

# 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 It was pointed out that, if the Clean Energy Package were repealed, and in the absence of a carbon price and an overall limit on emissions, these schemes would become even more important to help Australia meet its emissions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.



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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

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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**

