



**Australian Government**

# Emissions Reduction Fund White Paper

April 2014

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# Minister's foreword

The Government is committed to practical actions that will achieve real, measurable results for the environment.

The Emissions Reduction Fund is a central component of the Government's Direct Action Plan. Working in partnership with business, we will achieve a cleaner environment while improving business competitiveness. These two goals go hand in hand.

The Australian Government accepts the science of climate change and is firmly committed to reducing Australia's emissions to meet its target of five per cent below 2000 levels by 2020.

The Government believes there is a better way to reduce emissions than by imposing a tax that increases energy costs for businesses and households.

That is why the Government is repealing the carbon tax and replacing it with the Emissions Reduction Fund. Rather than increasing prices and eroding Australia's competitive advantage, the Emissions Reduction Fund's incentive-based approach will support Australian businesses to lower their energy costs and increase their productivity, while at the same time reducing Australia's emissions.

In the Green Paper, the Government set out an initial commitment of \$1.55 billion to the Emissions Reduction Fund. The Government will extend this commitment to \$2.55 billion, with further funding to be considered in future budgets. These funds will be allocated flexibly over time according to the profile of projects contracted under the Emissions Reduction Fund. This is a significant investment, and shows the Government's resolve to assist businesses to lower their energy costs, restore competitiveness and reduce Australia's emissions.

The final design of the Emissions Reduction Fund is presented in this White Paper, and reflects extensive feedback from the community and business. I would like to extend my thanks to the more than 300 organisations, businesses and individuals, and especially the Emissions Reduction Fund Expert Reference Group, who have taken the time to contribute their expertise and ideas on the design of the Emissions Reduction Fund.

I look forward to continuing to work with business and the community as we move to implement the Emissions Reduction Fund.

Our objective is to conserve our natural environment while ensuring strong economic growth.



**Greg Hunt**

Minister for the Environment

# Contents

Minister's foreword

Letter from Emissions Reduction Fund Expert Reference Group Co-Chairs ....4

Executive summary .....6

**1. Introduction .....14**

1.1 Australia's emissions 14

1.2 Global context and national circumstances 19

1.3 Design principles 21

1.4 Consultation and review 22

**2. Crediting emissions reductions .....24**

2.1 Proposing and registering a project 24

2.2 Emissions reduction methods 25

2.3 How methods will achieve genuine emissions reductions 29

2.4 Approving methods 36

2.5 Reporting and verification of emissions reduction projects 37

2.6 Project aggregation 38

2.7 Priorities for method development 39

2.8 Large projects 40

2.9 Tax treatment of Australian Carbon Credit Units 40

**3. Purchasing emissions reductions.....41**

3.1 Identifying lowest-cost projects 42

3.2 Contracting for successful projects 46

3.3 Ensuring delivery of emissions reductions 48

3.4 Publication of information 49

3.5 Voluntary market 50

<b>4. Safeguarding emissions reductions .....</b>	<b>51</b>
4.1 Commencement of the safeguard mechanism	51
4.2 Coverage	51
4.3 Setting emissions baselines	53
4.4 Flexible compliance arrangements	54
4.5 New investments	55
4.6 Electricity generation	56
4.7 Consultation process	57
<b>5. Carbon Farming Initiative .....</b>	<b>58</b>
5.1 Transitional arrangements	58
5.2 Streamlining of Carbon Farming Initiative processes	59
<b>6. Administration and governance .....</b>	<b>64</b>
6.1 Administering the Emissions Reduction Fund	64
6.2 Governance arrangements and independence	67
6.3 Funding arrangements	67
<b>APPENDIX A: SUMMARY OF EMISSIONS REDUCTION FUND POLICY POSITIONS .....</b>	<b>68</b>
<b>APPENDIX B: INITIAL PRIORITY METHODS FOR THE EMISSIONS REDUCTION FUND .....</b>	<b>87</b>
<b>APPENDIX C: STAKEHOLDER SUBMISSIONS .....</b>	<b>90</b>
<b>APPENDIX D: MEMBERSHIP OF EMISSIONS REDUCTION FUND EXPERT REFERENCE GROUP .....</b>	<b>98</b>
<b>GLOSSARY .....</b>	<b>99</b>

# Letter from Emissions Reduction Fund Expert Reference Group Co-Chairs

The Hon Greg Hunt MP  
Minister for the Environment  
Parliament House  
CANBERRA ACT 2600

Dear Minister Hunt

We are pleased to provide you with an account of the discussions of the Expert Reference Group on the Emissions Reduction Fund.

As you know, the Group was established to provide high-level advice to the Government on the Emissions Reduction Fund. The Group considered in-depth the key design elements of the Emissions Reduction Fund. The discussions were very constructive, and the Group developed a shared understanding of the policy issues and different industry perspectives.

In particular, the Group focussed on practical aspects of the crediting and purchasing elements of the Emissions Reduction Fund, including the likely sources of low cost emissions reductions, conduct of auctions and length of contracts. The Group also considered the function of the safeguard mechanism and its potential application to key industries.

While a range of views were expressed by the participants there was broad agreement on a number of key policy settings to ensure the Emissions Reduction Fund made an effective contribution to reducing greenhouse gases in Australia. These included:

- the need for an effective safeguard mechanism;
- the operation of baselines that permit sustainable economic growth;
- ensuring the Government only sponsors projects that would not otherwise proceed but make a genuine contribution to achieving the targeted reduction in greenhouse gases;
- ensuring there is no net increase in the administrative burden on industry;
- ensuring the commercial arrangements associated with the operation of the Emissions Reduction Fund attract economic investments;
- reducing duplication and overlaps between Commonwealth and State policies to reduce greenhouse gases;
- to the extent possible, develop the Emissions Reduction Fund in a way that can mesh in with a range of international initiatives to reduce greenhouse gases; and
- recognition of the important role of local communities in achieving sustainable outcomes.

Climate change is an issue with potential to touch the lives of all Australians. We believe that it is important that the policy response is implemented in an efficient and effective way, which allows Australia's climate change commitments to be met in ways which engage Australians and support sustainable economic growth.

We hope that the Group's deliberations have contributed to the development of such a policy.

Thank you for the opportunity to chair the Emissions Reduction Fund Expert Reference Group and to engage with the leaders of some of Australia's most influential industries and organisations on this important issue. We are available at your discretion to sustain this process to achieve the successful creation of the Emissions Reduction Fund.

Yours sincerely



**Danny Price**  
Co-Chair  
Emissions Reduction Fund Expert Reference Group



**David Green**  
Co-Chair  
Emissions Reduction Fund Expert Reference Group

# Executive summary

A healthy environment and a healthy economy are two essential elements of the Government's vision for a strong Australia.

Our ability to build a strong Australia depends on our success in lowering business costs, improving competitiveness and protecting the environment for current and future generations.

The Direct Action Plan is an essential element of Australia's national environment policy framework and encompasses practical actions that will achieve real, measurable results.

The Emissions Reduction Fund is the centrepiece of the Government's Direct Action Plan.

## Global action and Australia's emissions reduction task

The Australian Government accepts the science of climate change and supports national and global efforts to reduce greenhouse gas emissions.

The Government is firmly committed to reducing Australia's emissions to meet its target of five per cent below 2000 levels by 2020. Australia's target poses a significant challenge because emissions are projected to increase without further action. Positive and direct action by the Government, business and community will allow us to meet this challenge (see Figure i). The Emissions Reduction Fund will provide the impetus for businesses and the community to improve practices, invest in new technologies, and reduce our emissions.

The Government will review its position, considering further action and targets in 2015 as part of negotiations on a new global climate change agreement. This review will focus on the extent to which other nations, including the major economies and Australia's major trading partners, are taking real and comparable actions to reduce emissions.

## The Emissions Reduction Fund

The Government's Emissions Reduction Fund will support Australian businesses and communities to enjoy the benefits of economic growth, increased productivity and a cleaner environment.

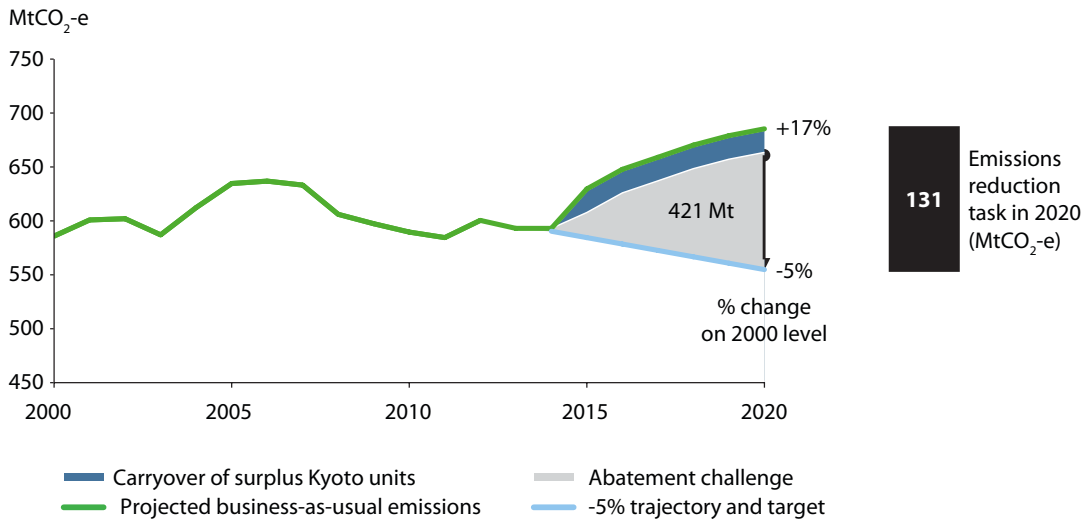
It is a practical policy that will reduce Australia's emissions at low cost, without adding to household and business energy costs. Its processes will be streamlined to ensure that it is easy for businesses to be rewarded for their positive actions.

The Government is committed to supporting economic growth and boosting productivity, while conserving the environment for current and future generations.

The Emissions Reduction Fund will provide incentives for businesses, not punish them.



**Figure i: Australia's emissions reduction task to 2020**



**Source:** Department of the Environment, *Australia's Abatement Task and 2013 Emissions Projections*, 2013, adjusted for updated data in *Australia's National Inventory Report 2012, 2014*.

**Notes:** The Kyoto Protocol allows countries that overachieve in meeting their Kyoto target in the first commitment period to credit that overachievement against the target for the second commitment period by 'carrying over' surplus Kyoto units. Since the release of *Australia's Abatement Task and 2013 Emissions Projections*, the 'carry over' surplus estimate has been revised upwards from 121 MtCO<sub>2</sub>-e to 131 MtCO<sub>2</sub>-e, which reduces the overall challenge to 421 MtCO<sub>2</sub>-e. Emissions are presented using the Intergovernmental Panel on Climate Change's Fourth Assessment Report global warming potentials.

The Emissions Reduction Fund will help reduce Australia's greenhouse gas emissions while delivering valuable co-benefits to Australian businesses, households and the environment. For example, households and businesses will save money by improving their energy efficiency. Revegetation will improve water quality, and reduce erosion and salinity. Replenishing the carbon content of soils will improve the health and productivity of Australian farms.

The Emissions Reduction Fund will operate alongside existing programmes that are already working to offset Australia's emissions growth, such as the Renewable Energy Target and energy efficiency standards on appliances, equipment and buildings.

## Principles underpinning the Emissions Reduction Fund

The overriding objective of the Emissions Reduction Fund will be to reduce emissions at lowest cost over the period to 2020, and make a contribution towards Australia's 2020 emissions reduction target of five per cent below 2000 levels by 2020.

In the Green Paper, the Government set out a commitment to the Emissions Reduction Fund of \$300 million, \$500 million and \$750 million—a total of \$1.55 billion. In line with the Government's ongoing commitment to the Emissions Reduction Fund, this commitment will be extended to \$2.55 billion, with further funding to be considered in future budgets. These funds will be allocated flexibly over time according to the profile of projects contracted under the Emissions Reduction Fund.

This is a significant investment, and demonstrates the Government's resolve in meeting its emissions reduction target.

Three principles have guided the design of the Emissions Reduction Fund:

- **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.

Reflecting these three design principles, the Emissions Reduction Fund has three elements:

- **crediting** emissions reductions
- **purchasing** emissions reductions, and
- **safeguarding** emissions reductions.

Box i outlines how businesses, landholders, and other organisations can participate in the Emissions Reduction Fund.

## Box i: Steps to participate in the Emissions Reduction Fund



### *Step 1—Estimate emissions reductions and register project*

Project proponents will use an approved method to estimate the likely emissions from their proposed projects. The Government will provide guidelines and estimation tools to help proponents to do this.

Proponents will register their emissions reduction projects with the Clean Energy Regulator. Proponents can also register to participate in a forthcoming auction. Prior to the auction, the Regulator will check the following:

- the identity, probity and capability of the proponent
- that the project is consistent with an approved method
- the proponent's legal right to undertake the project and the existence of any necessary consents by landholders for sequestration projects
- the commercial readiness of the project, and
- the credibility of the proponent's emissions reduction estimates.

This pre-qualification process will involve due diligence checks to ensure that projects can generate the stated emissions reductions within the timeframes indicated.

### *Step 2—Submit auction bid*

Proponents of approved projects can submit a bid into the auction to sell emissions reductions on the basis of price per tonne of carbon dioxide equivalent (tCO<sub>2</sub>-e).

Auctions will be designed to achieve the best value for money.

### *Step 3—Enter into a contract*

Successful bidders will enter into contracts in which the Government agrees to purchase emissions reductions from their projects.

Contracts will include provisions to 'make-good', unless under-delivery is not reasonably within the control of the proponent.

### *Step 4—Report project abatement and receive payment for contracted credits*

Proponents will undertake their projects and report their emissions reductions to the Clean Energy Regulator. The Regulator will verify reports and issue credits to the proponent.

Proponents will receive payment from the Regulator for credits at the contract price.

## Crediting emissions reductions

Businesses have identified a wide range of productivity-enhancing activities that the Emissions Reduction Fund can unlock. These include:

- upgrading commercial buildings
- improving energy efficiency of industrial facilities and houses
- reducing electricity generator emissions
- capturing landfill gas
- reducing waste coal mine gas
- reforesting and revegetating marginal lands
- improving Australia's agricultural soils
- upgrading vehicles and improving transport logistics, and
- managing fires in savanna grasslands.

Businesses, community organisations, local councils and other members of the community can undertake activities like these and sell the resulting emissions reductions to the Government.

Emissions reductions will be verified and credited according to approved methods. These methods will ensure that emissions reductions are genuine—that is, they are both real and additional.

Emissions reduction methods will set out the rules for estimating emissions reductions from different activities. To let a wide range of businesses participate in the Emissions Reduction Fund, a menu of emissions reduction methods will be available. This will let businesses choose the method that best suits their specific projects. There will be two categories of methods:

- **Activity methods** will be developed for specific emissions reduction activities, such as landfill gas capture, energy efficiency and land sector projects. Existing methods, for example from the Clean Development Mechanism, will be used where they meet the requirements of the Emissions Reduction Fund.  
Where appropriate, the Emissions Reduction Fund will draw on existing activity methods developed under state-based energy efficiency schemes to develop nationally consistent methods.
- **Facility-wide methods** will be developed using existing data under the National Greenhouse and Energy Reporting Scheme to encourage emissions reductions from a wide range of activities.

An independent expert committee, the Emissions Reduction Assurance Committee, will assess and provide advice to the Minister for the Environment on the suitability of methods.

The Emissions Reduction Assurance Committee will play an important ongoing role by providing advice directed to maintaining the integrity of the Emissions Reduction Fund. The Committee will review methods to ensure they can deliver real and additional emissions reductions.

Some emissions reduction activities such as revegetation and household and commercial energy efficiency may often be smaller-scale actions that are most cost-effectively implemented through aggregation. There are many businesses and organisations that are well placed to aggregate the emissions reductions resulting from these activities. The design of the Emissions Reduction Fund will encourage business models that aggregate emissions reductions.

Local councils and state and territory governments have substantial experience in delivering energy efficiency programmes. The Australian Government will work with state, territory and local governments to build on this expertise and achieve additional emissions reductions.

Emissions reductions will be recognised by the issue of Australian Carbon Credit Units, as currently occurs under the Carbon Farming Initiative. The existing National Greenhouse and Energy Reporting Scheme, including its audit framework, will be built upon and improved to ensure the process for reporting and verifying emissions reductions is efficient.

As occurs under the Carbon Farming Initiative, Australian Carbon Credit Units will constitute personal property with legal title registered on the Australian National Registry of Emissions Units. This will provide certainty for businesses and ensure that emissions reductions are credible. It will also give businesses the flexibility to sell their credits into the Emissions Reduction Fund or to use them in other ways, such as in voluntary offset programmes.

## Purchasing emissions reductions

The Emissions Reduction Fund will be built around a streamlined process to purchase emissions reductions at the lowest cost across the economy.

The Clean Energy Regulator will conduct auctions to purchase emissions reductions at the lowest available cost. Auctions create competitive pressures and are commonly used in Australia and overseas to purchase other types of environmental goods and services. For example, auctions are used to purchase water entitlements and manage water resources.

The auctions will start in the second half of 2014, and will be run quarterly. The Clean Energy Regulator will set a benchmark price for each auction, above which bids will not be considered.

The Government will enter into contracts with successful bidders, which will guarantee payment for the future delivery of emissions reductions. Businesses could use contracts to finalise project finance as necessary before projects are implemented.

The Government's preference is that contracts will be for five years. As part of its ongoing consultation with business, the Government will commission a commercial consultant to undertake market testing prior to the first auction to investigate the types of projects proposed to be bid into the Emissions Reduction Fund, and the contract details that will best meet business needs. This process will allow Government to make sure the contracting arrangements are right for business and assess whether alternate contract lengths are required.

The consultant commissioned to undertake this task will seek feedback from businesses on their experience in implementing emissions reduction projects, and the commercial challenges they have confronted. In providing advice to the Government, the consultant will ensure that businesses' input remains confidential.

This market testing process will be completed prior to the first auction so that proponents can incorporate its outcomes as they prepare their bids.

Contracts will be standardised to reduce transaction costs, increase transparency and ensure projects compete for funding at auctions on equal terms. Contracts will include a range of standard commercial provisions to manage the implementation of projects and the delivery of emissions reductions.

Publication of information about auction results will assist potential participants to consider future project proposals. This information will let the community observe the progress of the Emissions Reduction Fund.

## Safeguarding emissions reductions

The Emissions Reduction Fund is founded on a presumption of economic growth as a positive and inevitable good for Australia.

In this context, the Emissions Reduction Fund's safeguard mechanism will provide clear guidelines within which businesses can operate. It will safeguard the value of funds spent under the Emissions Reduction Fund and create a stable and predictable policy landscape in which businesses can make new investments.

The safeguard mechanism will encourage businesses to keep emissions within historical baselines. In this way, it will ensure that emissions reductions paid for by the Emissions Reduction Fund are not displaced by a significant rise in emissions elsewhere in the economy.

The safeguard mechanism will only apply to a small number of large facilities currently reporting information under the National Greenhouse and Energy Reporting Scheme. It will not require new mandatory reporting obligations.

The safeguard mechanism will commence from 1 July 2015, to enable consultation with businesses on policy detail. Specific provision will be made for new projects that will play an integral role in Australia's economic development.

No revenue from firms is sought, nor will any be budgeted by the Government, as part of the safeguard mechanism.

## Building on the Carbon Farming Initiative

Existing Carbon Farming Initiative participants will be well placed to bid into the Emissions Reduction Fund. There are already methodologies for many land sector activities and more will be approved before the Emissions Reduction Fund begins following the repeal of the carbon tax.

Through the Emissions Reduction Fund auction arrangements, the Government will purchase Australian Carbon Credit Units from existing Carbon Farming Initiative projects that are competitive at an auction. This will allow existing participants in the Carbon Farming Initiative to secure a return from eligible projects following the repeal of the carbon tax.

Streamlined reporting and audit requirements will apply automatically to existing Carbon Farming Initiative projects, reducing their costs. Methodologies made under the Carbon Farming Initiative legislation will continue to apply but can be streamlined under the Emissions Reduction Fund to encourage uptake of land sector projects.

## Implementing the Emissions Reduction Fund

The crediting and purchasing elements of the Emissions Reduction Fund will start following the repeal of the carbon tax. The safeguard mechanism will start on 1 July 2015. All elements will be administered by the Clean Energy Regulator.

The Clean Energy Regulator is well-established and has the required expertise to perform this function, as it currently administers the Carbon Farming Initiative and the National Greenhouse and Energy Reporting Scheme—both of which are the building blocks for the Emissions Reduction Fund. This will provide continuity for business where it is important, and allow for streamlined administration.

The Government will implement the Emissions Reduction Fund by expanding the coverage of the Carbon Farming Initiative legislation to allow crediting of emissions reductions across the economy, and in time, through the National Greenhouse and Energy Reporting legislation to apply the safeguard mechanism.

The Government has committed to review its international targets in 2015. The review will consider Australia's international emissions reduction targets and settings in the context of negotiations on a new global climate change agreement to apply to all countries from 2020. It will focus on the extent to which other nations, including the major economies and Australia's major trading partners, are taking real and comparable actions to reduce emissions.

The Government will also review operational elements of the Emissions Reduction Fund towards the end of 2015. There will be a focus on those elements that will benefit most from early review, including the conduct of auctions and early experience in using methods. The findings of the review will inform the structure of the Emissions Reduction Fund post-2020.

## This White Paper

This White Paper sets out the Government's final positions on the design, implementation and ongoing development of the Emissions Reduction Fund. All policy positions are summarised in Appendix A.

Work to identify and prioritise emissions reduction opportunities has already begun. The Government has set up technical working groups that have started preparing draft methods that businesses can use to unlock emissions reductions. It has held workshops with existing emissions reduction providers to consider the design of the Emissions Reduction Fund and examine options for streamlining the Carbon Farming Initiative. A summary of the methods being developed for the Emissions Reduction Fund is at Appendix B.

In finalising the design of the Emissions Reduction Fund, the Government has sought the views of businesses and the community. It received over 290 submissions in response to the Terms of Reference on the Emissions Reduction Fund and a further 344 written submissions in response to the Green Paper (see Appendix C).

The Government has also taken advice from an Expert Reference Group made up of experts from business, the non-government sector and leading consultants. The members of the Expert Reference Group are listed at Appendix D.

# 1. Introduction

A healthy environment and a healthy economy are two essential elements of the Government's vision for a strong Australia.

Our ability to build a strong Australia depends on our success in lowering business costs, improving competitiveness and protecting the environment for current and future generations.

The Direct Action Plan is an essential element of Australia's national policy framework and encompasses practical actions that will achieve real, measurable results.

The Emissions Reduction Fund is the centrepiece of the Government's Direct Action Plan.

## 1.1 Australia's emissions

The Government will reduce Australia's emissions to five per cent below 2000 levels by 2020.

The Government accepts the science of climate change. The world's leading scientific organisations, including Australia's Bureau of Meteorology, the Commonwealth Scientific and Industrial Research Organisation and the Australian Academy of Science, have found that the Earth's climate is changing as a result of human activities and that further change is projected.

