6 The committee notes that whether a 5% target is adequate has been discussed earlier in this report. At the time of writing, on current emissions projections, a 5% target represents a reduction amount of 131 million tonnes of CO<sub>2</sub>-e<sup>8</sup> in 2020 and a cumulative amount between 2014 and 2020 of 431 million tonnes.<sup>9</sup>

### **Clean Air Plan**

5.7 Since coming into Government, the Coalition has released the *Plan for a Cleaner Environment*.<sup>10</sup> The 'Clean Air' component of this plan contains some of the commitments made in the Direct Action Plan, and confirms the target of reducing Australia's emissions by 5% below 2000 levels by 2020.<sup>11</sup> The Clean Air Plan indicates that this target will primarily be reached through the ERF, described as the 'centrepiece of the Government's climate action policy'.<sup>12</sup> The Clean Air Plan also contains three other initiatives: 'One Million Solar Roofs', 'Solar Towns and Solar Schools' and 'Twenty Million Trees'. These are discussed further in Chapter 7 of this report.

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7 Department of the Environment, *Emissions Reduction Fund Green Paper* (Green Paper), December 2013, p. 1, <http://www.environment.gov.au/topics/cleaner-environment/clean-air/emissions-reduction-fund/green-paper> (accessed 9 February 2014).

8 CO<sub>2</sub>-e: carbon dioxide equivalent, which is a measure that quantifies different greenhouse gases in terms of the amount of carbon dioxide that would deliver the same global warming potential: Climate Change Authority, *Targets and progress review*, Final report, February 2014, Glossary, p. 349.

9 Green Paper, p. 1

10 Department of the Environment, *A Plan for a Cleaner Environment*, October 2013, <http://www.environment.gov.au/system/files/resources/d25d512f-fd38-49f4-8434-bf6a9edd6d5d/files/cleaner-environment.pdf> (accessed 7 January 2014).

11 Department of the Environment, *A Plan for a Cleaner Environment*, p. 7. Note that although the baseline year has changed from 1990 to 2000, this does not significantly change the abatement reduction task. The recently released Green Paper for the Emissions Reduction Fund confirms this target: the aim is to reduce emissions by 5% by 2020 based on 2000 levels.

12 Department of the Environment, *A Plan for a Cleaner Environment*, p. 7.

## **Budget**

5.8 In 2010, the proposed budget for the Direct Action Plan was a total of \$3.2 billion over four years. The ERF was allocated \$2.55 billion of this total. The ERF had an initial allocation of \$300 million in its first year, \$500 million in the second year, \$750 million in its third year, and \$1 billion in its fourth year.<sup>13</sup>

5.9 The more recent *Plan for a Cleaner Environment* commits \$300 million, \$500 million and \$750 million for the ERF over the forward estimates (a total of \$1.5 billion). The fourth year commitment has no longer been specified.<sup>14</sup> The Government has indicated that once the budget for the Direct Action Plan is exhausted, no further monies will be spent, whether or not emissions reduction targets have been achieved.<sup>15</sup>

5.10 The table in Appendix 4 sets out original funding commitments under the Direct Action Plan and the current status of that funding and/or commitment.

## **Background: the Emissions Reduction Fund**

5.11 Although described as the 'centrepiece' of the Government's climate policy, the final design of the ERF is still unclear and is currently the subject of a consultation process. On 16 October 2013, the Government released the terms of reference for the ERF. Submissions to the terms of reference closed on Monday, 18 November 2013, and were used to inform the development of the Green Paper.<sup>16</sup>

5.12 The ERF Green Paper (the Green Paper)<sup>17</sup> was released on 20 December 2013, with submissions due by 21 February 2014. The Green Paper sets out the Government's 'preferred options' for design of the ERF including key features such as auctions, baselines and contract arrangements. Submissions to the Green Paper will be considered leading up to the release of a white paper in 'early 2014'. The Department advised that, as part of the white paper process, exposure legislation would be released along with the white paper. The stated goal is for the ERF to commence on 1 July 2014.<sup>18</sup> However, the Department clarified that the ERF will actually commence in two stages: the purchasing and crediting processes would

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13 Direct Action Plan, p. 13.

14 Department of the Environment, *A Plan for a Cleaner Environment*, p. 6.

15 Jonathan Swan, 'Liberals cap spending on climate change', *Sydney Morning Herald*, 18 August 2013, <http://www.smh.com.au/federal-politics/federal-election-2013/liberals-cap-spending-on-climate-change-policy-20130817-2s3q0.html> (accessed 13 January 2014).

16 Department of the Environment, *Emissions Reduction Fund – Call for public comment*, <http://www.environment.gov.au/emissions-reduction-fund/consultation.html> (accessed 17 December 2013).

17 Department of the Environment, *Emissions Reduction Fund Green Paper*, December 2013, <http://www.environment.gov.au/topics/cleaner-environment/clean-air/emissions-reduction-fund/green-paper> (accessed 9 February 2014).

18 Green Paper, p. 6. See also Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, pp 1–2.

commence on 1 July 2014, whereas the aim is for the safeguard mechanism to commence on 1 July 2015.<sup>19</sup>

5.13 A review of the ERF will commence 'towards the end of 2015'.<sup>20</sup> A review of 'Australia's climate change policy' will also be conducted in 2015.<sup>21</sup>

### ***Design of the ERF: Summary of Green Paper***

5.14 The Green Paper proposes to retain some existing programs and entities: the Clean Energy Regulator; the CFI; and the National Greenhouse and Energy Reporting Scheme (NGERS).<sup>22</sup>

5.15 The Clean Energy Regulator will administer the ERF and will run the auction process and enter into contracts with successful applicants.<sup>23</sup> The Green Paper notes that 'legislative changes would be made to expand the role of the Clean Energy Regulator'.<sup>24</sup>

5.16 The ERF will also 'build on the existing arrangements' under the Carbon Farming Initiative for crediting emissions reductions.<sup>25</sup> However, the Green Paper did seek views on options for 'streamlining' the CFI.<sup>26</sup>

5.17 The Green Paper states that three principles will guide the design of the ERF:

- Lowest-cost emissions reductions. The Emissions Reduction Fund will identify and purchase emissions reductions at the lowest cost.
- Genuine emissions reductions. The Emissions Reduction Fund will purchase emissions reductions that make a real and additional contribution to reducing Australia's greenhouse gas emissions.
- Streamlined administration. The Emissions Reduction Fund will make it easy for businesses to participate.<sup>27</sup>

5.18 The ERF would have two key aspects:

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19 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 2.

20 Green Paper, pp 6 and 8.

21 Green Paper, pp 6 and 8.

22 Green Paper, pp 3–5. The Direct Action Plan foreshadowed that the ERF would use the existing NGERS: Direct Action Plan, p. 14.

23 Green Paper, p. 6. The Clean Energy Regulator currently administers the NGERS, Carbon Pricing Mechanism, Carbon Farming Initiative, and the Renewable Energy Target: <http://www.cleanenergyregulator.gov.au/Pages/default.aspx> (accessed 10 January 2014).

24 Green Paper, p. 48.

25 Green Paper, p. 21.

26 For example, the consultation period for draft methods could be reduced from 40 to 28 days. For further details on possible 'streamlining' of the CFI see pp 44–46 of the Green Paper. This issue discussed further in Chapter 7 of this report.

27 Green Paper, pp 2 and 17.

- a process for purchasing and crediting emissions reductions (which would commenced on 1 July 2014); and
- a 'safeguard' mechanism (not scheduled to commence until 1 July 2015).<sup>28</sup>

### ***Process for purchasing emissions reductions***

5.19 The Green Paper proposes that:

...businesses will submit emissions reduction projects into a competitive bidding process run by the Clean Energy Regulator. The bids with the lowest cost per tonne will be selected, and the Clean Energy Regulator will enter into contracts to purchase those emissions reductions. The competitive nature of this process will ensure that the best value for money is achieved.<sup>29</sup>

5.20 The Green Paper suggests the Clean Energy Regulator could:

- run 'relatively frequent auction rounds';
- apply a confidential benchmark price—the maximum amount it will pay per tonne of emissions reduced — with only bids costing less than the benchmark price being considered;
- use standard contracts with a maximum duration of five years (the contracts could include 'make-good' provisions to address under-delivery of emissions reductions);<sup>30</sup> and
- publish details about auctions results and contracts would be published to 'provide information to the public on the progress' of the ERF.<sup>31</sup>

5.21 The Green Paper states that to 'ensure the integrity of the auction', bids and participants would need to meet certain requirements, including identity checks; project eligibility under a relevant 'emissions reduction method'; commercial readiness of the relevant technology or practice; and the credibility of emissions reduction estimates.<sup>32</sup>

### ***Calculating and crediting emissions reductions – 'emissions reduction methods'***

5.22 The Green Paper states that the ERF will build on existing arrangements under the CFI for crediting emissions reductions. Approved emissions reduction 'methods' will set out the rules for calculating and verifying emissions reductions from different activities. The arrangements for assessing those methods will be based on those under the CFI:

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28 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, pp 2–3.

29 Green Paper, p. 29.

30 Green Paper, p. 33.

31 Green Paper, pp 33–34.

32 Green Paper, pp 29–30.

The Clean Energy Regulator will issue Australian Carbon Credit Units for emissions reductions that are measured and verified by approved methods, as currently occurs under the Carbon Farming Initiative.<sup>33</sup>

5.23 Two types of emissions reduction methods are proposed in the Green Paper:

- **Activity methods** for 'specific emissions reduction actions'. These methods would expand the set of land sector methodologies developed for the Carbon Farming Initiative. It is proposed that existing international methods, such as the Clean Development Mechanism under the Kyoto Protocol, could be used and adapted to Australia.<sup>34</sup>
- **Facility methods** for aggregate emissions reductions from multiple activities at a particular facility. These methods could be used by businesses that already report data under the NGERs.<sup>35</sup>

5.24 The Green Paper proposes that the focus of the ERF would be on emissions reductions that would not have occurred without the ERF—often referred to as 'additionality'.<sup>36</sup> Activities already occurring as part of normal business practice will not be funded. Similarly, only activities which are new, not required by law or do not receive funding from other Government programmes (such as the Renewable Energy Target, or state based energy efficiency schemes) will be eligible.<sup>37</sup> The Green Paper states that the ERF is 'designed to complement rather than duplicate these schemes'.<sup>38</sup>

#### ***'Safeguard' mechanism***

5.25 The original Direct Action Plan states that businesses that reduce their emissions *below* their individual baseline would be able to offer this CO<sub>2</sub> abatement for sale to the Government. However, businesses undertaking activity with an emissions level *above* their 'business as usual' levels would incur a financial penalty.<sup>39</sup> The Direct Action Plan stated that the value of penalties will be set in consultation with industry but that:

Given the trend towards lower emissions-intensive activity, and the economic growth projections that have been built into 'business as usual' emissions estimates, this is only expected to apply in exceptional circumstances.<sup>40</sup>

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33 Green Paper, p. 21.

34 See further Green Paper, pp 24–25.

35 Green Paper, p. 23 and see further pp 26–27.

36 See also Green Paper, Glossary, p. 60.

37 Green Paper, p. 22.

38 Green Paper, p. 22.

39 Direct Action Plan, p. 14.

40 Direct Action Plan, p. 14.

5.26 This commitment appears to have evolved in the Green Paper to a 'safeguard mechanism'. The Green Paper now states that the ERF 'is designed to allow businesses to continue ordinary operations without penalty':

Businesses will be encouraged to decrease emissions below their historical business-as-usual levels through the Emissions Reduction Fund. In addition, a mechanism will be developed in conjunction with business stakeholders to provide incentives not to exceed historical emissions baselines.<sup>41</sup>

5.27 The Green Paper refers to this as the 'safeguard mechanism', and suggests it could commence from 1 July 2015 to:

...provide lead time to consult comprehensively with businesses on these elements and allow time for access to the Emissions Reduction Fund's crediting and purchasing elements to help reduce emissions.<sup>42</sup>

5.28 The Green Paper identifies the following issues for the design of an effective framework to discourage emissions growth above historical levels:

- the entities and emissions to be covered by the scheme ('coverage');
- how baseline emission levels would be determined;
- action required from businesses if baselines were exceeded; and
- appropriate treatment of new investments and significant expansions.

#### *Coverage*

5.29 In terms of coverage, the Green Paper suggests that the simplest approach would be to limit the scheme to corporations and greenhouse gases already subject to the NGERs<sup>43</sup>—that is, facilities which emit over 25,000 tonnes of CO<sub>2</sub>-e emissions each year.<sup>44</sup> The Green Paper suggests that:

Coverage thresholds should be set at a level that maximises emissions coverage but minimises the number of entities that may need to interact with these elements of the Emissions Reduction Fund.<sup>45</sup>

5.30 The Green Paper then suggests if coverage were restricted to facilities which emit 100,000 tonnes of CO<sub>2</sub>-e per year, this would 'significantly streamline coverage by covering around 50 per cent of Australia's emissions, but limit the number of covered entities to around 190'.<sup>46</sup>

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41 Green Paper, p. 35.

42 Green Paper, p. 35.

43 The greenhouse gases reported under NGERs include carbon dioxide, methane, nitrous oxide, sulphur hexafluoride, hydrofluorocarbons and perfluorocarbons: see Green Paper, p. 36.

44 Green Paper, p. 36.

45 Green Paper, p. 36.

46 Green Paper, p. 36.

*Setting baselines for the safeguard mechanism*

5.31 A 'baseline' is defined as 'a projected level of future emissions or a historical level of emissions that would have occurred without policy intervention'.<sup>47</sup> The Green Paper notes that:

Baseline parameters need to be designed to help achieve the goals of the Emissions Reduction Fund with minimal complexity. A facility's emissions are likely to fluctuate over time due to a variety of influences such as changes in production levels, the mix of outputs produced, plant maintenance, and the quality of inputs used. Baselines could be set in a way that takes account of these normal variations.<sup>48</sup>

5.32 Options include setting historical baselines based on *emissions intensity* (the ratio of emissions per output) or on *absolute emissions* levels (the absolute level of emissions from a facility during a historical period). The Green Paper notes that baselines based on absolute emissions 'would be simple to determine' using the existing NGERs reporting framework without requiring any new reporting.<sup>49</sup>

5.33 The Green Paper suggests that initial baselines could be set 'using data that represents a high point in historical emissions for a facility' and explains that:

This would ensure baselines accommodate situations where a facility increases production in the future back towards fully installed capacity or where normal variation occurs as a result of the issues described above. While this approach may provide sufficient flexibility in baselines to accommodate historical variations, significant expansions in the production capacity at a facility are likely to require specific treatment.<sup>50</sup>

5.34 The Green Paper states that there is no intention to raise revenue via the ERF, and that if an entity did exceed its baseline, 'there would be flexible compliance arrangements available'.<sup>51</sup> Options suggested include 'an initial transition period during which compliance action for exceeding baselines would not apply'; a multi-year compliance period, where a facility could exceed a baseline in one year so long as its average emissions over the full compliance period remained below the baseline; and enabling businesses to purchase credits to bring their net emissions back within baselines.<sup>52</sup>

5.35 Finally, the Green Paper also states that the ERF would 'put in place a framework that supports new facilities or significant expansions at *best practice*'.<sup>53</sup>

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47 See Green Paper, Glossary, p. 60.

48 Green Paper, p. 37.

49 Green Paper, p. 37.

50 Green Paper, p. 37.

51 Green Paper, p. 38.

52 Green Paper, p. 38.

53 Green Paper, p. 39.

The Green Paper notes that the definitions of 'best practice' and 'significant expansion' will be key issues.<sup>54</sup>

### Capacity of the Direct Action Plan to meet Australia's targets

5.36 This section considers the evidence relating to the capacity of the Direct Action Plan to meet Australia's targets adequately and in a cost-effective manner. The more technical design issues relating to the ERF are considered further in the next chapter.

5.37 An overwhelming number of submissions and witnesses expressed doubt about whether the Direct Action Plan and the ERF could achieve Australia's existing emissions reduction targets.<sup>55</sup> This doubt was based on a number of factors which are discussed further below:

- the need for more detail to make an assessment;
- the budget allocated to the ERF and the associated price of abatement;
- comparison with the performance of similar past schemes;
- the administrative burden involved in the ERF;
- the voluntary nature of the ERF;
- the lack of economy-wide incentives to reduce emissions;
- the overall cost-effectiveness of the scheme; and
- the need for other complementary measures.

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54 Green Paper, pp 39–40.

55 Professor Ross Garnaut, *Submission 105*, p. 5; Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 7; Reverend Evan Pederick, Deputy Chair, Anglican EcoCare Commission, *Committee Hansard*, 31 January 2014, p. 60 and *Submission 40*, p. 2; Doctors for the Environment Australia, *Submission 13*, p. 6; CCWA, *Submission 29*, p. 1; 350 Australia, *Submission 33*, p. 2; Anglican EcoCare Commission, *Submission 40*, p. 2; Sustainable Energy Now, *Submission 34*, p. 1; Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 9; Mr Dugald Murray, Senior Economist, ACF, *Committee Hansard*, 5 February 2014, p. 35; Ms Kellie Caught, National Manager, Climate Change, WWF-Australia, *Committee Hansard*, 5 February 2014, p. 59; Wentworth Group of Concerned Scientists, *Submission 95*, pp 1, 4; ACF, *Submission 14*, pp 2, 6; ARRCC, *Submission 21*, p. 9; Environment Victoria, *Submission 25*, pp 1-2; GetUp Action for Australia, *Submission 47*; Climate Action Newcastle, *Submission 48*, p. 1; Conservation Council of South Australia, *Submission 44*, p. 5; Oxfam Australia, *Submission 31*, pp 5–6; Mr David Rossiter, *Committee Hansard*, 28 February 2014, pp 8–9 and *Submission 70*, p. 2; UnitingJustice Australia, *Submission 68*, p. 2; Climate and Health Alliance, *Submission 99*, p. 13.

**More detail required**

5.38 Many identified the need for more detail in order to properly evaluate the proposed ERF.<sup>56</sup> As Professor Garnaut observed, it is difficult to make a responsible choice between the two approaches of the ERF and the carbon pricing mechanism. He described the choice as a 'Martian beauty contest':

... there has been an incomplete definition of the alternative...the Senate is put in the position of a judge of a Martian beauty contest who is invited to make the unseen candidate the winner, having seen some imperfections in the first candidate.<sup>57</sup>

5.39 Professor Ross Garnaut remarked that the Green Paper is an 'unusual document':

Normally a green paper on a very important new policy would specify more clearly the objectives, the alternative ways of meeting them and the government's preferred approach as a means of underpinning a productive and constructive discussion.<sup>58</sup>

5.40 Professor Garnaut described the Green Paper as a 'shooting of the breeze':

...there are many things that would need to be part of an effective emissions reduction fund that simply are not discussed in the paper. We are left to work out for ourselves how quite a number of things would work. Some important issues are raised, but raised just lightly, without suggestions of what the government has in mind to go about it.<sup>59</sup>

5.41 Several submissions concluded that 'it is premature to assess the impact or potential impact' of the Direct Action Plan and the ERF until further detail is available.<sup>60</sup> For example, the Energy Supply Association of Australia told the committee that:

Direct Action as a suite of policies still under development, and in that context it is not possible to make definitive statements regarding its efficacy as compared with carbon pricing.<sup>61</sup>

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56 Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 6; Professor Ray Wills, *Committee Hansard*, 31 January 2014, pp 48 and 50; Mr Noel Campbell, ADIC, *Committee Hansard*, 5 February 2014, p. 47; North Queensland Conservation Council, *Submission 77*, p. 1; Mr Bernie Fraser, Chair, Climate Change Authority, *Committee Hansard*, 7 March 2014, p. 27; Energy Supply Association of Australia, *Submission 61*, p. 1; Australian Industry Group, *Submission 92*, p. 3.

57 Professor Ross Garnaut, *Committee Hansard*, 7 March 2014, p. 1; and *Submission 105*, p. 7.

58 Professor Ross Garnaut, *Committee Hansard*, 7 March 2014, p. 2.

59 Professor Ross Garnaut, *Committee Hansard*, 7 March 2014, p. 2; and *Submission 105*, p. 3.

60 NFF, *Submission 37*, p. 1; see also Mr Tennant Reed, Principal National Advisor, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, p. 52; Grattan Institute, *Submission 22*.

61 Mr Kieran Donoghue, General Manager, Policy, Energy Supply Association of Australia, *Committee Hansard*, 5 February 2014, p. 40.

5.42 Similarly, the ADIC told the committee that:

...there is the potential that the Direct Action Plan could assist, but it will depend on how it is designed and [whether it] has enough funding...<sup>62</sup>

5.43 Several submitters put forward modelling analysing the Direct Action Plan based on various possible designs for the ERF. For example, Mr Erwin Jackson from The Climate Institute told the committee that:

...even using very conservative assumptions and very generous assumptions about the direct action policy, our assessment with SKM and Monash University suggests that Australia's emissions would *increase* by around 10 per cent to 2020 under the current policy framework.<sup>63</sup> [emphasis added]

5.44 Mr Jackson further pointed out that the Government has not presented any evidence or independent modelling to demonstrate that the Direct Action Plan can achieve its target.<sup>64</sup> The Climate Institute submission further remarked that:

No independent analysis to date has shown that the [Direct Action Plan] policy framework as outlined can achieve Australia's international obligations and emission commitments.<sup>65</sup>

5.45 Even those who were more optimistic that the ERF might be enough to meet a 5% target<sup>66</sup> cautioned that the ERF needed to be designed well. For example, ClimateWorks Australia submitted that, *if well designed and sufficiently resourced*, the ERF could potentially meet more than a 5% emission reduction target.<sup>67</sup>

5.46 Mr Tony Wood from the Grattan Institute also expressed the view that 'the Direct Action Plan can effectively and efficiently reduce emissions', but 'whether it will be efficient in reducing emissions is going to depend upon the design of the scheme, many elements of which are yet to be determined'.<sup>68</sup>

5.47 Others were concerned that the Direct Action Plan and ERF fail to provide a market-based price signal to reduce emissions.<sup>69</sup> For example, Mr David Rossiter told the committee that:

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62 Ms Irene Clarke, Senior Policy Manager, ADIC, *Committee Hansard*, 5 February 2014, p. 51.

63 Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 9; see also The Climate Institute, *Submission 2*, pp 5–6 and Attachment 1.

64 Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 13.

65 The Climate Institute, *Submission 2*, p. 5.

66 Noting the discussion in earlier chapters of this report as to whether this target is sufficient.

67 ClimateWorks Australia, *Submission 24*, p. 2.

68 Mr Tony Wood, Program Director—Energy, Grattan Institute, *Committee Hansard*, 5 February 2014, p. 1; see also, for example, ADIC, *Submission 11*, pp 2–3; Grattan Institute, *Submission 22*, p. 2.

69 Sustainable Energy Association, *Submission 90*, p. 3.

...this plan provides public funding to companies for specific abatement purposes, but because the company may not have had to fund this abatement, there will be no cascading price signal coming down from the company due to additional costs of their produce, so the consumers in the wider community will not get a price signal to reduce the abatement further.<sup>70</sup>

5.48 The Grattan Institute indicated that the ERF *could* effectively establish at least a 'shadow' carbon price:

Although the ERF does not include a tradable commodity such as is created by an Emissions Trading Scheme or the RET, it will establish a carbon price, based on the marginal cost curve of emissions reduction activities covered by the fund.<sup>71</sup>

5.49 However, the Grattan Institute reiterated that whether this will occur depends on design and that more detail is needed:

An assessment of the capacity of the Direct Action Plan to achieve cost effective greenhouse gas reductions rests on whether it will effectively generate a carbon price across a broad range of abatement options. In principle and with good design, the ERF could meet this criterion. There is simply insufficient detail yet available to make this assessment, and whether providing that detail would lead to greater administrative complexity and cost than would be associated with a well-designed ETS.<sup>72</sup>

5.50 Technical design issues are discussed further in Chapter 6.

### ***Adequacy of the Budget and the price of abatement***

5.51 Evidence to the committee indicated that a key constraint on the ability of the ERF to meet Australia's targets is the budget for the ERF and the associated cost of abatement opportunities.

#### ***Budget for the ERF***

5.52 As noted earlier in this chapter, the Government has indicated that if the budget for the Direct Action Plan is exhausted, no further monies will be spent, whether or not emissions reduction targets have been achieved.<sup>73</sup>

5.53 Many submissions criticised this approach of a cap on funding rather than a cap on emissions.<sup>74</sup> Mr David Rossiter pointed out that the abatement target is an

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70 Mr David Rossiter, *Committee Hansard*, 28 February 2014, p. 9.

71 Grattan Institute, *Submission 22*, p. 3; see also Mr Tony Wood, Program Director—Energy, *Committee Hansard*, 5 February 2014, p. 8.

72 Grattan Institute, *Submission 22*, p. 3.

73 Jonathan Swan, 'Liberals cap spending on climate change', *Sydney Morning Herald*, 18 August 2013, at: <http://www.smh.com.au/federal-politics/federal-election-2013/liberals-cap-spending-on-climate-change-policy-20130817-2s3q0.html> (accessed 13 January 2014).

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international commitment and yet 'the Government has a cap set on its DAP [Direct Action Plan] funding regardless of whether or not it can reach its abatement target'.<sup>75</sup>

5.54 Many queried whether the funding allocated to the ERF would be sufficient to meet Australia's targets.<sup>76</sup> The Grattan Institute submitted that 'the funding allocation, rather than the inherent design, of the Direct Action Plan will be the major determinant of its adequacy'.<sup>77</sup> The Grattan Institute pointed to published analyses which suggest that 'the target cannot be achieved with the allocated funds, given assumptions of emissions projections, abatement costs and budgetary allocation'.<sup>78</sup>

5.55 It was suggested that to be effective, the ERF would need increased funding.<sup>79</sup> Various estimates were put forward of exactly how much more funding might be needed up to 2020, ranging from \$4 billion to up to \$100 billion.<sup>80</sup> The estimates varied depending on the design of the ERF and the estimated price of abatement. WWF-Australia warned that:

...the cost per tonne of abatement is expected to be significantly higher than has been budgeted for under the ERF. As a result the fund is expected to run out before the required level of abatement has been purchased.<sup>81</sup>

5.56 Some submitters therefore concluded:

...if funding for the ERF/DAP won't be increased, it seems clear that the Coalition have no real intention of even meeting the emission reduction targets they have promised.<sup>82</sup>

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74 See, for example, Sustainable Energy Association, *Submission 90*, p. 7; 350 Australia, *Submission 33*, p. 8; Anglican EcoCare Commission, *Submission 40*, p. 3; Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 34; Environmental Farmers Network, *Submission 9*, p. 1; Mr Peter Boyer, *Submission 6*, p. 2; Mr John Hawkins, *Submission 7*, p. 5; Climate Action Network Australia, *Submission 73*, p. 2.