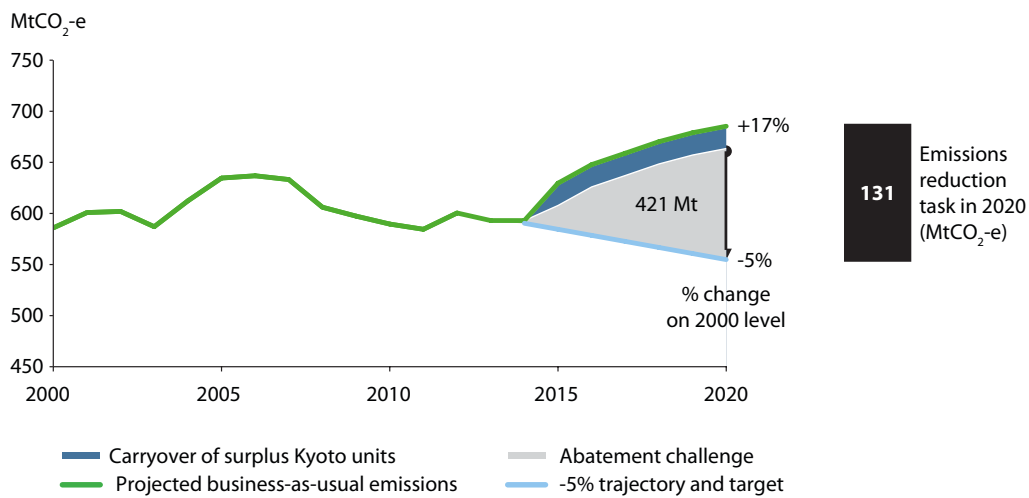
Climate change can only be effectively mitigated if all major economies take coordinated action to restrain emissions.

Australia will work towards a new international agreement to be agreed in late 2015 that will establish for the first time, from 2020, a common platform for all countries to take serious, coordinated global climate action that is economically and fiscally responsible. The agreement must be one where all major economies, including Australia's key trading partners and competitors, play a real part in controlling their emissions through comparable global action.

The latest estimates of Australia's future greenhouse gas emissions are that, on current trends, Australia faces a cumulative emissions reduction task of 591 million tonnes of carbon dioxide equivalents (MtCO<sub>2</sub>-e) in the period to 2020, or 131 MtCO<sub>2</sub>-e in 2020 alone. After taking into account updated emissions data for 2013 and 2014, and Australia reducing emissions by more than its first Kyoto Protocol target from 2008 to 2012, the cumulative emissions reduction task is around 421 MtCO<sub>2</sub>-e in the period to 2020. This is shown in Figure 1.1.



**Figure 1.1: Australia's emissions reduction task to 2020**



**Source:** Department of the Environment, *Australia's Abatement Task and 2013 Emissions Projections*, 2013, adjusted for updated data in *Australia's National Inventory Report 2012*, 2014.

**Notes:** The Kyoto Protocol allows countries that overachieve in meeting their Kyoto target in the first commitment period to credit that overachievement against the target for the second commitment period by 'carrying over' surplus Kyoto units. Since the release of *Australia's Abatement Task and 2013 Emissions Projections*, the 'carry over' surplus estimate has been revised upwards from 121 MtCO<sub>2</sub>-e to 131 MtCO<sub>2</sub>-e, which reduces the overall challenge to 421 MtCO<sub>2</sub>-e. Emissions are presented using the Intergovernmental Panel on Climate Change's Fourth Assessment Report global warming potentials.

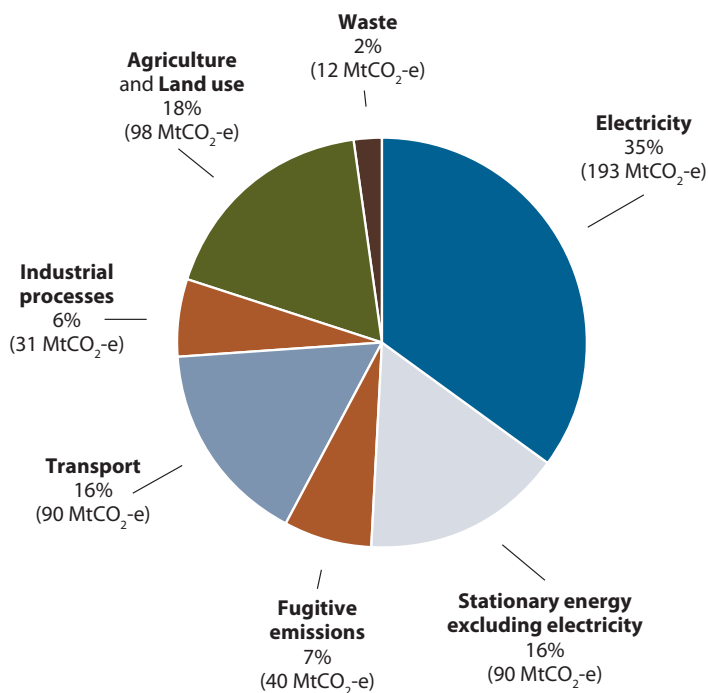
The starting point for Australia's emissions reduction challenge is to look at our current emissions profile. In 2012, Australia's emissions were 555 MtCO<sub>2</sub>-e, with these emissions sources spread across the economy (Figure 1.2).<sup>1</sup> In 2012, electricity generation contributed just over one-third of total emissions (193 MtCO<sub>2</sub>-e), with other stationary fuel combustion, transport, and agriculture/land contributing around one-sixth each (90 MtCO<sub>2</sub>-e, 90 MtCO<sub>2</sub>-e and 98 MtCO<sub>2</sub>-e respectively). Collectively, industrial and chemical processes, fugitive emissions (such as methane released from coal mines) and waste emissions together contributed the final sixth of Australia's emissions (83 MtCO<sub>2</sub>-e).

In total, Australia contributes around 1.3 per cent of total global emissions and is the fifteenth largest emitter of greenhouse gases in the world. Compared to many other nations, Australia has a relatively emissions-intensive economy and high per capita emissions, mostly due to the extensive use of black and brown coal in electricity supply, consistent with our resource endowments.

Over the past decades, coal has provided Australia with cheap and reliable power which has helped underpin Australia's economic growth and prosperity. Affordable energy has also been a key source of competitive advantage for Australia in global markets. The ongoing development of Australia's extensive coal and gas reserves will continue to be an important element of future growth prospects. The challenge for Australia is to reduce emissions while not damaging this valuable source of comparative advantage.

<sup>1</sup> Australian Government, *Australia's National Inventory Report 2012*, 2014.

**Figure 1.2: Australia's National Inventory 2012**



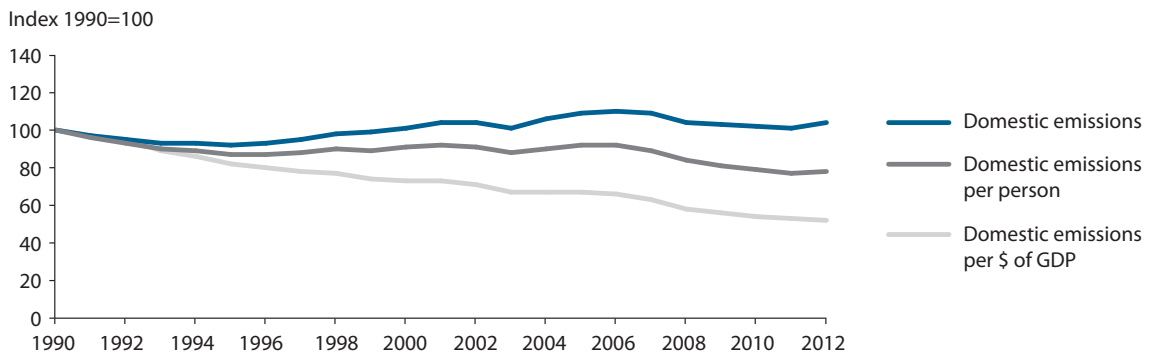
**Source:** Australian Government, *Australia's National Inventory Report 2012*, 2014.

**Note:** Figures are expressed using Kyoto Protocol accounting rules in terms of millions of tonnes of carbon dioxide equivalents (MtCO<sub>2</sub>-e), using the global warming potentials published in the Intergovernmental Panel on Climate Change's Second Assessment Report.

Australia is already reducing its emissions. Since 1990, the emissions-intensity of the Australian economy has fallen by around 50 per cent from 0.8 kilograms of carbon dioxide equivalents (kgCO<sub>2</sub>-e) per dollar of Gross Domestic Product to 0.4 kgCO<sub>2</sub>-e per dollar of Gross Domestic Product (see Figure 1.3). This reduction has been driven by a number of factors, including the Australian economy's transition to less emissions-intensive industries, and the policies in place over a long time to improve energy efficiency and reduce emissions.

Australia has implemented a number of key emissions reduction measures over the past two decades that have significantly reduced emissions. These include land clearing regulations in New South Wales and Queensland, which have resulted in a significant fall in land use emissions. Additionally, the Renewable Energy Target and energy efficiency programmes for industry, appliances and buildings have contributed to the recent decline in emissions from electricity generation (see Figure 1.4). The Government is currently undertaking a review of the Renewable Energy Target.

**Figure 1.3: Emissions intensity of the economy**

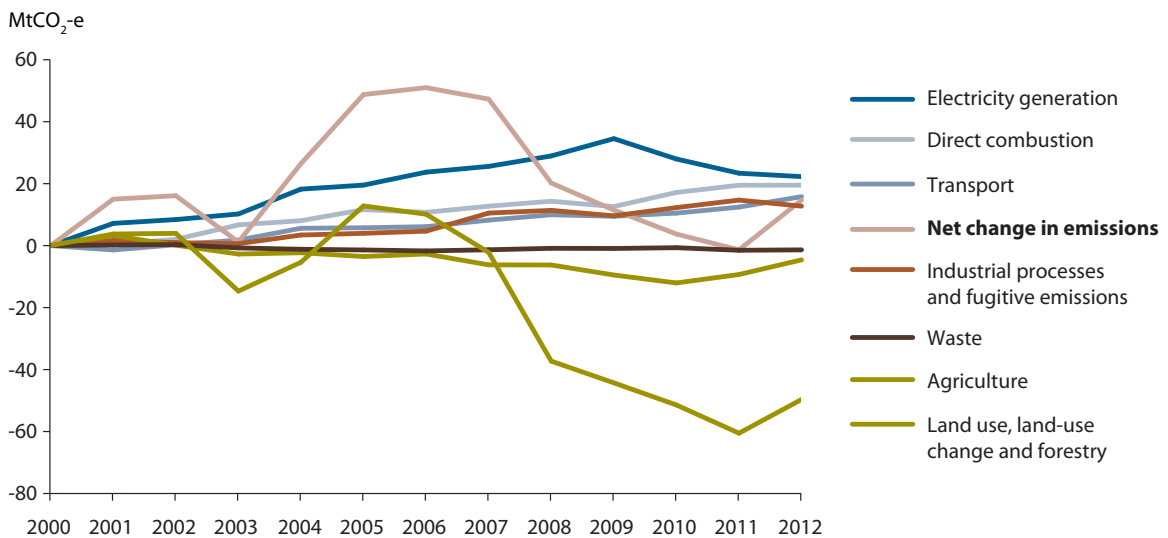


**Source:** Australia's Abatement Task and 2013 Emissions Projections and Australian Bureau of Statistics.

**Note:** Emissions are presented using the Intergovernmental Panel on Climate Change's Fourth Assessment Report global warming potentials.

Policy measures, combined with structural changes in Australia's economy, have been effective in constraining emissions growth over the past two decades, with Australia's total emissions being at broadly the same level in 2011 as they were in 1990.

**Figure 1.4: Change in historical emissions from 2000**

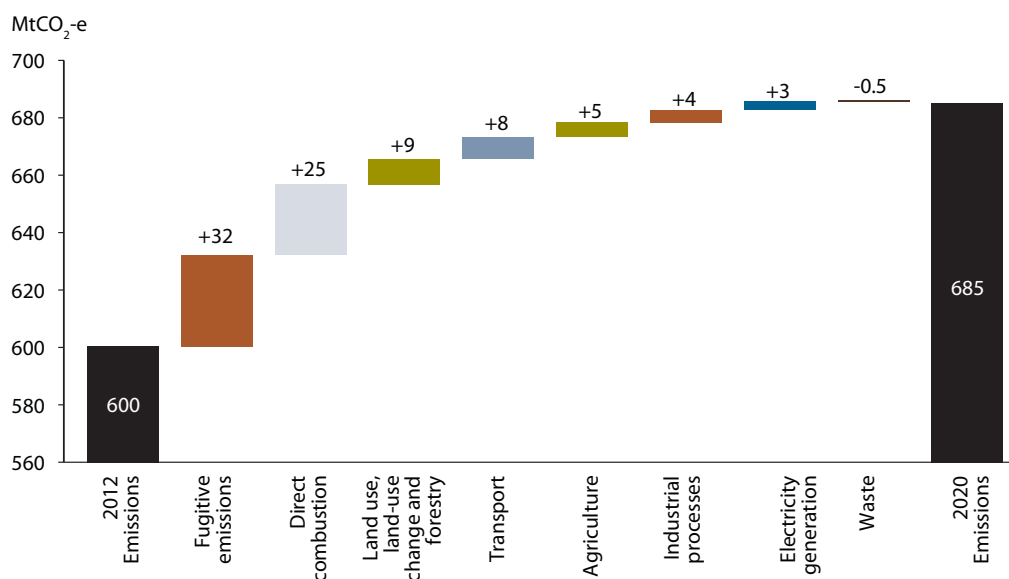


**Source:** Department of the Environment, Australia's Abatement Task and 2013 Emissions Projections, 2013.

**Note:** Emissions are presented using the Intergovernmental Panel on Climate Change's Fourth Assessment Report global warming potentials.

Over the next decade, even with these existing measures in place, Australia's emissions are projected to grow to around 685 MtCO<sub>2</sub>-e (see Figure 1.5).

**Figure 1.5: Projected growth in emissions by sector, 2012–2020**



**Source:** Department of the Environment, *Australia's Abatement Task and 2013 Emissions Projections*, 2013.

**Note:** Totals may not add due to rounding. Emissions are presented using the Intergovernmental Panel on Climate Change's Fourth Assessment Report global warming potentials.

Increased production of liquefied natural gas (LNG) and coal, in response to strong export demand, is projected to be the strongest driver of growth in Australia's emissions to 2020. Fugitive emissions are projected to increase as new coal mines are developed. Direct emissions from the use of natural gas to operate LNG facilities are projected to rise as Australia's LNG production quadruples to 2020.<sup>2</sup>

Declining levels of carbon sequestration from reforestation are also projected to increase domestic emissions to 2020.

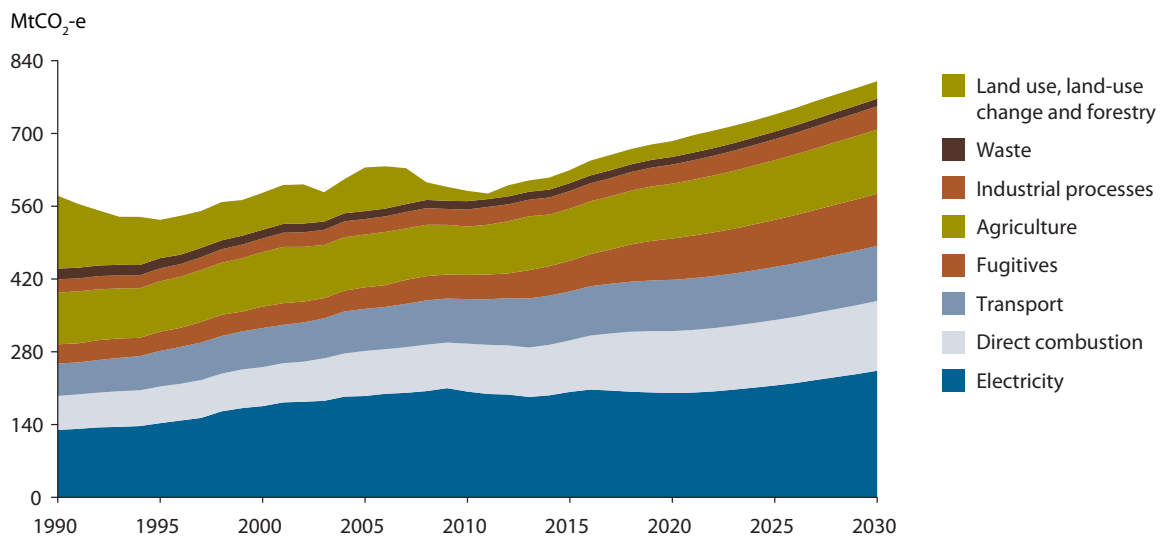
Emissions from transport and industrial processes are expected to continue to grow to 2020. Agriculture emissions are also projected to grow by a small amount, largely driven by the recovery in livestock populations as the farming sector in parts of the country emerge from drought and due to increases in export demand for dairy and meat products.

Emissions from electricity are projected to grow slowly to 2020 reflecting existing policy measures such as the Renewable Energy Target and a lower electricity demand outlook.

Emissions from the waste sector are projected to remain stable reflecting offsetting trends within the waste sector. While waste generation is expected to increase, emissions are constrained by increased diversion of waste from landfills to alternative treatment facilities and increased uptake of methane capture for electricity generation.

<sup>2</sup> Bureau of Resources and Energy Economics, *Australian energy projections to 2034–35*, 2011.

Figure 1.6: Australia's emissions projections to 2030



Source: Department of the Environment, *Australia's Abatement Task and 2013 Emissions Projections*, 2013.

Without the actions proposed under the Direct Action Plan, emissions are projected to continue to rise beyond 2020 to 2030 (see Figure 1.6). Australia's emissions are projected to reach 801 MtCO<sub>2</sub>-e in 2030. Emissions growth in the decade to 2030 is dominated by emissions from electricity, although nearly all other sectors are also projected to grow during the decade.

While emissions projections are based on many assumptions, they do illustrate the importance of sustained policies to reduce emissions. The Government's Direct Action Plan and, in particular, the Emissions Reduction Fund are designed to help achieve the emissions reductions needed to meet Australia's target.

## 1.2 Global context and national circumstances

Looking abroad, it is clear that there are different approaches to reducing emissions.

These approaches include incentive-based measures that reward positive action like baseline and credit schemes and direct purchasing. They also include price-based measures like emissions trading or carbon taxes. Energy efficiency, emissions standards and direct support for investment in better practices and technologies are other approaches. There is no one-size-fits-all way to reduce emissions and, around the world, respective governments are choosing approaches that best suit their national circumstances.

For instance, Japan is establishing its Joint Crediting Mechanism to help meet emissions reduction targets by purchasing direct emissions reductions and funding low-carbon technology diffusion through bilateral agreements with developing countries.

Sweden also directly purchases emissions reductions (see Box 1.1).

### **Box 1.1: The Swedish experience**

The Swedish Clean Development Mechanism and Joint Implementation programme was established by the Swedish Energy Agency and has been operating for more than a decade. The purpose of the programme is to purchase up to 10 million Certified Emission Reductions issued in the second commitment period of the Kyoto Protocol (2013–2020).

Project participants submit proposals to the Swedish Energy Agency and if successful enter into a standard contract. This contract leaves the development and management of the project to the proponent, whilst providing for a fixed price payment on delivery of abatement.

The United Nations operates another incentive-based measure in the form of the Clean Development Mechanism, which is a baseline and credit scheme. From just over 2000 projects, over 1.4 billion tonnes of abatement have been made available. Norway's commercial Carbon Procurement Facility is a significant buyer of Clean Development Mechanism credits through a competitive tender process.

In Canada, the province of Alberta operates a baseline and credit scheme in the form of the Specified Greenhouse Gas Emitters Regulation. The regulation aims to reduce the emissions intensity of large emitters to 12 per cent below their 2003–05 baseline emissions intensity. The regulation also provides for a voluntary offsets scheme which has 145 registered projects to date encompassing 28.6 MtCO<sub>2</sub>-e of emissions reductions.

Similarly, in California a baseline and credit Compliance Offset Scheme operates in parallel to the Californian emissions trading scheme. About 5.5 billion offset credits have been issued in this scheme from projects such as the destruction of ozone depleting substances, forestry and livestock digesters.

In Europe, the world's largest emissions trading scheme operates. The European Union Emissions Trading Scheme is now in its third phase of operation (from 2013 to 2020) and covers more than 11 000 power stations and industrial plants in 31 countries.

Elsewhere, energy efficiency measures are used. Russia, South Africa and the United States, among many others, employ energy efficiency measures to reduce emissions. In the United Kingdom, all new homes built from 2016 will need to have zero emissions for heating, hot water, cooling and lighting. Under the Korean Target Management Scheme, around 500 large emitting entities are required to meet energy efficiency targets. There are energy intensity and efficiency schemes in countries such as China, India, Indonesia, Japan, New Zealand, Thailand, Turkey and the United States. New Zealand has an economy-wide energy intensity improvement target of 1.3 per cent annually to 2016.

Renewable energy targets are also common. Countries and regions as varied as Brazil, China, Europe, India, Indonesia, Mexico, New Zealand, Russia, South Korea, Vietnam and 30 US states have renewable energy targets. Mexico's goal is to generate 35 per cent of its electricity from renewable energy sources by 2024.

Vehicle emissions and power generation standards are another frequently used approach. The European Union, the United States, and many other countries all use emissions standards. The European Union emissions standard for cars aims for a fleet-wide average of 130 gCO<sub>2</sub>-e per kilometre in 2015 and 95 gCO<sub>2</sub>-e per kilometre in 2020. Fleet-wide emissions are currently on track to meet the 2015 target. Targets for light vehicle emissions performance are also in place in the United States, with targets of 139 gCO<sub>2</sub>-e per kilometre by 2020 and 101 gCO<sub>2</sub>-e per kilometre by 2025. In the power generation sector, regulatory standards for power stations have been tightened in the United States and Canada. New regulatory standards for coal-fired power plants in Canada will start from 2015 and, according to Environment Canada, are expected to reduce emissions from 2005 levels by 41 MtCO<sub>2</sub>-e in 2020.

While there is a menu of approaches, their impact on societies and economies can be vastly different. For example, carbon taxes and emissions trading schemes operate by increasing costs associated with the emission of greenhouse gases. Typically these costs are reflected in prices and flow through to higher prices for households and businesses. In Australia, the Government believes that there is a better way to reduce emissions than by imposing taxes or emissions trading systems that increases energy costs for businesses and households.

For Australia, an incentive-based approach that directly purchases emissions reductions and rewards practical and positive action is a better way to achieve the 2020 emissions reduction target than an approach that raises prices for all Australians. That is why the Government is repealing the carbon tax and replacing it with the Emissions Reduction Fund. Rather than increasing prices and eroding Australia's competitive advantage, the incentive-based approach adopted through the Emissions Reduction Fund will invest in Australian businesses, reducing their energy costs and increasing our productivity as a nation.

## 1.3 Design principles

Three principles have guided the design of the Emissions Reduction Fund:

- **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.

### 1.3.1 Lowest-cost emissions reductions

The Emissions Reduction Fund will focus on lowest-cost emissions reductions to deliver the best value for money to the Australian community.

Businesses across many sectors supported the focus on lowest-cost emissions reductions:

*APPEA supports a national climate change policy that delivers abatement at least cost.  
(Australian Petroleum Production and Exploration Association)*

*AFPA notes the emphasis in the Green Paper on the lowest cost of abatement. This is a sound public policy principle and should be part of the ERF guiding principles in terms of achieving economic efficiency and cost-effective climate change mitigation. (Australian Forest Products Association)*

*Council supports the prioritisation of lowest cost abatement under the ERF. (Brisbane City Council)*

*The primary focus in designing the ERF should be to ensure lowest-cost abatement. Banding has every chance of inflating costs and skewing bids to particular forms of abatement in each band. (Business Council of Australia)*

The Emissions Reduction Fund will be built around a streamlined process to ensure that lowest-cost emissions reductions are purchased. Businesses can submit their projects into a competitive bidding process run by the Clean Energy Regulator. The Clean Energy Regulator will select bids with the lowest cost per tonne, and 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.

### 1.3.2 Genuine emissions reductions

Many actions undertaken by businesses to reduce their operating costs also reduce emissions. This is most clearly illustrated where businesses improve the energy efficiency of their operations. While these activities make a positive contribution to reducing Australia's emissions, their feasibility does not always rely on incentives.

In order to make a substantial contribution to Australia's 2020 target, the Emissions Reduction Fund will provide incentives for projects that would not otherwise occur.

*Abatement whether from the land sector or elsewhere must be real, additional and permanent.  
(Commonwealth Scientific and Industrial Research Organisation)*

The Emissions Reduction Fund will identify 'additional' actions in a way that minimises the costs to businesses and encourages participation in the programme. Chapter 2 provides more detail on how the Emissions Reduction Fund will encourage genuine emissions reductions—that is, emissions reductions that are both real and additional.

### 1.3.3 Streamlined administration

Clear and transparent rules will keep administrative costs low and ensure businesses, landholders, and other providers of emissions reduction projects can easily participate in the Emissions Reduction Fund. This will maximise the take-up of lowest-cost emissions reduction opportunities.

The Emissions Reduction Fund will use existing reporting and administrative structures, such as the Carbon Farming Initiative and the National Greenhouse and Energy Reporting Scheme, wherever possible. The Government will also work with state, territory and local governments to build on existing programmes and develop national approaches to crediting energy savings projects. This will avoid unnecessary duplication, streamline administration and provide continuity for business.

*SEA supports the use of the Carbon Farming Initiative (CFI) and the National Greenhouse and Energy Reporting Scheme as the bases for emissions reduction method and eligible reduction activities, and for calculating and verifying emissions reductions. (Sustainable Energy Association of Australia)*

While building on these schemes, the Government will take the opportunity to streamline their operation. For example, it has become apparent through the operation of the Carbon Farming Initiative that verification arrangements under that scheme are unnecessarily onerous. Moving to risk-based verification will significantly reduce costs to business without sacrificing environmental integrity (see Section 5.2.4). The Government will also continue to seek opportunities to further streamline the National Greenhouse and Energy Reporting Scheme. Importantly, businesses will no longer have the burden of paying and complying with the carbon tax.

## 1.4 Consultation and review

The Government has consulted widely with businesses and the community to ensure the Emissions Reduction Fund is designed and implemented effectively. The crediting and purchasing elements of the Emissions Reduction Fund will start operation following the repeal of the carbon tax, with the safeguard mechanism commencing on 1 July 2015.

The continuous improvement of the Emissions Reduction Fund will be achieved through ongoing monitoring and evaluation of its performance. The key performance metric will be reducing emissions at lowest cost and helping to achieve Australia's 2020 target.



The Green Paper proposed that a review of the Emissions Reduction Fund would be undertaken in 2015. A number of submissions expressed concern with the proposed timing for this review. For instance:

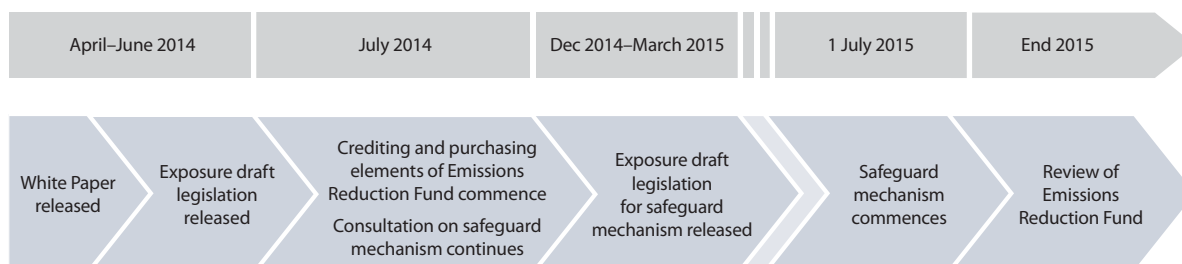
*A review this early in the life of the scheme needs to be progressed carefully. It is possible that an early review could reduce investment certainty, potentially limiting the participation from industry in terms of tendering for abatement. On the other hand, it could help to provide some certainty by providing a pathway towards post-2020 targets and the future of the ERF. This could actually enhance the investment environment for abatement. (Energy Supply Association of Australia)*

The Government has heard these views. The Government has committed to review its international targets in 2015. This review will consider Australia’s international emissions reduction targets and settings in the context of negotiations on a new global climate change agreement to apply to all countries from 2020. It will focus on the extent to which other nations, including the major economies and Australia’s major trading partners, are taking real and comparable actions to reduce emissions.

The Government will conduct a targeted review of the Emissions Reduction Fund towards the end of 2015 that will focus on operational elements such as the conduct of auctions and method development, rather than the fundamental elements of the Emissions Reduction Fund’s design.

The timeline for implementation of the Emissions Reduction Fund is shown in Figure 1.7.

**Figure 1.7: Implementation timeline for the Emissions Reduction Fund**



Climate change policy interacts with many other key policy areas. The Government is coordinating the development of policy for the Emissions Reduction Fund with other policy reviews, particularly the current reviews of energy policy and the Renewable Energy Target.

A number of submissions suggested that the Government should consider complementary measures and policies to unlock low-cost emissions reductions. For example:

*There are likely to be significant opportunities for emission reduction through the efficient level of uptake of alternative fuels and vehicles in Australia. There are a range of barriers across the supply chain for the alternative fuels industry ... There exist a suite of policy measures for consideration across the supply chain segments: vehicle supply; fuel supply; infrastructure; and end customers. The policy incentives within these segments must work end-to-end to deliver the vehicles, fuels, and services to market, and must work cohesively and efficiently with the Government’s broader energy and emissions reduction reform agendas. (AGL Energy)*

The Government’s 2014 Energy White Paper will set out a coherent and integrated approach to energy policy to reduce cost pressures on households and businesses and improve Australia’s international competitiveness. In preparing the Energy White Paper, the Government will consider barriers to fuel and energy efficiency and the appropriate policy response for addressing these.

## 2. Crediting emissions reductions

The Government, through the Emissions Reduction Fund, will purchase emissions reductions that are brought forward by businesses, community organisations, local councils or any other member of the community. Emissions reductions must be estimated and verified using approved methods. These methods will ensure that emissions reductions are genuine—that is, they are both real and additional.

Emissions reduction methods will set out the rules for estimating emissions reductions from different activities. A menu of methods will be available so that businesses can easily participate in the Emissions Reduction Fund using the methods that best suit their specific projects.

The Emissions Reduction Fund will build on and streamline the existing arrangements under the Carbon Farming Initiative for crediting emissions reductions. The Clean Energy Regulator will issue Australian Carbon Credit Units for emissions reductions from approved projects. Proponents will then be able to offer these units for sale to the Government through the Emissions Reduction Fund.

This chapter sets out how proponents will register their projects and be awarded credits according to methods developed collaboratively between the Government and business.

### 2.1 Proposing and registering a project

Businesses, community organisations, local councils and any other member of the community can identify potential emissions reduction opportunities in their operations and seek funding from the Emissions Reduction Fund for those projects.

Experience with comparable programmes, such as state-based energy savings schemes, suggests that firms that specialise in the aggregation of emissions reductions will emerge and support emissions reduction activities by individual households, small businesses and farms. Aggregation brings economies of scale to small-scale emissions reduction projects and has proven to be effective in reducing transaction costs and simplifying participation for individuals. The Emissions Reduction Fund will be designed to support aggregation (see Section 2.6).

To seek support from the Emissions Reduction Fund, all projects will need to estimate emissions reductions consistent with an approved method. More detail about emissions reduction methods is provided in Sections 2.2 and 2.3.

The Government will prepare guidance material to assist project proponents in applying methods to their projects. This guidance material will be easy to understand and in plain English. Where possible, the Government will provide tools to assist proponents in estimating emissions from a project under a method. These tools will assist proponents in registering their projects with the Clean Energy Regulator prior to auction.

The Emissions Reduction Fund will build on and streamline the existing arrangements under the Carbon Farming Initiative for crediting emissions reductions. The Regulator will issue Australian Carbon Credit Units to a registered emissions reduction project for each tonne of CO<sub>2</sub>-e that is reduced or that is stored in the land. These units will be awarded in arrears, subject to emissions reductions having been measured and, if necessary, verified (see Section 2.3.7 for more information on the timing of crediting). If a project has a contract to sell these credits to the Emissions Reduction Fund and the necessary conditions are met, then the Regulator will pay the proponent for those units.

Proponents will register a project with the Clean Energy Regulator to be eligible to receive Australian Carbon Credit Units and to bid in Emissions Reduction Fund auctions. Proponents can register their project, submit pre-qualification information and register for a forthcoming auction simultaneously.

The Clean Energy Regulator will register a project if the proponent meets basic probity checks, the project is covered by a relevant method and the proponent has a legal right to undertake the project.

The Clean Energy Regulator will publish details about registered projects on the Emissions Reduction Fund Register. This will be consistent with the existing arrangements under the *Carbon Credits (Carbon Farming Initiative) Act 2011*. Details will include information on all eligible projects, including the proponent, project description, applicable methodology, location, and Australian Carbon Credit Units issued for each project. Where a project has been awarded a contract to sell credits to the Emissions Reduction Fund, additional information will also be included on the Register, as outlined in Section 3.4.

Box 2.1 outlines the process for estimating emissions reductions from a project and then how a project proponent can access funds through the Emissions Reduction Fund for those emissions reductions.

The remainder of this chapter discusses emissions reduction methods, including the process for how they are developed and approved. Chapter 3 sets out in more detail the process whereby a proponent can sell emissions reductions to the Government through the Emissions Reduction Fund.

## 2.2 Emissions reduction methods

Businesses can use emissions reduction methods to identify projects, assess their greenhouse gas benefits and develop bids for funding.

### 2.2.1 Facility and activity-based methods

The Emissions Reduction Fund will feature two types of emissions reduction methods:

- activity methods for specific emissions reduction actions, and
- facility methods that can aggregate emissions reductions from multiple activities at large facilities for which data are reported under the National Greenhouse and Energy Reporting Scheme.

Many submissions made in response to the Green Paper supported the development of both of these types of methods so that businesses can choose the easiest way to participate.

*Rio Tinto supports the flexibility that establishing both activity and facility methods will allow. Methods which are relatively simple to apply and can be used in a broad range of applications are preferred, rather than specific and complex methods which can only be used in very limited circumstances.*

*(Rio Tinto)*

*Alinta Energy is broadly comfortable with two overarching approaches, activity based methods and facility based methods. (Alinta Energy)*

## Box 2.1: Steps to participate in the Emissions Reduction Fund

### Method Development

**Step 1:**  
Estimate and register project

**Step 2:**  
Submit auction bid

**Step 3:**  
Enter into a contract

**Step 4:**  
Report on project and receive payment for credits

### *Step 1—Estimate emissions reductions and register project*

Project proponents will use an approved method to estimate the likely emissions from their proposed projects. The Government will provide guidelines and estimation tools to help proponents to do this.

Proponents will register their emissions reduction projects with the Clean Energy Regulator. Proponents can also register to participate in a forthcoming auction. Prior to the auction, the Regulator will check the following:

- the identity, probity and capability of the proponent
- that the project is consistent with an approved method
- the proponent's legal right to undertake the project and the existence of any necessary consents by landholders for sequestration projects
- the commercial readiness of the project, and
- the credibility of the proponent's emissions reduction estimates.

This pre-qualification process will involve due diligence checks to ensure that projects can generate the stated emissions reductions within the timeframes indicated.

### *Step 2—Submit auction bid*

Proponents of approved projects can submit a bid into the auction to sell emissions reductions on the basis of price per tonne of carbon dioxide equivalent (tCO<sub>2</sub>-e).

Auctions will be designed to achieve the best value for money.

### *Step 3—Enter into a contract*

Successful bidders will enter into contracts in which the Government agrees to purchase emissions reductions from their projects.

Contracts will include provisions to 'make-good', unless under-delivery is not reasonably within the control of the proponent.

### *Step 4—Report project abatement and receive payment for contracted credits*

Proponents will undertake their projects and report their emissions reductions to the Clean Energy Regulator. The Regulator will verify reports and issue credits to the proponent.

Proponents will receive payment from the Regulator for credits at the contract price.

Emissions reduction methods can be designed to apply broadly to similar activities across a range of business circumstances or to a particular technology or process. An example of a broadly applicable method is the *Metered baseline method* under the New South Wales Energy Saving Scheme, which covers improvements in energy efficiency under a wide range of circumstances.<sup>3</sup> The methodology for *Avoided emissions from diverting waste from landfill for process engineered fuel manufacture* under the Carbon Farming Initiative is an example of a project-specific method.

Where possible, methods under the Emissions Reduction Fund will be designed to apply broadly, rather than to specific projects. This will let project developers apply methods to a wide variety of projects and encourage innovation in project design. This will support the development of methods for the most common emissions reduction activities at the start of the Emissions Reduction Fund.

Over time, the number of available methods will expand to cover the broadest possible range of emissions reduction opportunities across the economy. This will make it easier for businesses to participate in the Emissions Reduction Fund, increase competition for funds at auction and lower the cost of achieving emissions reductions over time.

A wide range of methods for estimating emissions reductions has already been developed under domestic and international programmes. Building on these methods, many of which are familiar to business, will keep participation costs low.

## 2.2.2 Methods being developed for the start of the Emissions Reduction Fund

The Government has set up technical working groups that are working to develop suitable methods for the most promising emissions reduction opportunities, so that new projects can bid for funding from the start of the Emissions Reduction Fund.

Methods currently under development include:

- a generic method for emissions reductions at facilities reporting under the National Greenhouse and Energy Reporting Scheme
- capture and destruction of coal mine fugitive emissions
- reductions in emissions-intensity of transport
- commercial, industrial and aggregated energy efficiency
- capture and combustion of landfill gas
- alternative treatment of organic waste
- capture and combustion of biogas from wastewater, and
- methods for the land sector, including increasing soil carbon, reducing livestock emissions, expanding opportunities for environmental and carbon sink plantings, and reforestation.

With the development of these methods, plus those in place under the Carbon Farming Initiative, there will be more than 30 methods available at the start of the Emissions Reduction Fund. They will ensure that large businesses covered under the National Greenhouse and Energy Reporting Scheme, as well as proponents in the waste, transport, building energy efficiency and land sectors, can participate in the Emissions Reduction Fund at the outset.

<sup>3</sup> See: [http://www.ess.nsw.gov.au/How\\_to\\_apply\\_for\\_accreditation/Methods\\_for\\_calculating\\_energy\\_savings/Metered\\_Baseline\\_Method](http://www.ess.nsw.gov.au/How_to_apply_for_accreditation/Methods_for_calculating_energy_savings/Metered_Baseline_Method)

The Government will continue to consult with businesses in determining the priorities for further method development following the start of the Emissions Reductions Fund. As new emissions reduction methods are developed, more activities can be credited.

The priorities for developing methods will be determined by the Minister for the Environment in collaboration with business based on potential volume and speed to market. More information about the matters that the Minister will take into account in setting priorities is set out in Section 2.7.

A summary of the methods planned for the start of the Emissions Reduction Fund is at Appendix B.

### 2.2.3 State-based energy savings scheme methods

Existing state-based energy efficiency schemes (see Box 2.2) have made considerable progress in developing and refining emissions reduction methods. For example, the New South Wales Energy Savings Scheme already has methods for crediting energy efficiency upgrades to existing commercial buildings and industrial energy efficiency projects.

#### **Box 2.2: State-based energy saving schemes**

Energy savings schemes operate in New South Wales, Victoria, South Australia and the Australian Capital Territory. These schemes support projects in the household, industrial, commercial and small business sectors. They place obligations on energy retailers to find and implement energy savings or to purchase certificates that have been created by accredited agents who have implemented approved energy efficiency projects.

A number of submissions proposed that the Emissions Reduction Fund should recognise and build on these methods:

*EECCA recommends that the Government look to the existing state based energy efficiency schemes for methods to calculate abatement. These schemes provide a ready set of robust monitoring, verification and compliance arrangements for measuring savings and abatement from energy efficiency projects. (Energy Efficiency Certificate Creators Association)*

*Existing methodologies should be utilised under the ERF to ensure the timely participation in the program of activity-level abatement. (Energy Networks Association)*

The Government will leverage the experience of state and territory-based schemes by building on their methods as a model for the development of nationally applicable energy efficiency methods under the Emissions Reduction Fund. The Government will seek to align participation requirements, including approaches to measurement, reporting and verification, with the approaches taken under relevant state schemes. This will open up energy efficiency abatement opportunities in new jurisdictions while applying an approach that will be familiar to existing market players.

The Australian Government will seek to partner with state regulatory agencies over time, in particular for crediting emissions reductions from energy savings projects. Partnering with state-based regulatory agencies could reduce duplication and simplify arrangements for abatement providers and aggregators.

This approach will allow the Emissions Reduction Fund to build on the progress made by states in developing and refining energy efficiency methods, particularly those that relate to energy use in commercial, community and other buildings. For instance, there may be opportunities for the Emissions Reduction Fund to build on recent work to allow crediting of large-scale, community level energy savings, where a large number of households reduce their collective energy use when compared with a similar group.

A broad-based energy efficiency industry has emerged in recent years under these state-based schemes. These businesses will be well placed to find support under the Emissions Reduction Fund because they will be able to expand their specialist services to other sectors and other states.

*Effective schemes such as the NSW Energy Savings Scheme (ESS) and the Victorian Energy Efficiency Target (VEET) should be recognised, and retained. These schemes are currently operating effectively to reduce emissions in the built environment, illustrated by high participation rates from stakeholders and simple administration processes. If national harmonisation of these schemes with the ERF is being considered, the engagement and participation of this sector should be retained. (Council of Capital City Lord Mayors)*

The Government will continue to work closely with the New South Wales, Victorian, South Australian and Australian Capital Territory governments so that the Emissions Reduction Fund operates effectively alongside the schemes in those jurisdictions.

## 2.2.4 Existing Carbon Farming Initiative methods

Methods for a range of land-based activities, including reforestation and savanna fire management, have already been developed through the Carbon Farming Initiative. Expanding the scope of those methods, enabling landholders to select either a 100-year or 25-year permanence option, and streamlining audit and record keeping requirements will promote the uptake of those projects.

*Existing CFI projects are a source of readily available, reasonably priced emissions reductions. They will also be major participants early in the scheme, while other projects are being established. (Global Renewables Eastern Creek)*

Methods for a range of land activities that have already been developed under the Carbon Farming Initiative will continue to be available under the Emissions Reduction Fund.

## 2.3 How methods will achieve genuine emissions reductions

To meet the requirements of the Emissions Reduction Fund, methods must ensure that credits are issued for genuine emissions reductions, which are real and additional to normal business practice, and count towards Australia's emissions reduction target.

In the Green Paper, the Government outlined the importance of targeting emissions reductions that are new and additional to business as usual and indicated that the Emissions Reduction Fund would do this in a transparent and streamlined way. Submissions indicated strong support for this. For example:

*The NFF welcomes the Government's intent that the ERF design seeks additionality while minimising costs and encouraging participation. (National Farmers' Federation)*



*The BCA endorses the principles identified in the green paper to underpin the design of the ERF, namely, funding will be provided for projects that provide emissions reduction beyond business-as-usual at lowest cost, using simple and cost-effective administrative arrangements. (Business Council of Australia)*

Methods can ensure that emissions reductions are genuine by applying different tools or approaches, which can be tailored to specific activities or sectors. These tools are set out below. Some tools may not be appropriate for all emissions reduction methods and methods may use more than one tool.

### 2.3.1 New projects

As outlined in the Green Paper, the Emissions Reduction Fund will provide incentives for new emissions reduction activities (including the expansion or upgrade of an existing emissions reduction activity) or changes in management practices.

'New projects' will be defined as projects that are not implemented before they have been registered with the Clean Energy Regulator. This means that a project in operation prior to the commencement of the Emissions Reduction Fund will not be eligible for credits; and, for example, a project for which approval is sought in 2018 could not have commenced in 2017. This is a practical filter that will help ensure that projects that produce emissions reductions but which do not need Government assistance to take place are not funded by the Emissions Reduction Fund. This approach protects value for money for the community.

Projects that pass the additionality tests under the Carbon Farming Initiative before it becomes part of the Emissions Reduction Fund will remain eligible under the Emissions Reduction Fund for the remainder of their crediting period.

A number of submissions argued that projects already implemented to manage increased costs caused by the carbon tax should be eligible for support under the Emissions Reduction Fund, as the removal of the carbon tax diminishes the business case for these projects.

*... there are a number of existing emissions reduction projects undertaken in industry in response to previous climate policies, including the carbon pricing mechanism. These projects include gas-fired cogeneration systems and scrubber or catalyst systems to reduce emissions of industrial gases. The capital costs of these projects have already been incurred, but they also have ongoing costs to operate—particularly cogeneration, since gas is an increasingly expensive fuel. In the absence of a financial incentive these systems are very likely to be shut down, resulting in an increase in emissions. (Australian Industry Group)*

The Government acknowledges that companies have made significant progress towards reducing their emissions intensities over recent years. The abolition of the carbon tax will benefit Australian business by removing costs that many emissions reduction projects were designed to avoid. To ensure value for taxpayer funds, the Government will target the Emissions Reduction Fund to new and additional emissions reductions projects.



## 2.3.2 Improved technologies and practices

Methods under the Emissions Reduction Fund will ensure that credits are issued for emissions reductions achieved through improved practices or technology.

Methods will not credit variations in emissions from year to year, which occur as part of normal business operation.

Crediting improvements in emissions-intensity—reductions in emissions per unit of output—is a practical way to support economic growth while reducing emissions. An emissions-intensity approach rewards deliberate effort by crediting reductions in the emissions-intensity of each unit produced, regardless of whether production is expanding or contracting.

*Establishing baselines will be a critical challenge to ensure that the operation of the Fund does not restrain growth and productivity or reward reductions in activity. Ideally the baseline should be designed on the basis of emissions per unit of output to overcome this problem ... (Australian Academy of Technological Sciences and Engineering)*

Some submissions have suggested that it may be counterproductive to credit improvements in emissions-intensity if a business increases its overall emissions. The Government does not accept this view and is committed to supporting economic growth in Australia, improving productivity and seeing businesses grow. Further, withdrawing incentives to participate in the Emissions Reduction Fund from businesses that are growing would mean forgoing a key source of low cost abatement, making the overall abatement task for Australia more costly.

In this regard, a key element of the Government's plan is a safeguard mechanism to ensure that emissions do not significantly increase above historical levels across the economy—providing a guarantee that emission increases will not cancel out the benefits of emissions reductions paid for through the Emissions Reduction Fund. More detail about the Emissions Reduction Fund's safeguard mechanism is set out in Chapter 4.