75 Mr David Rossiter, *Submission 70*, p. 3.

76 See, for example, South East Council Climate Change Alliance, *Submission 39*, p. 2; Dr Justin Wood, *Submission 28*, p. 1; ACTU, *Submission 30*, p. 5; Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 38; 350 Australia, *Submission 33*, p. 6; Anglican EcoCare Commission, *Submission 40*, p. 3; Mr John Hawkins, *Submission 7*, p. 5; Carbon Market Institute, *Submission 64*, p. 9; Professor Frank Jotzo, *Submission 86*, p. 2; Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 31.

77 Grattan Institute, *Submission 22*, p. 2.

78 Grattan Institute, *Submission 22*, p. 3.

79 See, for example, Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 4; Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 27.

80 See, for example, The Climate Institute, *Submission 2*, p. 6; Mr John Hawkins, *Submission 7*, p. 6; Greenbank Environmental, *Submission 63*, p. 8; Mr James Wight, *Submission 65*, p. 15; and WWF-Australia, *Submission 67*, Table 3, on p. 19, which sets out a comparison of cumulative budget impact estimates of the Direct Action Plan from various sources.

81 WWF-Australia, *Submission 67*, p. 10.

82 350 Australia, *Submission 33*, p. 6; also Anglican EcoCare Commission, *Submission 40*, p. 5.

5.57 At the same time, it was pointed out that, if the ERF suffers from the same problem as previous grant-based schemes like the former Greenhouse Gas Abatement Program, as discussed later in this chapter, this is a strong possibility that the ERF will actually be underspent.<sup>83</sup>

#### *Estimated price of abatement*

5.58 It was generally suggested that the price available for abatement under the ERF, given its current budget, would be too low for many abatement opportunities.<sup>84</sup> The committee also heard various estimates of the possible price of abatement that would be available per tonne of emissions under the ERF. Many submitters and witnesses calculated their estimates based on the funding allocation for the ERF (of \$1.55 billion) and the abatement target of 431Mt to 2020. Estimates varied from \$3.60 per tonne to \$12 per tonne, with most around the average of \$8 per tonne.<sup>85</sup>

5.59 For example, the Sustainable Energy Association calculated that:

To achieve abatement of 431 million t CO<sub>2</sub>-e by 2020 with a budget of \$1.55 billion, as is currently proposed, the average price of carbon would need to be \$3.60/t CO<sub>2</sub>-e to achieve the emissions target.<sup>86</sup>

5.60 The CEFC submitted that 'the hypothetical price per tonne of emissions purchased for abatement' would need to be 'very low' – possibly in the order of \$4-7/tonne if the ERF was expected to deliver the majority of this abatement target.<sup>87</sup>

5.61 Greenbank Environmental similarly warned that:

...the Government's 'estimated' \$8-10 price of GHG Emission reductions is too low to fund renewable energy projects and too high to meet the emissions reduction target within the allocated funds.<sup>88</sup>

5.62 It was suggested that, realistically, most abatement opportunities would cost at least \$25–\$30 per tonne, and possibly up to \$114 per tonne, and as a result the budget for the ERF would need to be increased to achieve an emissions reduction target of 5%.<sup>89</sup> For example, the CEFC submitted that:

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83 See, for example, CEFC, *Submission 75*, p. 27; The Australia Institute, *Submission 38*, p. 5; Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 12.

84 See, for example, Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 8; see also *Submission 81*, p. 2; Sustainable Energy Association, *Submission 90*, p. 6; Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 5; Professor David Pannell, *Committee Hansard*, 31 January 2014, p. 13.

85 See, for example, Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 8; Mr John Hawkins, *Submission 7*, p. 3; Greenbank Environmental, *Submission 63*, p. 9.

86 Sustainable Energy Association of Australia, *Submission 90*, p. 6.

87 CEFC, *Submission 12*, p. 12.

88 Greenbank Environmental, *Submission 63*, p. 3.

89 See, for example, Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, pp and 11; WWF-Australia, *Submission 67*, p. 10.

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Independent modelling has shown, consistent with CEFC's experience, that an abatement cost of between AU\$20–\$40 per tonne is the likely settlement price needed to achieve the goals of the Emission Reduction Fund.<sup>90</sup>

5.63 Mr Jackson from The Climate Institute agreed that:

...the government's estimates—that it could achieve the target with emission reductions in the order of six or seven dollars a tonne—are not realistic and not supported by any evidence. We are talking in the order of \$25 or \$30 a tonne required in order to get most of these projects off the ground.<sup>91</sup>

5.64 Sustainable Energy Now calculated that, if the average cost of abatement were \$30 per tonne, the ERF would buy around 85 million tonnes of abatement. That would leave at least 340 million tonnes left to abate to reach the emissions reduction target of 5% by 2020, which would mean the budget for the ERF would need to be increased by around \$10.4 billion.<sup>92</sup>

5.65 The Climate Change Authority also told the committee that the modelling in its recent report showed that under low and medium carbon price scenarios, a 5% emissions reduction target would not be able to be achieved domestically.<sup>93</sup>

5.66 The Australia Institute noted that the ERF Green Paper appears to have budgeted for 'about \$9 to \$12 per tonne of CO<sub>2</sub>e over the forward estimates'. In contrast:

Most competitive grant schemes have cost between \$60 and \$100 per tonne of CO<sub>2</sub>e, with many schemes costing in excess of \$100 per tonne of CO<sub>2</sub>e. This compares to market mechanisms...which cost between \$15 and \$40 per tonne of CO<sub>2</sub>e...If we assume a more realistic, but still very optimistic cost of abatement of \$60 per tonne of CO<sub>2</sub>e then ERF would need to be increased by \$7.2 billion over the forward estimates and about \$21 billion out to 2020. This of course assumes that enough projects can be found to achieve the required level of abatement...<sup>94</sup>

#### *Low cost abatement opportunities*

5.67 There was discussion during the committee's inquiry as to where such low cost abatement opportunities might arise. For example, ClimateWorks Australia suggested that, if well designed and sufficiently resourced, the ERF could target abatement opportunities that:

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90 CEFC, *Submission 75*, p. 25.

91 Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 11.

92 Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 31.

93 Ms Anthea Harris, Chief Executive Officer, Climate Change Authority, *Committee Hansard*, 7 March 2014, p. 36.

94 The Australia Institute, *Submission 38*, p. 5.

...are large in volume, technologically proven and can be captured at reasonable cost. Among these, major focus areas include capture of waste methane from coal mines, increased deep retrofitting of commercial buildings and industrial facilities, and carbon farming and forestry.<sup>95</sup>

5.68 However, Ms Gillian Broadbent AO, CEFC Chair, cautioned that:

...if you want to find the lowest cost abatement, then the more broad the range of transactions that you consider means you are more likely to find it. If you cut it down to only large transactions and only large transactions that are self-financing through large corporations, you are not looking as broadly, you are not getting the cost down to necessarily the lowest cost of abatement...<sup>96</sup>

5.69 By way of example of the costs of other forms of abatement, the CSIRO indicated that the cost of abatement of current technologies for the capture of fugitive emissions is around \$10–20 per tonne, but that they were hoping with the next generation of technologies, this might be reduced to \$5 per tonne and be deployed 'towards the end of this decade'.<sup>97</sup> In relation to abatement opportunities relating to livestock, the CSIRO told the committee that this would cost around \$73 per tonne.<sup>98</sup> The CSIRO submitted that whether Australia will capture the many abatement opportunities 'will depend on the detailed design of the program'.<sup>99</sup>

5.70 The committee heard that most of the lowest cost abatement opportunities in Australia related to energy efficiency.<sup>100</sup> However, the Clean Energy Council expressed concern that:

In this context the implications of a strict 'least cost abatement' approach to assessing projects also need to be considered. Some activities, like energy efficiency, might come to dominate the program and reduce the level of diversity in activity that would most likely be needed in order to achieve a balanced approach to emission reduction across the economy.<sup>101</sup>

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95 ClimateWorks Australia, *Submission 24*, p. 2. Note also the ClimateWorks cost curve, which is set out on p. 13 of ERF Green Paper. See also AFPA, *Submission 15* in relation to opportunities in the forestry sector.

96 Ms Gillian Broadbent AO, Chair, CEFC, *Committee Hansard*, 7 March 2014, p. 24.

97 Dr Alex Wonhas, Director, Energy Flagship, CSIRO, *Committee Hansard*, 7 March 2014, p. 8.

98 Dr Michael Battaglia, Deputy Director, Sustainable Agriculture Flagship, CSIRO, *Committee Hansard*, 7 March 2014, p. 9.

99 CSIRO, *Submission 102*, p. 2.

100 See, for example, Ms Anna Skarbek, Executive Director, ClimateWorks Australia, *Committee Hansard*, 5 February 2014, p. 27; Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 6; Professor Ray Wills, *Committee Hansard*, 31 January 2014, p. 50.

101 Clean Energy Council, *Submission 16*, p. 4.

5.71 WWF-Australia warned in relation to energy efficiency projects, that many 'would have occurred anyway as they make good financial sense'.<sup>102</sup> Similarly, the Australian Manufacturing Workers' Union (AMWU) submitted that:

...there is no way for the Government to guarantee that such non-additive abatement isn't purchased by the Government. Many capital investment projects would lead to improved energy efficiency and thus abatement as a bi-product of the efficiency improvement. Such projects can be presented as abatement projects and can participate in Direct Action auctions in an attempt to secure funding for a part of the projects cost. Indeed, it is not unlikely that firms are holding off implementing such projects in anticipation of having the project cost decreased through an Emission Reduction Fund grant.<sup>103</sup>

5.72 Others queried why government should be involved in 'picking winners' in terms of abatement opportunities, rather than letting the market decide using a carbon pricing mechanism.<sup>104</sup> However, as Dr Paul Burke observed:

In terms of working out where the abatement could possibly come from, as an economist I would prefer to let the market do that rather than me sit back and pick it.<sup>105</sup>

5.73 Others objected generally to the involvement of government in this way:

...we need to reduce government regulation. We need to have a light-handed government....Why are we going to a direct action policy that involves the government hand when we could have left it to the market to make decisions about where these investments would be made?<sup>106</sup>

5.74 It was also pointed out that there are also a number of practical obstacles to low-cost abatement, such as lack of information, shortage of capital and the short timeframes.<sup>107</sup> To overcome these obstacles, it was suggested that a higher price may actually need to be paid. For example, Mr Paul Pollard warned that 'a \$20 price/incentive may be needed to uncover emissions reductions where theoretically a \$10 figure would suffice'.<sup>108</sup>

5.75 Dr Paul Burke also pointed out that the costs to business of making an application under the ERF system could also add to the cost of abatement under the ERF:

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102 WWF-Australia, *Submission 67*, p. 13. This issue of 'additionality' is discussed further in the next chapter.

103 Australian Manufacturing Workers' Union (AMWU), *Submission 50*, pp 8–9.

104 Mr Richard Korner, *Submission 89*, p. 1; see also The Australia Institute, *Submission 38*, p. 3.

105 Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 38.

106 Professor Ray Wills, *Committee Hansard*, 31 January 2014, p. 47.

107 The issue of short timeframes under the ERF is discussed further in the next chapter.

108 Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 8 and *Submission 81*, p. 4.

...subsidy approaches can involve an economic cost per unit of emissions reduction that is more than 10 times higher than can be achieved using price-based approaches.<sup>109</sup>

5.76 The AMWU agreed that the Government could end up paying a premium on abatement under the ERF:

As polluters would not be obliged to participate, they would require a price per tonne of abatement that was greater than the cost per tonne of abatement in order to participate, otherwise there would be no benefit (and therefore no reason) to participate. This would by definition guarantee that the Government would be overpaying for every tonne of abatement (as it would be paying a premium to every participant).<sup>110</sup>

### ***Ability of grant-based schemes to deliver abatement***

5.77 A key concern was that the ERF auction process closely resembles unsuccessful grant-based schemes used by governments in the past and would therefore be plagued by similar problems.<sup>111</sup> For example, The Australia Institute submitted that similar schemes in the past:

- took significantly longer to achieve any abatement than originally planned;
- were unable to find enough suitable projects; and
- achieved substantially less emissions reductions than planned.<sup>112</sup>

5.78 A key example put to the committee was the former Greenhouse Gas Abatement Program (GGAP).<sup>113</sup> The GGAP was a competitive grant program for emission reduction projects. It commenced on 1 July 2000 with an initial allocated budget of \$400 million over four years, but was subsequently extended and ran until

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109 Dr Paul Burke, *Submission 80*, p. 1.

110 AMWU, *Submission 50*, p. 7.

111 See, for example, Grattan Institute, *Submission 22*, p. 3; The Australia Institute, *Submission 38*; ACF, *Submission 14*, p. 2; Mr David Rossiter, *Committee Hansard*, 28 February 2014, p. 9 and *Submission 70*, p. 2; Mr John Hawkins, *Submission 7*, p. 9.

112 The Australia Institute, *Submission 38*, p. 3; see also Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 37; and ACF, *Submission 14*, p. 2 and Daley. J et al (2011) *Learning the hard way: Australia's policies to reduce emissions*, Grattan Institute.

113 See, for example, ACF, *Submission 14*, pp 7–8; The Australia Institute, *Submission 38*, pp 4–5; Kimberley Land Council, *Submission 27*, p. 1; Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 37; Climate Action Network Australia, *Submission 73*, p. 4; Mr David Rossiter, *Committee Hansard*, 28 February 2014, pp 9 and 12 and *Submission 70*, pp 1–2; Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 36; Mr John Hawkins, *Submission 7*, pp 9–10; CEFC, *Submission 75*, p. 17.

2009.<sup>114</sup> GGAP was projected to reduce greenhouse gas pollution by 51.5 Mt CO<sub>2</sub>-e.<sup>115</sup> The aims of GGAP sound somewhat familiar:

GGAP is targeting opportunities for large-scale, cost-effective and sustained abatement across the economy. GGAP will only support projects that will result in quantifiable and additional abatement not expected to occur in the absence of GGAP funding...<sup>116</sup>

5.79 An Auditor-General review revealed that by 30 June 2003, the GGAP had only spent \$50.1 million of its original \$400 million budget.<sup>117</sup> A further investigation by the Auditor-General in 2010 reported that the GGAP only managed to reduce emissions by 15.5 MT CO<sub>2</sub>-e—30% of the original intention—and spent only 40% of its original budget allocation over a ten year period.<sup>118</sup> The \$400 million allocated to GGAP was consistently underspent throughout the life of the program. The Auditor-General found that the underspend reflected three key factors:

- difficulties in attracting sufficient numbers of quality project proposals;
- termination of nine of the 23 approved projects for reasons such as failure to meet contractual obligations and operational difficulties with project implementation; and
- reallocation of funds to other programs.<sup>119</sup>

5.80 As Mr Jamie Hanson from the ACF observed, some of these reasons for under-delivery 'were remediable but others were structural problems that face grant and tender schemes'.<sup>120</sup>

5.81 The Grattan Institute similarly cautioned that 'these schemes have a mixed record' and there is 'a significant risk that developers will bid extremely low in order to win the auction, but then fail to deliver the project'.<sup>121</sup> The Grattan Institute noted

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114 Australian National Audit Office, Audit Report No. 34 2003–4, *The Administration of Major Programs, Australian Greenhouse Office*, p. 88; ANAO, Audit Report No. 26 2009–10, *Administration of Climate Change Programs*, p. 13.

115 ANAO, Audit Report No. 34 2003–4, *The Administration of Major Programs, Australian Greenhouse Office*, p. 37; ANAO, Audit Report No. 26 2009–10, *Administration of Climate Change Programs*, p. 43.

116 Senate Environment, Communications, Information Technology and the Arts References Committee, *The Heat Is On: Australia's Greenhouse Future*, November 2000, p. 120.

117 ANAO, Audit Report No. 34 2003–4, *The Administration of Major Programs, Australian Greenhouse Office*, p. 63.

118 ANAO, Audit Report No. 26 2009–10, *Administration of Climate Change Programs*, p. 25.

119 ANAO, Audit Report No. 26 2009–10, *Administration of Climate Change Programs*, pp 84–85; see also Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 37.

120 Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 37.

121 Grattan Institute, *Submission 22*, p. 3.

that this risk can be addressed and that the Government is proposing to address the issue in the ERF design by paying only on delivery. However, Mr Wood from the Grattan Institute pointed out that the problem then becomes project delivery:

...if I bid a project and get a contract and then fail to deliver that project in three years' time, you won't pay me the money—the government won't pay me the money—but then again the government does not get its abatement either. The problem with many of these programs is not that the money gets purloined inappropriately, it is that it never gets spent. So the fundamental objective to reduce emissions never gets achieved...<sup>122</sup>

5.82 The Australia Institute contrasted other similar grant based schemes with market mechanisms, and concluded that competitive grant schemes had been 'relative costly' and only reduced emissions by small amounts compared to market mechanisms.<sup>123</sup>

5.83 Submitters were also concerned that grant-based schemes impose a high administrative burden on Government, and the complex processes involved could also be a disincentive to participation for businesses.<sup>124</sup>

#### *Administrative burden*

5.84 Submissions were also critical of the ERF model for its administrative complexity. This included the workload involved in assessing bids made under auctions, as well as the considerable complexity involved in crediting emissions reduction methods, setting baselines and determining 'additionality', all of which will result in a high administrative burden for Government.<sup>125</sup> As Dr Burke explained, the ERF is:

... administratively complex, requiring the government to guess baselines and assess and monitor abatement projects. These are expensive tasks that the government does not need to do and should not be doing.<sup>126</sup>

5.85 Dr Burke then observed that he would:

...feel very sorry for the Canberra bureaucrat or team of bureaucrats who would need to be doing this job. It is extremely difficult to be guessing

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122 Mr Tony Wood, Program Director—Energy, Grattan Institute, *Committee Hansard*, 5 February 2014, p. 6; see also Grattan Institute, *Submission 22*, p. 3.

123 The Australia Institute, *Submission 38*, p. 4.

124 See, for example, ACF, *Submission 14*, pp 7–8; Mr David Rossiter, *Committee Hansard*, 28 February 2014, p. 10; AMEC, *Submission 74*, p. 2; CEFC, *Submission 75*, p. 13.

125 See, for example, Mr Tony Wood, Program Director—Energy, *Committee Hansard*, 5 February 2014, pp 4–5; Mr John Hawkins, *Submission 7*, p. 11; Professor Frank Jotzo, *Committee Hansard*, 28 February 2014, p. 32 and *Submission 86*, p. 3; Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 8 and *Submission 81*, p. 6; Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 32 and *Submission 80*, p. 1; Mr David Rossiter, *Committee Hansard*, 28 February 2014, p. 16.

126 Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 32.

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baselines on a project or even company basis over a period of five years or more...<sup>127</sup>

5.86 As will be discussed further in the next chapter, Mr Rossiter suggested that up to 600 baselines might need to be set, which would require considerable levels of staffing and technical expertise.<sup>128</sup>

5.87 In response to the committee's questioning as to the levels of staffing that might be required to design and administer the ERF, departmental representatives advised that decisions about staffing levels:

...will be guided by the decisions the government takes on the nature, scope and otherwise of the program. Currently the Clean Energy Regulator has a staff of well over 300, from memory, and then the department advises on other aspects. So there is substantial capacity in government to administer any arrangements. However, all budget decisions and the size and scope of the scheme are decisions in front of the government at the moment...<sup>129</sup>

5.88 Other submitters and witnesses pointed out that there would be also be a cost to bidders under the ERF, which would be a disincentive to participation. As Professor Ross Garnaut pointed out:

It will cost money for enterprises to prepare a bid. To prepare a credible bid, firms would actually have to have designed the investments that were going to reduce emissions and that costs a lot of money. There would be no return on that investment in the way of payments from the Emissions Reduction Fund unless they were successful in the competitive process.<sup>130</sup>

5.89 Dr Burke cautioned that, as a result, the ERF will not necessarily support lowest cost abatement:

Firms will not apply for subsidies for many of the least-cost emissions reduction possibilities. This is because: (1) Many low-cost abatement possibilities may be small in nature or not in line with Direct Action requirements; and (2) There are costs and uncertainties of applying for subsidies. Many of the "lowest hanging fruit" of emissions reductions will therefore be missed.<sup>131</sup>

5.90 Professor Frank Jotzo similarly observed:

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127 Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 37.

128 Mr David Rossiter, *Committee Hansard*, 28 February 2014, p. 12.

129 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 6.

130 Professor Ross Garnaut, *Committee Hansard*, 7 March 2014, p. 2; see also CEFC, *Submission 75*, p. 13.

131 Dr Paul Burke, *Submission 80*, p. 1.

...substantial transaction costs are associated with this, in particular, for small to medium size projects. Businesses might just decide that it is simply not worth their while entering into the process...<sup>132</sup>

5.91 The Australian Industry Group acknowledged that the safeguard mechanism 'has the potential to create administrative costs and compliance costs', depending on its design. However, they argued that the 'quite simple method tentatively proposed in the Green Paper' would not create significant administrative costs.<sup>133</sup>

5.92 In response to questioning on this issue, the Department advised that one of the design principles of the ERF is to focus on ensuring that costs are kept to a minimum. The Department further noted that:

The transaction costs or administrative costs that might come about under the ERF come about in two ways. The first way is around the crediting and purchasing element. This is an entirely optional part of the scheme. Any firm that comes forward with a project that it wants to generate credits under and bid into the ERF does that entirely voluntarily. Any costs that were reflected in a bidding in for that return it would presumably include in the scope of the project in which it was bidding in, of course, because it is expecting to win a contract to pay for undertaking the project. However, having said that, there would be no reason not to keep those costs as low as possible.<sup>134</sup>

### *Voluntary nature of the scheme*

5.93 Many submitters and witnesses were critical of the voluntary nature of the Direct Action Plan and ERF.<sup>135</sup> For example, Reverend Pederick from the Anglican EcoCare Commission told the committee that:

...it is an opt-in process. There is no compulsion on businesses to compete for participation in ERF projects, and no penalty for those who choose not to.<sup>136</sup>

5.94 In the same vein, WWF-Australia submitted that it is difficult to see why companies would be inclined to participate in the ERF 'if they don't need to'.<sup>137</sup>

5.95 Dr Tom Skladzien from the AMWU argued that, because it is a voluntary choice for business whether to engage in the ERF auction process and there will be transaction costs involved in participating, businesses 'will only engage if it is in their

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132 Professor Frank Jotzo, *Committee Hansard*, 28 February 2014, p. 38.

133 Mr Tennant Reed, Principal National Adviser, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, p. 52.

134 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 8.

135 See, for example, AMWU, *Submission 50*, p. 7; Mr James Wight, *Submission 65*, p. 12; Climate and Health Alliance, *Submission 99*, p. 12; 350 Australia, *Submission 33*, p. x.

136 Reverend Evan Pederick, Deputy Chair, Anglican EcoCare Commission, *Committee Hansard*, 31 January 2014, p. 61.

137 WWF-Australia, *Submission 67*, p. 12.

financial interest to do so'. As noted earlier in this chapter, this could result in the Government paying a premium for abatement.<sup>138</sup>

.... will only engage if it is in their financial interest to do so. That means that the government will be paying a premium for every tonne of abatement, because otherwise they would be indifferent to engage or not and would choose not....<sup>139</sup>

5.96 Mr Nathan Fabian of the IGCC was of the view that 'direct action is not an investment grade policy' and that:

...from what we know of the ERF the scale, duration and carbon prices of deals likely to be on offer will not provide sufficient incentive for investors to participate. We think the banks will take a similar view.<sup>140</sup>

5.97 Mr Rossiter pointed out that, according to NGERS data, just 12 emitters produce 50% of Australia's emissions. He was concerned, if participation is voluntary, the ERF scheme:

...would have no capacity to focus on the biggest emitters and assist in reducing their emissions. The scheme neither provides an obligation for the large emitters to reduce their emissions nor does it provide sufficient funding to attract large emitters to make bids. This is a huge flaw in the scheme...<sup>141</sup>

5.98 A departmental representative responded to concerns about the voluntary nature of the scheme as follows:

It will be voluntary to enter the scheme and generate credits, but the opportunity to sign a contract with the Commonwealth over a number of years for a given price, for given tonnes of abatement, is potentially a very strong incentive for some businesses.<sup>142</sup>

### ***No economy wide incentives***

5.99 A key concern for many was that the Direct Action Plan and the ERF would provide no incentives or opportunities to assist Australia in the necessary transition to

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138 Dr Tom Skladzien, National Economic and Industry Adviser, AMWU, *Committee Hansard*, 28 February 2014, p. 29.