## 2.3.3 Estimating emissions reductions

To establish that a project will deliver real and additional emissions reductions, a proponent must estimate what their emissions would have been in the absence of the Emissions Reduction Fund. This is often called an estimate of baseline emissions or the 'alternative emissions scenario'.

The most effective way to establish an alternative emissions scenario will vary for different types of emissions reduction activities. Illustrative examples of common approaches to ensuring that emissions reductions are genuine are shown in Box 2.3.

Emissions Reduction Fund methods can incorporate different approaches to estimating the alternative emissions scenario. The most appropriate approach for a given emissions reduction activity will be developed through the relevant technical working group during the method development process. This approach will ensure that the Emissions Reduction Fund can deliver value for money and support projects to go beyond business-as-usual practices, while at the same time maintaining administrative simplicity.

Estimates of emissions reductions must be as accurate as practical, recognising that in some cases it may be more practical and cost-effective to use science-based models to determine emissions reductions. For instance, a method may apply a model for the estimation of carbon sequestration in forests, as it will not be practical to measure the growth of each tree. Where methods rely on models, these must be unbiased and based on credible scientific evidence or data.

### Box 2.3: Measuring emissions reductions from different types of projects

*Figure 1:* It will often be most practical to measure the impact of a project relative to historical emissions data. In many cases, past data provide a realistic picture of future emissions because there are few commercial or other drivers to reduce emissions.

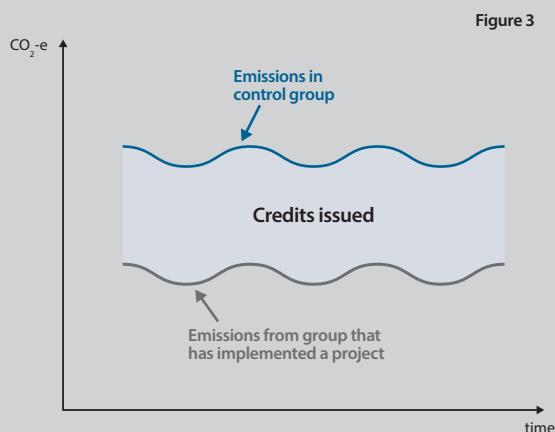
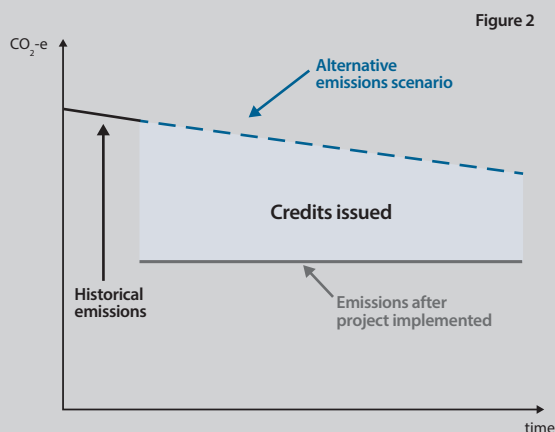
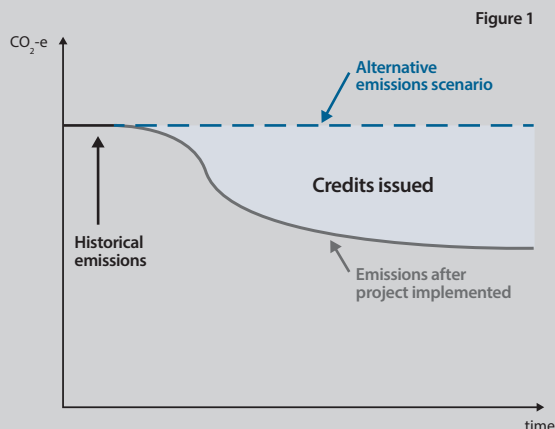
For example, where land has been used for agriculture and has been clear of trees for an extended period it is reasonable to assume that this land use practice will continue. In this case, the emissions reduction method could measure the impact of a reforestation project relative to this past land use.

*Figure 2:* Where technology is improving in efficiency over time, past emissions data may not provide a good proxy for future emissions. Here, it may be most realistic to assume that emissions will continue to decline under business as usual.

For example, transport fuel efficiency has been steadily improving. This suggests that the impact of a transport project should be measured relative to a declining emissions scenario.

*Figure 3:* Emissions reductions as a result of a project can be measured in comparison to emissions from a control group. Provided the control group and the project group are statistically similar, this will provide a realistic estimate of the impact of the project.

For example, the impact of a programme for household energy efficiency in a local government area could be measured relative to energy use in a statistically similar area.



### 2.3.4 Common practice

Where data is limited, it may be challenging for the Emissions Reduction Fund to distinguish between additional emissions reduction projects and those that would have occurred under business-as-usual situations. In these circumstances, the most practical approach may be for the Emissions Reduction Fund to encourage ambitious projects that clearly go beyond common practice. Several submissions supported this approach to additionality.

*It is important that emissions reductions funded through the ERF are additional. Actions which go beyond common place should be not only above regulatory requirements but should go above standard practice. If an action is common place, even if not regulated, it should not be credited as additional. (Council of Capital City Lord Mayors)*

*It is strongly recommended that the Fund be utilised to catalyse delivery of the full abatement potential (and address additionality concerns) by taking a 'whole of house' approach which requires packaging of the low cost energy efficiency actions with more extensive retrofit measures that, individually, have longer payback periods such as insulation and heating, ventilation and air conditioning (HVAC). (ClimateWorks Australia)*

Established metrics, such as the National Australian Built Environment Rating System (NABERS) and the Greenhouse and Energy Minimum Standards (GEMS), could provide a practical way for the Emissions Reduction Fund to identify activities and equipment upgrades that are beyond common practice.

For example, rather than crediting incremental improvements in building energy efficiency, which could be business as usual, a method could require building upgrade projects to achieve a prescribed minimum level of improvement based on the NABERS rating system. This approach would encourage projects that are most likely to deliver real and additional emissions reductions.

### 2.3.5 Crediting periods

Government programmes will typically deliver best value for money where they provide incentives for new activities that deliver community and business benefits, and become self-supporting. Businesses tend to become more efficient over time as they work to stay competitive in the marketplace and as a result of technological advances. This means that, over time, emissions reduction activities that receive government funding to get started will become business as usual.

The Emissions Reduction Fund will ensure value for money by crediting projects for a single defined 'crediting period'. The crediting period is the period of time over which a project is likely to deliver additional emissions reductions and can create Australian Carbon Credit Units. The crediting period is different to the contract period (discussed in Section 3.2.2).

This approach will ensure that funds continue to target new projects and encourage new private investment in emissions reduction activities—continually building on previous gains.

Consistent with the Carbon Farming Initiative, the standard crediting period under the Emissions Reduction Fund will be seven years.

To provide flexibility, methods can also provide for shorter, three-year crediting periods or longer, 10-year crediting periods in certain circumstances. This recognises that some activities are likely to remain additional to business as usual for significantly shorter or longer periods than the standard seven-year crediting period.

For example, while a seven year crediting period would be provided for a whole-of-building energy efficiency upgrade, a shorter crediting period could be considered for some space heating projects that are likely to become business as usual very quickly.

Conversely, large and ambitious projects with the potential to make a substantial single contribution towards reducing Australia's emissions may require longer crediting periods. These projects could be provided with a 10-year crediting period (see Section 2.8 for more detail on large projects).

In addition, the Carbon Farming Initiative provides 15-year crediting periods for reforestation projects. The Government is currently developing a soil carbon methodology and intends to make a 15-year crediting period available for soil carbon projects. These activities will continue to have 15-year crediting periods following the transition of the Carbon Farming Initiative to the Emissions Reduction Fund.

## 2.3.6 Australia's National Greenhouse Gas Inventory

Methods must provide credible ways of estimating emissions. Estimation methods must be supported by scientific evidence or other data, and be based on conservative assumptions to avoid over-crediting. Applying conservative assumptions will increase the effectiveness of the Emissions Reduction Fund by ensuring that each credit represents at least one tonne of CO<sub>2</sub>-e.

For a project to assist Australia in meeting its five per cent emissions reduction target, emissions reductions delivered by the project must be included in Australia's National Greenhouse Gas Inventory.

The National Greenhouse and Energy Reporting Scheme (see Box 2.4) provides credible, practical and well-established approaches to estimating emissions from different sources. Over several years, the Government has worked closely with business to develop, refine and streamline these approaches. These approaches are consistent with those applied in compiling Australia's National Greenhouse Gas Inventory, which is used to report on progress towards Australia's target.

### **Box 2.4: The National Greenhouse and Energy Reporting Scheme**

The National Greenhouse and Energy Reporting Scheme was a deregulation initiative taken by the Howard Government in 2007. A key object of the National Greenhouse and Energy Reporting Act 2007 was to provide a single national scheme for the collection of energy and emissions data, and to remove the need for inconsistent and duplicative reporting of this data across jurisdictions. A number of submissions suggested that the Government should further streamline arrangements under the National Greenhouse and Energy Reporting Scheme:

*... the Government must examine approaches to streamlining NGERs, consistent with the requirement for detailed emissions information from industry. Whilst there have been a number of welcome changes to NGERs over the past year, more extensive reform is possible to improve the efficiency of reporting for companies through streamlining reporting obligations without affecting the quality of data collected. (Australian Industry Greenhouse Network)*

*This review should have as one of its core purposes a significant simplification of current reporting obligations, consistent with the Government's overall red tape and green tape reduction programme. (Australian Petroleum Production and Exploration Association)*

Since the introduction of the scheme, the Government has worked with business to identify areas where reporting obligations can be simplified and streamlined. Recent amendments to the National Greenhouse and Energy Reporting Regulations 2008 will deliver a reduced compliance burden for many businesses over the coming months as they prepare their 2013–14 reports.

The Government will continue to work with businesses to identify further areas where the National Greenhouse and Energy Reporting Scheme can be streamlined without reducing the integrity and value of the data collected.

Where possible and applicable, emissions reduction methods will use estimation approaches established under the National Greenhouse and Energy Reporting Scheme. Many businesses already report emissions and energy use using this system and are familiar with its operation. The use of these estimation approaches under the Emissions Reduction Fund will streamline reporting processes and make it easier for businesses to participate.

*The ERAA supports the use of NGERs for the reporting and measurement of emissions under the ERF, and believes that the Clean Energy Regulator is well suited to administer the ERF. (Energy Retailers Association of Australia)*

*The National Greenhouse and Energy Reporting Scheme (NGERS) has the national scope, guidelines, and reporting history to be a sound basis for future reporting. (Australian Aluminium Council)*

Where methods include sources of emissions that are not covered by the National Greenhouse and Energy Reporting Scheme, such as emissions from agriculture, estimation methods must be consistent with those used to compile Australia's National Greenhouse Gas Inventory.

### 2.3.7 Timing of crediting and 'deeming'

The Green Paper set out the principle that the Emissions Reduction Fund would not provide upfront payments for emissions reductions. Rather, payments would only be made once emissions had been measured and verified. A number of submissions noted that this principle is different to approaches commonly applied in other crediting schemes, such as existing state-based energy savings schemes. Submissions also argued that upfront payment (which requires 'deeming' of emissions reductions over the lifetime of the project) can be important for encouraging the take-up of energy efficiency by households and small businesses.

*To provide sufficient commercial incentive to attract genuinely additional abatement, the ERF needs to provide a forward payment of savings wherever there is a strong evidence base for doing so. (Energy Efficiency Certificate Creators Association)*

Some submissions suggested that payments could be made once a project is implemented in areas where future emissions reductions are highly certain. For instance:

*For basic and predictable energy efficiency upgrades, metrics should be established that would enable completion of a contract once plant or equipment is verified as installed. For example: where a project involves the retrofitting of energy efficient lighting, the reduction in energy use and greenhouse gas emissions will be highly predictable. To reduce administration and ongoing reporting costs, the amount of abatement should be deemed and paid in full once the lights are installed. (Australian Sustainable Built Environment Council)*

Other submissions opposed the upfront crediting of emissions reductions. For example:

*In terms of payments, the CIF and NLAA consider payment should be made on delivery of the abatement. (Cement Industry Federation and National Lime Association of Australia)*

*... deeming of abatement, whereby future abatement is considered to be delivered immediately, should be avoided. (AGL Energy)*

The Government recognises that upfront payment is a common and popular feature of energy savings schemes. However, providing payment upfront where emissions reductions can be deemed with confidence confers a benefit on these projects which is not available to projects that cannot deem but must measure emissions reductions as they occur. On balance, the Government remains of the view that the Emissions Reduction Fund should provide payment for all emissions reductions as they occur. This will ensure that public funds are always tied to real emissions reductions and that projects are competing on the same basis.

While the Emissions Reduction Fund will not provide upfront payment for emissions reductions, in certain circumstances methods will be able to use modelling or data to deem (or 'pre-calculate') emissions reductions from certain activities. The use of modelling is applied widely in comparable project-based emissions reduction programmes, including the Carbon Farming Initiative and state-based energy efficiency schemes. Where there is sufficient data to develop credible models or deemed approaches, this can reduce implementation costs for proponents by eliminating the need for highly dispersed, small-scale projects, such as energy efficiency improvements in households and small businesses, to be individually measured and verified. However, while emissions reductions would be deemed at the beginning of the project, credits would be issued as emissions reductions occur over time.

This approach was supported by some businesses. For example:

*... ACIL Allen expects that deeming will be a feature of some ERF methodologies. This need not be inconsistent with the Government's statements that payment for ERF actions is to be made 'on delivery'. It is entirely feasible for expected future abatement to be deemed upfront and subsequently result in a stream of payments over time to the ERF bidder. (ACIL Allen, for Lighting Council Australia)*

Emissions reduction methods will only provide for pre-calculation where there is strong certainty about future emissions reductions from an activity. When assessing new methods, the Emissions Reduction Assurance Committee will be able to seek advice from external experts on technical details and the evidence base for pre-calculation models and formulas.

## 2.4 Approving methods

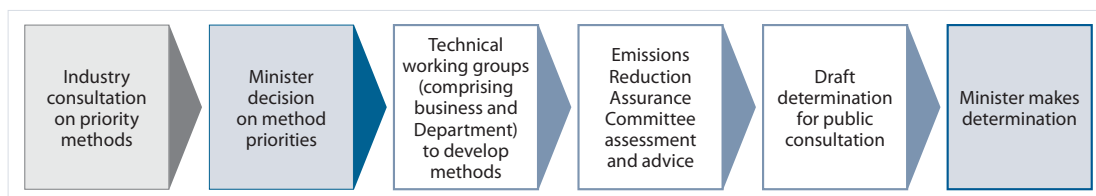
The Minister for the Environment will approve activity-based and facility methods that meet the requirements of the Emissions Reduction Fund and have business support. In approving methods, the Minister may take into account the potential volume of emissions reductions that could be delivered by the method and their speed to market. The process for developing and approving methods is shown in Figure 2.1.

The Government will work collaboratively with business, through technical working groups for different industry sectors, to develop emissions reduction methods. Technical working groups will propose methods to the Emissions Reduction Assurance Committee for review, before they are approved by the Minister. Technical working groups will ensure that emissions reduction methods are practical, cost-effective and apply to activities that have the potential for strong business uptake.

Information about the composition of technical working groups, their work programme and progress in developing new methods will be published on the Department of the Environment's website. Regular updates on the progress of technical working groups, including draft methods, will be provided through the *Emissions Reduction Fund Update*, which is published on the Department's website. This will give businesses and other interested parties opportunities to provide feedback on methods as they are developed.

The Emissions Reduction Assurance Committee will assess both activity-based and facility methods and provide independent advice to the Minister on whether they meet the requirements of the Emissions Reduction Fund. The Committee will ensure that methods are appropriately designed to generate real and additional emissions reductions. In carrying out their assessment of new methods, the Committee may seek advice from external experts on technical details and the evidence base for models and other elements.

**Figure 2.1: Method development and approval**



The Emissions Reduction Assurance Committee will begin reviewing methods for the Emissions Reduction Fund as they are developed. This will ensure that new methods are in place by the time of the first auction.

To assist technical working groups in developing methods, the Government will issue guidelines for method development that explain in more detail the requirements of the Emissions Reduction Fund and the issues that the Emissions Reduction Assurance Committee will consider when assessing whether methods would generate real and additional emissions reductions.

Technical working groups can seek preliminary advice from the Emissions Reduction Assurance Committee on the suitability of proposed approaches. This will help technical working groups to focus their efforts on the most prospective options.

The Emissions Reduction Assurance Committee will also monitor and review the effectiveness of emissions reduction methods over time. In carrying out these functions, the Committee could examine whether a method is continuing to drive additional emissions reductions and recommend amendments that account for changing market conditions. Each method will be reviewed at least once every four years.

The Minister will approve changes to methods following any review. Changes will apply to new projects. Approved projects will be able to continue to use the original agreed method.

Emissions reduction methods will be legislative instruments, as they are under the Carbon Farming Initiative, which means they must be made in accordance with the Emissions Reduction Fund legislation and can be disallowed by the Parliament. This will provide confidence to the community that methods are producing genuine emissions reductions and that the distribution of funds under the Emissions Reduction Fund is appropriately scrutinised.

## **2.5 Reporting and verification of emissions reduction projects**

The reporting and verification arrangements under the Emissions Reduction Fund will build on and streamline those already in place under the Carbon Farming Initiative.

Project proponents will need to report the emissions reductions achieved by their projects to the Clean Energy Regulator. The information that proponents will report will be set out in methods. To provide flexibility to proponents and assist in managing project cash flows, proponents can choose when to report emissions reductions achieved through their projects, provided that the reporting period is no shorter than six months and no longer than two years. Longer reporting periods will continue to be available for sequestration projects with longer crediting periods.

Emissions reductions must be independently verified once they have occurred to ensure they are genuine. To achieve this, proponents will submit assurance reports prepared by an independent auditor registered under the National Greenhouse and Energy Reporting Scheme. The Clean Energy Regulator will apply a risk-based approach to determine how often assurance reports will need to be provided, what they will need to cover and the level of assurance required.

The details of this approach will be published well in advance of the first auction to allow potential proponents to understand the likely verification requirements for their project.

This streamlined approach will maintain a high level of environmental integrity, while minimising administrative costs.



## 2.6 Project aggregation

Some emissions reduction activities such as revegetation and household and commercial energy efficiency are likely to be most cost-effectively implemented through aggregation. The Emissions Reduction Fund will encourage project aggregation so that small businesses, households and farm groups can benefit from the Emissions Reduction Fund without the costs of direct participation.

*... one way of reducing the administrative burden faced by smaller businesses is for third party aggregators to be involved in constructing bids for larger volumes of abatement to be delivered by actions undertaken by a number of separate businesses. (Pitt & Sherry)*

*Aggregation of many small projects across the industry would reduce participation costs for individual farmers or small companies, and encourage investment in improving their energy efficiency by reducing upfront capital costs. (Australian Dairy Industry Council)*

The Emissions Reduction Fund will encourage aggregation by removing barriers that might otherwise prevent companies and other organisations from developing business models to create economies of scale. For example, under the existing Carbon Farming Initiative, forestry and soil carbon projects can be aggregated only if the project developer owns or has a property interest in the project area. These arrangements will be streamlined under the Emissions Reduction Fund so that a project aggregator must only show that it has the agreement of landholders to participate in the project. Methods specific to very large, aggregated projects will also be developed as a priority (see Section 2.8).

The Government will also set up standard arrangements for transferring rights from households and small businesses to a project aggregator, as commonly exist under the Small-scale Renewable Energy Target and state-based energy savings schemes. Standard arrangements can encourage participation by small parties by reducing implementation costs and perceptions of risk. A number of submissions supported this approach:

*In relation to aggregation, the key role for Government is ensuring that the ERF design clarifies the rights and entitlements of small, less sophisticated entities such as households and small businesses when engaging with aggregators to deliver abatement, and ensuring that these entities cooperate with relevant verification or auditing requirements. ... This process can be clarified and strengthened by requiring:*

- *A standardised ‘assignment form’ whereby the small entity formally assigns the recognition for abatement in respect of a particular activity to the aggregator for the purpose of the ERF, as well as any liability for penalty due to non-delivery*
- *An explanation of the consumer’s rights and entitlements, including that the consumer should reasonably expect the aggregator to have offered a financial benefit to the consumer through the assignment process, and that the consumer is aware that they are not entitled to any further financial benefits from the Government after assignment*
- *A declaration that the consumer is willing to comply with reasonable requirements of a correctly appointed verifier or auditor in relation to the ERF. (ACIL Allen, for Lighting Council Australia)*

*There is also an opportunity to ensure appropriate information, produced independently of the aggregator, is publicly available to landholders to ensure that they can be informed of the risks and benefits of participating in an aggregated project. (National Farmers’ Federation)*



There is also potential for state, territory and local governments to play an important role in the Emissions Reduction Fund as aggregators of projects that target households and small businesses. State, territory and local governments have built up significant experience in delivering energy efficiency programmes. Many of these programmes offer grants or other forms of financial assistance to adopt more efficient technologies or practices. The Australian Government will work with state and territory governments to identify opportunities to deliver additional emissions reductions by leveraging these types of programmes.

Finally, the Government will support aggregation by simplifying and providing guidance on the application of regulatory frameworks for financial markets and financial services.

## 2.7 Priorities for method development

The Minister for the Environment will determine the priorities for method development in consultation with businesses through technical working groups supported by the Department of the Environment. The Minister may also seek the advice of the Emissions Reduction Assurance Committee.

Priorities will be established annually and published to ensure transparency. This will assist project developers and provide the market with information about the likely pipeline of projects.

The Minister will consider the following matters when determining the priorities for developing activity methods:

*1. The potential uptake of the method and the likely volume of emissions reductions.*

Potential uptake and the likely volume of emissions reductions from a method will depend on the size of the emissions source targeted by the activity, the cost-effectiveness of the activity and whether potential technologies to be employed have reached a stage of commercial readiness. The Minister will also consider the level of business support for the uptake of the activity.

*2. Whether emissions reductions can be estimated with a reasonable degree of certainty and at an acceptable cost.*

This will ensure that straightforward methods, which can be developed quickly, are established first. For example, emissions from coal mine gas capture are already covered by the National Greenhouse and Energy Reporting Scheme. Box 2.5 provides more detail.

### **Box 2.5: Approaches to determining emissions reductions**

Some methodological approaches are more straightforward than others. It is easier to accurately estimate the impact of uptake—rather than production—of lower emission technologies or inputs. For example, emissions reductions from adopting LPG vehicles will be easier to estimate than emissions reductions from supplying LPG vehicles to the market at lower cost.

Similarly, it is usually easier to estimate changes in emissions that are directly within the control of the project proponent than to estimate changes in emissions over the lifecycle of a product (also called ‘lifecycle analysis’).

*3. Whether the activity could have adverse social, environmental or economic impacts.*

Some activities could have adverse social, environmental or economic consequences. It would be inconsistent with the Government’s broader policy objectives to provide incentives for these activities through the Emissions Reduction Fund.

For example, destocking land of cattle could have adverse social and economic consequences, undermining the Government's regional economic development objectives. However it may be appropriate to undertake destocking in areas specifically set aside for conservation.