139 Dr Tom Skladzien, National Economic and Industry Adviser, AMWU, *Committee Hansard*, 28 February 2014, p. 29.

140 Mr Nathan Fabian, IGCC, *Committee Hansard*, 7 March 2014, p. 11 and also p. 12.

141 Mr David Rossiter, *Committee Hansard*, 28 February 2014, p. 9.

142 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 10.

a low-carbon economy in the long-term.<sup>143</sup> The AMWU were particularly scathing in this regard:

Direct Action is neither equitable, economically efficient, nor capable of bringing about significant economic change. It will hinder not help the development of a global solution to climate change, and it will set a dangerous precedent...Rather than any serious attempt at a policy to address climate change, Direct Action is more likely an attempt to delay a real climate change policy at taxpayer expense.<sup>144</sup>

5.100 Reverend Pederick from the Anglican EcoCare Commission was concerned that the Direct Action Plan and ERF 'basically avoids making the structural changes that the Australian economy requires'.<sup>145</sup> Mr Hanson from the ACF agreed that:

The single greatest flaw of the Direct Action Plan is that it simply cannot drive the long-term changes that are required.<sup>146</sup>

5.101 The AYCC agreed that while the ERF provides incentives for *some* businesses to reduce their carbon pollution:

...there is no incentive for other polluting businesses to clean up their act—and in fact some high polluting businesses may choose not to reduce pollution of their own accord in the hope of winning future ERF grants.<sup>147</sup>

5.102 As Professor Jotzo warned, the approach proposed under the ERF:

...can also create incentives to hold back investments that reduce energy use or emissions unless they are subsidised under the mechanism. This in turn has economic costs through suboptimal investment and skewed investment patterns.<sup>148</sup>

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143 See, for example, CCWA, *Submission 29*, p. 2; 350 Australia, *Submission 33*, p. 2; AUSTELA, *Submission 76*, p. 7; ACTU, *Submission 30*, p. 5; Ms Tania Maxted, *Submission 43*, p. 6; Professor Frank Jotzo, *Committee Hansard*, 28 February 2014, p. 32; WWF-Australia, *Submission 67*, p. 4; Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 9; Dr George Crisp, Doctors for the Environment Australia, *Committee Hansard*, 31 January 2014, pp 18 and 22; Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 27; ACF, *Submission 14*, p. 2; Environment Victoria, *Submission 25*, pp 2–3; Conservation Council of South Australia, *Submission 44*, p. 2; Mr Tim Buckley, *Committee Hansard*, 7 March 2014, p. 11; Anglican EcoCare Commission, *Submission 40*, p. 2; AMWU, *Submission 50*, p. 8; Northern Alliance for Greenhouse Action, *Submission 60*, p. 2; Sustainable Energy Association, *Submission 90*, p. 8.

144 AMWU, *Submission 50*, p. 11.

145 Reverend Evan Pederick, Deputy Chair, Anglican EcoCare Commission, *Committee Hansard*, 31 January 2014, p. 61.

146 Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 32.

147 Australian Youth Climate Coalition, *Submission 32*, p. 4; see also ACF, *Submission 14*, p. 5.

148 Professor Frank Jotzo, *Submission 86*, p. 3.

5.103 Ms Skarbek of ClimateWorks Australia indicated that research shows that a 'deep decarbonisation' of the Australian and global economy is required by 2050.<sup>149</sup> Many pointed out that it would be more costly and difficult to make emissions reductions in the long term, and that the longer we wait, the harder and more expensive it will get.<sup>150</sup> For example, Mr Murray from the ACF told the committee:

We can act sooner or we can act later to start the transformation of Australia's economy. The sooner we act...the lower the cost will be to business, to families and to Australia's economy. If we put off that action until later the costs are going to go up.<sup>151</sup>

5.104 The ACTU similarly expressed concern that:

Without an effective policy, the shift to a low carbon economy will be delayed. This will increase the cost and create greater uncertainty for industry and workers as the economy responds to the global carbon constrained environment. Finally it will result in missed opportunities. Innovation in low carbon and energy efficiency technologies presents new opportunities for industry, creating jobs of the future.<sup>152</sup>

5.105 Mr Fabian of the IGCC advised that the ERF 'is not an effective alternative to an emissions trading scheme and should not be substituted for it'.<sup>153</sup>

### ***Overall cost-effectiveness***

5.106 Many submissions and witnesses expressed the view that, in general, the cost of achieving Australia's emissions reduction targets under Direct Action would be higher than under the current carbon price framework.<sup>154</sup> As Professor Garnaut pointed out, the Green Paper does not attempt to analyse the costs of meeting even a minus 5% target through Direct Action and the ERF. However, Professor Garnaut reasoned that the Direct Action Plan is likely to cost more for less reduction in emissions.<sup>155</sup>

5.107 Others agreed that the ERF will not be cost-effective. For example, Mr Murray from the ACF argued that:

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149 Ms Anna Skarbek, Executive Director, ClimateWorks Australia, *Committee Hansard*, 5 February 2014, p. 25.

150 Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 32; CCWA, *Submission 29*, p. 2; Dr Tom Skladzien, National Economic and Industry Adviser, AMWU, *Committee Hansard*, 28 February 2014, p. 28; Professor Frank Jotzo, *Committee Hansard*, 28 February 2014, p. 38.

151 Mr Dugald Murray, Senior Economist, ACF, *Committee Hansard*, 5 February 2014, p. 34.

152 ACTU, *Submission 30*, p. 5.

153 Mr Nathan Fabian, IGCC, *Committee Hansard*, 7 March 2014, p. 11.

154 CCWA, *Submission 29*, p. 1; Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 32; Mr Dugald Murray, Senior Economist, ACF, *Committee Hansard*, 5 February 2014, p. 34; Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 27.

155 Professor Ross Garnaut, *Submission 105*, p. 3.

...an approach like direct action would come at a higher cost. The scheme costs more to implement and it may not get the same efficiencies that the market-based approach for the emissions trading scheme would bring about.<sup>156</sup>

5.108 Mr Piers Verstegen from the CCWA stated that the Direct Action Plan is not a cost-effective alternative to the current framework:

...it is going to be impossible to determine a baseline in terms of the national total emissions profile and then target emissions reduction expenditure in a way which is going to deliver the least-cost abatement. That is what an economy-wide price does. It delivers least-cost abatement. This policy will not deliver least-cost abatement. It will deliver much more expensive abatement, and it will conflict and create other market failures and other market problems which will reduce the efficiency of the delivery of that abatement effort.<sup>157</sup>

5.109 The Sustainable Energy Association pointed out that, unlike the carbon pricing mechanism, the Direct Action Plan proposal 'raises no revenue and comes at net cost to the Budget'.<sup>158</sup>

5.110 In contrast, the Grattan Institute considered that the ERF *could* deliver 'cost-effective reductions in greenhouse gas emissions', but there is 'currently inadequate detail available to assess its cost effectiveness'.<sup>159</sup>

5.111 Mr Jackson from The Climate Institute observed:

...the real issue for government, at the end of the day, is whether that is money well spent. You never really know and, unless it is achieving our targets, which it is unlikely to do, why would we spend the money? You are not actually delivering the outcome. You are just imposing a cost on the community with no real benefit.<sup>160</sup>

*Who should pay for emissions reductions?*

5.112 It was argued that Direct Action will not only be more expensive, but there is also a fundamental principal at stake as to who should pay for emissions reductions. For example, the Conservation Council of Western Australia were concerned that:

The mitigation that is achieved through Direct Action will come at a very high cost per tonne, which will be borne by taxpayers, rather than polluters.<sup>161</sup>

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156 Mr Dugald Murray, Senior Economist, ACF, *Committee Hansard*, 5 February 2014, p. 34.

157 Mr Piers Verstegen, Director, CCWA, 31 January 2014, p. 53.

158 Sustainable Energy Association, *Submission 90*, p. 8.

159 Grattan Institute, *Submission 22*, p. 2.

160 Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 11.

161 CCWA, *Submission 29*, p. 2; see also 350 Australia, *Submission 33*, pp 2 and 8; Sustainable Energy Now, *Submission 34*, p. 4.

5.113 Indeed, many submitters objected to the approach under the ERF based on the general 'polluter pays' principle. It was pointed out that, under the Direct Action Plan, the Government would pay polluters to reduce their pollution, effectively subsidising those polluters with taxpayer funds.<sup>162</sup> Some described the Direct Action Plan as 'fundamentally inequitable' for this reason.<sup>163</sup>

5.114 Mr Hanson from the ACF told the committee that:

....a fair and effective approach to pollution reduction will require polluters to pay for the damage they cause. Pollution comes at a cost. If polluters do not pay, the community will, and that is not fair. Yet the Direct Action Plan proposes subsidising polluters.<sup>164</sup>

5.115 The North Queensland Conservation Council submitted that:

In surprise move, the coalition government is reversing its habitual stand on market-based, user-pays systems, by proposing an approach that rewards polluters with the money of those that suffer from the pollution. Instead of 'fining' polluters and giving the money to the taxpayer, the DAP involves using taxpayer funds to 'encourage' polluters to refrain from their dirty habits.<sup>165</sup>

5.116 Several submissions also noted that businesses or facilities that have already taken action to reduce their emissions may be disadvantaged, while entities that have taken no action have more opportunities to access subsidies.<sup>166</sup> Or, as Mr John Hawkins argued, the ERF scheme 'penalises past good behaviour and rewards bad behaviour', so that, for example:

...a company that has been operating inefficiently and polluting a lot has much more scope to put in a tender than a responsible firm that has already taken action to minimise its emissions.<sup>167</sup>

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162 See, for example, Sustainable Energy Association, *Submission 90*, p. 4; Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 12; Mr Stephen Gates, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 31; Mr Peter Boyer, *Submission 6*, p. 2; Dr Justin Wood, *Submission 28*, p. 1; Ms Tania Maxted, *Submission 43*, p. 5; Dr Tom Skladzien, National Economic and Industry Adviser, AMWU, *Committee Hansard*, 28 February 2014, p. 27; Professor Frank Jotzo, *Committee Hansard*, 28 February 2014, p. 32 and *Submission 86*, p. 1; Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 32; The Climate Institute, *Submission 2*, p. 6; Mr John Hawkins, *Submission 7*, p. 2; AMWU, *Submission 50*, p. 8; Greenbank Environmental, *Submission 63*, p. 8; Mr David Rossiter, *Submission 70*, p. 3; Mr Paul Pollard, *Submission 81*, p. 5; Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 27.

163 ACTU, *Submission 30*, p. 5; Dr Tom Skladzien, National Economic and Industry Adviser, AMWU, *Committee Hansard*, 28 February 2014, p. 28.

164 Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 32.

165 North Queensland Conservation Council, *Submission 77*, p. 2.

166 Sustainable Energy Association, *Submission 90*, p. 9; Mr John Hawkins, *Submission 7*, p. 2; see also, for example, Dr Paul Burke, *Submission 80*, p. 2.

167 Mr John Hawkins, *Submission 7*, p. 2.

### *Other complementary measures needed*

5.117 Many submissions suggested that they could support the ERF as an additional measure to achieve emissions reductions, but not as a stand-alone solution.<sup>168</sup> These submissions observed that the challenge of reducing Australia's greenhouse gas emissions will require 'a combination of approaches'.<sup>169</sup> As The Australia Institute remarked:

The idea that we should only use one strategy to combat climate change is as strange as employing only one strategy to reduce smoking. Multiple strategies need to be employed if we are to effectively reduce emissions.<sup>170</sup>

5.118 Mr Verstegen of the CCWA similarly told the committee that the Direct Action Plan 'may be able to make an additional useful contribution' along with other policy instrument including an economy-wide carbon price and cap and renewable energy targets, but:

...on its own we do not believe it is capable of delivering anywhere near what is required to reduce our greenhouse emissions.<sup>171</sup>

5.119 A range of other complementary measures to reduce Australia's greenhouse gas emissions were suggested during the committee's inquiry. These included a carbon price scheme; renewable energy targets; stricter land clearing regulations; carbon labelling; building and vehicle emission standards; energy efficiency measures; and

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168 See, for example, Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 1; Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 27; Mr Piers Verstegen, Director, CCWA, 31 January 2014, p. 53; CCWA, *Submission 29*, p. 1; Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 38; ACF, *Submission 14*, pp 1–2; ARRCC, *Submission 21*, p. 4; Reverend Evan Pederick, Deputy Chair, Anglican EcoCare Commission, *Committee Hansard*, 31 January 2014, p. 61; CANA, *Submission 73*, p. 4.

169 See, for example, Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 1.

170 The Australia Institute, *Submission 38*, p. 5.

171 Mr Piers Verstegen, Director, CCWA, 31 January 2014, p. 53; see also, for example, Reverend Evan Pederick, Deputy Chair, Anglican EcoCare Commission, *Committee Hansard*, 31 January 2014, p. 61.

education and research funding.<sup>172</sup> Several submissions also called for the reduction and removal of direct and indirect fossil fuel subsidies.<sup>173</sup>

5.120 The Green Paper notes that there are 'several other government programmes that promote emission reductions, including the Renewable Energy Target',<sup>174</sup> and other Direct Action measures such as the Twenty Million Trees program as well as state based efficiency schemes.<sup>175</sup>

5.121 The committee notes that the Green Paper sought views on 'regulatory reform opportunities that would complement the ERF'. However, the only measure identified in that part of the Green Paper was a phase down on the use of hydrofluorocarbons (HFCs) under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Cth).<sup>176</sup>

5.122 In the context of energy efficiency, submissions expressed support for the Energy Efficiency Opportunities Program, as well as disappointment at its abandonment.<sup>177</sup> The committee notes that the Government recently announced that the program will not continue in its current form. The Government website states that 'companies continue to have obligations under the *Energy Efficiency Opportunities Act 2006*' and that 'the department will continue to verify compliance with the program'. Finally it states that 'through the Energy White Paper process, the Government is consulting on how to optimise energy efficiency policy as part of the overall energy policy mix'.<sup>178</sup> However, WWF-Australia submitted that:

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172 See, for example, Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 1; Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 27; Mr Piers Verstegen, Director, CCWA, 31 January 2014, p. 53; 350 Australia, *Submission 33*, pp 9–10; Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 15; The Climate Institute, *Submission 2*, pp 7–8; Ms Anna Skarbek, Executive Director, ClimateWorks Australia, *Committee Hansard*, 5 February 2014, p. 25; ClimateWorks Australia, *Submission 24*, p. 2; Climate Change Authority, *Submission 51*, p. 2; Dr Barry Naughten, *Submission 96*, p. 2; ARRCC, *Submission 21*, p. 5; Green Building Council Australia, *Submission 35*, p. 2; Ms Anthea Harris, CEO, Climate Change Authority, *Committee Hansard*, 7 March 2014, p. 29; Australian Sustainable Built Environment Council, *Submission 82*, pp 1–2.

173 See, for example, Sustainable Energy Now, *Submission 34*, p. 7; Ms Mary Voice, *Submission 58*, p. 1; Mr Brian Mollan, *Submission 23*, p. 1; LIVE, *Submission 19*, p. 6; ARRCC, *Submission 21*, p. 7; Ms Tania Maxted, *Submission 43*, p. 6; Environment Victoria, *Submission 25*, p. 3.

174 This is discussed further in Chapter 7 of this report.

175 Green Paper, p. 22.

176 Green Paper, pp 28–29.

177 Sustainable Energy Now, *Submission 34*, pp 2–3; Ms Mary Voice, *Submission 58*, p. 1; Ms Irene Clarke, Senior Policy Manager, ADIC, *Committee Hansard*, 5 February 2014, p. 48; Tasmanian Climate Change Office, *Submission 46*, p. 2; WWF-Australia, *Submission 67*, p. 12.

178 Department of Industry, *Energy Efficiency Opportunities*, <http://energyefficiencyopportunities.gov.au/> (accessed 21 February 2014).

...cost effective energy efficiency opportunities already identified under this reporting framework should not now be eligible for ERF funding, so as to ensure that abatement delivered by the ERF is fully additional to business as usual.<sup>179</sup>

### **Committee comment**

5.123 The committee finds that there is no evidence that the Direct Action Plan and its Emissions Reduction Fund will achieve substantial emissions reductions at a reasonable cost. In fact, there was considerable doubt in evidence received by the committee as to whether the Emissions Reduction Fund will meet a 5% emissions reduction target, let alone the higher targets that will be required into the future that have been recommended by the Climate Change Authority, as discussed in Chapter 2.

5.124 Based on the evidence that is available to the committee—and noting that there is a considerable amount of detail lacking about the design of the Emissions Reduction Fund—the committee is persuaded that the Government's Direct Action Plan and the proposed Emissions Reduction Fund are fundamentally flawed. They ignore the well-established principle of 'polluter pays', and instead propose that the Australian taxpayer should effectively subsidise big polluters.

5.125 The committee notes that the Government has indicated that the funding for the Direct Action Plan is capped. That is, if the budget for the Direct Action Plan is insufficient, no further monies will be spent, regardless of whether emissions reduction targets have been achieved. On the one hand, the committee heard evidence that the budget allocated to Direct Action will be completely inadequate to achieve the required levels of abatement. At the same time, evidence to the committee was that similar grant-based schemes in the past have struggled to spend their money because they did not attract sufficient numbers of quality project proposals and many of the projects failed to deliver. While it is hard to reconcile these two issues, the committee considers that it is an indication of a fundamentally flawed proposal.

5.126 Moreover, the committee heard evidence that the Direct Action Plan and its Emissions Reduction Fund will not assist in the necessary transition to a low-carbon economy. As a voluntary program, there is no guarantee that businesses will even participate in the scheme. Even if they do, the design requires the Government to 'pick winners' rather than letting the market decide and as such imposes a high administrative burden on the Government.

5.127 The committee agrees with evidence that the Emissions Reduction Fund is not an adequate substitute for the carbon pricing mechanism. The committee considers that the Direct Action Plan and Emissions Reduction Fund are a significant step backwards for climate policy in Australia. The only conclusion that can be made is that the Government is paying lip service to the science of climate change. A Government that truly accepted the science of climate change would not put forward such a flawed, inadequate and irresponsible 'fig leaf' policy.

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179 WWF-Australia, *Submission 67*, p. 12.

5.128 Nevertheless, the committee recognises the evidence that, although the Emissions Reduction Fund is not a stand-alone solution, it could be supported if it were part of a range of measures to reduce Australia's greenhouse gas emissions, including a carbon pricing mechanism and the Renewable Energy Target. However, the committee is concerned as to whether the Emissions Reduction Fund is an appropriate and cost-effective use of taxpayer's money and considers that the design issues discussed in the next chapter would need to be adequately addressed.

#### **Recommendation 10**

**5.129 The committee recommends that the Emissions Reduction Fund not be substituted for the carbon pricing mechanism.**



# Chapter 6

## Technical design issues with the Emissions Reduction Fund

6.1 This chapter examines a number of technical design issues related to the design of the Emissions Reduction Fund (ERF), as identified by submissions and witnesses. These critical issues, which will impact on the ERF's ability to reduce Australia's greenhouse gas emissions, include:

- additionality;
- difficulties in setting baselines;
- compliance mechanisms and penalties;
- overall limits on emissions;
- the need for longer timeframes, including contract duration and funding and planning beyond 2020;
- future scalability of the ERF; and
- access to international permits.

6.2 Mr Erwin Jackson from The Climate Institute summarised the design problem as follows:

The challenge you have is balancing the burden of proof, if you like. If you make it too strict then you will not get people investing, because it becomes too strict and too much of a burden. If it is too loose, then you basically get a whole bunch of money being given away for no benefit.<sup>1</sup>

### Additionality

6.3 A key design issue was the difficulty involved in ensuring that emissions reductions are 'additional' to reductions that would have happened without intervention.<sup>2</sup> Submitters were concerned that funding could be provided under the ERF auction process to projects that would have gone ahead anyway, such as

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1 Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 14.

2 See, for example, Sustainable Energy Association, *Submission 90*, p. 8; Mr Piers Verstegen, Director, CCWA, *Committee Hansard*, 31 January 2014, p. 58; CCWA, *Submission 29*, p. 1; Sustainable Energy Now, *Submission 34*, p. 2; Mr Tony Wood, Program Director—Energy, *Committee Hansard*, 5 February 2014, p. 5; Sunshine Coast Environment Council, *Submission 78*, p. 4; Conservation Council of South Australia, *Submission 44*, pp 6–7; Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 8 and *Submission 81*, p. 6; WWF-Australia, *Submission 67*, p. 12; Mr John Hawkins, *Submission 7*, p. 3; Energetics, *Submission 59*, p. 4; Dr Paul Burke, *Submission 80*, p. 1; Mr Tas Thamo, *Committee Hansard*, 31 January 2014, p. 10

investments in energy efficiency equipment when a company may have already planned to purchase this equipment.<sup>3</sup>

6.4 As Sustainable Energy Now warned:

If criteria for additionality are not determined fairly, there is a real danger that taxpayers will be simply subsidising industries and projects that do not need subsidising. Conversely there is also the risk that additionality criteria acceptable to taxpayers would make the scheme too unattractive to attract bidders.<sup>4</sup>

6.5 The Grattan Institute pointed to another possible example of the need for caution in relation to additionality in the case of:

...electricity generators where falling demand is already leading to the mothballing and possible permanent closure of capacity. The 2010 published Direct Action Plan allowed for the ERF to support the reduction of emissions from old or inefficient power stations. It would be inappropriate if such funding was to flow to power stations that would have closed anyway.<sup>5</sup>

6.6 Professor Frank Jotzo described the problem of additionality as:

...a problem fundamentally of asymmetric information. No government and no government agency will be able to truly get to the bottom of cost structures as they exist in industry, and so if the potential financial gains are large enough to business it will be easy to pull the wool over the eyes of any regulatory.<sup>6</sup>

6.7 Professor Ross Garnaut suggested that additionality 'actually requires clairvoyance to know whether or not, on financial grounds, an investor would have made an investment'.<sup>7</sup>

6.8 Some suggested that the question of additionality could be satisfactorily resolved with appropriate administrative resources. However, Mr Paul Pollard was concerned that there would need to be 'huge administrative resources to investigate every spending proposal and even to get into the minds of the firm to know that they were not going to do this anyway'.<sup>8</sup> Similarly, Mr Tony Wood from the Grattan Institute observed that it is not yet clear 'how much extra administrative work will be imposed as a result of having to be comfortable that activities which are credited under the program are additional'.<sup>9</sup>

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3 See, for example, WWF-Australia, *Submission 67*, p. 12.

4 Sustainable Energy Now, *Submission 34*, p. 2.

5 Grattan Institute, *Submission 22*, p. 4.

6 Professor Frank Jotzo, *Committee Hansard*, 28 February 2014, p. 33.

7 Professor Ross Garnaut, *Committee Hansard*, 7 March 2014, p. 4.

8 Mr David Rossiter, *Committee Hansard*, 28 February 2014, p. 12.

9 Mr Tony Wood, Program Director—Energy, *Committee Hansard*, 5 February 2014, p. 1.

6.9 As the ACTU concluded:

...it will be near impossible for the Direct Action Plan to avoid funding non-additional abatement. This means government will be paying business for projects and abatement that would have occurred even in the absence of government policy.<sup>10</sup>

6.10 In response to questioning on this issue, the Department advised that 'genuine and additional abatement is a key part of the Government's policy as outlined in the green paper' and:

That is a challenge we already face under the Carbon Farming Initiative. It is also a challenge that other schemes have faced and dealt with. The Clean Development Mechanism, for example, also has to deal with the issue of how to establish abatement and how to determine that the abatement that is being claimed is genuine and additional...there are a number of different approaches one can use in different sectors with different methods, with a strong focus on keeping them as simple as possible. But the policy principle around paying for abatement, not paying for emissions reductions that would have occurred anyway, is a clear policy principle of this scheme, and so all the design around developing methods is to give the greatest confidence possible that anything that is being credited and subsequently contracted for is additional.<sup>11</sup>

### Difficulties in setting baselines

6.11 The ERF will also require various emissions 'baselines' to be set, both in relation to the purchasing and crediting of emissions reductions and also the proposed safeguard mechanism.<sup>12</sup> As the Department explained, for crediting emissions reductions, baselines will form part of the crediting methodology:

One has to understand...what the underlying change in emissions, say, per unit of output, might have been before an action was taken and then credit over and above that action.<sup>13</sup>

6.12 Baselines will also need to be set for the safeguard mechanism – that is a mechanism to provide businesses with an incentive not to exceed historical emissions baselines.<sup>14</sup> In response to questioning as to how those historical baselines might be determined, the Department indicated that NGERs reporting information could provide a useful basis in this context, but that the:

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10 ACTU, *Submission 30*, p. 5.

11 Dr Steven Kennedy Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, pp 8–9.

12 Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 10; see also Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, pp 5–6.

13 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 5.

14 See Green Paper, p. 35.

...other aspects of the safeguard baselines, such as how they would evolve over time, who they would cover, what any compliance arrangements would be that were associated with them, what form they would take—all those dimensions the government is currently consulting on and it has not announced its decisions on those dimensions of the scheme.<sup>15</sup>

6.13 However, the inherent difficulty and complexity involved in establishing emissions baselines was highlighted by many submitters and witnesses.<sup>16</sup> As the Grattan Institute observed that 'setting of baselines and establishing additionality are not straight forward—they present a high regulatory burden and a large potential for regulatory capture'.<sup>17</sup>

6.14 Mr David Rossiter, former Renewable Energy Regulatory, who had the task of setting baselines for the original Renewable Energy Target, submitted that setting baselines is:

...a very difficult and highly specialised task that should not be under estimated. It is highly site and geographical location specific, extremely resource intensive and often exposes a lack of firm data from which baselines can be set.<sup>18</sup>

6.15 Mr Rossiter told the committee that:

...baseline setting and verification are complex and resource intensive, so there will be considerable time delays in the implementation. The credibility of the whole plan will be rapidly eroded if baselines are not set in a transparent, fair, robust and repeatable manner. These delays will further reduce the period of time available to recover abatement costs and also reduce the abatement quantities the plan can achieve.<sup>19</sup>

6.16 Mr Rossiter, suggested that it is possible that up to 600 baselines may need to be set, depending on geographical locations and different types of actions.<sup>20</sup> He was concerned that if there is not sufficient funds, it would be very difficult and that:

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15 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 6.

16 See, for example, Australian Dairy Industry Council, *Submission 11*, p. 3;; Mr Tennant Reed, Principal National Advisor, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, pp 52, 57–58; ACF, *Submission 14*, p. 9; Grattan Institute, *Submission 22*, pp 4–5; Facility Management Association of Australia, *Submission 36*, p. 4; Origin, *Submission 45*, pp 8–9; Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 37 and *Submission 80*, p. 1; 350 Australia, *Submission 33*, p. 8; Sustainable Energy Now, *Submission 34*, pp 2–3; Climate Action Newcastle, *Submission 48*, p. 2; Energetics, *Submission 59*, p. 4; Energy Supply Association of Australia, *Submission 61*, pp 2–4; Carbon Market Institute, *Submission 64*, pp 22–23; CEFC, *Submission 75*, p. 21; Mr Paul Pollard, *Submission 81*, p. 8; Sustainable Energy Association, *Submission 90*, p. 9.

17 Grattan Institute, *Submission 22*, p. 4.

18 Mr David Rossiter, *Submission 70*, p. 2.

19 Mr David Rossiter, *Committee Hansard*, 28 February 2014, p. 8.

20 Mr David Rossiter, *Submission 70*, p. 2 and *Committee Hansard*, 28 February 2014, p. 12.

I would be quite worried about the level of staffing and the capability of the staff...This is a technical operation...<sup>21</sup>

6.17 Other emphasised the importance of establishing robust baselines:

...if there are no effective baselines and penalties for exceeding that baseline in enterprises which are not being paid to reduce emissions, once can expect those other sources of emissions to rise strongly, and so the fund would have to buy a lot more and there is actually a limit to that...<sup>22</sup>

6.18 The setting of baselines, and the consequences for organisations that go above or below their baselines under the safeguard mechanism, was described by the Grattan Institute as complex, but 'fundamentally important' to how effective and efficient the ERF will be.<sup>23</sup> The Grattan Institute highlighted the challenge of determining the 'detail around historical activity' and 'what business as usual activity means'.<sup>24</sup> Mr Wood gave the example of LNG plants in Queensland – 'there is no history in the world of developing LNG off the back of a large coal seam gas facility, so how would you set baselines for those facilities?'.<sup>25</sup>

6.19 As noted in the previous chapter, for the safeguard mechanism, the Government has put forward two options for setting these historical baselines, based on either *emissions intensity* (the ratio of emissions per output) or on *absolute emissions* levels (the absolute level of emissions from a facility during a historical period).<sup>26</sup>

6.20 Some, such as the ADIC, expressed a preference for baselines based on emissions intensity.<sup>27</sup> However, others, such as Mr Erwin Jackson from The Climate Institute noted that baselines based on emissions intensity would be difficult and complex, and expressed a preference for setting absolute baselines 'for the major emitting industries outside the electricity sector'. He noted that, in the electricity sector, setting absolute baselines would disadvantage gas versus coal.<sup>28</sup>

6.21 WWF-Australia noted that applying an absolute emissions baseline, as opposed to an emissions intensity baseline, will result in significantly more abatement from the safeguard mechanism.<sup>29</sup>

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21 Mr David Rossiter, *Committee Hansard*, 28 February 2014, p. 12.

22 Professor Ross Garnaut, *Committee Hansard*, 7 March 2014, p. 2.

23 Mr Tony Wood, Program Director—Energy, *Committee Hansard*, 5 February 2014, p. 1.

24 Mr Tony Wood, Program Director—Energy, *Committee Hansard*, 5 February 2014, p. 4.

25 Mr Tony Wood, Program Director—Energy, *Committee Hansard*, 5 February 2014, p. 4.

26 Green Paper, p. 37.

27 Australian Dairy Industry Council, *Submission 11*, p. 3; see also Mr Noel Campbell, Chair, Australian Dairy Industry Council, *Committee Hansard*, 5 February 2014, p. 49.

28 Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 10.

29 WWF-Australia, *Submission 67*, p. 10.

6.22 Mr Rossiter further observed:

The atmosphere is not concerned about emissions intensity and neither are Australia's international target commitments framed in such terms—total emissions are the only issue at stake here.<sup>30</sup>

### **The 'safeguard mechanism': Compliance and penalty issues**

6.23 Another key design issue was the proposed 'safeguard mechanism'. Some described the safeguard mechanism as a 'key component' which could 'act to prevent business from increasing their emissions to an extent that may cause problems for other sectors of the economy'.<sup>31</sup> Mr Jackson from The Climate Institute highlighted the importance of a robust safeguard mechanism:

...to safeguard against emissions increases in sectors which work against your national target...if you are spending money to improve the efficiency of buildings, you want to make sure that does not mean you are getting emissions increases from the cement industry or the steel industry. You need some sort of safeguarding mechanism to ensure you are not wasting your money...<sup>32</sup>

6.24 However, there was considerable concern as to whether there will be any penalties or compliance mechanisms under the ERF system.<sup>33</sup> For example, 350 Australia were concerned that the Green Paper:

...states that business will only be 'encouraged' to reduce emissions, that 'flexible' compliance arrangements will be available, and that there is no funding sought or available for a 'safeguard' mechanism.<sup>34</sup>

6.25 The committee notes there have been media reports indicating that the Environment Minister has stated that there will be strong enough penalties to stop companies from going 'rogue' with their carbon emissions, but that any penalties will allow for 'fluctuations in emissions as part of the business cycle'.<sup>35</sup>

6.26 The Energy Supply Association of Australia (ESAA) was under the impression that 'Government has stated on numerous occasions that it does not intend

30 Mr David Rossiter, *Submission 70*, p. 3.

31 Energetics, *Submission 59*, p. 2.

32 Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 15.

33 ACF, *Submission 14*, p. 10; Mr Peter Boyer, *Submission 6*, p. 2; Dr Justin Wood, *Submission 28*, p. 1; GetUp Action for Australia, *Submission 47*, p. 4; Sunshine Coast Environment Council, *Submission 78*, p. 4; Ms Jaime Yallup Farrant, 350 Australia, *Committee Hansard*, 31 January 2014, p. 36; Reverend Evan Pederick, Deputy Chair, Anglican EcoCare Commission, *Committee Hansard*, 31 January 2014, p. 61; Mr John Hawkins, *Submission 7*, pp 12–13; Mr James Wight, *Submission 65*, p. 9.

34 350 Australia, *Submission 33*, p. 7.

35 Joanna Heath, 'Direct Action will have penalties for 'rogue' emitters, Hunt warns', *Australian Financial Review*, 5 February 2014, p. 3.

for the penalties mechanism to apply to business as usual activity'.<sup>36</sup> ESAA argued that 'penalties should not apply where businesses are clearly operating as usual'.<sup>37</sup>

6.27 The Australian Industry Group similarly noted that:

The government's expressed intention is not to penalise businesses for business-as-usual activity...our view that if you were to require, through a standard of some sort, a business to stick with gas when coal is cheaper that is imposing a real cost on that business and that is not what we understand the government's policy intention to be.<sup>38</sup>

6.28 However, others pointed out that, for the safeguard mechanism to work effectively, there would need to be consequences for breaching the baselines.<sup>39</sup> WWF-Australia were concerned that the Green Paper 'suggests that there will be no penalty mechanism' and that:

It is unclear what then will be the motivation for companies to reduce their emissions if there is no penalty for not reducing emissions and what, therefore, will prevent Australia's emissions from continuing to increase.<sup>40</sup>

6.29 Sustainable Energy Now argued that, if there are no penalties, this would be a 'fundamental flaw' in the system:

The lack of penalties would mean no guaranteed limit to emissions and would not provide any incentive for industry to reduce carbon intensity in future.<sup>41</sup>

6.30 WWF-Australia argued that a penalty price would need to be set at a sufficiently high level 'to incentivise abatement activity'.<sup>42</sup> However, WWF-Australia pointed out that a high penalty price would be irrelevant if no company exceeds their individual baseline, and therefore the safeguard mechanism would also need adequate and appropriate baselines.<sup>43</sup>

6.31 Some submitters observed that, with a robust safeguard mechanism, the ERF has the potential to be a 'baseline and credit' style system.<sup>44</sup> ESAA pointed out that:

If there is to be any consideration of a baseline scheme with penalties, it must also include credits for businesses that are able to reduce their

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36 Energy Supply Association of Australia, *Submission 61*, p. 5.

37 Energy Supply Association of Australia, *Submission 61*, p. 5.

38 Mr Tennant Reed, Principal National Advisor, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, p. 55.

39 Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 5; see also Sustainable Energy Association, *Submission 90*, p. 9.

40 WWF-Australia, *Submission 67*, pp 10 and 12.

41 Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 27.

42 WWF-Australia, *Submission 67*, p. 10.

43 WWF-Australia, *Submission 67*, p. 13.

44 Energetics, *Submission 59*, p. 3; Clean Energy Council, *Submission 16*, p. 3

emissions. A scheme that has penalties for exceeding baselines but no incentives for remaining below is unbalanced and could increase costs for businesses. Any costs imposed through penalties would ultimately be passed on to end consumers through higher prices.<sup>45</sup>

6.32 Mr Nathan Fabian from IGCC also told the committee that the baselines would need to be reduced over time and would need to require companies in major emitting sectors to participate in the scheme.<sup>46</sup>

6.33 Some witnesses warned that, in the absence of penalties, a carbon price or sufficient safeguard mechanism, there is also a possibility that fuel-switching might occur. That is, some companies may convert to the use of coal for electricity generation, as a result of rising gas prices.<sup>47</sup>

6.34 Once again, it was observed that the safeguard mechanism could potentially result in a huge administrative effort:

...the implication is that the government will need to calculate a 'business as usual' projection of emissions for every business (not just those currently producing reports under NGERs, or those submitting tenders) against which their actual emissions can be assessed. This sounds like a vast and subjective bureaucratic enterprise...<sup>48</sup>

6.35 Professor Ross Garnaut agreed:

A baseline and credit scheme of the kind contemplated requires baselines to be established for old and new firms, with incentives for over-achievement and penalties for underachievement. The setting and enforcement of baselines is an immense bureaucratic task.<sup>49</sup>

6.36 In relation to all these concerns, the Department advised that this is why 'the government is consulting very carefully over that dimension of the scheme'. The Department noted that 'quite a bit of relevant information is already collected in the area through the National Greenhouse and Energy Reporting Scheme that could form part of those considerations'. The Department further noted that:

The extent of any possible compliance burden there would also depend on who was covered under such an arrangement, which is also a decision that the government is consulting carefully on.<sup>50</sup>

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45 Energy Supply Association of Australia, *Submission 61*, p. 5.

46 Mr Nathan Fabian, IGCC, *Committee Hansard*, 7 March 2014, p. 11; see also Energetics, *Submission 59*, p. 3.

47 Ms Kellie Caught, National Manager, Climate Change, WWF-Australia, *Committee Hansard*, 5 February 2014, p. 61.

48 Mr John Hawkins, *Submission 14*, p. 14.

49 Professor Ross Garnaut, *Submission 105*, p. 3.

50 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 8.

## No overall limit on emissions

6.37 Another concern was that there would be no overall limit or legislated 'cap' on greenhouse gas emissions under the Direct Action Plan or the ERF.<sup>51</sup> For example, Mr Jamie Hanson from ACF told the committee that:

A good climate policy will place a limit on the amount of pollution Australia creates each year and will reduce that limit over time, incentivising Australia's biggest polluters—our dirty coal power stations or chemical processors, for instance—to belch out less environmentally-damaging pollution each year.<sup>52</sup>

6.38 Similarly, Mr Gates remarked that:

You have to have a cap; otherwise, how do you know you are going to meet your target? We know what the emission reduction trajectories have to be, so unless we set a cap we are bound to fail. It is like taking your hands off the steering wheel and just hoping you there; there is no feedback into the system.<sup>53</sup>

6.39 The ACTU submitted that:

By not capping emissions or providing a signal beyond 2020 (the year in which the Emissions Reduction Fund Program will conclude), the Direct Action Plan fails to provide the required long term incentive and certainty to the market for industry to invest in deep emission-reduction investments with longer payback periods. Without a clear signal driving abatement, it also risks delaying climate action to post-2020, which will be more costly and disruptive to the economy.<sup>54</sup>

6.40 In this context, a key issue raised as to how new business and projects with significant greenhouse gas emissions will be dealt with under the Direct Action Plan and the ERF.<sup>55</sup> For example, 350 Australia warned that the system 'could give new

51 See, for example, Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 9; 350 Australia, *Submission 33*, p. 7; Anglican EcoCare Commission, *Submission 40*, p. 1; Friends of the Earth Australia, *Submission 66*, pp 4–5; Mr Dugald Murray, Senior Economist, ACF, *Committee Hansard*, 5 February 2014, p. 35; Ms Kellie Caught, National Manager, Climate Change, WWF-Australia, *Committee Hansard*, 5 February 2014, p. 59; ACF, *Submission 14*, p. 5; Dr Justin Wood, *Submission 28*, p. 1; Australian Youth Climate Coalition, *Submission 32*, p. 3; Climate Action Newcastle, *Submission 48*, p. 3; Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 30; Mr Piers Verstegen, Director, CCWA, 31 January 2014, p. 56; Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 36; Professor Ross Garnaut, *Committee Hansard*, 7 March 2014, p. 4; Mr Nathan Fabian, IGCC, *Committee Hansard*, 7 March 2014, p. 11 and *Submission 94*, p. 2; WWF-Australia, *Submission 67*, p. 3.

52 Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 32.

53 Mr Stephen Gates, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 30.

54 Australian Council of Trade Unions, *submission 30*, pp 5–6.

55 See, for example, Mr John Hawkins, *Submission 7*, p. 3; 350 Australia, *Submission 33*, pp 7–8; CCWA, *Submission 29*, p. 1.

polluters the rights to pollute up to current industry rates rather than incentivising cleaner and alternative technologies and lower rates of pollution...'.<sup>56</sup> The Grattan Institute noted that:

A preferred solution has not been published by the Government, although it has sought input from stakeholders. The absence of a solution will represent a threat to both the effectiveness and efficiency of the Direct Action Plan.<sup>57</sup>

6.41 Several submitters and witnesses also warned of the need to guard against domestic 'carbon leakage', that is, ensuring that emissions reductions paid for under the ERF does not result in emissions increases by other business or activities.<sup>58</sup> As Dr Paul Burke submitted, 'without a cap on total emissions, there is no guarantee that emissions reductions in a specific project will not be offset by additional emissions elsewhere'.<sup>59</sup>

6.42 However, The Climate Institute advised that the safeguard mechanism could, in theory, potentially work as an effective cap on emissions:

Absolute emission baselines could be applied to facilities in major emitting sectors, possibly excluding electricity. These absolute baselines could be added up to an effective cap on emissions in these sectors. Absolute emissions baselines at a facility level may be not appropriate for the electricity sectors as it may discourage switching from coal to gas-fired generation.<sup>60</sup>

6.43 As Professor Garnaut observed:

... it is not clear from the Green Paper whether and the extent to which abatement through the Emissions Reduction Fund would place restraints on growth in emissions in enterprises that were not receiving payments for reductions in emissions.<sup>61</sup>

6.44 Professor Garnaut described this as a 'large and obvious flaw' in the ERF and a source of pressure on its budget:

this flaw may lead a Government seeking to meet its emissions targets to set baselines for each enterprise and penalties for emissions in excess of the baseline. Without a national cap of a kind that is present under established Carbon Pricing policies, the baselines and penalties would need to be set

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56 350 Australia, *Submission 33*, pp 7–8.

57 Grattan Institute, *Submission 22*, p. 4.

58 Professor David Pannell, *Committee Hansard*, 31 January 2014, p. 11; Mr John Hawkins, *Submission 7*, p. 2.

59 Dr Paul Burke, *Submission 80*, p. 1.

60 The Climate Institute, *Answers to questions taken on notice from public hearing*, Melbourne, 5 February 2014, p. 1; see also Mr Erwin Jackson, Deputy CEO, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 11; see also Energetics, *Submission 59*, p. 6.

61 Professor Ross Garnaut, *Submission 105*, p. 5.

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business facility by business facility. This would be a huge bureaucratic exercise.<sup>62</sup>

## **Timeframes**

6.45 A number of issues relating to timeframes were raised in relation to the Direct Action Plan and the ERF, including:

- the commencement of the system;
- duration of contracts under the ERF; and
- the need for a longer term approach.

### ***Commencement of the ERF and its safeguard mechanism***

6.46 It was also suggested that it will be difficult for the ERF to attain emissions reductions targets, simply because it will be difficult to get the scheme up and running in time. As Dr Burke pointed out:

2020 is actually very soon. This scheme is going to take time to get going, even once it is started. Companies would need to submit bids for it and projects would need to be analysed, approved and then, of course, implemented. Everything takes time, and our experience...is that these programs take a lot of time for emissions reductions to perhaps start to happen....<sup>63</sup>

6.47 Several submissions and witnesses were concerned that the Government has deferred its decision on how emissions baselines will be determined for the safeguard mechanism until mid-2015, noting that 'this is a critically important element of Direct Action that remains uncertain...'.<sup>64</sup> In contrast, the Australian Industry Group told the committee:

...the purpose of the baseline system is not entirely clear and at this stage our suggestion would be either to articulate a clearer purpose for the safeguard mechanism or not to proceed with that element of the policy. We certainly appreciate that the government has undertaken that that element will not commence until at least 1 July 2015, to allow additional time for consultation with industry.<sup>65</sup>

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62 Professor Ross Garnaut, *Submission 105*, p. 5.

63 Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 36; see also, for example, Mr David Rossiter, *Committee Hansard*, 28 February 2014, p. 9.

64 Sustainable Energy Association, *Submission 90*, p. 8; see also Mr Erwin Jackson, Deputy CEO, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 10.

65 Mr Tenant Reed, Principal National Adviser, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, p. 52; see also Australian Industry Group, *Submission 92*, p. 6.

6.48 Others expressed surprise at the proposed review of the Direct Action Plan in 2015, given that 'implementation would only be getting underway at that time'.<sup>66</sup> The Climate Institute suggested that:

The Government needs to be flexible on this timeline as it is currently misaligned with international processes and commitments.<sup>67</sup>

### ***Duration of contracts***

6.49 Many submitters and witnesses highlighted the need for long-term commitments, were concerned that the proposed maximum five-year contract duration proposed in the ERF Green Paper would be too short.<sup>68</sup> In particular, it was suggested that it would be difficult to find finance for such short-term projects. For example, the CEFC submitted that:

...the proposed five year forward contracts will be insufficient and may need to be for longer than five year's duration to be effective in attracting the necessary finance for abatement projects.<sup>69</sup>

6.50 Similarly, Professor Frank Jotzo warned that:

Project proponents will have no realistic expectations that further payments would be made beyond the initial five-year period. Therefore, only investments with payback periods of less than five years at a given payment per tonne of claimed emissions reductions will be commercially viable. This will exclude many abatement options that involve long-lived equipment, as is usually the case in energy and industrial investments.<sup>70</sup>

6.51 Representatives from the NFF also pointed out that a five-year timeframe 'probably does not correlate with the time it takes to actually put projects on the ground' and that 'longer term approaches are required for agriculture'.<sup>71</sup> They pointed to the time taken to approve methodologies for the CFI by way of example.<sup>72</sup> In the same vein, WWF-Australia submitted that:

...to unlock more substantial levels of abatement from the land sector, potential investors and project developers will need a long-term investment

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66 Environmental Farmers Network, *Submission 9*, p. 2.

67 The Climate Institute, *Submission 2*, p. 8.

68 See, for example, ACF, *Submission 14*, p. 4; Clean Energy Council, *Submission 16*, p. 4; ESAA, *Submission 61*, p. 4; Sustainable Energy Association, *Submission 90*, p. 10; Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 4; Mr Tony Wood, Program Director—Energy, Grattan Institute *Committee Hansard*, 5 February 2014, p. 5; Facility Management Association of Australia, *Submission 36*, p. 4; Mr David Rossiter, *Submission 70*, p. 3; Dr Paul Burke, *Submission 80*, p. 1; CEFC, *Submission 75*, p. 16; Australian Industry Group, *Submission 92*, p. 4.

69 Clean Energy Finance Corporation, *Submission 75*, p. 4 and see also p. 23.

70 Professor Frank Jotzo, *Submission 86*, p. 3.

71 Ms Deborah Kerr, Australian Pork Ltd, *Committee Hansard*, 28 February 2014, p. 3; see also Environmental Farmers Network, *Submission 9*, p. 1.

72 Ms Jacqueline Knowles, NFF, *Committee Hansard*, 28 February 2014, p. 3.

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signal. Indeed, most land-use projects require an income stream of at least 10 years to become economically viable.<sup>73</sup>

6.52 Others pointed out that certain emissions reduction activities will deliver abatement over a much longer time frame than five years.<sup>74</sup> For example, the ESAA were concerned that:

...emissions reduction activities from power stations are unlikely to be cost-competitive with other forms of abatement, as they will deliver abatement over a much longer time frame than that for which they will be rewarded by the fund...we consider it unlikely that there will be significant participation from our sector in the emissions reduction fund. This is not a flaw in the design of the fund per se, but it is important to recognise that if the government's policy framework is solely focussed on short-term goals it will be less likely to deliver long-term changes.<sup>75</sup>

6.53 In contrast, the Australian Industry Group expressed support for five year limits on contracts:

...to succeed the ERF needs to attract strong participation, and that could be assisted by minimising the risks to bidders including around the adoption, if there is a five-year limit on the terms for which abatement will be contracted, allowing projects to recover their full costs within that period without competitive disadvantage inside the auction process.<sup>76</sup>

6.54 Others warned that the short timeframes would increase the cost of abatement. For example, Mr Pollard told the committee that the short timeframes of the ERF would be a 'major obstacle' to finding low-cost opportunities:

...emissions mainly come from very large long-term investments like a power station and so a low-cost abatement comes about looking at over 30 or 40 years or 15 or 20 years. Clearly you need a long-term payment scheme or a long-term pricing scheme to reduce that low-cost abatement.<sup>77</sup>

6.55 Mr Rossiter agreed that:

...the five-year maximum term for recovery of abatement costs will increase the apparent costs by factors of two to four or more, because industry normally looks for returns over periods of 10, 15, 20 years or more. This time restriction and consequent increased apparent abatement cost will reduce the number of actions bid into the program and

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73 WWF-Australia, *Submission 67*, p. 18 and Attachment 3.

74 Facility Management Association of Australia, *Submission 36*, p. 4; Mr Kieran Donoghue, General Manager, Policy, Energy Supply Association of Australia, *Committee Hansard*, 5 February 2014, p. 40; CSIRO, *Submission 102*, p. 4.

75 Mr Kieran Donoghue, General Manager, Policy, Energy Supply Association of Australia, *Committee Hansard*, 5 February 2014, p. 40.

76 Mr Tennant Reed, Principal National Advisor, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, p. 52.

77 Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 8.

implemented. This will severely reduce abatement quantities that the plan can achieve.<sup>78</sup>

6.56 In response to questioning on this issue, the Department advised that it had received a number of submissions in response to the Green Paper which were concerned that the five-year contract length. The Department stated that 'the government will take its decision [on contract length] in the light of those submissions'.<sup>79</sup>

### *No long-term plan*

6.57 Another concern was that the ERF and the Direct Action Plan appear to be a short-term measure. In particular, there is no funding committed for the Direct Action Plan and ERF beyond its fourth year and that there is no indication of any continued program, budget or target beyond 2020.<sup>80</sup> As the ACF observed:

Climate change will not end in 2020 and business decisions being taken now and up to 2020 will have costly impacts for decades for come.<sup>81</sup>

6.58 Mr Hanson from ACF described the Direct Action Plan as 'a short-term fix':

Investors have indicated that they require at least a 20-year time frame if they are to make good long-term investment decisions and drive the development in Australia of enduring industries for the future. The Direct Action Plan does not provide that; it creates the opposite.<sup>82</sup>

6.59 Similarly, WWF-Australia were concerned that the ERF does not provide a long-term signal to give 'business the certainty and confidence to plan for transition, make long-term investments and drive structural change in the economy'.<sup>83</sup>

6.60 Many submitters and witnesses also expressed concern that the Direct Action plan is only funded for a three-year period initially:

This creates a significant concern that it will create a boom-bust cycle of regulatory and political uncertainty, one that has been historically problematic for both renewable energy and energy efficiency markets and businesses. Short-term policy, such as Direct Action as it is currently

78 Mr David Rossiter, *Committee Hansard*, 28 February 2014, pp 9, 10 and *Submission 70*, p. 3.

79 Dr Steven Kennedy Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 10 and also p. 9.

80 350 Australia, *Submission 33*, p. 8; see also Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 32; Mr Peter Boyer, *Submission 6*, p. 2; Ms Tania Maxted, *Submission 43*, p. 6; Mr John Hawkins, *Submission 7*, p. 2; Mr David Rossiter, *Submission 70*, p. 3; Carbon Market Institute, *Submission 64*, p. 10; Professor David Karoly, *Submission 72*, p. 2; Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 8.

81 ACF, *Submission 14*, p. 2.

82 Mr Jamie Hanson, Climate Change Campaigner, ACF, *Committee Hansard*, 5 February 2014, p. 32; see also ACF, *Submission 14*, p. 9.

83 WWF-Australia, *Submission 67*, p. 3; see also, for example, Energy Supply Association of Australia, *Submission 61*, p. 1; Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 8.

framed, is opportunistic rather than visionary and is not likely to contribute to the development of technology, knowledge and skills within Australia to support the long-term reduction of Australia's carbon emissions.<sup>84</sup>

6.61 As Ms Rose from the Sustainable Energy Association observed:

Energy infrastructure and the people who invest in energy infrastructure are looking decades out. The lack of understanding of what the policy may look like decades from now is a serious inhibitor to investment, without a doubt.<sup>85</sup>

6.62 Similarly, the Energy Supply Association of Australia submitted that:

Long-term signals for investment would assist all sectors of the economy to provide abatement. The energy industry in particular is made up of capital-intensive, long-lived assets. The ERF should provide certainty that tenders for abatement can be made that extend beyond the current 2020 target date. This is crucial when some methodologies may take several years to design and implement, and may also have a long payback period. The ERF should take a long-term, strategic approach to ensure that all industries can participate and find ways to provide low-cost, measurable and verifiable abatement.<sup>86</sup>

6.63 As Mr Bernie Fraser, Chair of the Climate Change Authority told the committee:

There is a long haul element to this challenge of climate change, and that requires budgetary and other commitments from governments over long periods of time—periods of time that run to decades not just the period of the forward estimates.<sup>87</sup>

### **Future scalability and increasing targets**

6.64 As outlined elsewhere in this report, many submissions and the Climate Change Authority recommended that Australia increase its emissions reductions targets. However, many witnesses and submitters were concerned as to whether the Direct Action Plan could be 'scaled up' as Australia needs to make stronger emissions reductions in the future.<sup>88</sup> For example, the IGCC submitted that 'a policy framework

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84 Sustainable Energy Association, *Submission 90*, p. 10.