*4. Whether the activity could be promoted more efficiently through other government measures.*

This will ensure that Emissions Reduction Fund incentives are being targeted efficiently. For example, direct funding approaches may not be the most efficient means of increasing the uptake of more efficient vehicles or appliances because choices are often affected by non-price considerations such as size, colour, function and branding. This means that even relatively large incentives may do little to change consumer preferences. In these circumstances, emissions reductions are likely to be achieved more efficiently through other measures, such as minimum energy performance standards.

Similarly, the Renewable Energy Target provides incentives for renewable energy projects.

## 2.8 Large projects

While broadly-based methods will be an efficient way to encourage common types of emissions reduction projects, they may not adequately cover complex projects with the potential to deliver large volumes of genuine emissions reductions over a longer period. Due to their size and significance, methods that are tailored to these types of projects could be the best way to encourage projects that will make a substantial single contribution towards reducing Australia's emissions.

Proponents of large projects, which have the potential to deliver more than 250 000 tonnes of emissions reductions a year on average, can propose the priority development of a bespoke method for their project. The Minister will have flexibility to amend the priority list for methodology development to include these methods.

Projects that are likely to remain additional for longer than the standard seven-year crediting period and are likely to deliver more than 250 000 tonnes of emissions reductions a year on average will also be provided with 10-year crediting periods (see Section 2.3.5 for more detail on crediting periods).

## 2.9 Tax treatment of Australian Carbon Credit Units

The taxation treatment of eligible Australian Carbon Credit Units (as defined in existing and proposed legislation) created under the Emissions Reduction Fund is intended to be consistent with arrangements currently in place under the *Carbon Farming Initiative Act 2011*. If issued under the *Carbon Farming Initiative Act 2011*, eligible Australian Carbon Credit Units will be GST-free.

Payments received for undertaking projects under the Emissions Reduction Fund would be income for taxation purposes. Standard deduction allowances for costs incurred in the process of generating such income will apply.

## 3. Purchasing emissions reductions

The Emissions Reduction Fund will be built around a transparent and streamlined process to purchase emissions reductions at the lowest cost across the economy. Businesses can submit their projects into a competitive bidding process run by the Clean Energy Regulator. The Clean Energy Regulator will select projects with the lowest cost per tonne, and will enter into contracts to purchase the emissions reductions from these projects.

Projects that reduce emissions typically deliver valuable co-benefits. Energy efficiency projects can help households and businesses reduce their electricity bills. Energy can be produced using waste methane from landfills, coal mines and waste water treatment facilities. Capturing methane can reduce odour and improve safety. Revegetation will improve water quality, and reduce erosion and salinity. Replenishing the carbon content of soils will improve the health and productivity of Australian farms.

Businesses will take advantage of co-benefits from emissions reduction projects that let them become more competitive on the global stage. These important co-benefits will reduce the level of funding required under the Emission Reduction Fund to make projects viable. The competitive nature of the auction process will create incentives for businesses to submit their best bids, taking co-benefits into account, and ensure that value for money is achieved.

In this way the Emissions Reduction Fund will provide financial support, as a supplement to other project benefits to bridge the gap and make emission reduction projects cost effective.

Auctions have also been used in Australia and overseas to identify the lowest cost for emissions reductions and other types of environmental goods and services (see example in Box 3.1).

### **Box 3.1: The United Kingdom Non-Fossil Fuel Obligation Scheme**

The Non-Fossil Fuel Obligation Scheme in the United Kingdom (1990–98) was a reverse auction for the United Kingdom Government's purchase of renewable energy from new renewable energy installations. The scheme began with a tender, where project bids included a 'cost justification', along with a price. This allowed the United Kingdom Government to gather information on likely costs, helping to set price ceilings in future auctions.

In designing the Emissions Reduction Fund, the Australian Government has taken into account lessons learned from the Non-Fossil Fuel Obligation Scheme. For example, the Clean Energy Regulator will assess the commercial readiness of projects and the credibility of their emissions reduction estimates prior to auction. Contracts will also include make-good provisions to support delivery of emissions reductions.

This chapter sets out the process for businesses to secure funding for their projects from the Emissions Reduction Fund.

## 3.1 Identifying lowest-cost projects

The Emissions Reduction Fund Green Paper indicated that projects will be selected using a competitive approach, involving either a tender process or an auction. Box 3.2 considers some key differences between these two options. In submissions to the Green Paper, some businesses supported a tender approach, while others preferred an auction, but most did not express a strong preference.

*AFPA would support the initial auctions being conducted via a tender process as it allows market forces to determine the lowest cost abatement options through competition. This would be easily comprehended, administratively simple, and transparent. (Australian Forest Products Association)*

*Origin is familiar with the sealed bid auction mechanism as proposed in the Green Paper and supports it as a reasonably simple and efficient platform for this purpose. (Origin Energy Limited)*

### Box 3.2: Tenders versus auctions

A tender typically involves assessment of projects against a range of criteria. A multiple criterion approach is often suited to programmes with multiple objectives. By contrast, an auction is a rules-based approach where no decision or judgement is required. Auctions typically work best when they focus on a single criterion—often price—and rank bids (or projects) based on this criterion. For this reason, auctions operate most effectively in programmes with a single clear objective.

Both approaches provide a competitive process that can help to identify lowest-cost emissions reductions. On balance, the Government has decided to use auctions to select projects from the start of the Emissions Reduction Fund.

### 3.1.1 Auctions

Auctions will have a straightforward format that makes it easy for business to participate in the Emissions Reduction Fund. The Clean Energy Regulator will conduct auctions according to transparent guidelines and procedures to ensure that projects are ranked fairly according to their cost.

Auctions will be conducted solely with regard to the criterion of cost, with other project attributes such as project risk and commercial readiness being assessed in the pre-qualification phase. This process will ensure that all projects meet minimum requirements, rather than ranking or weighting bids. More information on pre-qualification requirements is set out in Section 3.1.3.

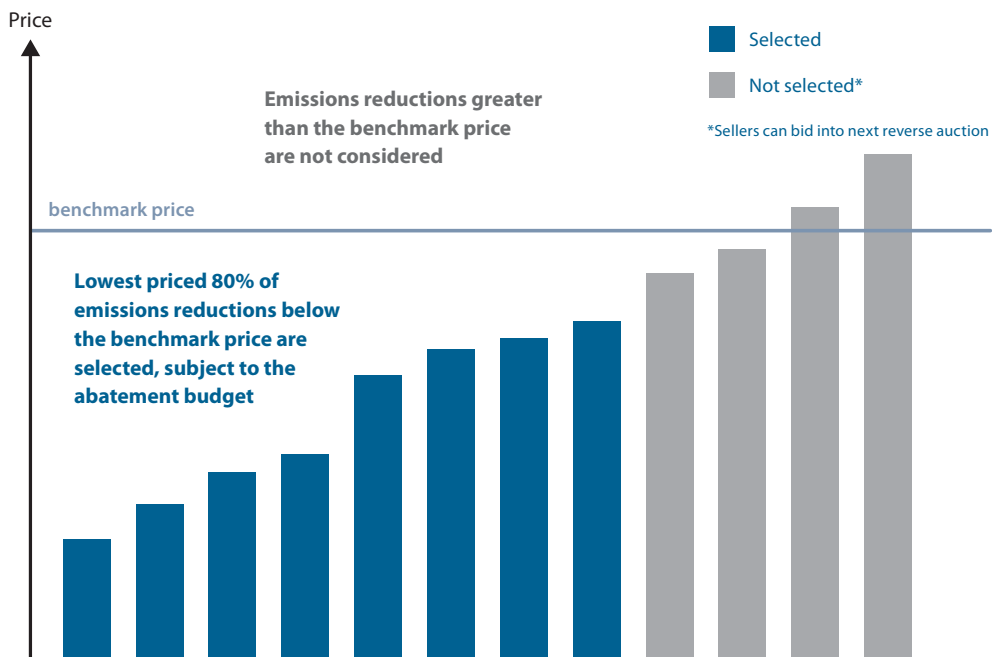
Participants will submit a bid—specifying a price per tonne of emissions reductions—with the lowest-cost projects being selected. Participants will not be able to see what other companies are bidding as bids will be ‘sealed’ or secret. Successful participants will be paid the price that they bid (often called a ‘pay-as-bid’ auction).

Competition at auction is needed to provide an incentive for businesses to offer emissions reductions at their lowest cost. The Government will engender competition by purchasing only 80 per cent of the emissions reductions offered for sale at an auction at prices below the maximum that the Government is willing to pay. This is illustrated in Figure 3.1. Where a project straddles the 80 per cent threshold, the entire project would be treated as though it is below that threshold. For more information on the maximum, or ‘benchmark’ price, see Section 3.1.2.

Participants will only be able to submit one bid for each project and it will not be possible for emissions reductions from a project to be divided into ‘parcels’ and included in separate auction bids.

Consistent with standard auction practice, once a project is successful at auction it cannot be re-bid into a later auction. However, if a business is not successful at an auction then it can bid into a subsequent auction for that project.

**Figure 3.1: Emissions Reduction Fund reverse auctions**



It is important that auctions take place in a fair and orderly manner, and participants have confidence that this is the case. Participants will be subject to the *Competition and Consumer Act 2010* and the *Criminal Code Act 1995*, which prohibit and penalise collusion and other misconduct designed to influence prices or manipulate auction outcomes.

The Clean Energy Regulator will conduct auction rounds in accordance with published guidelines and procedures. The Regulator will have the flexibility to adjust procedures in response to lessons learned about the operation and efficiency of the auction. Business will be given advance notice of adjustments to auction rules.

### 3.1.2 Benchmark price

To ensure value for money, the Clean Energy Regulator will apply a benchmark price—which is the maximum amount it will pay for emissions reductions. Only bids costing less than the benchmark price will be considered.

The Clean Energy Regulator will set the benchmark price in advance of each auction, having regard to factors such as:

- the overall objective of achieving low-cost emissions reductions
- the observed cost per tonne of emissions reductions in projects previously bid at auction
- the amount of funding allocated at previous auctions, and
- emissions reductions required to meet the five per cent target.

Businesses expressed differing views on whether the benchmark price should be revealed in advance of the auction. Some supported the benchmark price remaining confidential to discourage bidders from inflating their bids.

*InterGen supports the application of a benchmark price and also supports the Federal Government keeping this element of its policy confidential to ensure genuinely competitive tender rounds. (InterGen)*

Others observed there may be disadvantages to the benchmark price remaining confidential:

*To have a probable chance of success, organisations might need a benchmark upper price or an indicative price range. However, the green paper indicates that the price cap will be confidential, which will increase the risk for bidders. (Institute of Chartered Accountants Australia)*

*We note that under the current proposal, the benchmark price (under which bids will be accepted) will be commercial-in-confidence... to encourage businesses to put in their most competitive bid; however we question whether it may have the effect of discouraging bids in the first place, given the costs of bid preparation. (Independent Pricing and Regulatory Tribunal)*

The Government acknowledges the trade-offs in policy design identified by submissions on this issue. The Clean Energy Regulator will publish the weighted average price paid across successful bids following each auction. This will provide information to future participants about auction prices and support the development of projects. Section 3.4 contains further details about information that will be published.

However, as no price information will be available prior to the first auction, there may be a policy case for publishing the benchmark price in advance of this auction only. To encourage early participation in the Emissions Reduction Fund, the Clean Energy Regulator will have the discretion to publish the benchmark price for the first auction. The benchmark price will not be revealed in advance of subsequent auctions.

### 3.1.3 Pre-qualification requirements

Businesses will have greater confidence in the conduct of auctions if there are arrangements in place to ensure participation of only genuine bidders and credible bids. A number of submissions identified the importance of pre-qualification requirements to promote a credible and efficient auction process.

*As noted, pre-qualification processes are appropriate to ensure that projects that succeed at auction are more likely to deliver the abatement expected. Any pre-qualification requirements should relate exclusively to the ability of the project and proponent to succeed... (Australian Industry Group)*

The Clean Energy Regulator will ensure that only bids that meet pre-qualification requirements will be considered at auction.

Projects must be registered before a bid can be submitted. To register a project, participants will need to confirm their identity and probity and propose a schedule of annual emissions reductions estimated in accordance with an approved measurement method. The Clean Energy Regulator will review the credibility of emissions reduction estimates and assess the commercial readiness of the technology or practice to be employed in the project. The Regulator will also take account of a proponent's history of compliance with Emissions Reduction Fund contracts or related legislation. For example, the Regulator could exclude bids from participants that have previously been successful at auction but who failed to successfully complete delivery under the resulting contract.

### 3.1.4 Minimum bid size

The Emissions Reduction Fund Green Paper discussed a minimum bid size to encourage the aggregation of smaller activities and help streamline the application process for smaller entities. Some businesses supported a minimum bid size, while others did not.

*The Master Builders does not support the proposal for minimum bid sizes, which by their very nature exclude, and thus likely disadvantage, small business. (Master Builders Australia)*

*A minimum bid size may be applied to streamline project assessment by the CER and encourage aggregation. Council considers minimum bids in the range of 10,000 to 25,000tCO<sub>2</sub>-e (over 5 years) to be appropriate. (Brisbane City Council)*

Having considered the range of views, the Government has settled on an initial minimum bid size of 2000 tonnes of CO<sub>2</sub>-e a year on average over the life of the contract. The Clean Energy Regulator will have the flexibility to adjust this threshold over time, to balance the objectives of identifying emissions reductions at the lowest cost and managing administration costs. The minimum bid size could be increased, for example, as the aggregation market matures and small projects have greater opportunity to participate in the Emissions Reduction Fund through aggregated projects.

The minimum bid size will not apply to projects approved under the Carbon Farming Initiative before its incorporation into the Emissions Reduction Fund. This will assist in the transition of these projects into the Emissions Reduction Fund.

### 3.1.5 Auction schedule

Auctions will be held regularly to provide opportunities for business to access the Emissions Reduction Fund.

Four auctions will be scheduled for the first year. This will provide regular opportunities for participation as new methods become available and more projects are approved. The Regulator will publish an indicative forward schedule of auctions over the subsequent 12 months.

A project proponent must register to participate in an auction. To ensure competition, each auction must have a minimum number of registered bidders and amount of emissions reductions. Once there are enough registered bidders to hold an auction, the Clean Energy Regulator will confirm the auction date with four weeks' notice to allow participants to finalise and submit their bids.

## 3.2 Contracting for successful projects

After the auction, the Clean Energy Regulator will enter into contracts, on behalf of the Commonwealth, with successful bidders to purchase emissions reductions. These contracts will set out the Government's obligation to pay for emissions reductions and a participant's obligation to deliver them.

### 3.2.1 Contracts

Contracts will provide proponents with certainty about the payment schedule and conditions, and could be used to finalise finance.

In particular, contracts will include a schedule nominating a quantity of emissions reductions each year and the price that the Government will pay. The Government will only pay for emissions reductions after they have occurred and been issued with credits.

Contracts will include conditions to secure project finance and any necessary regulatory approvals, such as planning and environmental approvals. The Clean Energy Regulator will have the option to terminate a contract if these conditions are not met within a reasonable timeframe.

Together with the auction pre-qualification requirements, contract conditions will provide confidence that proposed projects will deliver the expected emissions reductions.

Some projects will already have begun generating credits under the Carbon Farming Initiative. For these existing projects, both the credits that have already been generated and those yet to be generated can be bid into the auction.

### 3.2.2 Contract period

The contract period is the period over which the Government will guarantee to purchase emissions reductions. In the Green Paper, the Government proposed that the contract period could be up to five years. While a project will be bound by a contract immediately after having been successful at auction, the contract period will not commence until certain conditions, such as financing and regulatory approvals, have been met.

Many businesses indicated that five years may be too short, as many projects reduce emissions over a longer timeframe.

*Westpac would support extending the available contracted period to ten years. Previous experience with a range of CFI projects would indicate that a contract period of five years may act as a disincentive for securing project finance for some projects, particularly in project types where abatement delivery ramps up over time to deliver significant scale but over a longer timeframe. (Westpac)*

*... the five-year time period for bids is of concern. The government should consider whether the five-year timeframe will lead to higher than expected bidding prices as project proponents front-end the costs of proposals to manage risk... (Business Council of Australia)*

*The five year limit has been raised by a wide variety of Ai Group members as a serious disincentive to participation in the ERF. Most abatement projects will involve substantial upfront investment producing abatement over a long period, often after a significant delay. (Australian Industry Group)*



The Government's preference is that contracts will be for five years. However, the Government understands the concerns raised by business on this issue and will undertake targeted market testing of contractual terms, including in relation to alternate contract lengths, prior to the first auction. Further details about this process are set out in Section 3.2.3.

A five year contract period means that, in many cases, the standard seven-year crediting period will extend beyond the contract period. Once a project has been successful at auction, it will not be able to seek additional funding through a future auction. However, it will be possible for credits generated beyond the contract period to be sold to other businesses. For example, businesses that cannot deliver emissions reductions from their own project will need to source replacement credits from another project (see Section 3.3.1 on make-good provisions). Alternatively, credits could be sold into the voluntary carbon market.

### 3.2.3 Market testing

Businesses have suggested a number of ways in which contract periods may have important implications for businesses' commercial decision-making.

For example, contracts under the Emissions Reduction Fund will provide an initial period of certainty to project proponents. They will also provide a guarantee to businesses about the quantity and price of Australian Carbon Credit Units that can be sold to the Government.

While proponents could create and sell credits following this initial contract period (for example, into voluntary carbon markets), proponents will nonetheless typically aim to recover their project costs and achieve an appropriate commercial return within the contract period. Therefore, different contract periods are likely to influence the types of projects that proponents bring forward to the Emissions Reduction Fund.

The Government accepts that the effect on commercial decision-making is a key element in determining the appropriate length of the contract period. However, many of the issues that are relevant to this matter are internal to businesses' decision-making and are often of a commercial-in-confidence nature.

As part of its ongoing consultation with business, ahead of commencing the Emission Reduction Fund, the Government will commission a commercial consultant to undertake a market assessment of projects proposed to be bid into the Fund by business and the commercial impacts of alternative contract lengths.

This process will focus on market factors that affect the viability of different projects under alternative contract lengths. It will examine potential projects across a number of key sectors.

The private sector consultant commissioned to undertake this task will seek feedback from businesses on their experience in implementing emissions reduction projects, and the commercial challenges they have confronted. In providing advice to the Government, the private sector consultant will ensure that businesses' input remains confidential.

This market testing process will be completed prior to the first auction so that proponents can incorporate its outcomes as they prepare their bids.

### 3.2.4 Encouraging large projects

Large projects that deliver low-cost emissions reductions can play an important role in reducing Australia's emissions and minimising the administrative costs of the Emissions Reduction Fund. Submissions provided feedback that the Emissions Reduction Fund needs to make special provisions for large projects.

*In order to enable an appropriate return within 5 years, it is possible larger projects with greater abatement potential will require a higher cost per ton abatement, effectively requiring parties to overprice projects that would otherwise (with a longer term) create more abatement at a cheaper price for a longer term. (Energy Users Association of Australia)*

The Government recognises that some projects may deliver large volumes of emissions reductions and the Emissions Reduction Fund should provide incentives for such projects.

The Government will retain discretion to enter out-of-auction contracts for major projects which can deliver emissions reductions above 250 000 tonnes of CO<sub>2</sub>-e per year, on average, or 1.25 MtCO<sub>2</sub>-e or more over the contract period. To enable this, the Clean Energy Regulator will be given the flexibility to use different types of procurement and tendering processes.

### 3.2.5 Standard contracts

Participants must agree to be bound by the standard contract as a condition for auction participation. The use of standard contract terms and conditions will allow the lowest cost emissions reductions to be identified efficiently and transparently, as participants will be subject to largely the same terms. The standard contract terms used may differ for project aggregators, given the different business models that such arrangements may involve.

Contracts will detail the price, quantity and delivery time for emissions reductions, as specified in the successful bids. Responsibility for managing the project, undertaking reporting and compliance and delivering the required emissions reductions will rest with the project proponent, who is best placed to manage project risks.

The final design of the standard contract will be developed in consultation with businesses and the legal profession and will be available well in advance of the first auction.

## 3.3 Ensuring delivery of emissions reductions

On-time delivery of emissions reductions will help the Emissions Reduction Fund to achieve efficient emissions reductions.

### 3.3.1 Managing under-delivery

The Government set out in the Green Paper that contracts could include make-good provisions to support the delivery of emissions reductions. Make-good provisions are a common contractual tool requiring parties to fulfil their obligations through alternative means when they are unable to satisfy the original terms of the contract. In this case, they protect taxpayers' interests and ensure value for money.

While some business groups saw make-good provisions as a disincentive to participation, others were of the view that make-good provisions would support the underlying objective of the Emissions Reduction Fund. For example:

*The NFF supports the inclusion of make-good provisions in contracts if the proponent is unable to deliver the emissions reductions. Our view is that such provisions can assist in underpinning the integrity of the ERF.*  
(National Farmers' Federation)

*ASBEC supports the proposal for 'making-good' on contractual shortfalls... (Australian Sustainable Built Environment Council)*

After considering the different views put forward in submissions, the Government has decided that contracts will include flexible make-good provisions to support the delivery of emissions reductions.

Make-good provisions will apply if a proponent is unable to deliver emissions reductions through their own project. A proponent that does not deliver contracted emissions reductions can obtain emissions reductions from another project. For example, a proponent that generates more Australian Carbon Credit Units than the Government has contracted to purchase could sell their excess credits to participants that need to make up a shortfall under make-good provisions.

Replacement credits must be sourced from domestic projects to ensure that Emissions Reduction Fund monies are directed towards reducing Australia's emissions, improving the productivity of Australian businesses and supporting the domestic carbon market.

The Government will pay the contract price originally established at auction for emissions reductions delivered under make-good provisions.

In line with normal commercial practice, contracts may also make provision for liquidated damages that could be payable by the proponent if make-good requirements are not met.

### 3.3.2 Contract variations

Projects will be subject to a range of uncertainties that could affect the timing and amount of emissions reductions delivered. Many are beyond a company's reasonable control and will be set out in the contract. For example, a project could be affected by natural events such as floods or fires. Measured emissions reductions from energy efficiency projects may also be affected by changes in the emissions intensity of upstream electricity generation. The contract will enable the Clean Energy Regulator and the business to vary the quantity and schedule for delivery of emissions reductions if the project or measured emissions are affected by these specified circumstances. Other standard terms and conditions will not be varied. Natural events such as bushfire for land sequestration projects will continue to be managed through the 'risk of reversal' buffer that currently operates under the Carbon Farming Initiative.

## 3.4 Publication of information

Businesses have indicated that the publication of price information will be important to help them assess the opportunities available under the Emissions Reduction Fund and make informed decisions about whether to develop a project.

*The Paper refers to aggregated information being published on each auction round, including the total amount of emissions reductions offered in the successful bids and the total amount of funding allocated to successful bids, but we are concerned this level of information disclosure does not go far enough to allow price discovery. Consideration should be given to at least publishing the range of successful bid prices and the emissions reductions at various price intervals. (Plastics and Chemicals Industries Association)*

The Clean Energy Regulator will publish the weighted average price awarded to successful projects after each auction to provide information to the market and help future participants to determine whether their project is likely to be successful.

In addition, aggregated information will be published each year, including information on:

- the total amount of emissions reductions offered in the successful bids
- the total amount of funding allocated to successful bids
- the total number of Australian Carbon Credit Units purchased, and
- the total funding spent on purchased Australian Carbon Credit Units.

After each auction, the Clean Energy Regulator will also publish details of each contract it enters, including the name of the emissions reduction provider, the name of the project, the relevant auction date, the total amount of emissions reductions to be delivered, and the duration of the contract.

This information will be included on the Emissions Reduction Fund Register (see Section 2.1).

### 3.5 Voluntary market

The Australian Government currently administers the National Carbon Offset Standard, which ensures that carbon neutrality claims are robust and credible. This programme has been effective in supporting the growth of a strong voluntary carbon market in Australia. Some organisations suggested that the Government should continue to support the voluntary carbon market and streamline arrangements underpinning the National Carbon Offset Standard. For instance:

*The CCCLM also supports expansion and further streamlining of voluntary emissions reduction programs already assisting Australia to reduce emissions. For example, streamlined administration, including risk based verification, should also apply to the National Carbon Offset Standard (NCOS) Carbon Neutral Program, in the same way that the Green Paper proposes for the ERF ... Despite being voluntary, the reporting and verification requirements and costs of participating in the NCOS Carbon Neutral Program can be onerous, making it a disincentive to participate. (Council of Capital City Lord Mayors)*

The Government will continue to support voluntary carbon markets by ensuring that businesses can sell Australian Carbon Credit Units into those markets. This will ensure there remains a supply of credible carbon units for households, businesses and other organisations who wish to offset their emissions. The Government will cancel a Kyoto unit where Australian Carbon Credit Units are retired by participants in the National Carbon Offset Standard Carbon Neutral Program.

The Government will review the National Carbon Offset Standard later in 2014 to ensure that it is meeting its aims efficiently and effectively.

The Government will also take voluntary action, including household purchases of Green Power, into account when considering the post-2020 architecture of the Direct Action Plan in 2015.

It will be possible for overseas buyers to own Australian Carbon Credit Units. However, the Australian Government will not export credits into foreign registries for at least three years as this will make it harder for Australia to meet its five per cent emissions reduction target.

Future arrangements concerning the export of Australian Carbon Credit Units will be examined as part of the 2015 review of the Emissions Reduction Fund.

## 4. Safeguarding emissions reductions

The Emissions Reduction Fund will provide incentives through its crediting and purchasing elements for businesses to reduce emissions below historical business-as-usual levels. It will also encourage businesses not to go above historical emissions levels through the safeguard mechanism.

The safeguard mechanism will protect taxpayer funds by ensuring that emissions reductions paid for through the Emissions Reduction Fund are not displaced by a significant rise in emissions elsewhere in the economy.

The safeguard mechanism will provide business with a stable and predictable policy landscape within which to make new investments by setting clear expectations about future emissions levels. It will be designed so that businesses will not be subject to any new mandatory reporting requirements. This chapter outlines policy decisions the Government has taken relevant to the Emissions Reduction Fund's safeguard mechanism and those on which it will continue to consult with business.

The Government has made decisions on:

- which entities will be covered and what emissions will be included (coverage), and
- how the level of emissions baselines will be determined (baselines).

The Government will continue to consult on:

- what action would be required from businesses if baselines levels are exceeded (compliance), and
- options for the treatment of new investments.

### 4.1 Commencement of the safeguard mechanism

In response to the Green Paper, businesses have highlighted the need for an enduring framework that provides long-term investment certainty.

*Central to encouraging growth and investment in any sector, particularly projects with long operating lives, is having an environment of policy and regulatory certainty. A stable regulatory framework which is established with a long term outlook is critical to the achievement of rates of return that ensure economic efficiency throughout the industry and the economy more broadly. (AGL Energy)*

The Green Paper raised the possibility of the safeguard mechanism starting on 1 July 2015 rather than when the crediting and purchasing elements of the Emissions Reduction Fund start.

In light of strong support from businesses for this implementation timeframe, the Government will start the safeguard mechanism on 1 July 2015. This will allow time to consult comprehensively with business on the details. In the meantime, businesses will have the opportunity to access the Emissions Reduction Fund's crediting and purchasing elements before the safeguard mechanism starts to let them start reducing their emissions.

### 4.2 Coverage

The objective of the safeguard mechanism is to ensure that emissions reductions purchased through the Emissions Reduction Fund are not displaced by a significant rise in emissions elsewhere in the economy. In response to the Green Paper, some businesses suggested that the coverage of the safeguard mechanism should be broad to cover as many of Australia's emissions as possible.

*The coverage should be inclusive of all industries actively involved in the economy. BP does not support the commentary suggesting that only NGERs reporters be subjected to the safeguarding mechanism. The burden of safeguarding Australia's emissions to retain the value of the emissions reductions should be equally shared across the economy. (BP Australia)*

*To meet the objective of driving emissions reductions across the Australian economy, the safeguarding mechanism needs to apply broadly across all sectors of the economy. (Santos)*

Other submissions suggested that the Government's goals would be best achieved by the safeguard mechanism covering a substantial proportion of Australia's emissions, while keeping the number of businesses covered to a minimum.

*Setting coverage to capture a large number of organisations will therefore generate significant administrative costs for little gain. (Simcoa Operations)*

*The Green Paper proposes that coverage could be set at a level that maximises emissions coverage but minimises the number of entities that would be covered under the safeguard mechanism. This approach has merit. (Carbon Market Institute)*

The Government will implement its policy objectives in the most efficient way possible. The coverage of the safeguard mechanism will therefore be set with the aim of finding the appropriate balance between covering a substantial proportion of Australia's greenhouse gas emissions and minimising the number of affected businesses.

The safeguard mechanism will not impose new mandatory reporting obligations on existing businesses. Coverage will be limited to a subset of companies that report emissions under the National Greenhouse and Energy Reporting Scheme. Restricting the coverage of the safeguard mechanism to these entities will ensure that small businesses, which do not have significant emissions, are unaffected.

Two sources of emissions are reported under the National Greenhouse and Energy Reporting Scheme: direct emissions and indirect emissions from energy consumption. The safeguard mechanism will apply only to direct emissions because electricity generators will be responsible for the direct emissions arising from electricity production. Most indirect emissions arise from electricity use and covering those while also covering the electricity sector would unnecessarily duplicate the application of the safeguard mechanism.

The safeguard mechanism will apply at the facility level rather than the company level and will be restricted to facilities with direct emissions of 100 000 tonnes of CO<sub>2</sub>-e a year or more. This approach will make the mechanism highly efficient by covering approximately 52 per cent of Australia's emissions while limiting the number of covered businesses to around 130.

*... Alinta Energy agrees that limiting mandatory participation to NGER facilities with emissions greater than a predefined emissions threshold (say 100,000 tonnes CO<sub>2</sub>-e) would make the scheme more relevant and simpler to administer, whilst still capturing a significant portion of Australia's industrial emissions. (Alinta Energy)*

*CSR would support a baseline threshold of 100kta emissions pa. This captures the larger emitters who generally have a capability to comply. (CSR)*

*LMS agrees that setting the coverage of the mechanism to companies above 100,000 tonnes CO<sub>2</sub>-e annual emissions is a good way to streamline the scheme without limiting the effectiveness of the scheme ... it will still capture over 50% of Australia's emissions but will significantly reduce the burden on small to medium sized Australian businesses. (LMS Energy)*

### 4.3 Setting emissions baselines

Emissions baselines will be set using data reported under the National Greenhouse and Energy Reporting Scheme.

In response to the Green Paper some businesses suggested that emissions baselines should take account of common factors that can cause fluctuations in a facility's emissions, such as changes in production levels, the mix of outputs produced, plant maintenance, and the quality of inputs used.

To take account of these factors, some businesses suggested that emissions-intensity approaches be used to set emissions baselines:

*Wesfarmers submits it is most appropriate to set historical business-as-usual emissions intensity baselines. (Wesfarmers)*

*Using a five year industry average based on NGERs to initially achieve a baseline per unit of output in a certain industry would appear to be the best approach. (LMS Energy)*

Others emphasised that setting emissions-intensity baselines would be complex and require businesses to provide additional data:

*Emissions intensity baselines are in theory attractive, as they may provide an automatic hedge against changes in level of production ... However, it may not always be clear what the unit of production is, or where there are companies who produce multiple different products across one or more facilities. For some companies, this would require development and verification of complex apportionment methodologies and reporting more data, which runs counter to the objective of limiting the compliance burden. (Telstra)*

Submissions from the mining sector noted that both the absolute emissions and emissions-intensity of resources projects will often increase over time. For this reason, these submissions argued that, regardless of which approach is applied, safeguard baselines must be able to account for circumstances where emissions intensity changes over a facility's life cycle:

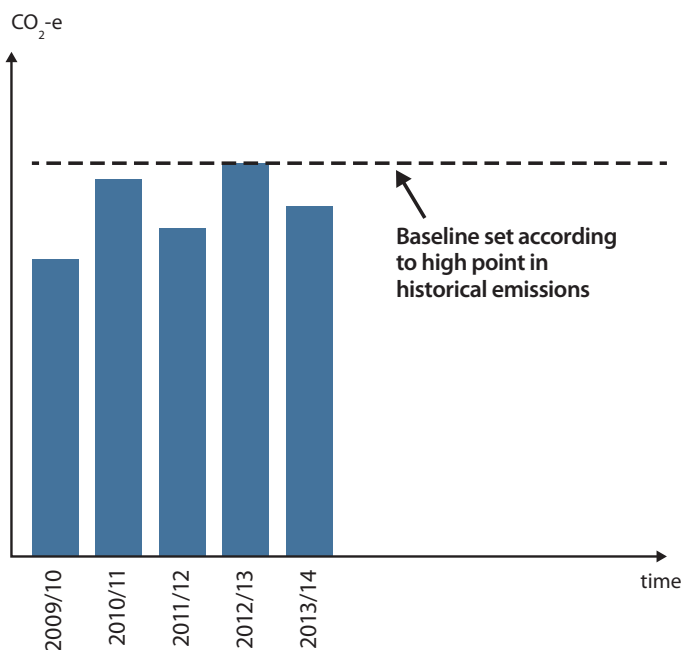
*Mining operations consist of a number of phases which have very different characteristics and emissions profiles. These phases can extend over multiple years, with considerable overlap, rather than representing distinct step-changes in emissions profiles (Rio Tinto)*

To avoid new mandatory reporting requirements, emissions baselines will be based on absolute emissions over a historical period. To accommodate factors such as natural variability in emissions, production levels and changes in the types of inputs used, safeguard baselines will be set using the highest level of reported emissions for a facility over the historical period 2009–10 to 2013–14, as shown in Figure 4.1.

The Government will include flexibility in the safeguard mechanism to accommodate significant expansions in production so that such investments are treated consistently with new investments. Further information concerning the treatment of new investments and significant expansions is set out in Section 4.5.



Figure 4.1: Setting safeguard baselines



**Note:** In this illustrative example, the hypothetical facility may have increased emissions in 2010–11 in response to improved market conditions following the global financial crisis; had lower emissions due to plant and equipment being offline for a scheduled upgrade in 2011–12; and higher emissions again in 2012–13 due to extra processing required of lower quality inputs in that year. Emissions in the year 2012–13 would be set as the safeguard baseline.

## 4.4 Flexible compliance arrangements

The Government has clearly stated that its objective is not to raise revenue from the safeguard mechanism. The Government has not budgeted for any revenue from the safeguard mechanism. Instead, businesses will bid for funding under the Emissions Reduction Fund to undertake projects to reduce emissions.

A flexible approach to compliance under the Emissions Reduction Fund was favoured by a range of submissions. For example:

*[Virgin Australia] support the establishment of flexible compliance arrangements, including multi-year compliance periods which allow for the averaging of emissions. (Virgin Australia Airlines)*

*The AFGC supports the “make-good” provisions allowing businesses to purchase emissions through an offset mechanism. (Australian Food and Grocery Council)*

*Government should consider a flexible risk-based approach to compliance with the safeguard mechanism. (Chamber of Commerce and Industry WA)*

The Government will work with businesses to establish a flexible framework for complying with the safeguard in the unlikely event of baselines being exceeded. The Government will continue to consult on the compliance framework, including on the use of the following flexible compliance options:



- **Emissions-intensity test.** To address circumstances where production is continuously expanding, flexibility could be provided where a business' emissions rise above absolute baselines, but that business can demonstrate that its emissions-intensity of production is not rising.
- **Multi-year compliance period.** This approach could recognise that emissions can be cyclical, peaking in one year and declining the next. Averaging emissions over multiple years would reduce the impact of abnormal years and provide a more realistic general picture of emissions. It would also give businesses more time to reduce or offset their emissions in the event that emission baselines are exceeded.
- **Use of offsets.** Many businesses suggested that businesses could also offset increases in their emissions by purchasing credits created by other accredited emissions reduction projects.

## 4.5 New investments

The Government welcomes and supports growth in new economic activity and new facilities. It also wants to ensure value for money from the Emissions Reduction Fund. For this reason, it is important that the safeguard mechanism applies to new investments and, equally, that it does not diminish Australia's comparative economic advantage.

New investments, including significant expansions to existing facilities, will typically be made using the most efficient, commercially viable technology available, and so are likely to perform better than existing industry practice. Nevertheless, new investments are likely to be a significant source of emissions growth in Australia in the short to medium term.<sup>4</sup> Section 1.1 outlines the challenges presented by new investments for Australia's emissions reduction target.

To address this concern, the Emissions Reduction Fund will be designed to encourage new facilities and significant expansions to achieve and maintain best practice. 'Best practice' could be defined quite simply as the single best performer in an industry, or by reference to the 10 per cent of industry participants with the lowest emissions intensity.

A number of submissions supported this approach. For example:

*Pacific Hydro believes that new entrants should be encouraged, but that the Government should set a clear emissions limit for new entrants which is based on best practice international standards. (Pacific Hydro)*

*Baselines should be built around world best practice rather than a low cost but inefficient fleet. For this reason, investment should be directed only to achieve world best practise, and capacity ceilings should be placed on inefficient and carbon-intensive generation to ensure that absolute emissions are reduced. (Global Change Institute, University of Queensland)*

Some businesses argued that new investments or significant expansions should be exempt from the safeguard mechanism until sufficient data is available for them to derive an appropriate baseline. For example:

*PACIA recommends that the Government guarantee new entrants be excluded from any penalties that result from the safeguarding mechanism for the first 5 years of operation. (Plastics and Chemicals Industries Association)*

*CME considers defining 'best practice' to be problematic and recommends new 'greenfield' developments and 'brownfield' expansions to be excluded from the safeguarding mechanism. Entry under the safeguard mechanism should only be applicable at a point of reaching a specified percentage of nameplate capacity and/or when there is at least five years of representative NGERs data from first production. (Chamber of Minerals and Energy of Western Australia)*

<sup>4</sup> Department of the Environment, 2013, *Australia's Abatement Task and 2013 Emissions Projections*.

The Government does not support the exemption of new investments and significant expansions to existing facilities from the safeguard mechanism. Such an approach would undermine the integrity of the safeguard mechanism.

Therefore, the 100 000 tonne CO<sub>2</sub>-e minimum threshold to trigger the safeguard mechanism will apply to new investments. The Government recognises there will be complexities in setting baselines for new investments and significant expansions, and that careful consideration of a range of issues will be required in the setting of best practice benchmarks.

The treatment of new investments and significant expansions will require detailed consideration and consultation prior to the commencement of this element of the Emissions Reduction Fund from 1 July 2015.

Issues that will be subject to consultation include:

- **Definition of best practice.** Best practice can be defined by reference to existing industry peers, or by reference to technologies employed.
- **Ramp-up phase.** New entrants and significant expansions typically have a ‘ramp-up’ phase characterised by lower production and higher emissions intensities compared to when fully operational. The consultation process will examine options for the treatment of the ramp-up phase.
- **New industries.** Industries that are new to Australia pose a greater challenge in identifying baselines as domestic industry performance data is not available. The consultation process will examine options for deriving benchmarks for new industries based on reasonable interpretations of industry best practice.
- **Final investment decision.** New projects that have already taken their final investment decisions may have less scope to change the design of their projects than investments that have not yet taken these decisions. The consultation process will examine whether there should be differences in baselines for projects that have and have not taken a final investment decision.

## 4.6 Electricity generation

The electricity generation sector produces more than 35 per cent of Australia’s emissions and is the single largest source of emissions by sector (see Figure 1.1). Recent modelling suggests that growth in electricity sector emissions will be at most relatively modest to 2020 but begin to steadily grow again after that to 2030. The electricity sector represents a key source of potential emissions reductions, much of which will lie in supplying electricity from less emissions-intensive sources as well as improvements in efficiency.

Australia’s Renewable Energy Target supports the deployment of renewable technology, driving emissions reductions in the electricity generation sector. The Renewable Energy Target comprises a Small-scale Renewable Energy Scheme and a Large-scale Renewable Energy Target. Liable entities under the Renewable Energy Target have obligations under both schemes to acquire and surrender renewable energy certificates created from both large-scale and small-scale renewable energy technologies. The Renewable Energy Target already provides a significant incentive for emissions reductions in the electricity sector by supporting the deployment of renewable energy technologies.

Several businesses raised the importance of the Emissions Reduction Fund and Renewable Energy Target being complementary. For example:

*Given the interrelationship of energy and emission policies it is critical that, to the extent possible, policies align and complement each other, or at minimum do not overlap to create an environment of competing or counter intuitive incentives and interests. (AGL Energy)*

The Government is conducting a review of the Renewable Energy Target to ensure it is operating efficiently and effectively. The review will be an open and transparent process and will consider the economic, environmental and social impacts of the Renewable Energy Target scheme, in particular the impacts on electricity prices, energy markets, the renewable energy sector, the manufacturing sector and Australian households.

Several businesses have suggested that the electricity sector has unique characteristics when compared to other sectors covered under the safeguard mechanism. In particular, electricity is a homogeneous output which is supplied on an instantaneous basis through highly sophisticated markets that determine which power stations are scheduled to generate output to meet a given level of demand at any point in time. Given these characteristics some submissions suggested that a separate approach may be preferable in applying the safeguard mechanism to the electricity sector:

*Therefore, as flagged in the Green Paper, the generation and networks sectors could be split out from the rest of the economy in the design of the ERF. The esaa considers that this is a sensible approach given the scale of the electricity industry and the fact it produces a uniform output—megawatt hours—regardless of fuel type or location. (Energy Supply Association of Australia)*

Given the significance of the electricity sector to Australia’s emissions profile and the review of the Renewable Energy Target currently underway, the Government will continue to consult with the sector on the specific application of the safeguard mechanism and its interaction with the Renewable Energy Target.

## 4.7 Consultation process

Before the safeguard mechanism starts on 1 July 2015, the Government will undertake detailed consultation with business.

A number of businesses proposed the legislation implementing the safeguard mechanism should be introduced separately to allow for detailed consultation with industry.

*The safeguard mechanism should not be legislated with the first tranche of the ERF legislation in 2014 as consultation is still required on the design detail (Business Council of Australia)*

In line with deferring the start of the safeguard mechanism, the Government will develop a separate legislative package in consultation with stakeholders for introduction in early 2015.

The consultation process for the safeguard mechanism is set out in Figure 4.2

**Figure 4.2: Indicative timeline for safeguard mechanism**



## 5. Carbon Farming Initiative

The land sector makes a significant contribution to Australia's emissions and has significant potential to generate emissions reductions to 2020.

Many land sector emissions reduction activities deliver valuable co-benefits. For example, reforestation can reduce erosion and improve water quality, address salinity and provide habitat for native species. Reducing livestock emissions can increase meat production. Increasing soil carbon can improve soil health, water retention and plant growth. Many land projects also provide important community benefits. For example, savanna fire projects provide employment for Indigenous communities as well as reducing fire risks to people and property.

The Carbon Farming Initiative was established in 2011 and since that time has enabled farmers and landholders to earn credits for reducing greenhouse gas emissions while capturing these important co-benefits. The Clean Energy Regulator has registered more than 100 Carbon Farming Initiative projects and issued more than four million Australian Carbon Credit Units. Activities that can be credited under the Carbon Farming Initiative include:

- increasing environmental plantings
- reducing emissions from savanna burning
- reducing methane emissions from piggeries and dairies, and
- reducing landfill gas emissions.

This chapter sets out how the Emissions Reduction Fund will incorporate and build on the Carbon Farming Initiative. The Carbon Farming Initiative will be folded into the Emissions Reduction Fund so there is one programme. In doing so, it will streamline existing administrative arrangements under the Carbon Farming Initiative and provide new opportunities for land sector projects.

### 5.1 Transitional arrangements

The Emissions Reduction Fund will provide continuity for Carbon Farming Initiative participants and businesses wanting to undertake land-based projects. Submissions from Carbon Farming Initiative participants emphasised the importance of transparent and effective transitional arrangements:

*Existing agricultural CFI projects ... require certainty, and a commitment is required to ensure that these projects will continue to be eligible and funded under the ERF. (National Farmers' Federation).*

*Origin suggests that 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. (Origin Energy)*

*Managed correctly, the transition from CFI to ERF has the potential to not only generate future abatement from existing projects, but also encourage those experienced participants to duplicate or expand the projects and provide further sources of emissions reductions. (Global Renewables Eastern Creek)*

Carbon Farming Initiative credits can be used for compliance under the carbon tax until final payments are due in February 2015, and the Emissions Reduction Fund will provide an ongoing market for Australian Carbon Credit Units following the repeal of the carbon tax.

Carbon Farming Initiative participants will be well placed to bid into the Emissions Reduction Fund because of the range of methodologies already in place. The Emissions Reduction Fund will purchase credits from existing Carbon Farming Initiative projects that are successful at auction. Contracts will provide a guaranteed revenue stream for these businesses.

Simplified reporting and audit arrangements established under the Emissions Reduction Fund will apply automatically to Carbon Farming Initiative projects and project commencement dates will also be simplified (see Section 5.2.2).

Methodologies made under the Carbon Farming Initiative legislation will continue to apply but will be simplified to make them easier and more cost-effective to use. Carbon Farming Initiative participants will be able to decide whether to continue with existing methods or transfer their projects to applicable updated methods.

The new Emissions Reduction Assurance Committee will replace and expand the scope of the existing Domestic Offsets Integrity Committee, which currently provides independent advice on whether land sector methodologies meet the integrity requirements of the Carbon Farming Initiative.

The Government will continue to work closely with the land sector to develop new methods. Priority areas for methodology development in the land sector include:

- increasing soil carbon
- reducing livestock emissions
- expanding opportunities for environmental and carbon sink plantings, and
- reforestation and avoided deforestation.

A formal review of the Carbon Farming Initiative was due to be undertaken in 2014. Through the Emissions Reduction Fund Green Paper and White Paper process, the Government has met these requirements, and a further review will not be undertaken.

## 5.2 Streamlining of Carbon Farming Initiative processes

### 5.2.1 Developing methods

Under the Emissions Reduction Fund, arrangements for assessing methodologies and approving projects will be streamlined.

The Emissions Reduction Fund will focus on large-scale emissions reduction opportunities and activities suitable for aggregation. The priority areas for method development will be identified, as outlined in Chapter 2, in consultation with business to allow opportunities to be provided quickly for the most common types of emissions reduction projects.

Emissions Reduction Fund methods will apply broadly to activities rather than being project specific. The Minister will seek the advice of the Emissions Reduction Assurance Committee on the suitability of proposed methods. This will ensure that methods approved for use in the Emissions Reduction Fund can be used for a significantly wider variety of projects than has been the case under the Carbon Farming Initiative.