85 Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 7.

86 Energy Supply Association of Australia, *Submission 61*, p. 2.

87 Mr Bernie Fraser, Chair, CCA, *Committee Hansard*, 7 March 2014, p. 27.

88 See, for example, Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 9; Mr Dugald Murray, Senior Economist, ACF, *Committee Hansard*, 5 February 2014, p. 36; Friends of the Earth Australia, *Submission 66*, p. 3; Dr George Crisp, Doctors for the Environment Australia, *Committee Hansard*, 31 January 2014, p. 23; The Australia Institute, *Submission 38*, pp 4–5; Environment Victoria, *Submission 25*, p. 2; GetUp Action for Australia, *Submission 47*, p. 4; Mr Nathan Fabian, IGCC, *Committee Hansard*, 7 March 2014, p. 11; Dr Paul Burke, *Submission 80*, p. 1.

that can respond to deeper targets, at relatively low cost is a fundamental requirement of any long-term policy framework'.<sup>89</sup>

6.65 Professor Frank Jotzo:

If you fast forward and you were to try to imagine a system where you wanted to halve Australia's emissions by way of a subsidy scheme, you would need enormous amounts of fiscal revenue to support that, even if you could address all of the other problems that have been identified...<sup>90</sup>

6.66 Ms Rose from the Sustainable Energy Association expressed similar concerns that the ERF is designed for 5% for 2020 'and not beyond'. She acknowledged that:

There are aspects of it that certainly could be expanded beyond 2020 if that is the choice, but one of our serious concerns is that we do not have any of that visibility or transparency.<sup>91</sup>

6.67 In this context, the Grattan Institute submitted that:

The Direct Action Plan as published is focused only the five per cent, 2020 target, although there is no fundamental reason why it could not be expanded to meet conditional 2020 targets or longer term targets to which the Government may commit...<sup>92</sup>

6.68 On the issue of scalability, the Department advised that:

The nature in which the scheme can emerge to meet any future target is also a matter for government, but crediting mechanisms, purchasing mechanisms and the safeguards mechanisms are all parts of the scheme that can change over time if required.<sup>93</sup>

6.69 However, others pointed out that, if the budget is limited and will not be increased, the targets under the ERF could not be scaled up due to budgetary constraints.<sup>94</sup> For example, WWF-Australia submitted that none of the ERF modelling scenarios were able to achieve a 25% target by 2020, *with domestic abatement alone* at any reasonable price.<sup>95</sup>

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89 IGCC, *Submission 94*, p. 3; see also, for example, Ms Anna Skarbek, Executive Director, ClimateWorks Australia, *Committee Hansard*, 5 February 2014, p. 28.

90 Professor Frank Jotzo, *Committee Hansard*, 28 February 2014, p. 37.

91 Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 7.

92 Grattan Institute, *Submission 22*, p. 2.

93 Dr Steven Kennedy Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 9.

94 Mr Nathan Fabian, IGCC, *Committee Hansard*, 7 March 2014, p. 11; AMWU, *Submission 50*, p. 10.

95 WWF-Australia, *Submission 67*, pp 2–3.

6.70 In contrast, if international emissions reductions were accessible under the ERF, the committee notes that it *might* be possible for the ERF to meet increased targets. This is discussed further below.

### Accessing international credits

6.71 The Direct Action Plan proposes to source all emissions reductions domestically, rather than using any overseas emissions credits.<sup>96</sup> However, many submissions queried whether this was the best approach.<sup>97</sup> For example, the IGCC submitted that 'access to verified international permits supports our emissions reduction objectives, reduces abatement costs and supports low carbon technologies internationally'.<sup>98</sup>

6.72 Many noted that purchasing international permits for emissions reductions would be cheaper and more cost-effective.<sup>99</sup> The Climate Institute suggested that some of the ERF funds should be apportioned to purchase credible Kyoto Protocol-compliant emission units 'as an insurance policy against the risk that domestically sourced abatement is not available at the scale or price required to achieve Australia's international carbon budget obligations'.<sup>100</sup>

6.73 Mr Jackson from The Climate Institute further argued that:

This is a global problem. If we limit access to international markets then we limit our ability to contribute to the global problem. The ability to achieve much stronger targets is in part linked to our ability to access international markets.<sup>101</sup>

6.74 Several submissions suggested that access to international emissions credits should be part of 'make-good' provisions under the ERF. For example, the Australian Industry Group suggested that it would reduce the risks for bidders if proponents were

96 Direct Action Plan, p. 2.

97 See, for example, Mr Tony Wood, Program Director—Energy, *Committee Hansard*, 5 February 2014, p. 3; Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 3; Sustainable Energy Association, *Submission 90*, p. 7; Mr Tenant Reed, Principal National Advisory, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, p. 52; Australian Industry Group, *Submission 92*, p. 3; Professor David Karoly, *Submission 72*, p. 2; Professor Frank Jotzo, *Committee Hansard*, 28 February 2014, p. 35; Mr Nathan Fabian, IGCC, *Committee Hansard*, 7 March 2014, p. 11; Mr John Hawkins, *Submission 7*, p. 7; Carbon Market Institute, *Submission 64*, p. 9 cf Mr James Wight, *Submission 65*, p. 15; Corporate Carbon Advisory, *Submission 79*, p. 2.

98 IGCC, *Submission 94*, p. 3.

99 See, for example, Dr Paul Burke, *Committee Hansard*, 28 February 2014, p. 38; Mr Tim Buckley, *Committee Hansard*, 7 March 2014, p. 17; Mr Tenant Reed, Principal National Advisory, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, pp 52 and 56; Mr Erwin Jackson, Deputy CEO, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 9; Professor Ross Garnaut, *Submission 105*, p. 5.

100 The Climate Institute, *Submission 2*, p. 8.

101 Mr Erwin Jackson, Deputy CEO, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 10; see also AMWU, *Submission 50*, p. 10.

able to access international carbon credits, particularly in relation to the 'make good' provisions under the ERF.<sup>102</sup>

6.75 The committee notes that the recent Climate Change Authority report recommended that:

The government use international emissions reductions to bring any gap between domestic reductions achieved under the Direct Action Plan and the recommended 2020 goals.<sup>103</sup>

6.76 And further that:

The government establish a fund to purchase Clean Development Mechanism units to complement the Direct Action Plan and help meet the recommended 2020 goals.<sup>104</sup>

6.77 In response to questioning on these recommendations, Mr Fraser, Chair of the Climate Change Authority, explained, although they 'would like to see most of the reductions in emissions occur through domestic actions':

In the short term, to get a credible start on the task of reducing emissions for the 2020 target, it is not practicable to get these domestic measures in place to achieve the minimum 15 per cent goal that we talked about...in the next five or six years you cannot expect the kinds of investments to occur and be flowing through to get to that 2020 emission reduction target...in the short term, if we are going to make a serious attempt to get to the 2020 target, we have to resort to permits for international emission reductions.<sup>105</sup>

6.78 Mr Fraser provided the following example:

Even if you could get emission standards for light vehicles in place tomorrow, by the time the whole light vehicle fleet turned over it would be eight or 10 years. It would be a longer period of time before the full effect of these domestic emission reductions would start to flow through. That is true of so many other investments. Even if they start tomorrow to replace old and inefficient power plants or to put more renewable energy projects in place, it takes time, even with the best will and the best political environment in the world, to do that.<sup>106</sup>

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102 Mr Tenant Reed, Principal National Advisory, Public Policy, Australian Industry Group, *Committee Hansard*, 5 February 2014, p. 52; see also Australian Industry Group, *Submission 92*, p. 3; Origin, *Submission 45*, p. 8; The Climate Institute, *Answers to questions taken on notice from public hearing*, Melbourne, 5 February 2014, p. 1; Energetics, *Submission 59*, p. 3; ESAA, *Submission 61*, p. 5.

103 CCA, *Targets and Progress Review*, Final Report, February 2014, p. 186.

104 CCA, *Targets and Progress Review*, Final Report, February 2014, p. 186.

105 Mr Bernie Fraser, Chair, Climate Change Authority, *Committee Hansard*, 7 March 2014, p. 33.

106 Mr Bernie Fraser, Chair, Climate Change Authority, *Committee Hansard*, 7 March 2014, p. 33.

## Benchmark price

6.79 Finally, some witnesses expressed the view that 'benchmark price' proposed by the Green Paper should be made public, thereby increasing transparency. For example, Ms Kirsten Rose from the Sustainable Energy Association observed that:

A benchmark price in a reverse auction is helpful to the participants, because they know roughly where they need to come in at to be competitive...the benchmark price should be public, it should be open to all to see, not necessarily on that specific auction.<sup>107</sup>

6.80 The CEFC warned that, if the benchmark price were kept confidential, participants in ERF auctions would run a risk that the undisclosed price cap in the auction would be well below the minimum price required, which could lead to waste time and expense for participants. This risk, in turn, could be a strong disincentive to participation. The CEFC recommended:

Publishing a benchmark price in advance for the auctions would ensure that only those participants who can achieve abatement below the benchmark will expend time and money developing project proposals and participating in auctions.<sup>108</sup>

6.81 Similarly, Mr Wood from the Grattan Institute suggested that the ERF could create 'at least a shadow carbon price', and 'it will be very important to have price visibility' under the ERF.<sup>109</sup>

## Committee comment

6.82 The committee notes that there has been very little detailed public analysis of the Emissions Reduction Fund and its proposed design. The evidence to this committee overwhelmingly indicated that there are numerous inherent design problems with the Emissions Reduction Fund. Establishing baselines, and ensuring that emissions reductions are truly additional, will be extremely difficult and impose a high administrative burden on the Government. The evidence also highlighted that the five-year timeframes proposed for contracts under the Emissions Reduction Fund are insufficient to provide investor confidence and encourage long-term business investment in low-carbon technologies and projects. Based on its current proposed design and budget, it is unlikely that the Emissions Reduction Fund could be sufficiently 'scaled up' as Australia needs to make stronger emissions reductions in the future.

6.83 Clearly, any scheme to reduce Australia's emissions needs to ensure that there is a limit or 'cap' on overall domestic emissions, and penalties for polluters who

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107 Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 6; see also Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 34; 350 Australia, *Submission 33*, p. 8; Mr John Hawkins, *Submission 7*, p. 3.

108 CEFC, *Submission 75*, p. 25.

109 Mr Tony Wood, Program Director—Energy, *Committee Hansard*, 5 February 2014, p. 8.

exceed reasonable emissions limits. The committee notes evidence that the so-called 'safeguard mechanism' has some potential in this regard, but there is almost no detail about how the 'safeguard mechanism' will work and whether there will be sufficient penalties and robust baselines associated with the mechanism. Further, the Department indicated that the 'safeguard mechanism', which is absolutely critical to the scheme, will not even be in place until 1 July 2015 at the earliest.

6.84 The committee also considers that the proposal to review the Emissions Reduction Fund in 2015 is extremely premature. The auction process itself will take time in terms of preparing bids and assessing projects. It will also take time to get projects under way and achieving emissions reductions. The safeguard mechanism may not even be operational at that point. As such, it will be difficult to make an accurate assessment of the success or otherwise of the Emissions Reduction Fund.

6.85 The committee is also deeply concerned that there is no budget for the Direct Action Plan beyond 2017, and that there appears to be no climate policy or plan at all beyond 2020. Climate change will not be solved by then: it is a long-term problem that requires a long-term solution. Further, the lack of long-term planning and resultant uncertainty undermines investment and business confidence in the very sectors that we need to be encouraging in the transition to a low-carbon economy.

6.86 In light of all these issues, the committee considers that the Emissions Reduction Fund is a fundamentally flawed proposal and should not proceed. However, if the Government insists on proceeding with the Emissions Reduction Fund, the committee considers that it will need increased funding and staffing, a robust safeguard mechanism, an overall limit on Australia's emissions, longer timeframes and to allow access to international emissions credits.

### **Recommendation 11**

**6.87 The committee recommends that the Government not proceed with the Emissions Reduction Fund as it is fundamentally flawed and in doing so notes that:**

- **there is insufficient funding to be able to secure enough abatement to meet Australia's emissions targets now and into the future;**
- **there is a lack of a robust safeguard mechanism with stringent baselines and penalties for exceeding baselines;**
- **there is no legislated limit or 'cap' on Australia's emissions in line with emissions reductions targets;**
- **there is no access to international emissions credits;**
- **the maximum terms of contracts for purchasing emissions reductions under the Emissions Reduction Fund need to be increased;**
- **the use of international permits needs to be limited at 50%, with the maximum caps being 12.5% from Certified Emissions Reductions under the Clean Development Mechanism and 37.5% from European Union permits;**

- **an increase of staffing will be required within the Department of the Environment to enable the scheme to be designed properly;**
- **an increase of staffing will be required within the Clean Energy Regulator in order to administer the scheme properly; and**
- **the maintenance and establishment of a range of complementary measures, including the Renewable Energy Target and fuel emissions standards are required.**

6.88 In particular, the committee also notes the overwhelming support for allowing the purchasing of international emissions credits as a cost-effective means of reaching Australia's emissions reduction target. The committee supports the recommendations of the Climate Change Authority in this regard.



# Chapter 7

## Related issues

7.1 This chapter considers a number of other issues raised during the committee's inquiry, including:

- the importance of the Renewable Energy Target (RET);
- carbon farming, including abatement opportunities using soil carbon under the Direct Action Plan and interaction of the ERF with the Carbon Farming Initiative; and
- other components of the Direct Action Plan.

### Renewable Energy Target

7.2 Submitters and witnesses emphasised the importance of other schemes as part of the mix of policies to reduce Australia's greenhouse gas emissions. It was pointed out that, if the Clean Energy Package were repealed, and in the absence of a carbon price and an overall limit on emissions, these schemes would become even more important to help Australia meet its emissions reduction targets.<sup>1</sup> One of the key schemes raised in evidence was the RET. As the Grattan Institute submitted:

Although the Direct Action Plan does not explicitly include the RET, an inquiry into the effectiveness and efficiency of the Government's climate change policy is not complete without reference to the RET. This is because the RET contributes to the effectiveness of the ERF in reducing emissions.<sup>2</sup>

#### *Overview of the RET*

7.3 The RET creates financial incentives to promote the deployment of renewable energy and reduce greenhouse gas emissions in the electricity sector. The current RET scheme sets a target of 45,000 GWh of electricity generation from renewable sources by 2020 (representing 20% of projected demand). It operates in two parts, as the Large Renewable Energy Target (LRET) and the Small-Scale Renewable Energy Scheme (SRES). The LRET covers commercial-scale renewable power generation, and sets a target of 41 000 GWh in 2020. The balance of renewable power generation above this

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1 See, for example, Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 9; Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 2; Mr Kane Thornton, Deputy Chief Executive, Clean Energy Council, *Committee Hansard*, 5 February 2014, p. 17.

2 Grattan Institute, *Submission 22*, p. 2.

figure will be made up of units installed under the SRES. The schemes are underpinned by the *Renewable Energy (Electricity) Act 2000*.<sup>3</sup>

7.4 Several submissions pointed out that the RET has been a very successful carbon abatement measure. The Clean Energy Council described the RET as 'Australia's largest and most effective carbon abatement policy, as well as being a very effective policy for stimulating investment in new generation capacity'.<sup>4</sup> Mr Kane Thornton from the Clean Energy Council told the committee that their analysis showed that the RET will over its lifetime 'deliver some 380 million tonnes of carbon abatement'.<sup>5</sup> Mr Erwin Jackson from the Climate Institute noted that the RET produces:

...200 million tonnes of emissions reductions and about \$20 billion of investment in Australia through clean energy, mainly in regional areas.<sup>6</sup>

7.5 Others pointed out that the RET is a relatively cost-effective measure to reduce greenhouse gas emissions. For example, Ms Kellie Caught from WWF-Australia told the committee that:

The RET has already had significant benefits in contributing to reducing emissions in Australia's energy sector at a reasonably low cost to consumers, accounting for around three per cent of household bills...some renewables such as onshore wind are already cheaper than new-build fossil fuel alternatives...by 2030 the most cost-effective energy option will be solar. The RET will help accelerate the transition to competitive renewable energy and drive emission reductions.<sup>7</sup>

7.6 Mr Thornton from the Clean Energy Council also noted that the cost of the RET is coming down as the 'cost of renewable energy continues to trend downwards'.<sup>8</sup>

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- 3 Clean Energy Regulator, *About the Renewable Energy Target*, <http://climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/RET-Factsheet.pdf> (accessed 26 February 2014); see also CCA, *Renewable Energy Target Review Final Report*, December 2012, pp 5–6, [http://climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/20121210%20Renewable%20Energy%20Target%20Review\\_MASTER.pdf](http://climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/20121210%20Renewable%20Energy%20Target%20Review_MASTER.pdf) (accessed 26 February 2014).
  - 4 Clean Energy Council, *Submission 16*, p. 1; see also Infigen Energy, *Submission 62*, p. 1.
  - 5 Mr Kane Thornton, Deputy Chief Executive, Clean Energy Council, *Committee Hansard*, 5 February 2014, p. 17; see also Clean Energy Council, *Submission 16*, pp 1–2.
  - 6 Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 9 and see also p. 11.
  - 7 Ms Kellie Caught, National Manager, Climate Change, WWF-Australia, *Committee Hansard*, 5 February 2014, p. 60; see also Mr Kane Thornton, Deputy Chief Executive, Clean Energy Council, *Committee Hansard*, 5 February 2014, p. 17; Mr Bret Harper, Associate Director of Research, Reputex, *Committee Hansard*, 5 February 2014, p. 62; Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, pp 9, 11.
  - 8 Mr Kane Thornton, Deputy Chief Executive, Clean Energy Council, *Committee Hansard*, 5 February 2014, p. 17.

7.7 Mr Oliver Yates from the CEFC also pointed out that the RET 'has a broad based effect':

Wind is a very small part of the sector that is benefitting from the RET. We are seeing numerous projects, particularly in the agribusiness sector—in biogas, in biofuels, in the ethanol sector—where the agricultural business are seeking out ways to reduce emissions, and they are also benefitting from the RET.<sup>9</sup>

*Interaction between the RET and the Direct Action Plan*

7.8 It was suggested that the RET and other measures to reduce Australia's greenhouse gas emissions, including the Direct Action Plan, are inextricably linked. For example, Mr Tony Wood, from the Grattan Institute, observed that:

...the way in which the Renewable Energy Target and the Emissions Reductions Fund work together is quite different from the way in which the Renewable Energy Target would work under the scope of an emissions trading scheme. Under the Direct Action program of the current government, they work together. One affects the other and, to some extent, a review of one that ignores the other is going to be somewhat limited.<sup>10</sup>

7.9 The CEFC similarly submitted that 'the effectiveness of Direct Action and the ERF is co-dependent on what other policy remains in place', including the RET.<sup>11</sup>

7.10 Indeed, Ms Kirsten Rose, from the Sustainable Energy Association, expressed the view that the success of the Direct Action policy hinges on the RET:

The question of whether Direct Action can achieve our abatement targets can only truly be answered by considering the future of the RETs. With the RET, Direct Action can be more effective and do far less of the heavy lifting with regards to emissions reductions.<sup>12</sup>

7.11 Infigen Energy warned that:

Any reduction in the 2020 LRET target will inevitably increase greenhouse gas emissions from the electricity sector resulting in higher costs for Direct Action to achieve the Government's policy. If the 41,000GWh LRET target in 2020 is significantly reduced, then the cost of Direct Action will, likewise, be significantly increased.<sup>13</sup>

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9 Mr Oliver Yates, Chief Executive Officer, CEFC, *Committee Hansard*, 7 March 2014, p. 24.

10 Mr Tony Wood, Program Director—Energy, *Committee Hansard*, 5 February 2014, p. 1; see also, for example, Mr Bernie Fraser, Chair, CCA, *Committee Hansard*, 7 March 2014, p. 29; Ms Anthea Harris, Chief Executive Officer, CCA, *Committee Hansard*, 7 March 2014, p. 35; The Climate Institute, *Submission 2*, p. 6; ESAA, *Submission 61*, p. 6.

11 CEFC, *Submission 75*, p. 4 and see also p. 11.

12 Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 2; see also Mr Richard Harris, Director, WestGen Pty Ltd, *Committee Hansard*, 31 January 2014, p. 71.

13 Infigen Energy, *Submission 62*, p. 3.

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*Reviews of the RET*

7.12 On 17 February 2014, the Minister for Industry and the Minister for the Environment released the terms of reference for a review into the RET by a government-appointed panel. The Ministers explained that the review 'upholds a clear commitment that the Coalition took to the election, to review the RET to make sure it is working efficiently and effectively'.<sup>14</sup> The review will consider:

...the contribution of the RET in reducing emissions, its impact on electricity prices and energy market, as well as its costs and benefits for the renewable energy sector, the manufacturing sector and Australian households.<sup>15</sup>

7.13 This RET review follows a Climate Change Authority review completed in December 2012. That comprehensive review found that the RET has a continuing role to play in supporting investment in renewable generation. Among other matters, the Authority recommended that the frequency of scheduled reviews of the RET should be amended from every two years to every four years to promote greater investor confidence. The Authority also recommended that the target should remain fixed in terms of gigawatt hours to provide confidence to investors. Essentially, the Authority sought to leave the broad design of the RET scheme unchanged, but suggested changes to contain costs and improve scheme efficiency.<sup>16</sup>

7.14 Meanwhile, the Climate Change Authority is still obliged under the *Renewable Energy (Electricity) Act 2000* (Cth) to conduct another statutory review of the RET by the end of this year. The Climate Change Authority advised the committee that it was not pursuing any work related to a review of the target at this stage, given the uncertainty surrounding the bill to abolish the Climate Change Authority. However, it is conducting some research work which 'could usefully be available to be fed into reviews' of the RET in future.<sup>17</sup>

7.15 Several witnesses noted that recent and current reviews of the RET are causing considerable uncertainty in the renewable energy sector.<sup>18</sup> This uncertainty has been impacting negatively on investment in the sector and resulted in a number of

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14 The Hon Greg Hunt MP, Minister for the Environment and The Hon Ian Macfarlane MP, *Review of the Renewable Energy Target*, Joint Media Release, 17 February 2014, <http://www.environment.gov.au/minister/hunt/2014/mr20140217.html> (accessed 27 February 2014).

15 The Hon Greg Hunt MP, Minister for the Environment and The Hon Ian Macfarlane MP, *Review of the Renewable Energy Target*, Joint Media Release, 17 February 2014.

16 CCA, *Renewable Energy Target Review Final Report*, December 2012, and see also CCA, *RET Overview*, <http://climatechangeauthority.gov.au/ret/overview> (accessed 27 February 2014).

17 Mr Bernie Fraser, Chair, CCA, *Committee Hansard*, 7 March 2014, pp 29–30.

18 See, for example, Mr Richard Harris, Director, WestGen Pty Ltd, *Committee Hansard*, 31 January 2014, pp 69 and 71.

projects being put 'on hold'.<sup>19</sup> The Clean Energy Council submitted that there needs to be 'an end to the constant reviews of the RET':

The RET has undergone regular and substantial reviews since it was first designed in the late 1990s. The 20 per cent target was legislated in 2009 and enhanced in 2010. This was followed by a legislated review of the scheme in 2012, and an expected review of the scheme in early 2014. Each review creates uncertainty and results in a slowing or deferment of investment in renewable energy...the upcoming review should be the last review of the scheme until 2020.<sup>20</sup>

7.16 In contrast, the ESAA observed that:

...when the RET was originally designed it was envisioned to be pushing renewable energy into a growing market. What we have seen since 2008 is a market that is shrinking, yet the renewable energy target is still pushing new supply into that market. So the effects that we are now seeing are quite different from what was envisaged.<sup>21</sup>

7.17 Many submitters were concerned about the current non-statutory review of the RET and that there may be a weakening of the RET. Many urged for the RET to be retained in its current format as a fixed target—or even increased.<sup>22</sup> Others warned that any weakening of the RET would increase the cost of achieving emissions reductions targets under the Direct Action Plan. For example, Professor Ross Garnaut warned that, if policies such as the RET were weakened, this 'would increase the load that had to be carried by the Emissions Reduction Fund, and the fiscal cost of carrying the load'.<sup>23</sup> Ms Rose from the Sustainable Energy Association agreed that:

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19 Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 11; Mr Nathan Fabian, Chief Executive Officer, IGCC, *Committee Hansard*, 7 March 2014, p. 18; Mr Kane Thornton, Deputy Chief Executive, Clean Energy Council, *Committee Hansard*, 5 February 2014, p. 17; Mr Bret Harper, Associate Director of Research, Reputex, *Committee Hansard*, 5 February 2014, p. 63.

20 Clean Energy Council, *Submission 16*, p. 2.

21 Mr Andrew Dillon, General Manager, Corporate Affairs, ESAA, *Committee Hansard*, 5 February 2014, p. 42.

22 Mr Richard Harris, Director, WestGen Pty Ltd, *Committee Hansard*, 31 January 2014, p. 69; 350 Australia, *Submission 33*, p. 10; Anglican EcoCare Commission, *Submission 40*, pp 4–5; Clean Energy Council, *Submission 16*, p. 2; LIVE, *Submission 19*, p. 7; ARRCC, *Submission 21*, p. 5; AUSTELA, *Submission 76*, pp 10–11; CCSA, *Submission 44*, pp 7–8; Ms Tania Maxted, *Submission 43*, p. 6; WWF-Australia, *Submission 67*, p. 17; Energetics, *Submission 59*, p. 1; Climarte, *Submission 87*, p. 7.