To date, the most commonly used methodologies under the Carbon Farming Initiative have been developed collaboratively with industry through technical working groups. Similarly under the Emissions Reduction Fund, development of priority methods will be undertaken collaboratively between the Government and abatement providers through technical working groups.

The Emissions Reduction Fund's streamlined approach to method development will reduce participation costs and make project aggregation easier because more projects will be able to use the same method.

The Government will also remove unnecessary processes that have acted as a disincentive for methods to be brought forward under the Carbon Farming Initiative.

In its current design, the Carbon Farming Initiative includes a common practice test for additionality, with activities that go beyond common practice included on a 'positive list' and eligible for crediting. The 'positive list' described the types of projects for which methods could be developed. Feedback from businesses on their past experiences with the Carbon Farming Initiative indicates that the process of testing whether an activity goes beyond common practice within an industry has been administratively onerous and has contributed to unnecessary delays in developing new methods.

*AFPA supports streamlining the administrative process for methods approval under the CFI, as it is presently lengthy, complex and inflexible ... AFPA recommends abolishing the positive and negative list approaches, as the matters to be addressed by these lists can be adequately addressed using appropriate integrity principles and in the development of the methods themselves. These lists simply add more administrative complexity, uncertainty and cost to the process. (Australian Forest Products Association)*

*Abolishing the 'positive list' and reducing the current two-step process of additionality and methodology assessment into a single step will substantially reduce the administrative requirements and time taken for this critical process and facilitate early participation. (Brisbane City Council)*

In response to this feedback, the positive list and the approach to assessing common practice under the Carbon Farming Initiative will be removed.

The concept of common practice will remain a useful way to identify activities that deliver genuine emissions reductions under the Emissions Reduction Fund. However, additionality will be determined through methodologies, removing the need for a separate process. Under the Emissions Reduction Fund, methods will be able to use a range of tools to ensure that credits are issued for genuine emissions reductions (see Section 2.3).

The Emissions Reduction Fund will not place restrictions on the kinds of methods that can be developed. For example, it will encourage economic growth by allowing credits to be issued for improvements in emissions intensity not just reductions in total emissions. This will allow incentives to be provided, for example, for projects that improve the emissions intensity of milk production from dairy cows.

Carbon Farming Initiative methodologies generally include detailed reporting, monitoring and record-keeping requirements. These detailed requirements increase the costs of using methods and, if too onerous, can discourage participation by proponents in an emissions reduction project. In many cases, these additional requirements are unnecessary and do not improve the credibility of emissions reductions. This issue has been raised by participants.

*The ILC supports the notion of streamlining the CFI to foster a more efficient process. In particular, current project audit requirements could be reviewed to reflect a risk-based approach. For example, small projects could be subject to spot audits rather than audits needing to be undertaken for every Project Offset Report. This would also improve the viability of many smaller land sector projects. (Indigenous Land Corporation)*

*Greenfleet welcomes the proposal for a risk based approach to verification as it would reduce costs without adversely impacting integrity. As has previously been stated by Greenfleet, audit costs for projects are inordinately high and become disproportionate for smaller projects leading to them being deemed uneconomical and unviable (Greenfleet)*

Methods under the Emissions Reduction Fund will be more streamlined than under the Carbon Farming Initiative. The Minister may seek the advice of the Emissions Reductions Assurance Committee on whether the reporting and record-keeping requirements in a method are necessary to deliver credible emissions reductions. This is consistent with the Government's broader streamlining agenda, which is designed to reduce business costs while maintaining the same high standards.

Assessment of methods will also be improved and streamlined by amending the approach to public consultation. While proposals for Carbon Farming Initiative methodologies are currently subject to public consultation for at least 40 days, there is no requirement for public consultation on methodologies in the final form that would be approved by the Minister. This means the potential project developers have no opportunity to suggest detailed changes to enable the method to apply more broadly or simply.

Under the Emissions Reduction Fund, transparency will be improved by releasing draft methods in their final form for public consultation. The final, public consultation period will also be reduced from 40 to 28 days to allow methods to be approved more quickly.

The method development process under the Emissions Reduction Fund will be open and transparent. The Government will work collaboratively with representatives from the land sector on new methods through technical working groups to develop priority methods.

Technical working groups can seek preliminary advice from the Emissions Reduction Assurance Committee on the suitability of proposed approaches, which will assist in focussing efforts towards the most prospective options. Advice will be provided about the ongoing progress of methods so parties have a clearer understanding of when and why decisions have been made. The Government will approach the method development process with a view to ensuring that all parties have a reasonable opportunity to provide input and have their concerns heard.

Chapter 2 provides more information about how methods will be developed under the Emissions Reduction Fund.

## 5.2.2 Project approval and aggregation

Carbon Farming Initiative projects will continue to be approved by the Clean Energy Regulator as part of the new arrangements that apply to projects from all sectors.

To simplify approval of projects under the Emissions Reduction Fund, the Government will amend existing Carbon Farming Initiative rules so that project start dates are the same for the land sector as for other Emissions Reduction Fund projects. Under the streamlined arrangements, projects from all sectors will need to start after they are registered by the Clean Energy Regulator and cannot be backdated (see Section 2.3.1 for more on project start dates and on how 'new projects' are defined).

Where existing Carbon Farming Initiative provisions allow a project commencement date earlier than 1 July 2014, projects will have 12 months after the start of the Emissions Reduction Fund to register under those rules.

The Emissions Reduction Fund will reduce the costs of undertaking small-scale activities by encouraging project aggregation. The experience in other sectors (such as the energy services sector) is that significant emissions reductions can be realised from small, dispersed projects if specialist businesses emerge that apply economies of scale to costs associated with project management and reporting.



Aggregation will be supported in the land sector by simplifying the management of property rights for project proponents. Under current arrangements, forestry and soil carbon projects can be approved only if the project developer owns the land or has another relevant property right, such as a lease or carbon property right. Some businesses have suggested these arrangements make it difficult to aggregate projects because landholders are often unwilling to transfer these property rights.

*While efficiencies may be gained through the appropriate aggregation of CFI projects under the same methodology, potentially assisting land sector projects to become more competitive, there are also challenges associated with aggregation. Facilitating the agreement of Indigenous landholders to conduct activities on their land and/or hand over control of carbon 'rights' to a third-party aggregator can be a slow and expensive process. (Indigenous Land Corporation)*

*Simplified processes for aggregation are strongly supported. However, this also has the potential to increase the administrative burden for small scale projects. There will be significant effort required to develop the relationships and support mechanisms to ensure stable approaches to aggregation are developed (National Rangelands Natural Resource Management Alliance).*

To encourage aggregation under the Emissions Reduction Fund, a project aggregator will only need to demonstrate that it has the agreement of landholders to participate in the project. These arrangements will reduce perceived risks for landholders and make emissions reduction projects more attractive. They will also make participation more attractive by enabling risks and transaction costs to be shared across multiple properties and property owners.

Finally, the Government will encourage aggregation by simplifying and providing guidance on the application of regulatory frameworks for financial markets and financial services, particularly the circumstances where it would be necessary to hold an Australian Financial Services Licence.

### 5.2.3 Permanence

Under the Carbon Farming Initiative, forestry, revegetation and soil carbon projects (called 'carbon sequestration projects') are subject to a 100-year permanence obligation. This means that carbon stores must, on average, remain on the site for 100 years because the environmental benefits from these projects can be lost when vegetation is cleared or soil carbon is lost and not replaced. The 100-year permanence rule also means that sequestration credits are seen as equivalent to credits from other emissions reduction activities and have the same value.

However, the 100-year rule can be a significant barrier for some types of sequestration projects, particularly for soil carbon and replanting projects. Farmers and foresters have expressed concern about permanence obligations that restrict future land use and could have serious consequences for future generations.

*The NFF notes that the 100 year permanence rule has been a significant concern for the agriculture sector, particularly as this not only exceeds most farm business planning horizons (~15–20 years) but also is likely to span several generations of farmers creating intergenerational issues. (National Farmers' Federation)*

*Rangelands NRM (WA) supports the proposal to reduce the permanence requirement for CFI sequestration projects to 25-years. This period is much more realistic and practicable compared to the current 100-year rule which is well beyond the planning time frame for most commercial graziers. (Rangelands NRM)*



To address these concerns, a 25-year permanence option for sequestration projects will be included in the Emissions Reduction Fund. The number of Australian Carbon Credit Units issued for these projects will be discounted by 20 per cent relative to 100-year projects. This discount reflects the potential cost to Government of replacing carbon stores if 25-year projects are discontinued. In practice, however, many carbon sequestration projects are likely to be retained as they will continue to deliver co-benefits for natural resource management and agricultural productivity.

Land managers will retain the option of undertaking projects that will remain in place for 100 years. Land managers will be able to agree to the full permanence period and receive the full carbon value for their project. Existing Carbon Farming Initiative sequestration project proponents will be able to choose to move to the shorter permanence period by relinquishing credits in line with the discount rate.

The new permanence option will not affect the 'risk of reversal' buffer that currently applies to all sequestration projects. Under existing Carbon Farming Initiative rules, a risk buffer of five per cent is applied to such projects, meaning that for every 100 tonnes of carbon stored by a project, 95 Australian Carbon Credit Units are issued. This buffer means that a project proponent does not have to replace credits if carbon stores are lost because of natural events such as a bushfire.

## 5.2.4 Reporting and verification

Under the Carbon Farming Initiative, all project reports undergo a reasonable assurance audit by an independent auditor registered under the National Greenhouse and Energy Reporting Scheme.

These reporting and verification requirements will be simplified and reduced under the Emissions Reduction Fund by applying a risk-based approach to verification. The new approach will maintain a high level of environmental integrity, while significantly reducing the burden on participants (see Chapter 2).

The Emissions Reduction Fund will also provide participants with more flexibility in the frequency of their reporting. Under current arrangements, Carbon Farming Initiative participants can choose when to report on their project, provided that the reporting period is no shorter than 12 months and no longer than five years.

The Government will amend these arrangements under the Emissions Reduction Fund so that more frequent reporting and crediting is allowed. Participants will be able to choose reporting periods of any duration between six months and two years. This will improve cash flow for some project operators and, with reduced verification requirements, improve the cost effectiveness of some projects. Longer reporting periods will continue to be available for sequestration projects with longer crediting periods.

# 6. Administration and governance

The Government has designed administrative arrangements for the Emissions Reduction Fund to provide certainty and predictability for participants, to be clear, stable and streamlined, and to support long-term investment in emissions reduction projects.

Governance arrangements will ensure that decisions made in the administration of the Emissions Reduction Fund are transparent and accountable.

This chapter outlines administrative arrangements that build on the existing legislative and administrative architecture of the Carbon Farming Initiative.

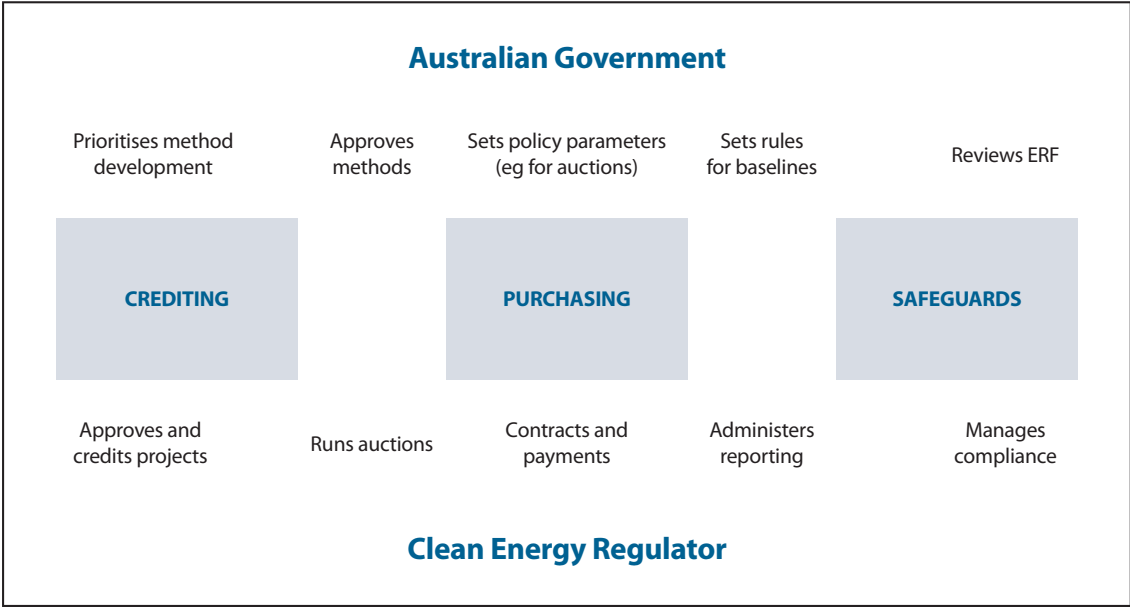
## 6.1 Administering the Emissions Reduction Fund

Policy and administrative functions underpinning the Emissions Reduction Fund will be separated to streamline processes, ensure transparency and avoid conflicts of role.

The Government will make decisions about the design of the Emissions Reduction Fund. Through the Minister for the Environment, the Government will be responsible for making the rules that will guide its operations, including setting methods and emissions baselines that will apply under the safeguard mechanism. The Clean Energy Regulator will be responsible for administering the Emissions Reduction Fund and applying its rules.

Roles and responsibilities under the Emissions Reduction Fund are shown in Figure 6.1.

**Figure 6.1: Policy and administrative roles**



## 6.1.1 Policy functions

The Government has set out in this White Paper the design of the Emissions Reduction Fund following extensive consultation with business and the community.

The Government will continue to consult extensively with business and the community in finalising remaining policy decisions including the details of the safeguard mechanism.

The Minister for the Environment will approve the establishing legislative framework for the Emissions Reduction Fund, methods, baselines and other detailed elements of the safeguard mechanism. The Minister will have the power to delegate the making of methods to persons specified in the Emissions Reduction Fund legislation such as the Secretary of the Department of the Environment. This will provide flexibility to make rules of a technical nature quickly. Methods, which will be legislative instruments, will continue to be subject to scrutiny by the Parliament.

The Minister for the Environment will set the priorities for method development. The Minister will seek the advice of a newly established Emissions Reduction Assurance Committee when approving new methods for the Emissions Reduction Fund and may seek their advice when setting method development priorities.

The new Emissions Reduction Assurance Committee will replace and expand the scope of the existing Domestic Offsets Integrity Committee and be given additional functions beyond the land sector.

The Domestic Offsets Integrity Committee provides independent advice on whether land sector methodologies under the Carbon Farming Initiative meet integrity requirements. It is comprised of independent experts with specialist knowledge of land sector science, natural resource economics and international offsets markets. By providing an independent source of advice on the integrity of emissions reduction methods approved under the Carbon Farming Initiative, this committee has played a key role in the success of that scheme to date.

*There must be rigorous independent scientific and economic oversight of the ERF which is independent of the government, as per the Carbon Farming Initiative (CFI) where the Domestic Offsets Integrity Commission (DOIC) and the Clean Energy Regulator oversee the administration. (Victorian National Parks Association)*

The Emissions Reduction Assurance Committee will have broad expertise to reflect the economy-wide coverage of the Emissions Reduction Fund. In particular, members of the new Emissions Reduction Assurance Committee will have industry experience and expertise in industrial emissions reduction opportunities. The number of members will increase from a maximum of six members, including the chair, to a maximum of nine members, including the chair. The conditions for appointments and procedures for the Emissions Reduction Assurance Committee will be the same as for the Domestic Offsets Integrity Committee.

The Emissions Reduction Assurance Committee will also be responsible for the ongoing monitoring and review of emissions reduction methods. In carrying out these review functions, the Committee will examine whether methods are continuing to drive additional emissions reductions and to recommend amendments that account for changing market conditions.

The Clean Energy Regulator will also be able to provide feedback to the Emissions Reduction Assurance Committee on whether proposed methods are likely to be workable and cost effective.

The Department of the Environment provides advice to the Minister and implements Government policy. The Department will provide support to business to prepare emissions reduction methods, consistent with the priorities set by the Minister. The Department will also provide secretariat support to the Emissions Reduction Assurance Committee. An officer of the Department will be a non-voting member of the Committee. A representative of the Commonwealth Scientific and Industrial Research Organisation will also be on the Committee.

## 6.1.2 Administrative functions

The Clean Energy Regulator will administer the Emissions Reduction Fund.

The Clean Energy Regulator is well-placed to undertake this role as it is well-established and already has the required skills, capabilities, infrastructure and experience. The Regulator will build on its experience in administering both the National Greenhouse and Energy Reporting Scheme and the Carbon Farming Initiative—the building blocks of the Emissions Reduction Fund.

*To facilitate an effective abatement program AGL supports the use and expansion of existing mechanisms and processes such as the CFI and NGERs. (AGL Energy)*

*SEA supports the use of the Carbon Farming Initiative (CFI) and the National Greenhouse and Energy Reporting Scheme as the bases for emissions reduction method and eligible reduction activities, and for calculating and verifying emissions reductions. (Sustainable Energy Association of Australia)*

*Governance arrangements should build on existing infrastructure where possible. The National Greenhouse and Energy Reporting (NGER) Act should be used as much as possible to meet reporting and auditing obligations to keep administrative costs at a minimum. (Business Council of Australia)*

The Clean Energy Regulator will be responsible for a range of key administrative tasks under the Emissions Reduction Fund, including:

- registering projects
- administering auctions
- issuing Australian Carbon Credit Units for certified emissions reductions, and
- contracting and making payments on delivery of emissions reductions

The Clean Energy Regulator will also administer the Emissions Reduction Fund's safeguard mechanism. The National Greenhouse and Energy Reporting Scheme, which is already administered by the Regulator, will provide the systems for monitoring and reporting emissions under the mechanism.

The Government will put forward legislative changes to expand the role of the Clean Energy Regulator and give it the necessary powers to administer the Emissions Reduction Fund.

The Government will also explore options for the Clean Energy Regulator to work with other regulators as delivery partners. For example, state and territory governments have energy savings schemes that have established emissions reduction estimation methods, approve emissions reduction projects and verify emissions savings. Leveraging rather than duplicating these crediting arrangements could benefit business by avoiding the costs of having to engage with different crediting requirements across jurisdictions.

*The ERAA supports the principle that there will not be any overlap between existing energy efficiency schemes and the ERF. (Energy Retailers Association of Australia)*

*New processes would result in unnecessary duplication of cost and risk for business who are directly and indirectly involved in the ERF. Therefore we recommend that the CER delegate administration for project accreditation and audits to one or more of the existing state energy efficiency scheme administrators. (Energy Efficiency Certificate Creators Association)*

## 6.2 Governance arrangements and independence

The Government will put in place best practice governance and accountability arrangements to guarantee the integrity of the Emissions Reduction Fund.

The Emissions Reduction Fund will have transparent reporting and decision review arrangements. The Clean Energy Regulator will report on Emissions Reduction Fund operations each financial year as part of its annual report, which must be provided to the Minister and tabled in Parliament. The Regulator's decisions will also be subject to appropriate review processes, including internal review, judicial review under the *Administrative Decisions (Judicial Review) Act 1977* and merits review of reviewable decisions by the Administrative Appeals Tribunal.

The Clean Energy Regulator will have operational independence in implementing and administering the Emissions Reduction Fund and in the way it will apply to individual cases. The Regulator will be accountable to the Minister for the Environment and subject to ministerial directions of a general nature only.

Some businesses raised concerns about the Clean Energy Regulator being responsible for both crediting and purchasing emissions reductions. For instance:

*Master Builders is concerned at the prospective imbalance of market power between the Clean Energy Regulator (CER; which will have a monopoly in the issuance of Australian carbon credit units), and other market participants, in particular the CER's capacity to 'game the market' by manipulating the supply of ACCUs. (Master Builders Australia)*

The Clean Energy Regulator will be given appropriate discretion to make administrative decisions under the Emissions Reduction Fund legislation. However, administrative decisions will be made in accordance with clearly established principles and constraints set out in the legislation and under other relevant Commonwealth laws. To minimise uncertainty, key features of the Emissions Reduction Fund, such as how historical baselines are set and credits are calculated, will be clearly established in law.

Within the Regulator, the crediting, purchasing and safeguard functions will be managed as discrete operations to ensure there is no real or perceived conflict between the Regulator's roles in administering the three elements of the Emissions Reduction Fund.

## 6.3 Funding arrangements

Consistent with the Coalition's 2013 election commitment, total funding of \$2.55 billion will be provided under the Emissions Reduction Fund, with further funding to be considered in future budgets.

This funding will be flexibly spent according to the profile of verified emissions reductions contracted under the Emissions Reduction Fund.

These administrative arrangements will give budget certainty to businesses and the community, and confidence that the Emissions Reduction Fund will represent a stable and enduring policy framework.

# APPENDIX A: SUMMARY OF EMISSIONS REDUCTION FUND POLICY POSITIONS

## OVERVIEW OF POLICY

The Emissions Reduction Fund's ('ERF') overriding objective will be to reduce emissions at lowest cost over the period to 2020, and make a contribution towards Australia's 2020 emissions reduction target of five per cent below 2000 levels by 2020.

### 1. CREDITING

The Clean Energy Regulator will issue Australian Carbon Credit Units for genuine emissions reductions estimated and verified in accordance with approved methods.

There will be a streamlined and transparent approach to developing and assessing new methods.

### 2. PURCHASING

Companies, organisations and state, territory and local government entities can bid to undertake projects to deliver emissions reductions.

Bids will be selected through an auction, with low-cost emissions reductions purchased at the price offered by each project successful at auction.

The Government will enter into a contract with successful parties to provide payment on delivery of emissions reductions.

### 3. SAFEGUARDING

The safeguard mechanism will limit significant emissions increases from very large industrial sources.

It will start from 1 July 2015 to enable detailed consultation with business on:

- emissions baselines for new projects, and
- flexible options for keeping within emissions baselines.

### 4. CARBON FARMING INITIATIVE

The Carbon Farming Initiative ('CFI') will be streamlined and merged with the ERF.

### 5. REVIEW

The Government has committed to review its international targets in 2015.

The ERF will be reviewed towards the end of 2015.

# 1. CREDITING

## 1.1. Methods

There will be a streamlined and transparent way to develop and assess methods for identifying emissions reductions in sectors and activities.