23 Professor Ross Garnaut, *Submission 105*, p. 4.

Any move to relax the RET will mean that the emissions reduction hurdle will only be higher for the government's Direct Action policy and therefore more costly.<sup>24</sup>

7.18 However, in terms of interaction between the ERF and RET, the Department of the Environment advised the committee that the RET review is being conducted by an 'expert reference panel' supported by a secretariat in the Department of the Prime Minister and Cabinet, and 'is an entirely separate process to our ERF considerations'.<sup>25</sup>

## **Carbon Farming**

7.19 This section considers carbon farming, and in particular:

- opportunities for emissions abatement under the ERF using soil carbon; and
- the interaction between the ERF and the CFI.

### ***Soil carbon***

#### *Soil carbon and soil sequestration*

7.20 The original 2010 Direct Action Plan placed a heavy emphasis on abatement (emissions reductions) from sequestration<sup>26</sup> of carbon into soil. It anticipated that 60% of abatement, or 85 million tonnes per annum of CO<sub>2</sub>,<sup>27</sup> would come from 'soil carbon' – that is, changed land management practices that take carbon out of the air and incorporate it into soil. The Direct Action Plan claimed that:

The single largest opportunity for CO<sub>2</sub> emissions reduction in Australia is through bio-sequestration in general, and in particular, the replenishment of our soil carbons. It is also the lowest cost CO<sub>2</sub> emissions reduction available in Australia on a large scale.<sup>28</sup>

7.21 In contrast, the ERF Green Paper only briefly mentions soil carbon in the context of land sector abatement in relation to the CFI.<sup>29</sup>

7.22 At the time of writing, there are 22 carbon farming methodologies approved under the CFI, none of which relate to soil carbon. The methodologies currently relate to agricultural projects (dairies and piggeries), vegetation projects (regrowth,

24 Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 2; see also Mr Erwin Jackson, Deputy Chief Executive Officer, The Climate Institute, *Committee Hansard*, 5 February 2014, p. 9 and see also p. 11; Mr Bret Harper, Associate Director of Research, Reputex, *Committee Hansard*, 5 February 2014, p. 62.

25 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 3.

26 'Sequestration' is defined as the removal of atmospheric carbon dioxide, either through biological processes (for example, photosynthesis in plants and trees) or geological processes (for example, storage of carbon dioxide in underground reservoirs): Green Paper, p. 61.

27 Of the 140 million tonnes target: see Direct Action Plan, p. 18.

28 Direct Action Plan, p. 16.

29 Green paper, pp 42–43, 45.

reforestation and savannah burning) and landfill and alternative waste treatment (landfill gas and waste diversion and capture).<sup>30</sup>

7.23 However, on 18 March 2014, the Minister announced that the land management activity 'sequestering carbon in soil in grazing systems' would be added to the Carbon Farming Initiative Regulations, which in turn 'paves the way for developing methodologies for soil carbon sequestration, under which projects can participate in the Emissions Reduction Fund'. The Minister further announced that:

This initial methodology is expected to be ready in mid 2014, in time for land managers with soil carbon sequestration projects to participate in early rounds of the Emissions Reduction Fund soon after its commencement on 1 July 2014.<sup>31</sup>

7.24 Some, such as the Wentworth Group of Concerned Scientists, pointed out the potential of 'carbon farming' more generally to make a contribution, both to climate change and to other issues such as land degradation.<sup>32</sup> However, there was considerable debate during the committee's inquiry about the role, relative contribution and potential of soil carbon sequestration to reduce emissions.<sup>33</sup>

7.25 Some were optimistic about the role of soil carbon.<sup>34</sup> For example, Carbon Farmers of Australia disputed the idea that soil carbon might only be a 'minor player with not much potential to contribute to climate action' as 'patently wrong and based

30 Department of the Environment, *Carbon Farming Initiative Methodology determinations*, <http://www.climatechange.gov.au/reducing-carbon/carbon-farming-initiative/methodologies/methodology-determinations> (accessed 18 March 2014).

31 The Hon. Greg Hunt MP, Minister for the Environment, 'Carbon Farming and Direct Action', *Paper to the National Carbon Farming Initiative*, 18 March 2014, <http://www.environment.gov.au/minister/hunt/2014/mr20140318.html> (accessed 19 March 2014); see also Ms Shayleen Thompson, First Assistant Secretary, International and Land Division, Department of the Environment, *Committee Hansard*, 18 March 2014, pp 4, 5.

32 Wentworth Group, *Submission 95*, p. 4; see also, for example, Ms Anna Skarbek, Executive Director, ClimateWorks Australia, *Committee Hansard*, 5 February 2014, p. 30; Environmental Farmers Network, *Submission 9*, p. 1; Dr Christine Jones, *Submission 103*, p. 2.

33 See, for example, Sustainable Energy Association, *Submission 90*, p. 5; North Queensland Conservation Council, *Submission 77*, pp 1–2; Mr Tas Thamo, *Committee Hansard*, 31 January 2014, pp 10–17; Professor David Pannell, *Committee Hansard*, 31 January 2014, pp 11–17; Mr Tas Thamo and Professor David J Pannell, *Submission 91*; CCSA, *Submission 44*, pp 9–10; Ms Deborah Kerr, Australian Pork, *Committee Hansard*, 28 February 2014, p. 4; Dr Michael Battaglia, Deputy Director, Sustainable Agriculture Flagship, CSIRO, *Committee Hansard*, 7 March 2014, pp 5–10; UnitingJustice Australia, *Submission 68*, p. 6; Mr John Hawkins, *Submission 7*, p. 14; NFF, *Supplementary Submission 37*, pp 28–29; Energetics, *Submission 59*, p. 4; Mr James Wight, *Submission 65*, p. 15; Mr Paul Pollard, *Submission 81*, p. 7; CSIRO, *Submission 102*, p. 3 cf Dr Christine Jones, *Submission 103*; Mr Michael Kiely, Director, Carbon Farmers of Australia, *Committee Hansard*, 28 February 2014, p. 19; Mrs Louisa Kiely, Director, Carbon Farmers of Australia, *Committee Hansard*, 28 February 2014, p. 19.

34 Dr Christine Jones, *Submission 103*, p. 1; Carbon Farmers of Australia, *Submission 104*.

on ignorance of the facts'.<sup>35</sup> They suggested that in three to five years they expected a cost of around \$10 to \$15 per tonne for soil carbon abatement, depending on a number of factors.<sup>36</sup>

7.26 However, many cautioned against an over reliance on soil carbon. The Commonwealth Scientific and Industrial Research Organisation (CSIRO) told the committee that soil carbon 'is not likely to make a substantial contribution to national abatement activities'.<sup>37</sup> CSIRO explained that building up soil carbon is a 'challenging task' and estimated that by 2020 around 2–3Mt of abatement 'might be possible'.<sup>38</sup> CSIRO further cautioned that 'what is required is that methodologies deliver confidence in the credited level of abatement, not necessarily precision in the sequestered level of carbon'.<sup>39</sup>

7.27 CSIRO acknowledged that there is potential to increase soil carbon 'on the extensive savannah areas of Australia through changes in burning regimes and so forth, but those rates are very low and will take centuries of changed practices to accumulate'.<sup>40</sup> CSIRO suggested that the major opportunities in the land sector could instead be found in 'afforestation, avoided deforestation, livestock methane and increasing rangeland and savanna carbon stocks through changed fire regimes'.<sup>41</sup>

7.28 The NFF also acknowledged that 'there appears to an over reliance on the ability for soil carbon to contribute significant sequestration opportunities' and that it was cognisant that research findings indicated that the 'opportunities are likely to be limited'.<sup>42</sup>

7.29 Another key concern was that the potential price of abatement through soil carbon would be too high compared to other sources of abatement.<sup>43</sup> Professor David

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35 Mr Michael Kiely, Director, Carbon Farmers of Australia, *Committee Hansard*, 28 February 2014, p. 19.

36 Mrs Louisa Kiely, Director, Carbon Farmers of Australia, *Committee Hansard*, 28 February 2014, p. 21.

37 Dr Michael Battaglia, Deputy Director, Sustainable Agriculture Flagship, CSIRO, *Committee Hansard*, 7 March 2014, p. 6; CSIRO, *Submission 102*, p. 2.

38 Dr Michael Battaglia, Deputy Director, Sustainable Agriculture Flagship, CSIRO, *Committee Hansard*, 7 March 2014, p. 7.

39 CSIRO, *Submission 102*, p. 3.

40 Dr Michael Battaglia, Deputy Director, Sustainable Agriculture Flagship, CSIRO, *Committee Hansard*, 7 March 2014, p. 6. See also Kimberley Land Council, *Submission 27*, p. 2.

41 CSIRO, *Submission 102*, p. 2.

42 NFF, *Supplementary Submission 37*, pp 28–29.

43 See, for example, NFF, *Supplementary Submission 37*, p. 29; Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 5; Mr Benjamin Rose, Sustainable Energy Now, *Committee Hansard*, 31 January 2014, p. 27; Sustainable Energy Now, *Submission 34*, pp 1 and 2; Sustainable Energy Association, *Submission 90*, p. 5; Mr John Hawkins, *Submission 7*, pp 14–15; Mr Paul Pollard, *Submission 81*, p. 8; see also Ms Anna Skarbek, Executive Director, ClimateWorks Australia, *Committee Hansard*, 5 February 2014, p. 27.

Parnell described soil sequestration as 'difficult and expensive' and cautioned against it as a cornerstone of any climate change policy:

...we would caution against making an assumption that it will play a very major role in the overall portfolio of abatement activities...it probably has a reasonably minor role to play...<sup>44</sup>

7.30 Mr Tas Thamo agreed that:

...the real potential of soil carbon as a means to mitigate climate change is much more limited than some believe. It would be very difficult to design and implement a soil carbon policy in a way that is effective and efficient, and there is a high risk that it will redirect policy efforts away from superior approaches.<sup>45</sup>

7.31 Mr Thamo also warned that soil carbon is only a 'short-term solution' because carbon is difficult to retain in the soil, and that 'sequestration basically offers a finite amount of abatement. You can only store so much carbon per area of land'.<sup>46</sup> As a result:

...creating an efficient and effective policy for carbon sequestration in soil is extremely difficult. There is a high risk of paying farmers to sequester soil carbon but getting minimal greenhouse gas benefits. Creating a system that would actually provide genuine mitigation unavoidably involves high transaction costs and conditions that make it somewhat unattractive to farmers. Simpler systems, with lower transaction costs, would be more attractive to farmers but probably deliver little abatement benefit in the long term, and potentially make emission levels worse than having no policy...<sup>47</sup>

7.32 Others cautioned against reliance on 'offsets', such as soil carbon, on more general principles. Sustainable Energy Now submitted that 'Australian emissions must be reduced, rather than offset to meet our targets and tree planting and soil carbon will not do this'.<sup>48</sup> And as Mr Paul Pollard told the committee:

...if you have a limited amount of funds, the more you spend on offsets, the less you spend on abatement...if you spend all your money on offsets...you are not really addressing the cause of the problem...the less offsetting at the expense of abatement the better.<sup>49</sup>

7.33 In response to questioning as to whether soil carbon abatement would be viable under the ERF low-cost abatement approach, representatives from the Department of the Environment advised that:

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44 Professor David Parnell, 31 January 2014, p. 13 and see also p. 16.

45 Mr Tas Thamo, 31 January 2014, p. 11.

46 Mr Tas Thamo, 31 January 2014, pp 11–12.

47 Mr Tas Thamo, 31 January 2014, p. 10.

48 Sustainable Energy Now, *Submission 34*, p. 4.

49 Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 8.

...these questions about these sorts of costs are best answered on the back of actual experience with doing the projects...We have some internal work that we have done looking at the costs. The transaction costs have come out a little lower...it really is going to turn around actually seeing how it rolls out on the ground and what people's experience of it is. As with other aspects of the CFI, it will be something that farmers will need to make decisions about. No-one will be required to do these sorts of projects.<sup>50</sup>

### ***Interaction between the ERF and the CFI***

7.34 As noted elsewhere in this report, it is proposed that the ERF will build on the existing arrangements under the CFI for crediting emissions reductions.<sup>51</sup> However, the Green Paper did seek views on options for 'streamlining' the CFI.<sup>52</sup>

7.35 Many expressed support for the CFI and were pleased that 'the major elements of the CFI have been retained'.<sup>53</sup> Others recommended a number of changes to the CFI. For example, AFPA suggested that 'the cumbersome and lengthy administrative processes for methods approval under the CFI' needed to be addressed.<sup>54</sup>

7.36 Others expressed concern that the CFI verification requirements might be weakened, for example, by reducing auditing requirements, consultation periods and the permanence requirement from the present 100 years to just 25 years.<sup>55</sup> In response to questioning on the permanence requirement, the Department of the Environment advised that:

...the development of a 25-year permanence option could involve appropriate discounting of crediting under that option, compared to a 100-year permanence arrangement.<sup>56</sup>

7.37 However, the key concern was the financial viability of the CFI without the carbon price and with a focus on lowest cost abatement as proposed under the ERF. For example, Dr Michael Battaglia from the CSIRO told the committee that

50 Ms Shayleen Thompson, First Assistant Secretary, International and Land Division, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 5.

51 Green Paper, p. 21.

52 For example, the consultation period for draft methods could be reduced from 40 to 28 days. For further details on possible 'streamlining' of the CFI see pp 44–46 of the Green Paper.

53 Environmental Farmers Network, *Submission 9*, p. 2; see also Tasmanian Climate Change Office, *Submission 46*, Attachment, pp 6–7; Mrs Louisa Kiely, Director, Carbon Farmers of Australia, *Committee Hansard*, 28 February 2014, p. 19; Carbon Market Institute, *Submission 64*, pp 9 and 11–12.

54 AFPA, *Submission 15*, pp 5–7; and see also Mrs Louisa Kiely, Director, Carbon Farmers of Australia, *Committee Hansard*, 28 February 2014, p. 23; Corporate Carbon Advisory, *Submission 79*, pp 3–5.

55 CCSA, *Submission 44*, p. 9; Mr James Wight, *Submission 65*, p. 14.

56 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 5.

'significant CFI abatement will be impeded through the transaction costs of participating at a low carbon price'.<sup>57</sup> WWF-Australia told the committee that:

The ERF, as currently proposed, is unlikely to deliver a significant amount of abatement credits from the land sector, due to competition from larger and cheaper sources of non-land sector abatement. Instead it is anticipated that the ERF will be dominated by lower cost forms of abatement, with short payback periods (e.g. energy efficiency), crowding out other more costly forms of abatement. Reforestation and other land sector activities are likely to be constrained by the relatively high cost of implementation, versus the low forecast auction prices driven by the ERF.<sup>58</sup>

7.38 To overcome this problem, it was suggested that the ERF should be 'banded' – that is, giving particular categories of abatement different pricing structures.<sup>59</sup> It was suggested the projects developed under existing CFI methodologies should be banded, to ensure funding allocation for categories of abatement projects that have a different cost per tonne of abatement.<sup>60</sup> Mrs Louisa Kiely, from Carbon Farmers of Australia, told the committee that 'banding' would mean that soil carbon and land sector abatement would not need 'to compete with other 'potentially very cheap offsets'.<sup>61</sup>

7.39 However, WWF-Australia observed:

Increasing the price paid for abatement under the ERF is likely to significantly boost abatement from the land sector. Even under the high auction price scenarios, however, the land sector is projected to deliver only a small fraction of the total abatement required to achieve Australia's 2020 emission reduction goals.<sup>62</sup>

7.40 There was considerable uncertainty about the future of existing CFI projects under the ERF system. For example, the Kimberley Land Council were concerned that the Direct Action Plan and the CFI should not 'disadvantage remote Australia communities' and submitted that the CFI and ERF design should recognise and support Aboriginal carbon projects such as savannah burning.<sup>63</sup> Origin also submitted that:

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57 Dr Michael Battaglia, Deputy Director, Sustainable Agriculture Flagship, CSIRO, *Committee Hansard*, 7 March 2014, p. 10.

58 WWF-Australia, *Submission 67*, p. 18 and Attachment 3.

59 Mrs Louisa Kiely, Director, Carbon Farmers of Australia, *Committee Hansard*, 28 February 2014, p. 23.

60 Carbon Market Institute, *Submission 64*, p. 16.

61 Mrs Louisa Kiely, Director, Carbon Farmers of Australia, *Committee Hansard*, 28 February 2014, p. 19.

62 WWF-Australia, *Submission 67*, p. 18 and Attachment 3.

63 Kimberley Land Council, *Submission 27*, p. 2.

...on equity grounds, existing projects which are accredited under the CFI and have already spent a significant amount of time and money securing these approvals in good faith should be allowed access to the ERF.<sup>64</sup>

7.41 Concern was also expressed about existing CFI projects becoming 'stranded' when the focus shifts to lowest cost abatement under the ERF:

...the cost of abatement under CFI is typically in double digits...That is one of the risks that we see with an absolute dogged determination to achieve absolute lowest cost abatement: you lose other benefits like the social...and broader benefits of a project like savanna burning. That could be the case with many CFI projects—biodiverse reforestation, for example. That is very hard to achieve at anything close to \$3.60 a tonne.<sup>65</sup>

7.42 Mr Bret Harper from Reputex for WWF-Australia told the committee that:

A lot of the large potential sources of abatement from the land sector are in the form of carbon farming through land use and forestry, and those are portions of the CFI [Carbon Farming Initiative] that would not respond to the low carbon prices. They really require certainty around the investment that is going to be given to them and also a minimum price over time to make those kinds of land use changes and unlock that abatement.<sup>66</sup>

7.43 Ms Skarbek from ClimateWorks Australia remarked that the CFI:

...was meant to offer revenue to farmers who had an opportunity to store carbon in their soil or through trees. The challenge is: what is the price that they can be paid for that? Under the current legislation, they can be paid the equivalent of the carbon price. So at the moment, this year, they could strike a deal with someone who would be liable to pay the \$24 carbon price ...Those companies can choose to purchase a carbon farming project instead, and therefore pay the farmer the \$24 instead...The uncertainty is what will happen in future years given the current government's policy.<sup>67</sup>

7.44 In response to the concerns raised about the future of the CFI under the ERF, the Department advised that:

There will be transitional arrangements for people who are generating credits under the CFI to move quickly into the ERF.<sup>68</sup>

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64 Origin, *Submission 45*, p. 7.

65 Ms Kirsten Rose, Chief Executive, Sustainable Energy Association, *Committee Hansard*, 31 January 2014, p. 6.

66 Mr Bret Harper, Associate Director of Research, Reputex, *Committee Hansard*, 5 February 2014, p. 62.

67 Ms Anna Skarbek, Executive Director, ClimateWorks Australia, *Committee Hansard*, 5 February 2014, p. 30.

68 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 10.

7.45 The Department went on to state:

Anyone generating credits in the ERF arrangement, once the ERF commences, will be able to bid those units in, particularly from CFI projects, into the auctions or the purchasing arrangements.<sup>69</sup>

### **Other components of the Direct Action Plan**

7.46 As noted in Chapter 5, the Direct Action Plan originally proposed other initiatives such as a 'One Million Solar Roofs Program'; 'Solar Towns and Schools'; 'Geothermal and Tidal Towns'; 'Clean Energy Employment Hubs', and 'Urban Forests and Green Corridors'.<sup>70</sup>

7.47 The initiatives now listed under the Cleaner Environment Plan are:

- One Million Solar Roofs Programme to provide \$500 rebates to support the installation of one million rooftop solar energy systems over 10 years. This will be capped at 100 000 rebates per year (\$50 million per year).
- Solar Towns and Solar Schools programmes, under which \$50 million will be allocated for at least 25 Solar Towns and a further \$50 million for 100 schools. The projects will be developed over six years (\$100 million per year).
- Twenty Million Trees will be planted by 2020 in a programme that will commence mid-2014. The funding commitment for Twenty Million Trees is not specified in the Plan for a Cleaner Environment.<sup>71</sup>

7.48 At the time of writing of this report, further detail on these initiatives was unavailable.

7.49 The status of other proposals contained in the 2010 Direct Action Plan are outlined in Appendix 4: some initiatives have been retained (albeit with a reduced budget), others have been abandoned and the status of others is unclear.

### ***Solar Roofs, Towns and Schools***

7.50 Some submissions queried the need for the Solar Roofs, and Solar Towns and Schools programs. For example, Origin submitted that 'current support for solar PV systems should be moderated', noting that, since the Direct Action Plan was first announced in 2010:

...Australia has already eclipsed the one million solar roofs mark and based on our internal modelling is on track to deliver more than a further million solar roofs by 2020, based on current policy settings.<sup>72</sup>

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69 Dr Steven Kennedy, Deputy Secretary, Climate Change Group, Department of the Environment, *Committee Hansard*, 18 March 2014, p. 10.

70 Direct Action Plan, pp 17, 23–30.

71 Department of the Environment, *A Plan for a Cleaner Environment*, p. 7.

72 Origin, *Submission 45*, p. 5.

## 7.51 Energetics similarly suggested that:

Putting aside work that has shown that rebates are the least economically efficient means of promoting action, the recent history of the uptake of solar PV in Australia driven by the changing economics of solar PV has clearly indicated that an additional rebate from the Commonwealth is not required to support these activities.<sup>73</sup>

## 7.52 AUSTELA agreed that it was not clear why these programs are required:

...given that solar PV is already a cost effective investment, that new retail financing models are emerging making solar PV more accessible and affordable for Australian households and businesses, and that all Australian governments have actively been withdrawing subsidies from such systems over recent years. Investing further government funds in small scale solar PV installations has serious potential to distort the existing market for no discernable national benefit. Current policy settings have already delivered a million solar roofs in Australia in the last five years, high rates of deployment of solar PV continue despite withdrawal of government subsidies, and there is ample evidence of the damage, and unsustainable 'bubbles', caused by ad hoc interventions.<sup>74</sup>

7.53 The Clean Energy Council supported the commitment to a Million Solar Roofs, but cautioned that the scheme needs to be carefully considered so that it does operate alongside existing measures and works effectively.<sup>75</sup> The Clean Energy Council suggested that the program should have a focus of helping low-income Australians, including those in the rental market or public and social housing, to access solar PV and solar hot water.<sup>76</sup>

### ***Twenty Million Trees***

## 7.54 According to the Department of the Environment's website:

Twenty Million Trees will be planted by 2020 in a programme that will commence mid-2014. The Twenty Million Trees Fund will help green our urban and regional areas and create new green corridors, while making a contribution to meeting Australia's target of reducing greenhouse gas emissions by five per cent below 2000 levels by 2020.<sup>77</sup>

7.55 The funding commitment for Twenty Million Trees is not specified in the *Plan for a Cleaner Environment*, although the original Direct Action Plan allocated a

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73 Energetics, *Submission 59*, p. 4.

74 AUSTELA, *Submission 76*, pp 7–8.

75 Mr Kane Thornton, Deputy Chief Executive, Clean Energy Council, *Committee Hansard*, 5 February 2014, p. 18.

76 Mr Kane Thornton, Deputy Chief Executive, Clean Energy Council, *Committee Hansard*, 5 February 2014, p. 22; Clean Energy Council, *Submission 16*, p. 5; see also Greenbank Environmental, *Submission 63*, p. 12.

77 Department of the Environment, *Clean Air*, <http://www.environment.gov.au/topics/clean-air> (accessed 17 March 2014).

total of \$50 million for the Green Corridors and Urban Forests commitment, which committee to the planting of an additional 20 million trees by 2020. However, the original Direct Action Plan also estimated that the cost would be around \$5 per tree, yet only allocated \$50 million for 20 million trees.<sup>78</sup>

7.56 The Government recently released further information about the so-called 'Green Army', in which teams of Australians aged 17-24 will be deployed across the country to help communities deliver local conservation outcomes. However, this information makes no mention of the Twenty Million Trees initiative.<sup>79</sup> This is despite the fact that an earlier version of the information suggested that the Green Army might assist in the process of planting the Twenty Million Trees.<sup>80</sup>

7.57 In relation to the Twenty Million Trees initiative, the NFF told the committee that it had not 'seen any detail on what is proposed by the government in the 20 million trees program'.<sup>81</sup> NFF supported the initiative 'provided it remains a voluntary program, and does not target planting trees on productive agricultural land'.<sup>82</sup>

7.58 The committee understands from a recent speech given by the Environment Minister, that the 20 million trees will be 'planted in and around our cities over the coming years'.<sup>83</sup>

7.59 The Nursery and Garden Industry Australia also supported the Twenty Million Trees proposal, but noted that:

...the Green Corridors and Urban Forests component is budgeted at \$50 million dollars over four years. This equates to \$2.50 per tree planted. It is unclear how this \$50 million will be allocated in terms of operational costs, plant procurement, establishment and maintenance costs. Although this budget is feasible and will allow the planting of 20 million trees, we believe that additional funds should be allocated to this component to ensure long terms success.<sup>84</sup>

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78 Direct Action Plan, pp 28, 30.

79 Department of the Environment, *Green Army*, <http://www.environment.gov.au/topics/cleaner-environment/clean-land/green-army> (accessed 17 March 2014).

80 The Hon Greg Hunt MP, 'Green Army is just the start', *Bass Coast Post*, 30 September 2013 <http://www.basscoastpost.com/green-army-is-just-the-start.html> (accessed 16 January 2014); Department of the Environment, *Green Army*, at: <http://www.environment.gov.au/topics/cleaner-environment/clean-land/green-army> (accessed 16 January 2014).

81 Ms Deborah Kerr, Australian Pork Ltd, *Committee Hansard*, 28 February 2014, pp 5–6, 7.

82 NFF, *Submission 37*, p. 1.

83 The Hon Greg Hunt MP, Minister for the Environment, *Inaugural Alan Hunt Oration*, 7 March 2014, <http://www.environment.gov.au/minister/hunt/2014/sp20140307.html> (accessed 11 March 2014).

84 Nursery and Garden Industry Australia, *Submission 8*, p. 9.

### **Committee comment**

7.60 The committee is astounded that the Government has appointed a separate panel to conduct yet another review of the Renewable Energy Target (RET), despite the recommendations of the Climate Change Authority that reviews should be conducted every four years. The committee is deeply concerned by the evidence that constant reviews of the RET are causing considerable uncertainty in the renewable energy sector and hampering investment in the industry. In turn, the evidence was that this is hindering Australia's efforts to meet its greenhouse gas reduction targets. Previous reviews of the RET have shown the policy is delivering clean energy, creating jobs, driving significant investment across Australia and reducing Australia's carbon pollution, at a relatively minimal cost. Further, the committee acknowledges the evidence that if the RET were to be weakened, this would increase the load on other policies to reduce Australia's greenhouse gas emissions. The committee is persuaded by the evidence that the RET needs to be retained in its current format, if not increased.

### **Recommendation 12**

**7.61 The committee recommends that the Renewable Energy Target be retained in its current format.**

#### *Soil carbon and the Carbon Farming Initiative*

7.62 The committee notes that the original Direct Action Plan placed a large emphasis on soil carbon. This focus on soil carbon is notably absent from the recent Emissions Reduction Fund Green Paper. Indeed, the committee heard evidence from the CSIRO and others that soil carbon will be difficult and expensive and is unlikely to make a significant contribution to greenhouse gas abatement in Australia. The committee recognises the evidence that land sector abatement activities have other benefits, such as repairing degraded landscapes, improving water quality and soil health, as well as community benefits. However, these activities need to be managed appropriately and carefully and in this regard, the Carbon Farming Initiative is critical.

7.63 The committee welcomes the continued operation of the Carbon Farming Initiative, but is concerned about proposals to 'streamline' the Carbon Farming Initiative (CFI). At this stage, there is very little detail available as to government's precise intentions in this regard. The committee is also concerned about the viability of, and uncertainty surrounding, existing CFI projects and how they will be treated under the Emissions Reduction Fund. The committee considers that this is an issue that needs to be addressed.

### **Recommendation 13**

**7.64 The committee recommends that, once further details are available in relation to the proposed streamlining of the Carbon Farming Initiative, including the changes to permanency rules and the methodologies to be implemented, that the proposals be referred to a Senate Committee for inquiry and report.**

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**Recommendation 14**

**7.65 The committee recommends that, in the event the Emissions Reduction Fund proceeds, measures are put in place to ensure the viability of existing projects prior to 1 July 2014 under the Carbon Farming Initiative.**

*Other components of the Direct Action Plan*

7.66 The committee found that there is little information available about the implementation of other aspects of the Direct Action Plan, such as the 'One Million Solar Roofs Program'; 'Solar Towns and Schools'; and 'Twenty Million Trees'. The committee acknowledges the evidence querying the need for rebates in relation to solar PV and hot water, given the rapid uptake in recent years and the issue of government intervention in this area. Nevertheless, the committee considers that there could be some merit in the Solar Roofs and Solar Towns and Schools proposals, and supports the evidence suggesting that the programs focus on helping low-income Australians to access solar PV and solar hot water.

**Recommendation 15**

**7.67 The committee recommends that the 'One Million Solar Roofs' and the 'Solar Towns and Schools' program focus on helping low-income Australians to access solar PV and solar hot water and not be paid for out of the Australian Renewable Energy Agency's existing budget.**

7.68 The committee received very little evidence in relation to the Twenty Million Trees proposal, perhaps reflective of the fact that there is very little information available about the program. The committee therefore finds it difficult to make any comment on this initiative, and recommends that the government release further information about the proposal and its implementation.

**Recommendation 16**

**7.69 The committee recommends that the Government provide further details about the proposed Twenty Million Trees program and its implementation.**

**Senator the Hon Lin Thorp  
Chair**



# Dissenting Report from Government Senators

1.1 The Government believes there is a better way to tackle climate change than by imposing a \$7.6 billion, economy-wide tax that hinders business and does nothing for the environment.

1.2 That is why the Government is committed to repealing the carbon tax and implementing the Direct Action Plan. Legislation to repeal the carbon tax was the first item of business introduced by the Government into the new Parliament.

1.3 The Government accepts the science of climate change.

1.4 The Government seeks to meet its commitment (a politically bipartisan commitment) to reduce emissions by 5% below 2000 levels by 2020 with the implementation of the Direct Action Plan. This policy was endorsed by Australian voters at the 2013 Federal election in addition to the Government's commitment to repeal the carbon tax. It is also the Government's intention to consider further action and targets in 2015 on the basis of comparable real global action, in particular by major economies and trading partners.

## **The carbon tax is not reducing Australia's emissions**

1.5 The Government's plan is to abolish the carbon tax because it represents an ever increasing financial burden for no real environmental gain. Under the carbon tax, Australia's domestic emissions are projected to go up, not down.

1.6 Modelling presented by the Climate Change Authority showed that under the carbon tax Australia's domestic emissions rise from 590 million tonnes of carbon dioxide equivalent emissions in 2010 to 620 million tonnes in 2020.

1.7 The Department of the Environment presented evidence showing that there had been almost no change in domestic emissions in 2012-13 compared with 2011-12, despite carbon tax revenue of \$7.6 billion.

1.8 The Government is committed to repealing the carbon tax to reduce costs for households and business and to pave the way for our *Direct Action Plan*. Abolishing the tax will flow through to businesses in the form of lower input costs and to households through lower energy bills and cheaper household items.

1.9 On average, households will be around \$550 better off in 2014-15 than they would have been with the carbon tax in place. On average household electricity bills will be \$200 lower and gas bills \$70 lower.

1.10 The Committee received evidence that highlighted the significant impact of the carbon tax on the international competitiveness of Australian industries. The National Farmers Federation, the Business Council of Australia, the Minerals Council of Australia and the Australian Industry Group support the repeal of the carbon tax.

The National Farmers Federation does not support the carbon tax due to the significant flow-on impacts to agriculture (as an uncovered sector). Therefore, the NFF supports its repeal. (Submission 37)

1.11 The Direct Action Plan with the Emissions Reduction Fund as its centrepiece will provide incentives rather than penalties to reduce emissions: incentives for businesses to innovate and invest in new technologies, incentives to improve the efficiency and productivity of businesses' operations and incentives to encourage farmers and landholders to store carbon on the land.

1.12 The Emissions Reduction Fund will have an initial allocation of \$300 million, \$500 million and \$750 million over three years, the Fund will establish a pool of capital to create a market for abatement.

1.13 The Emissions Reduction Fund will not be prescriptive about the source of potential abatement and will unlock abatement opportunities across the Australian economy – from businesses, industries and the land sector. These emissions reductions will be real, genuine and additional to business-as-usual.

1.14 Climateworks provided evidence to the Committee showing a wide range of possible abatement opportunities, which may be unlocked under the Emissions Reduction Fund. (Submission 24)

1.15 Potential abatement opportunities include projects to clean up waste coal mine gas, clean up power stations, capture landfill gas, energy efficiency improvements in Australian buildings and industrial facilities, reforestation of marginal lands, revegetation or improvement of soil carbon.

1.16 To ensure that the repeal of the carbon tax proceeds in an effective and efficient manner, the Government has consulted extensively on exposure drafts of the repeal bills, giving stakeholders and businesses the chance to comment on the details of the repeal process.

### **Consultation on the Emissions Reduction Fund is underway**

1.17 The Committee received evidence that significant consultation was underway on the Direct Action Plan

1.18 The Department of the Environment gave evidence that:

...late last year the government released a green paper and invited submissions. Prior to that green paper, it had released the terms of reference and also invited submissions to those terms of reference to develop the green paper and subsequently the white paper. The government received around 300 submissions to the terms of reference, and it used those in guiding the putting together of the green paper. (Public Hearing, Canberra, 18<sup>th</sup> March 2014)

### **The minus five per cent target is sufficient**

1.19 Australia's emissions reduction target to reduce emissions by five per cent below 2000 levels by 2020 is significant. This represents an emissions reduction target of 17 per cent below business as usual levels.

1.20 The committee received submissions supporting the Government's minus five per cent target and the significant negative impact that the carbon tax had on businesses.

1.21 The Australian Forest Products Association 'commends the Government on their determination to maintain the commitment of the previous Government to unconditionally reduce national GHG emissions by 5 per cent over 2000 levels by 2020.' (Submission 15, page 1)

1.22 The Facility Management Association of Australia 'fully supports the Australian Government's intent to reduce carbon emissions to levels 5% lower than 2008 levels by 2020, and as custodians of buildings once constructed, facility management professionals are key contributors to reducing Australia's emissions in the built environment.' (Submission 36, Page 1)

1.23 The Committee further notes submissions by the Business Council of Australia and the Australian Industry Group to the Climate Change Authority Caps and Targets Review draft report that the minus five per cent target represent serious action.

1.24 The Business Council of Australia recommends that 'Australia maintain its current commitment to net emissions of -5% of 2000 levels by 2020 as there is no evidence to suggest that any of the conditions needed to trigger consideration of an increase to that commitment have been met and, further, it is clear that at -5% Australia's commitment more than matches the pledges of other advanced economies.' (BCA Submission to Climate Change Authority Caps and Targets Review, Page 2)

1.25 The Australian Industry Group does 'not support any decision on additional targets at this time.' (BCA Submission to Climate Change Authority Caps and Targets Review, Page 2)

### **Significant impact of the carbon tax**

1.26 A large number of submissions noted the significant impact of the carbon tax on Australian industry.

1.27 The Association of Mining and Exploration Companies provided evidence that:

The burden borne by Australian industry under the previous Governments Clean Energy package placed Australian mining and exploration industries at a significant disadvantage to our competitors. For the exploration and mining industry it was a financial penalty without any meaningful opportunities to contribute to Australia's response to climate change. (Submission 74, Page 1)

1.28 The National Farmers Federation 'does not support the carbon tax due to the significant flow on impacts to agriculture'. (Submission 37, Page 1)

1.29 The Australian Dairy Industry Council 'does not support any carbon tax or pricing scheme that results in a less competitive position for a trade-exposed industry such as the dairy industry.' (Submission 11, Page 1) and:

The risk with carbon pricing is that it could result in Australia's dairy industry being disadvantaged in the global market compared to its major dairy competitors. For example, the New Zealand dairy industry is not subject to the same liabilities under the New Zealand ETS as the Australian

industry is under the Australian carbon tax and ETS. (Submission 11, Page 2)

1.30 The Australian Forest Products Association 'recognise that following the September 2013 election the Government was given a clear mandate to remove the current carbon tax. AFPA strongly supports the removal of the current carbon tax and encourages the Government to act quickly, as it is in our national interest that businesses have policy certainty and clarity, as well as a level playing field with our major trading partners.' (Submission 15, page 1)

1.31 The Cement Industry Federation 'supports climate change policy that does not expose cement manufacturing operations in Australia to costs not faced by our competitors in other countries. The Clean Energy Future policy did not address this issue adequately, with only part of the cement manufacturing production process being recognised as being emissions intensive and trade exposed. This is inconsistent with the cement activity definitions of emissions trading schemes in New Zealand and California where all components of the cement manufacturing process are included.' (Submission 49, page 2).

1.32 The committee heard evidence of the significant package of assistance provided with the carbon tax. The Clean Energy Finance Corporation (CEFC) outlined it had been given \$10 billion to lend to renewable and low emissions projects which were delivering 3.88 million tonnes of abatement per year.

1.33 \$10 billion is similar to Commonwealth expenditure on ageing and aged care services in 2013-14 (\$12.3 bn).<sup>1</sup>

1.34 The CEFC was asked by the Committee to explain why it had chosen to invest in commercial wind farms which are already supported through the Renewable Energy Target. In one instance the Committee heard that the CEFC had provided a loan to an established and commercial wind-farm, the Macarthur wind farm. Once it received the loan, the wind farm was subsequently sold by its owner the New Zealand Government for a profit.

1.35 The CEFC was asked a question on notice from Senator Williams on how it had calculated its claimed 3.88 million tonnes of abatement. The CEFC provided reference to the CEFC website, but did not provide a detailed breakdown of emissions reductions by project. The list of projects includes projects already supported under the Renewable Energy target, the Clean Technology Investment Program, the Australian Renewable Energy Agency and Low Carbon Australia.

1.36 The CEFC did provide evidence that the abatement did not come from the established Macarthur wind farm. The Committee noted that the CEFC website was claiming the Macarthur wind farm is delivering emissions reductions of 1.7 million tonnes of emissions reductions per annum.

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1 Source: [https://www.health.gov.au/internet/budget/publishing.nsf/Content/2013-2014\\_Health\\_PBS\\_sup1/\\$File/2013-14\\_DoHA\\_PBS\\_2.04\\_Outcome\\_4.pdf](https://www.health.gov.au/internet/budget/publishing.nsf/Content/2013-2014_Health_PBS_sup1/$File/2013-14_DoHA_PBS_2.04_Outcome_4.pdf)

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## High cost of direct action

1.37 The Committee received evidence of the high cost and small emissions reductions that have occurred under the carbon tax.

1.38 The Department of the Environment indicated that 'The last quarterly update, which was for the quarter to September 2013, showed that Australia's greenhouse gas emissions were 542.1 million tonnes. This represents a decline of 0.3 per cent on the previous year.'

1.39 The Department of the Environment provided evidence that the carbon tax revenue in 2012-13 was \$7.6 billion made up of the carbon tax payments, carbon tax equivalent payments under the Synthetic Greenhouse Gas levies; and carbon tax equivalent payments under the fuel arrangements.

## Soil Carbon Sequestration

1.40 Carbon Farmers Australia gave evidence that the sequestration of carbon in the soil can be a major player in carbon abatement:

The first point is that soil carbon is said to be a minor player with not much potential to contribute to climate action. This is patently wrong and based on ignorance of the facts. The second point we would like to make is that permanence—the hundred years rule—which many people believes rules out any farmer's being involved in carbon sequestration is a permanent dead end; it is wrong. We are in the process of developing systems for soil carbon, and we know, based on our daily work, what the potential for soil carbon is. (Public Hearing, Canberra, 28<sup>th</sup> February 2014)

1.41 Similarly the CSIRO stated the case for building soil carbon for agriculture:

By building soil carbon you can increase the capacity of the soil to hold nutrients, but usually there you are talking about the other nutrients that would pass through the soil. What often happens is that, as you build soil carbon, you in fact lock up an increasing proportion of nitrogen—so the process of adding carbon to soils will lock up nitrogen, sulphur, potassium into the humus as well. That is not a problem but it does mean that there is a net nutrient cost in building soils up. But, overall, building soil carbon will add a lot of benefits through physical properties in what we call cation exchange—the holding capacity of nutrients in soils—which gives you better value out of a lot of agricultural practices. (Public Hearing, Canberra, 3<sup>rd</sup> March, 2014)

**Carbon tax revenue in 2012-13**

	<b>Accrual revenue 2012-13 (\$m)#</b>	<b>Approximate number of liable parties</b>
Carbon Pricing Mechanism	\$6,600	348
Revenue from SGGs	\$100	1, 059
Revenue from aviation and non-transport gaseous fuels	\$200	75,000 <sup>†</sup>
Fuel tax credit reduction*	\$700	
<b>Total carbon tax</b>	<b>\$7,600</b>	

Notes:

# Revenues are rounded to the nearest \$100 million.

\* This is an expenditure reduction, not a revenue measure. Treasury estimates.

† Approximate number of payers is not additive as entities paying via the Carbon Price Mechanism or SGGs may also be affected by the fuel tax credit reduction.

**World Carbon Taxes**

1.42 The Department of the Environment also provided information on carbon taxes and emissions trading scheme in operation in a number of jurisdictions, including:

- the European Union;
- the Regional Greenhouse Gas Initiative market (United States)
- California;
- Chinese pilot emissions trading schemes; and
- New Zealand.

1.43 The information showed that the Australian carbon tax is the highest and has the broadest national coverage.

## Comparison of international emissions trading units

Emissions Trading Schemes (ETSs) in operation				
Scheme	Currency	Price	As at:	AUD equivalent as at 19 Mar 2014
Australian Carbon Pricing Mechanism	AUD	24.15	19-Mar-14	24.15
New Zealand ETS (NZETS)	NZD	3.00	14-Mar-14	2.83
European Union ETS (EUETS)	EUR	5.72	18-Mar-14	8.72
Californian ETS	USD	11.48	19-Feb-14	12.57
Regional Greenhouse Gas initiative (RGGI)	USD	4.00	5-Mar-14	4.38
China - Shenzhen Pilot ETS	RMB	80	27-Nov-13	14.15
China - Shanghai Pilot ETS	RMB	28	27-Nov-13	4.95
China - Beijing Pilot ETS	RMB	50	28-Nov-13	8.84
China - Guangdong Pilot ETS	RMB	60	20-Jan-14	10.61
China - Tianjin Pilot ETS	RMB	26 to 28	26-Dec-13	4.60 to 4.95

### Sources:

Australian CPM	<i>Clean Energy Act 2011</i>
NZ ETS	PointCarbon, 14 March 2014 reporting of the lowest NZETS price in seven months. ( <a href="http://www.pointcarbon.com/news/reutersnews/1.4502381">www.pointcarbon.com/news/reutersnews/1.4502381</a> )
EUETS	PointCarbon, EUETS spot price at 18 March 2014. ( <a href="http://www.pointcarbon.com/">www.pointcarbon.com/</a> )
California ETS	Californian Air Resources Board, February 2014 auction clearing price. ( <a href="http://www.arb.ca.gov/cc/capandtrade/auction/february-2014/results.pdf">http://www.arb.ca.gov/cc/capandtrade/auction/february-2014/results.pdf</a> )
RGGI	RGGI, 5 March auction clearing price. ( <a href="http://www.rggi.org/docs/Auctions/23/PR030714_Auction23.pdf">www.rggi.org/docs/Auctions/23/PR030714_Auction23.pdf</a> )
Shenzhen Pilot ETS	Reuters, 28 November 2013 reporting of price at market close. ( <a href="http://www.reuters.com/article/2013/11/28/us-china-carbon-beijing-idUSBRE9AR07C20131128">www.reuters.com/article/2013/11/28/us-china-carbon-beijing-idUSBRE9AR07C20131128</a> )
Shanghai Pilot ETS	Reuters, 28 November 2013 reporting of price at market close. ( <a href="http://www.reuters.com/article/2013/11/28/us-china-carbon-beijing-idUSBRE9AR07C20131128">www.reuters.com/article/2013/11/28/us-china-carbon-beijing-idUSBRE9AR07C20131128</a> )
Beijing Pilot ETS	Reuters, 28 November 2013 reporting of trades of 40,000 permits. ( <a href="http://www.reuters.com/article/2013/11/28/us-china-carbon-beijing-idUSBRE9AR07C20131128">www.reuters.com/article/2013/11/28/us-china-carbon-beijing-idUSBRE9AR07C20131128</a> )
Guangdong Pilot ETS	PointCarbon, 20 January 2014 reporting of 28 companies purchasing over 3 million permits at auction at the suggested price of 60 RMB. ( <a href="http://www.pointcarbon.com/aboutus/pressroom/pressreleases/1.3782935">www.pointcarbon.com/aboutus/pressroom/pressreleases/1.3782935</a> )
Tianjin Pilot ETS	Reuters, 26 December 2013 reporting of five trades for a total of 45,000 permits. ( <a href="http://www.reuters.com/article/2013/12/26/china-tianjin-carbon-idUSL3N0K50AS20131226">www.reuters.com/article/2013/12/26/china-tianjin-carbon-idUSL3N0K50AS20131226</a> )

<b>Emissions Trading Schemes (ETSs) in operation<sup>2</sup></b>		
The design features of individual schemes are subject to change.		
<b>Scheme</b>	<b>Coverage</b>	<b>Free allocation</b>
Australian Carbon Pricing Mechanism	67 per cent of national emissions	Free allocation of either 66 per cent or 94.5 per cent of permits for Emissions-Intensive Trade-Exposed (EITE) industries depending on emissions intensity.
	348 directly liable entities are covered by the CPM, of which 57 received assistance in 2012-13.	
New Zealand ETS (NZETS)	53 per cent	Free allocation of either 60 per cent or 90 per cent of permits for Emissions-Intensive Trade-Exposed (EITE) industries depending on emissions intensity.
	221 mandatory entities	
	2 880 total entities	
European Union ETS (EUETS)	45 per cent	Electricity sector: full auctioning. Manufacturing sector: some free allocation based on industry benchmarks.
	>11, 000 installations	
Californian ETS	36 per cent	In the second compliance period (2015-2017) industrial facilities receive free allowances for transition assistance and to prevent leakage, based on emissions intensity and trade-exposure.
	350 entities representing 600 facilities	
Regional Greenhouse Gas initiative (RGGI)	22 per cent 168 facilities	Negligible – 94 per cent of 2013 allowances are auctioned.
China - Shenzhen Pilot ETS	38 per cent	Allowances are distributed for free based on sector-specific carbon intensity benchmarks. Proposal to move to full auctioning over time.
	635 companies and 197 public buildings	
China - Shanghai Pilot ETS	60 per cent	One-off free allocation for 2013–2015 based on 2009–2011 emissions considering company growth. Benchmarking will be used for the energy sector, airlines, ports and airports. Auctioning will be considered.
	Approximately 200 companies	
China - Beijing Pilot ETS	42 per cent	Free allocation based on 2009–2012 emissions and considering sector development. For new entrants, free allocation will be based on sector-specific benchmarks.
	Approximately 490 entities	
China - Guangdong Pilot ETS	55 per cent	Mainly grandfathering (97% in the first two years of operation, 90% in 2015) based on historical emissions (2010–2012), taking account of the characteristics of the sectors. The remaining allowances will be auctioned.
	Approximately 200 companies	
China - Tianjin Pilot ETS	60 per cent	Free allowances are expected to be distributed mainly based on historical emissions for existing entities and on benchmarks for new entrants. Auctioning may also be used.
	114 entities	

2 **Sources:** In January 2014 the International Carbon Action Partnership (ICAP) published a report: *Emissions Trading Worldwide International Carbon Action Partnership (ICAP) Status Report 2014*. This report provides up to date information on emissions trading schemes in operation around the world. The information in this table is taken from this report which can be found at: <https://icapcarbonaction.com/component/attach/?task=download&id=152>.

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## Support for Incentives rather than penalties

1.44 The committee received support for the use of incentives rather than taxes to achieve Australia's emissions reductions goals

1.45 The Nursery & Garden Industry Australia indicated:

The Government's Direct Action Plan commits the Government to the planting of an additional 20 million trees by 2020 in a bid to deliver greenhouse gas emission reductions. (Submission 8, Page 3)

1.46 And:

Carbon mitigation is but one element of incorporating trees in the landscape and the co-benefits of planting trees in urban areas are substantial. These relate to trees reducing air and water pollution, effective storm water and run off management; increasing aesthetics, reducing crime, increasing property values, and mitigating heat-islands. (Submission 8, Page 6)

1.47 The Australian Dairy Industry Council highlighted:

The Emissions Reduction Fund (ERF), if appropriately designed with realistic benchmark prices per tonne of CO<sub>2</sub>e, could offer the industry an opportunity to contribute substantially to reducing Australia's target of 5% reduction on emissions levels by 2020. The ERF at the same time could improve the dairy industry's profitability and international competitiveness by reducing the substantial energy costs for manufacturers and on farm (ranging from \$20 to \$100 a day per farm). (Submission 11, page 2)

1.48 The Australian Forest Products Association 'has identified a range of domestic activities that could potentially contribute up to 30 million tonnes of emissions abatement over the next 5 to 10 years.' (Submission 15, Page 3)

1.49 The Facility Management Association of Australia provided evidence that:

By encouraging facilities management industry investment the ERF scheme will be better placed to deliver real world, workable outcomes beyond 'business as usual', which will directly contributed to a reduction in emissions from the build environment. (Submission 36, Page 3)

1.50 And:

Cost effective abatement initiatives that FMs can implement and that offer the best return on investment include: improvements in building operations, improvements in maintenance, building commissioning and tuning, behavioural change and upgrading projects. (Submission 36, Page 3)

1.51 The Green Building Council of Australia submission highlighted that:

Retrofitting existing buildings such as offices, shopping centres, public buildings and hospitals remains one of the most cost-effective abatement opportunities, using technologies and practices that are available now. (Submission 35 , Page 2 ) and –

1.52 And:

The GBCA believes that a well-designed ERF can play a significant role in reducing carbon emissions, but if Australia is to take advantage of the many

emissions reduction opportunities that exist in the built environment and across the economy, the ERF must be one part of a range of complementary measures.' (Submission 35, Page 2)

1.53 Climateworks Australia indicated that:

If well designed and sufficiently resourced, the proposed Emissions Reduction Fund could effectively target opportunities that are not expected to occur without additional incentives yet are large in volume, technologically proven and can be captured at reasonable cost. (Submission 24, page 2)

1.54 Origin Energy 'believes that there are a number of excellent opportunities in the energy sector that would benefit from access to the ERF. Some of the opportunities we support include: GreenPower, Smart technologies, Cogeneration/Trigeneration and Electric vehicles.' (Submission 45, Page 2)

1.55 The Cement Industry Federation provided evidence that:

'There are significant opportunities for the Australian cement industry to further reduce CO2 emissions, especially through future amendments to the cement standard to allow increased mineral additions and via further adoption of alternative fuels to reduce thermal emissions.' (Submission 49, Page 7).

## **Recommendations**

### **Recommendation 1**

**1.56 Government Senators recommend the carbon tax is repealed and replaced with the Emissions Reduction Fund.**

### **Recommendation 2**

**1.57 Government Senators note that the minus five per cent emissions reduction is significant and represents emissions reduction of 17 per cent below businesses as usual in 2020. Government Senators further note that Australia's emissions reduction target is an international commitment which is lodged with the United Nations Framework Convention on Climate Change.**

### **Recommendation 3**

**1.58 Government Senators recommend that Australia should consider its emissions reduction target and further action in 2015 on the basis of comparable real global action, particular by major economies and trading partners.**

### **Recommendation 4**

**1.59 Government Senators note that removing the carbon tax will reduce cost of living of Australian households and business input costs. The Government Senators note that without the carbon tax in place, assistance mechanisms and carbon tax bureaucracy is not needed and should be removed.**

**Recommendation 5**

**1.60** Government Senators note that a review of the Renewable Energy Target is legislated to be undertaken in 2014. The Government is currently progressing this review.

**Recommendation 6**

**1.61** Government Senators do not support further inquiries into the Emissions Reduction Fund and Carbon Farming Initiative.

**Senator John Williams**  
**Deputy Chair**

**Senator Anne Ruston**  
**Senator for South Australia**



## Additional Comments from the Australian Greens

1.1 We are living in a global warming emergency. Scientific evidence reveals that the impacts are already severe and will worsen rapidly as we are on a trajectory to a 4-6 degrees increase in global temperatures. There is no time for Australia to waste on the ineffective, expensive policy that is Direct Action. Replacing our emissions trading scheme framework is fiscal and environmental vandalism.

1.2 As the world moves to a 2015 treaty to seriously limit emissions, it is inevitable that pricing greenhouse gases will be a permanent feature of the global economy. Should the 44<sup>th</sup> Parliament repeal the *Clean Energy Future* package and replace it with Direct Action, Australia will be dismantling infrastructure that will have to be reconstructed again in a very short time period. There would be a significant cost to Australia in lost time, money, innovation and competitive advantage.

1.3 Direct Action is not a viable replacement and is vastly inferior to existing law. While it should be acknowledged that Direct Action is still transforming from a slogan into a policy, there was not one single economist in written submissions or testimony who supported Direct Action over the existing emissions trading scheme. In contrast, economists have supported the retention of the existing law.<sup>1</sup>

1.4 Direct Action is a high-cost, narrow, government controlled scheme intended to replace the existing market driven, economy-wide, lowest-cost method of reducing harmful greenhouse gas emissions.

1.5 Stripped down, the centrepiece of Direct Action is the Emissions Reduction Fund (ERF), which is a small grant-based subsidy scheme for polluting industries. It will drive no transformation in the economy because of the following main reasons:

- i. It is short-term, lasting a few years at most. It is incapable of being scaled up to meet a higher ambition under future international agreements without a devastating impact on the national budget;
- ii. Finance institutions are not interested in Direct Action because the grants are so small, contracts are limited to five years and prices on offer are likely to be so low that it falls far short of creating investment grade projects;
- iii. The requirement that the lowest-cost abatement is awarded will direct most, if not all grants towards energy efficiency projects leaving carbon

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<sup>1</sup> For example, Professor Ross Garnaut *submission 105*; Mr Bernie Fraser *Committee Hansard 7 March 2014 pages 28-29*; Associate Professor Frank Jotzo *submission 86*, Dr Paul Burke *submission 80*, Mr Nathan Fabian Investor Group on Climate Change *Committee Hansard 7 March 2014 pages 11-12*; Mr Tim Buckley *Committee Hansard 7 March 2014 pages 11-12*; Mr John Hawkins *submission 7*, Mr Paul Pollard *submission 81* and Mr David Rossiter *submission 70*.

farming, energy generation, fugitive emissions from mining and transport will all be uncompetitive and cast aside from the ERF;

- iv. Because it is optional, there is no incentive for polluters to participate. The costs for firms to prepare tenders means the scheme will be underutilised resulting in low participation, an inability to spend the grant money but higher total abatement costs because of less competitive pressure and substantial departmental costs in operating the scheme. All these characteristics were revealed by the Auditor-General in 2010 when reviewing the Howard Government's Greenhouse Gas Abatement Scheme. The ERF is a rebirth of that failed policy;
- v. There is nothing that will promote innovation and the deployment of technological advances. This will result in a huge opportunity lost for our research and development industries where Australia has a natural competitive advantage; and
- vi. Those projects that are most likely to be successfully subsidised by the Fund will be low-cost, straightforward and have very short payback periods meaning they were the projects that were most likely to happen without government hand-outs. Firms will have delayed this investment in knowledge that Direct Action will subsidise the changes.

1.6 The main accompanying policy in Direct Action is the baseline system known in the Green Paper as the 'safeguard mechanism'. Without knowing much detail on how it will work and the Minister having changed his mind several times on whether there will be punishments or 'make good provisions' for exceeding baselines, the inherent problems with such an approach is:

- i. It requires a guess as to how firms will perform in the future and relies on the information provided by the firms as to how they have performed in the past. It can never be accurate. In contrast, emissions trading measures the actual emissions a firm sends into the atmosphere and makes them liable for their performance.
- ii. Any setting of the trajectory of a company's baseline emissions will always be contested and uncertain. This means that any measurement of emissions reductions will not be real, but just perceived against the estimate. This process will promote rent-seeking and developing close relationships with government to get a better outcome.<sup>2</sup>
- iii. Designing, setting and monitoring baselines is a very expensive and time-consuming task for departmental staff to be constantly engaged in. Even after all this work is finalised, there is far from any guarantee that less emissions will be put in the atmosphere as a result.

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<sup>2</sup> Associate Professor Frank Jotzo *submission 86* and Dr Paul Burke *submission 80*.

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- iv. Most of the money spent on the program will be sucked up by departmental costs, meaning that there will be high costs for very little abatement in greenhouse gases.

1.7 Finally, Direct Action as it is currently imagined will seal the fate of the short-lived Carbon Farming Initiative. Instead of land-based abatement projects having a market to sell their Australian Carbon Credit Units (ACCUs), there will only be one buyer—the Federal Government. There will no longer be any identifiable market value of ACCUs, farmers will be bidding blind and the significantly higher risks involved will result in farmers and land managers leaving the market altogether.

1.8 A land manager would have to bid into the auction against all other competitors in cheaper areas such as energy efficiency. Farmers have the major barrier of not being well positioned to aggregate projects to bring their costs down.<sup>3</sup> This is compounded by the government's stated intention to prefer large-scale projects.<sup>4</sup>

1.9 Land-based abatement will not be competitive enough to reach the expected tender price of around \$8 per tonne.<sup>5</sup> The Aboriginal Carbon Fund stated that savannah burning requires a price of \$15 per tonne to be profitable<sup>6</sup> while Sustainable Energy Now identified a price of \$16-25 a tonne for tree planting to be viable. These fledgling industries will have to close.

1.10 Soil carbon will be far more expensive than these two approved and comparatively simple abatement methods. Soil carbon is the preferred abatement method for the government which seeks to achieve a staggering 60% of its 431 million tonnes target from soil carbon.<sup>7</sup>

1.11 In the hope of making this commitment a reality the government has announced it will reduce permanency requirements from 100 to 25 years and will permit a methodology that will not have scientific integrity. There is no scientifically agreed methodology to support soil carbon being included on the CFI positive list and the government cannot name any scientific institution that has a robust methodology to date.

1.12 Even with this abandoning of scientific integrity for soil carbon there is unlikely to be any activity in soil carbon under the Direct Action proposal as it is estimated to cost around \$36 per tonne,<sup>8</sup> far short of the estimated \$8 benchmark price.

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<sup>3</sup> Australian Dairy Industry Council *Committee Hansard* 5 February 2014 page 49

<sup>4</sup> Department of Environment *Emissions Reduction Fund Green Paper* Pages 25-26

<sup>5</sup> See, for example, Mr Paul Pollard, *Committee Hansard*, 28 February 2014, p. 8; Mr John Hawkins, *Submission 7*, p. 3; Greenbank Environmental, *Submission 63*, p. 9.

<sup>6</sup> Aboriginal Carbon Fund *Submission to the Emissions Reduction Fund Green Paper* page 2.

<sup>7</sup> Peter Hannam *Sydney Morning Herald* "Coalition's soil carbon plan 'unviable' study finds" 17 July 2013.

<sup>8</sup> *Ibid.*

## **The Report's Recommendations**

1.13 The Australian Greens endorse this report in full with the exception of Recommendation 5. The Greens do not support bringing forward the floating price period for the following reasons.

1.14 A carbon price is used to drive a seamless transition to a low carbon economy. It is not in the interests of this goal to make it temporarily cheaper for big polluters to emit greenhouse gases at the same time that the European Union is rebuilding its trading price following its decision in February to backload its permit auctions.<sup>9</sup> An extra fixed price year is necessary to minimise the dislocation for clean technology investors.

1.15 It is clear that there would be no move to bring forward flexible pricing if the European Union price was €20 or more. This is a cynical move based on making it cheaper for big polluters. It is not a policy position responding to the accelerating global warming crisis.

1.16 There is insufficient time and a lack of preparation with our European Union trading partners for the floating price period to commence on 1 July 2014. Contributing to this lack of time and preparation was the Australian Labor Party's decision to support the government's removal of regulations that guided the auction of forward permits in the Senate. Without the regulatory procedures to guide the Clean Energy Regulator, an immediate auction could not proceed with clarity and certainty for participating businesses.

**Senator Christine Milne**  
**Leader of the Australian Greens**

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<sup>9</sup> [http://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/envir/141137.pdf](http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/envir/141137.pdf)

# Appendix 1

## Submissions, tabled documents and answers to questions taken on notice

1	Mr Mark A Zanker
2	The Climate Institute
3	Mr Robert Vincin, Emission Traders International Pty Ltd
4	Public Health Association of Australia
5	Mr Bill Wall
6	Mr Peter Boyer
7	Mr John Hawkins
8	Nursery & Garden Industry Australia
9	Environmental Farmers Network Inc
10	UnitingCare Australia
11	Australian Dairy Industry Council
12	Mr Patrick James
13	Doctors for the Environment Australia
14	Australian Conservation Foundation
15	Australian Forest Products Association
16	Clean Energy Council
17	Mr Julian Sharp
18	Ms Liz Franklin
19	LIVE
20	Mr Joe Boin
21	Australian Religious Response to Climate Change
22	Grattan Institute
23	Mr Brian Mollan
24	ClimateWorks Australia
25	Environment Victoria
26	Alliance for Future Health Inc
27	Kimberley Land Council
28	Dr Justin Wood
29	Conservation Council of Western Australia
30	Australian Council of Trade Unions
31	Oxfam Australia
32	Australian Youth Climate Coalition
33	350 Australia
34	Sustainable Energy Now

35	Green Building Council Australia
36	Facility Management Association of Australia
37	National Farmers' Federation
38	The Australia Institute
39	South East Councils Climate Change Alliance
40	Anglican EcoCare Commission for the Anglican Church, Diocese of Perth
41	Professor Ray Wills
42	Dr Mark Edwards
43	Ms Tanyia Maxted
44	Conservation Council of South Australia
45	Origin
46	Tasmanian Climate Change Office
47	GetUp Action for Australia
48	Climate Action Newcastle
49	Cement Industry Federation
50	Australian Manufacturing Workers' Union
51	Climate Change Authority
52	Mr James Mumme
53	Ms Pam Nairn
54	BREAZE Incorporated
55	Name Withheld
56	Name Withheld
57	Ms Joy Mettam
58	Ms Mary Voice
59	Energetics
60	Northern Alliance for Greenhouse Action
61	Energy Supply Association of Australia
62	Infigen Energy
63	Greenbank Environmental
64	Carbon Market Institute
65	Mr James Wight
66	Friends of the Earth
67	WWF-Australia
68	UnitingJustice Australia
69	Mr William Plain
70	Mr David Rossiter
71	Recurrent Energy
72	Professor David Karoly

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73	Climate Action Network Australia
74	Association of Mining and Exploration Companies
75	Clean Energy Finance Corporation
76	Australian Solar Thermal Energy Association
77	North Queensland Conservation Council
78	Sunshine Coast Environment Council
79	Corporate Carbon Advisory
80	Dr Paul Burke
81	Mr Paul Pollard
82	Australian Sustainable Built Environment Council
83	Ms Mary O'Byrne
84	Moving People 2030 Taskforce
85	Greenpeace Australia Pacific
86	Professor Frank Jotzo
87	Climarte
88	Mr David Arthur
89	Mr Richard Koerner, Asia Pacific Strategy
90	Sustainable Energy Association
91	Tas Thamo and David J Pannell, School of Agricultural and Resource Economics, The University of Western Australia
92	The Australian Industry Group
93	Investor Group on Climate Change
94	Mrs Jill E Nichol
95	Wentworth Group of Concerned Scientists
96	Dr Barry Naughten
97	Mr Tom Worthington
98	Australian Psychological Society
99	Climate and Health Alliance
100	Mr Milan Mitic
101	Australian Land Management Group
102	CSIRO
103	Dr Christine Jones
104	Carbon Farmers of Australia
105	Professor Ross Garnaut
106	Mr Rob Kenyon

**Tabled documents**

Sustainable Energy Now – tabled at public hearing, Perth, 31 January 2014

Explanatory notes for Cost Curve Diagram – tabled by Mr David Rossiter, public hearing, Canberra, 28 February 2014

Emissions Reduction Fund Green Paper Cost Curve, Figure 1.5 – tabled by Mr David Rossiter, public hearing, Canberra, 28 February 2014

Greenhouse and Energy Information by Registered Corporation 2011-12 – tabled by Mr David Rossiter, public hearing, Canberra, 28 February 2014

Clean Energy Finance Corporation – Opening statement by Ms Jillian Broadbent AO, Chair of the Board - tabled by Clean Energy Finance Corporation, public hearing, Canberra, 7 March 2014

**Answers to questions taken on notice**

The Climate Institute – Answers to questions taken on notice from public hearing, Melbourne, 5 February 2014

350 Australia – Answers to questions taken on notice from public hearing, Perth, 31 January 2014

Department of the Environment – Answers to questions taken on notice from public hearing, Canberra, 18 March 2014

Clean Energy Finance Corporation – Answers to questions taken on notice from public hearing, Canberra 7 March 2014

## **Appendix 2**

### **Public hearings**

*Friday, 31 January 2014 – Perth*

#### **Sustainable Energy Association**

Ms Kirsten Rose, Chief Executive

#### **Professor David Pannell, Private capacity**

#### **Mr Tas Thamo, Private capacity**

#### **Doctors for the Environment Australia**

Dr George Crisp, National Committee Member

Dr Sallie Forrest, WA Representative on the National Management Committee

Ms Katherine O'Shea, Student Representative

#### **Sustainable Energy Now**

Mr Benjamin Rose, Committee Member and Policy Group Leader

Mr Stephen Gates, Committee Member

#### **350 Australia**

Ms Tanya Maxted, Volunteer

Ms Jaime Yallup Farrant, Perth Coordinator

#### **Professor Ray Wills, Private capacity**

#### **Wilderness Society**

Mr Peter Robertson, Western Australian State Director

#### **Conservation Council of Western Australia**

Mr Piers Verstegen, Director

#### **Anglican EcoCare Commission, Anglican Diocese of Perth**

Reverend Evan Pederick, Deputy Chair

Right Reverend Bishop Thomas Wilmot, Chairperson

#### **Westgen Pty Ltd**

Mr Richard Harris, Director

***Wednesday, 5 February 2014 – Melbourne*****Grattan Institute**

Mr Tony Wood, Program Director – Energy

**The Climate Institute**

Mr Erwin Jackson, Deputy Chief Executive Officer

**Clean Energy Council**

Mr Kane Thornton, Deputy Chief Executive

**ClimateWorks Australia**

Ms Anna Skarbek, Executive Director

**Australian Conservation Foundation**

Mr Jamie Hanson, Climate Change Campaigner

Mr Dugald Murray, Senior Economist

**Energy Supply Association of Australia**

Mr Andrew Dillon, General Manager, Corporate Affairs

Mr Kieran Donoghue, General Manager, Policy

Mr Ben Pryor, Policy Adviser

**Australian Dairy Industry Council**

Mr Noel Campbell, Chair

Ms Irene Clarke, Senior Policy Manager

**Australian Industry Group**

Mr Tennant Reed, Principal National Adviser

**WWF-Australia**

Ms Kellie Caught, National Manager, Climate Change

Mr Bret Harper, Association Director of Research, Reputex

Mr Owen Pascoe, Policy Manager, Climate Change

***Friday, 28 February 2014 – Canberra*****National Farmers' Federation**

Ms Deborah Kerr, General Manager, Policy, Australian Pork Limited

Ms Jacqueline Knowles, National Resource Manager

**Mr Paul Pollard, Private capacity****Mr David Rossiter, Private capacity****Carbon Farmers of Australia Pty Ltd**

Mrs Louisa Kiely, Director

Mr Michael Kiely, Director

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**Australian Manufacturing Workers' Union**

Dr Tom Skladzien, National Economic and Industry Adviser

**Dr Paul Burke, Private capacity**

**Professor Frank Jotzo, Private capacity**

***Friday, 7 March 2014 – Canberra***

**Professor Ross Garnaut, Private capacity**

**Commonwealth Scientific and Industrial Organisation**

Dr Michael Battaglia, Deputy Director, Sustainable Agriculture Flagship

Dr Alex Wonhas, Director, Energy Flagship

**Mr Tim Buckley, Private capacity**

**Investor Group on Climate Change Australia and New Zealand**

Mr Nathan Fabian, Chief Executive Officer

**Clean Energy Finance Corporation**

Ms Jillian Broadbent AO, Chair

Mr Andrew Powell, Chief Financial Officer

Mr Oliver Yates, Chief Executive Officer

**Climate Change Authority**

Mr Bernie Fraser, Chair

Ms Anthea Harris, Chief Executive Officer

***Tuesday, 18 March 2014 – Canberra*****Department of the Environment**

Dr Steven Kennedy, Deputy Secretary, Climate Change Group

Mr Trevor Power, First Assistant Secretary, Emissions Reduction Fund Taskforce

Ms Shayleen Thompson, First Assistant Secretary, International and Land Division

Ms Lyndall Hoytink, Acting First Assistant Secretary, Renewables, Projections and Governance Division

Ms Maya Stuart-Fox, Assistant Secretary, Emissions Reduction Fund Taskforce

Mr James White, Assistant Secretary, Emissions Reduction Fund Taskforce

Mr Simon Writer, Assistant Secretary, Domestic Policy and System Branch, Renewables, Projection and Governance Division



## Appendix 3

### Australia's 2020 target policy<sup>1</sup>

#### **Reduce emissions by 5% relative to 2000 levels**

Conditions: None

#### **Reduce emission beyond 5%**

Conditions: The Government will not increase Australia's emissions reduction target above 5% until:

- the level of global ambition becomes sufficiently clear, including both the specific targets of advanced economies and the verifiable emissions reduction actions of China and India;
- the credibility of those commitments and actions is established for example, by way of a robust global agreement or commitments to verifiable domestic action on the part of the major emitters including the United States, India and China; and
- there is clarity on the assumptions for emissions accounting and access to markets.

#### **Reduce emissions by 15% compared with 2000 levels**

Conditions: International agreement where major developing economies commit to restrain emissions substantially and advanced economies take on commitments comparable to Australia's. In practice, this implies:

- global action on track to stabilisation between 510 and 540 ppm CO<sub>2</sub>e;
- advanced economy reductions in aggregate in the range of 15–25% below 1990 levels;
- substantive measurable, reportable and verifiable commitments and actions by major developing economies in the context of a strong international financing and technology cooperation framework, but which may not deliver significant emissions reduction until after 2020; and
- progress towards inclusion of forests (reduced emissions from deforestation and forest degradation) and the land sector, deeper and broader carbon markets and low-carbon development pathways).

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1 Climate Change Authority, *Targets and progress review*, Draft report, October 2013, p. 25, <http://climatechangeauthority.gov.au/sites/climatechangeauthority.gov.au/files/files/Target-Progress-Review/cca-targets-and-progress-report.pdf> (accessed 9 January 2014).

**Reduce emissions by 25% relative to 2000 levels (up to 5 percentage points through Government purchase)**

Conditions: Comprehensive global action capable of stabilising CO<sub>2</sub>-e concentration at 450 ppm CO<sub>2</sub>-e or lower. This requires a clear pathway to achieving an early global peak in total emissions, with major developing economies slowing the growth and then reducing their emissions, advance economies taking on reductions and commitments comparable to Australia's, and access to the full range of international abatement opportunities through a broad and functioning international market in carbon credits. This would involve:

- comprehensive coverage of gases, sources and sectors with inclusion of forests (reduced emissions from deforestation and forest degradation) and the land sector (including soil carbon initiatives if scientifically demonstrated) in the agreement;
- clear global trajectory, where the sum of all economies' commitments is consistent with 450 ppm CO<sub>2</sub>-e or lower, and with a nominated early deadline year for peak global emissions not later than 2020;
- advance economy reductions, in aggregate, of at least 25% below 1990 levels by 2020;
- major developing economy commitments to slow growth and to then reduce their absolute level of emissions over time, with a collective reduction of at least 20% below business as usual by 2020 and a nomination of peaking year for individual major developing economies; and
- global action which mobilises greater financial resources, including from major developing economies, and results in fully functional global carbon markets.

## Appendix 4

### Comparison of original Direct Action Plan funding and commitments v current funding and commitments<sup>1</sup>

Initiative	Original 'Direct Action Plan'	Current status	Notes
<b>Emissions Reduction Fund</b>	1 <sup>st</sup> year: \$300 mill 2 <sup>nd</sup> year: \$500 mill 3 <sup>rd</sup> year: \$750 mill 4 <sup>th</sup> year: \$1 bill	1 <sup>st</sup> year: \$300 mill 2 <sup>nd</sup> year: \$500 mill 3 <sup>rd</sup> year: \$750 mill (unspecified to 2020)	No additional funding if target not met. <sup>2</sup>
<b>One Million Solar Roofs</b>	\$1000 rebates for either solar panels or solar hot water systems, capped at 100,000 rebates per year.  (\$100 mill per year).	\$500 rebates to support installation of one million rooftop solar energy systems over 10 years, capped at 100 000 rebates per year. (\$50 mill per year).	Original rebate halved. <sup>3</sup>
<b>Solar Towns and Solar Schools</b>	\$100 million over four years for: - up to \$2 million to support 25 'solar town projects' for towns and non-capital cities to access direct solar energy - up to \$500,000 to support 100 solar school projects.	\$50 million will be allocated for at least 25 Solar Towns and a further \$50 million for 100 schools. Over six years.	Now funded over six years rather than four.

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- 1 This table was compiled using the following sources: Direct Action Plan (2010); A Plan for a Cleaner Environment; Parliamentary Budget Office, *Fiscal Budget Impact of Coalition Policies* <http://www.aph.gov.au/~media/05%20About%20Parliament/54%20Parliamentary%20Depts/548%20Parliamentary%20Budget%20Office/Post-election%20report/COA%202013%20election%20commitments.ashx> (accessed 10 January 2014); Australian Government, *Mid-year Economic and Fiscal Outlook 2013-14* (MYEFO), December 2013, Appendix A, <http://www.budget.gov.au/2013-14/content/myefo/html/index.htm> (accessed 16 January 2014).
  - 2 Jonathan Swan, 'Liberals cap spending on climate change', *Sydney Morning Herald*, 18 August 2013, <http://www.smh.com.au/federal-politics/federal-election-2013/liberals-cap-spending-on-climate-change-policy-20130817-2s3q0.html> (accessed 13 January 2014).
  - 3 Note: One Million Solar Roofs and Solar Towns and Schools were not mentioned in the 2013 MYEFO.

Initiative	Original 'Direct Action Plan'	Current status	Notes
<b>20 million trees (Urban forests and green corridors)</b>	An additional 20 million trees by 2020 (\$50 million over 4 years).	20 million trees to be planted by 2020. To commence mid-2014.	Budget allocation unclear. 'Green Army' will assist with this process? <sup>4</sup>
<b>Clean Energy Employment Hubs</b>	\$60 million over 4 years to La Trobe Valley, Hunter and Central Queensland regions to assist transformation of local coal industry jobs to clean energy jobs.	Unclear.	Appears no longer funded. <sup>5</sup>
<b>Geothermal and Tidal Towns Initiative</b>	\$50 million to support micro, pilot and demo projects in non-capital cities which access direct geothermal and tidal energy.	Unclear.	ARENA funds renewable energy projects, research and development, including geothermal and ocean energy projects. <sup>6</sup>
<b>Renewable fuels—Algal Synthesis and Biofuels</b>	\$5 million to study analysing the potential of algal synthesis and biofuels. Direct Action Plan refers to trials by MDB Energy and James Cook University.	-	ARENA has provided \$5 million to a relevant project at James Cook University. <sup>7</sup>
<b>Greenhouse Friendly Program</b>	\$10 million to re-establish the Greenhouse Friendly program over five years.	-	Greenhouse Friendly was replaced by the National Carbon Offset Standard in 2010. <sup>8</sup>

4 The Hon Greg Hunt MP, 'Green Army is just the start', *Bass Coast Post*, 30 September 2013 <http://www.basscoastpost.com/green-army-is-just-the-start.html> (accessed 16 January 2014); Department of the Environment, *Green Army*, <http://www.environment.gov.au/topics/cleaner-environment/clean-land/green-army> (accessed 16 January 2014).

5 See, for example, ABC News, 'Latrobe Valley clean energy jobs plan axed', 12 September 2013, <http://www.abc.net.au/news/2013-09-12/latrobe-valley-clean-energy-jobs-plan-axed/4952728> (accessed 10 January 2014); Tom Arup, 'Coalition climate policies take \$320m hit', *Sydney Morning Herald*, 6 September 2013, <http://www.smh.com.au/federal-politics/federal-election-2013/coalition-climate-policies-take-320m-hit-20130905-2t82a.html> (accessed 10 January 2014).

6 Australian Renewable Energy Agency, [www.arena.gov.au](http://www.arena.gov.au) (accessed 14 January 2014).

7 ARENA, *High Energy Algal Fuels*, <http://arena.gov.au/project/high-energy-algal-fuels/> (accessed 14 January 2014); see also Kirsten Heimann, *Explainer: what are algal biofuels?*, 9 April 2013, <https://theconversation.com/explainer-what-are-algal-biofuels-12560> (accessed 14 January 2014).

8 Department of the Environment, *Greenhouse Friendly*, <http://www.climatechange.gov.au/climate-change/carbon-neutral/national-carbon-offset-standard-ncos/greenhouse-friendly> (accessed 10 January 2014).