Feature	Policy	Rationale
<b>Overview of methods</b>	<p>Methods will ensure that credited emissions reductions are genuine by setting out the rules for estimating emissions reductions and the types of activities that are eligible for credit.</p> <p>Methods will apply broadly, enabling a wide variety of projects to use each method.</p>	<p>Broad methods will reduce the number of methods needed to cover the most common emissions reduction activities, reduce administrative costs, and be as inclusive as possible across all types of activities.</p>
<b>Genuine emissions reductions</b>	<p>Credits issued under the ERF must represent genuine emissions reductions.</p> <p>Emissions reductions are genuine if they:</p> <ul style="list-style-type: none"> <li>• would likely not have occurred without the ERF</li> <li>• are verifiable and calculated on a conservative basis, and</li> <li>• can be counted towards Australia's emissions reduction target.</li> </ul>	<p>Genuine emissions reductions will make a real and additional contribution to reducing Australia's emissions.</p> <p>Methods can use a number of approaches to ensure that credited emissions reductions are genuine including:</p> <ul style="list-style-type: none"> <li>• measuring the impact of a project relative to a realistic emissions scenario or baseline, and</li> <li>• crediting activities that go beyond business as usual.</li> </ul> <p>This flexible approach to additionality will replace the approach under the CFI, specifically the common practice test and the 'positive list', which identifies activities that meet this test.</p> <p>Soil carbon, revegetation and forest management are now counted towards Australia's Kyoto target. Provisions under the CFI for crediting non-Kyoto activities will be removed to simplify the ERF.</p>

Feature	Policy	Rationale
<b>Crediting periods</b>	<p>Projects will receive credits for a single ‘crediting period’ only.</p> <p>New ERF projects, other than sequestration projects, will have a crediting period of seven years unless the method provides another crediting period as follows:</p> <ul style="list-style-type: none"> <li>• three-year crediting periods where activities are likely to become business as usual in significantly less than seven years, or</li> <li>• ten-year crediting periods for projects that are likely to remain additional for longer than seven years and achieve average annual emissions reductions above 250 000 tonnes of carbon dioxide equivalent (CO<sub>2</sub>-e).</li> </ul> <p>New sequestration projects will have a fifteen-year crediting period (for example soil carbon and reforestation).</p>	<p>Activities should not be supported indefinitely as they become business as usual over time.</p> <p>Setting crediting periods will allow the ERF to target new projects and limit ongoing demands on the budget as further projects are approved. It will also encourage private investment in emissions reductions activities over time.</p>
<b>Opportunities to streamline</b>	<p>Emissions reporting will be the same under the ERF and the National Greenhouse and Energy Reporting Scheme (‘NGERS’).</p>	<p>This will ensure that emissions reductions count towards Australia’s international target, and align the ERF with NGERS reporting.</p>



## 1.2. Method development

Methods will set out what emissions reductions are genuine and how they are to be measured.

A streamlined process for setting methods will be established.

Feature	Policy	Rationale
<p><b>Development of methods for estimating emissions reductions</b></p>	<p>The Minister for the Environment will determine priorities for method development in accordance with criteria set out below.</p> <p>The Minister will consult with business and could seek the advice of the Emissions Reductions Assurance Committee ('ERAC') when setting priorities.</p> <p>Business and Government will work collaboratively to develop methods through technical working groups.</p> <p>The Government can also import high volume, high potential methods.</p>	<p>This will avoid duplication of methods, reduce the number of methods that must be administered and ensure that methods for the most common emissions reduction activities are available in the early phase of the ERF.</p> <p>The ERAC will replace the Domestic Offsets Integrity Committee ('DOIC') established under the CFI.</p>
<p><b>Criteria for prioritising method development</b></p>	<p>In setting priorities for method development, the Minister will consider:</p> <ul style="list-style-type: none"> <li>• broad business support for the method and likely volume of abatement</li> <li>• whether emissions reductions can be easily estimated with a reasonable degree of certainty</li> <li>• whether the technology involved is proven and commercially ready</li> <li>• if the activity could have adverse social, environmental or economic impacts, and</li> <li>• if the activity could not be promoted more efficiently through alternative measures.</li> </ul> <p>Companies or organisations proposing a large project could request through the ERAC that the Minister give priority to developing a method for their project. A large project is a project with the potential to deliver more than an average of 250 000 tonnes of CO<sub>2</sub>-e a year over the crediting period.</p>	<p>Prioritising methods will enable timely development of methods for projects that could make a significant contribution to the objective of the ERF.</p> <p>The negative list, established under the CFI, will also remain in operation under the ERF. This serves to exclude types of projects that could have adverse environmental consequences (for example, forestry activities that could impact on biodiversity or the availability of water for agriculture).</p>

Feature	Policy	Rationale
<p><b>State energy savings schemes</b></p>	<p>The Government will build on the experience of state and territory schemes to open up energy efficiency abatement opportunities in new jurisdictions, while applying an approach that will be familiar to existing market players.</p> <p>Initially, this will be achieved by:</p> <ul style="list-style-type: none"> <li>• developing nationally applicable energy efficiency methods, based on existing state-based methods, and</li> <li>• aligning participation requirements, including approaches to measurement, reporting and verification, with those under relevant state schemes.</li> </ul>	<p>Energy saving schemes currently operate in a number of states.</p> <p>The Government will seek to partner with state regulatory agencies to implement the ERF wherever possible.</p>
<p><b>Assessing methods</b></p>	<p>The ERAC will consider draft methods, taking into account the method priorities established by the Minister.</p> <p>The ERAC will advise the Minister on whether proposed methods ensure that credited emissions reductions are genuine and from projects that are eligible under the ERF.</p> <p>The number of DOIC members will increase from a maximum of six members, including the chair, to a maximum of nine members, including the chair. The conditions for appointments and procedures for the ERAC will be the same as for the DOIC.</p> <p>To ensure that methods are practical and cost-effective, the ERAC will consider written advice from the Clean Energy Regulator on implementation of proposed methods.</p> <p>The advice of the ERAC will not be subject to review by the Administrative Appeals Tribunal as the ERAC will not make administrative decisions.</p>	<p>The ERAC will undertake a similar function to that of the DOIC under the CFI.</p> <p>This will provide confidence in the emissions reductions purchased by the ERF and promote greater consistency across methods.</p> <p>The current membership of the DOIC reflects its role in assessing methods for agricultural emissions reductions. To reflect its broader focus, new members will be appointed to the ERAC who have experience of industrial sectors of the economy.</p> <p>The ERAC will be able to seek the advice of technical experts, for example to assist in the assessment of models used to estimate emissions reductions.</p>

Feature	Policy	Rationale
<b>Consultation on methods</b>	The consultation period for draft methods or variation of existing methods will be 28 days, unless the ERAC determines that a shorter period, no less than 14 days, is appropriate.	This will replace the 40 day consultation period under the CFI.
<b>Review of methods</b>	<p>The ERAC will monitor and review the effectiveness of emissions reduction methods over time.</p> <p>The ERAC will advise the Minister whether or not the method should continue to apply under the ERF or should be varied.</p> <p>Each method will be reviewed at least once every four years.</p>	The ERAC will be able to examine whether a method continues to drive additional emissions reductions and to recommend amendments that account for changing market conditions.
<b>Form of methods— Legislative instruments</b>	<p>Methods will be legislative instruments made by the Minister for the Environment.</p> <p>The Minister must seek the advice of the ERAC before making a new method for the ERF.</p> <p>When approving methods, the Minister must consider whether the method meets the requirements of the ERF and may take into account potential emissions reduction volume and speed to market.</p> <p>The Minister may delegate the power to make methods to specified officers of the Department at Secretary or Senior Executive Service level.</p>	Delegating the making of methods is appropriate as they are technical in nature. This will allow methods to be made and revised quickly.

### 1.3. Issuing credits

Businesses that deliver emissions reductions that are verified using approved methods will receive Australian Carbon Credit Units.

Feature	Policy	Rationale
<b>Australian Carbon Credit Units</b>	<p>The Clean Energy Regulator will issue Australian Carbon Credit Units for emissions reductions estimated and verified in accordance with approved methods.</p> <p>Credits will be issued to the registered project proponent, including where a project is an aggregated project comprising activities at multiple locations or involving different entities.</p>	<p>Building on existing crediting infrastructure will lower administrative costs, provide legal certainty around the ownership of emissions reductions, and reduce the risk of double counting and fraud.</p>
<b>Project registration</b>	<p>The Clean Energy Regulator will approve projects and include them on a register of emissions reductions projects as currently occurs under the CFI.</p> <p>This will be renamed the ERF register.</p>	<p>The register will provide information to the market and others interested in the operation of the ERF.</p>
<b>Project proponents</b>	<p>To have a project registered, the project proponent must:</p> <ul style="list-style-type: none"> <li>• become a recognised provider of emissions reductions by satisfying basic probity and identity checks</li> <li>• be responsible for carrying out the project, and</li> <li>• have the legal right to carry out the project, including the consent of others with a relevant property right if the project is a carbon sequestration project.</li> </ul> <p>A project proponent can be an individual, body corporate, trust, corporation sole, body politic or local governing body.</p>	<p>Currently under the CFI, a project proponent must first be a recognised offsets entity. This will be streamlined by undertaking identity and probity checks as part of the project approval process. Satisfying these checks will also enable the entity to open an account in the Australian National Registry of Emissions Units.</p> <p>Separate recognition of offsets entities will cease on commencement of the ERF.</p>

Feature	Policy	Rationale
<b>Eligible projects</b>	<p>A project will be eligible for registration where it meets the following criteria:</p> <ul style="list-style-type: none"> <li>the project is consistent with a relevant ERF method</li> <li>the project activity has not commenced before it has been registered by the Clean Energy Regulator</li> <li>the activity, or the resulting emissions reductions, are not required by law, and</li> <li>the activity will not occur as a result of another government programme.</li> </ul> <p>Projects can comprise different sub-projects. Sub-projects can have different methods, reporting schedules and audit requirements.</p>	<p>This will allow the ERF to target incentives towards genuine emissions reductions projects that would not occur without ERF support.</p> <p>The ERF will not pay for projects that will occur because they have been funded through another government measure, such as a state energy savings scheme, but could fund activities that receive only indirect or limited financial benefits through other government initiatives.</p> <p>These provisions will facilitate project aggregation.</p>
<b>Reporting emissions reductions</b>	<p>Project proponents can choose when to report on their project as currently occurs under the CFI.</p> <p>A project report can be submitted every six months and must be submitted at least once every two years or once every five years for sequestration projects.</p>	<p>This will also enable more frequent reporting and crediting than currently under the CFI, which could improve cash flow for some projects.</p>
<b>Verifying emissions reductions</b>	<p>The Clean Energy Regulator will apply a risk-based approach to determine project audit requirements taking into account inherent project risks and the risk profile of project proponents.</p> <p>The Clean Energy Regulator will have the power to require proponents to obtain:</p> <ul style="list-style-type: none"> <li>an initial audit at the beginning of the crediting period</li> <li>a minimum of three audits in total over crediting periods of seven years or more, with the potential for fewer audits over shorter crediting periods, and</li> <li>additional audits based on the Clean Energy Regulator’s risk based approach.</li> </ul>	<p>This will ensure that emissions reductions are genuine while significantly reducing costs of participation relative to the CFI, which required all project reports to be audited.</p> <p>The risk based approach would specify the level of assurance, frequency and scope of audit for different types of projects.</p> <p>The Clean Energy Regulator would retain powers under the CFI to:</p> <ul style="list-style-type: none"> <li>require proponents to obtain compliance audits where issues are identified; and</li> <li>conduct audits based on targeted and random sampling.</li> </ul>

Feature	Policy	Rationale
<b>When credits will be issued</b>	ERF methods will provide for emissions reductions to be credited after they have occurred.	This will avoid the risk that funds will be expended without achieving emissions reductions.
<b>Voluntary action</b>	<p>ERF credits will be able to be used in the National Carbon Offset Standard ('NCOS').</p> <p>The Government will cancel credits issued to it under the Kyoto Protocol when ERF credits are used under the NCOS.</p> <p>It will take account of other voluntary action, including household purchases of GreenPower when setting future emissions reduction targets.</p>	<p>Credits issued under the ERF can be sold to other businesses or purchased by the Government.</p> <p>Cancelling credits issued under the Kyoto Protocol means that voluntary action under NCOS is not able to be counted towards Australia's five per cent reduction target.</p>
<b>Export</b>	Australian Carbon Credit Units cannot be exported out of Australia's registry for the first three years of the ERF.	While ERF credits could be purchased by overseas buyers, the Australian Government will not export credits into foreign registries for at least three years, as doing so would make it harder for Australia to meet its emissions reduction target. This will be reviewed as part of the 2015 review of the ERF.

## 2. PURCHASING

Payment will be provided after emissions savings are delivered in accordance with an approved emissions reduction method.

### 2.1. Auctions

Auctions will be used to capture lowest cost emissions reductions.

Feature	Policy	Rationale
<b>How auctions will work</b>	<p>Emissions reduction providers can participate in auctions by submitting a secret or 'sealed' bid.</p> <p>Bids will be compared, and the bids that provide emissions reductions at the lowest cost per tonne will be selected.</p> <p>The Clean Energy Regulator will have the discretion and powers necessary to purchase emissions reductions through an auction or an alternative procurement process. Emissions reductions would be purchased in the form of Australian Carbon Credit Units or other eligible credits prescribed in regulations.</p> <p>There will be a benchmark price above which emissions reductions will not be purchased.</p> <p>The number of successful bids at each auction will be determined and the auction will clear by selecting projects that deliver 80 per cent of the emissions reductions below this price. Alternatively the Clean Energy Regulator may set a budget for the auction and select projects up to that budget. Emissions reductions will be purchased at the price offered in each bid.</p> <p>The Clean Energy Regulator will set the benchmark price. For the first auction only, discretion will be given to the Clean Energy Regulator to publish a benchmark price ahead of the auction. Otherwise the benchmark price will not be published.</p>	<p>The use of auction approaches will identify the lowest cost emissions reductions available, enabling the Government to maximise value for money.</p> <p>A price ceiling or benchmark price will prevent prices reaching unacceptable levels if project supply is limited at a particular auction.</p> <p>As auction outcome information will not be available prior to the first auction, there may be a policy case for publishing the benchmark price in advance for this auction only.</p> <p>Providing the Clean Energy Regulator with powers to purchase emissions reductions through alternative procurement processes will provide flexibility in the event that large and cost-effective projects are not being selected by the auction process.</p>

Feature	Policy	Rationale
<p><b>Auction participation</b></p>	<p>The Clean Energy Regulator will have the power to administer a range of pre-qualification checks prior to an emissions reduction provider being registered to participate in an auction.</p> <p>The participant must have an emissions reduction estimate that:</p> <ul style="list-style-type: none"> <li>• relates to a registered ERF project, and</li> <li>• is calculated in accordance with the approved method and credible.</li> </ul> <p>The Clean Energy Regulator may exclude participants on the following grounds:</p> <ul style="list-style-type: none"> <li>• the commercial readiness of the technology or practice</li> <li>• the capacity of the project proponent to carry out the project, and</li> <li>• compliance with ERF contracts and legislation administered by the Clean Energy Regulator.</li> </ul>	<p>This will ensure that only credible bids can be put forward and that the auction selects projects that can be delivered and represent value for money.</p>
<p><b>Scheduling of auctions</b></p>	<p>Auctions will be held regularly to provide opportunities for business to access the Emissions Reduction Fund.</p> <p>Four auctions will be scheduled for the first year. The Regulator will publish an indicative forward schedule of auctions over the subsequent 12 months.</p> <p>Once there are enough registered bidders to hold an auction, the Regulator will confirm the auction date with four weeks notice.</p>	<p>This will ensure that businesses have regular and predictable opportunities to participate in ERF auctions.</p>



Feature	Policy	Rationale
<p><b>Bidding rules</b></p>	<p>Auctions would be conducted in accordance with guidelines published by the Clean Energy Regulator. These guidelines would set out the rules for bidding at auction, including that:</p> <ul style="list-style-type: none"> <li>• bids must relate to a whole project not part of a project</li> <li>• bidders will only be allowed to submit one bid for each project per auction</li> <li>• once a project has been successful at an auction, it cannot be re-bid into a later auction</li> <li>• if a project is not successful it can be re-bid into a subsequent auction, and</li> <li>• there will be a minimum project size—initially 2000 tonnes CO<sub>2</sub>-e a year on average over the contract period.</li> </ul> <p>As a transitional measure, the minimum project size will not apply to projects approved under the CFI before it is incorporated within the ERF.</p>	<p>This will enable participants to package emissions reduction activities in a way that best suits their needs.</p> <p>This will make auctions more transparent and make it easier to assess whether projects will deliver value for money.</p> <p>A minimum bid size will improve the administrative efficiency of the ERF. The exemption for CFI projects from size restrictions will facilitate the transition from the CFI to the ERF.</p>

Feature	Policy	Rationale
<p><b>Publication of auction results and information</b></p>	<p>The Clean Energy Regulator will publish information following each auction and at the end of each year of operation.</p> <p>Information published after each auction will include the weighted average price awarded to successful projects, and contract related information for successful bidders including:</p> <ul style="list-style-type: none"> <li>• the name of the emissions reduction provider</li> <li>• the name of the project</li> <li>• the auction date</li> <li>• the total abatement to be delivered, and</li> <li>• the duration of the contract.</li> </ul> <p>On a yearly basis the CER will publish aggregated information for the year including the total amount of emissions reductions in successful bids, the total amount of funding allocated to successful bids, the total number of ACCUs purchased, and total funding spent on purchasing ACCUs.</p> <p>Contract details that are commercially sensitive will be kept confidential.</p>	<p>This will facilitate project development and provide information to the public on the progress of the ERF.</p>

## 2.2. Contracts

Contracts to purchase emissions reductions at a specified price will be provided following a successful auction bid.

Feature	Policy	Rationale
<p><b>Contracts for the purchase of emissions reductions</b></p>	<p>Contracts will have standard terms including:</p> <ul style="list-style-type: none"> <li>• conditions which, if not met, will allow obligations to lapse</li> <li>• a schedule setting out the delivery and payment for emissions reductions</li> <li>• scope to vary obligations where contract delivery is affected by matters outside the control of the emissions reduction provider, and</li> <li>• flexible delivery options allowing the supply of equivalent Australian Carbon Credit Units from another emissions reduction project.</li> </ul> <p>Damages may be payable if the provider is unable to deliver the contracted emissions reductions.</p> <p>Contracts will not be able to be traded but will be able to be transferred to another emissions reduction provider with the agreement of the Clean Energy Regulator.</p>	<p>This approach allocates risks where they are best able to be managed and enables the Government to manage the risks of under-delivery to the objectives of the ERF.</p> <p>The Government's preference is that contracts will be for five years.</p> <p>As part of its ongoing consultation with business on the design of the Emissions Reduction Fund, the Government will commission a commercial consultancy to undertake a market testing process prior to the first auction.</p> <p>This process will investigate the types of projects business are proposing to bid into the Fund, and the contract details that best meet the needs of business. It will allow Government to focus attention on methodologies to enable projects to come forward at the first auction and assess if alternate contract lengths are required.</p>

### 3. SAFEGUARD

Stakeholder feedback on design options for a mechanism to safeguard emissions reductions achieved under the ERF will continue to be sought, including in relation to compliance arrangements and the treatment of new entrants.

Feature	Policy	Rationale
<b>Timing</b>	The safeguard mechanism will commence from 1 July 2015 to allow for further consultation with business on policy detail.	This will enable the development of a robust policy framework that has a broad level of business acceptance and community support.
<b>Coverage</b>	<p>The safeguard mechanism will cover facilities with direct (scope 1) emissions of 100 000 tonnes of CO<sub>2</sub>-e a year or more. This will be around 130 entities. It will also apply to new entrants.</p> <p>The specific application of the safeguard mechanism to the electricity sector will take account of the outcomes of the review of the Renewable Energy Target.</p>	<p>This will limit the application of the safeguard to the largest emitters that report under NGERs, noting that the number of covered entities is a significant reduction compared to the carbon tax arrangements.</p> <p>All but the largest emitting businesses will be exempt.</p>
<b>Emissions baselines</b>	<p>For existing facilities, absolute emissions baselines will be set using existing data reported under NGERs.</p> <p>For new facilities and significant expansions at existing facilities, baselines will reflect industry best practice. How industry best practice will be determined will be subject to further consultation.</p> <p>The specific treatment of projects that have undertaken final investment decisions will also be the subject of further consultation.</p>	This will enable the safeguard mechanism to be implemented without any new mandatory reporting obligations.

Feature	Policy	Rationale
<b>Compliance options</b>	<p>Compliance options will be considered ahead of the implementation of the safeguard mechanism in July 2015. No revenue from firms is sought, nor will any be budgeted by the Government as part of the safeguard mechanism.</p> <p>Options to be considered will include:</p> <ul style="list-style-type: none"> <li>• providing for economic growth, by allowing businesses to exceed their absolute emissions baseline if they maintain or improve their efficiency (emissions intensity of production)</li> <li>• using multi-year compliance periods to manage cyclical peaks in emissions, and</li> <li>• allowing businesses to use eligible credits to offset any emissions above safeguard levels.</li> </ul>	<p>This will enable the development of flexible compliance arrangements that will assist in realising the objective of the safeguard mechanism with a broad level of business acceptance and community support.</p>
<b>Legislative framework</b>	<p>Following stakeholder consultation the Government will establish the safeguard mechanism in legislation in early 2015, to enable the mechanism to commence on 1 July 2015.</p>	<p>This will enable further consultation with business to develop a robust policy framework.</p>

## 4. CARBON FARMING INITIATIVE

The Carbon Farming Initiative ('CFI') will become part of the ERF.

Feature	Policy	Rationale
<p><b>Transitional arrangements</b></p>	<p>The following arrangements will enable transition of CFI methods and projects into the ERF:</p> <ul style="list-style-type: none"> <li>• projects approved under the CFI will become ERF projects, subject to streamlined reporting and verification provisions, when the CFI becomes part of the ERF</li> <li>• CFI projects can continue to operate under their original CFI methodology for the remainder of their crediting period or elect to use an applicable ERF method—with no change to the commencement or end date of the crediting period for that project</li> <li>• CFI methodologies will continue to apply until varied under the ERF, noting that new projects would have to use the varied method but existing projects can continue to use their original method, and</li> <li>• new projects can be approved under existing CFI eligibility rules until 1 July 2015 after which time all projects will be subject to ERF eligibility rules.</li> </ul> <p>The Clean Energy Regulator will continue to approve CFI projects and issue Australian Carbon Credit Units under the current legislation until the ERF legislation is passed.</p>	<p>This provides certainty and allows buyers to have confidence in CFI-generated credits and the emissions reductions they represent.</p> <p>The CFI allowed certain existing projects to transition from previous programmes. This provision sets a timeframe for existing projects to register under the CFI following its transition to the ERF.</p>

Feature	Policy	Rationale
<b>Crediting</b>	<p>The requirement that credits be issued for avoided deforestation and avoided harvest (called native forest protection projects) over 20 years will be removed. This will allow new ERF methods to largely credit these activities when the emissions reductions occur, which is when the decision is made not to clear or harvest the forest.</p> <p>New ERF methods for alternative waste treatment projects, which deliver emissions reductions over many decades, can credit total emissions reductions in equal proportions over the crediting period.</p>	<p>This will make methods for avoided deforestation and avoided harvesting easier to develop.</p> <p>The approach to alternative waste treatment avoids unnecessary administrative costs without upfront crediting which would confer a benefit not available to other types of projects.</p>
<b>Land Title</b>	<p>The legal requirement for sequestration project proponents to own the land or the carbon right will be removed.</p> <p>The project proponent will need to demonstrate they have the consent of the land or carbon right owner.</p>	<p>This will remove a barrier to aggregation that has been identified by CFI proponents.</p>
<b>Permanence</b>	<ul style="list-style-type: none"> <li>• Projects to store carbon in soils and vegetation will have the option of continuing for 25 rather than 100 years, and</li> <li>• Credits issued for 25-year projects will be discounted by 20 per cent. The 5 per cent risk of reversal buffer, which means credits do not have to be replaced if carbon stores are reversed during the 25-year project period will also apply. This means that proponents will receive credits equivalent to 75 per cent of the carbon stored in total.</li> </ul>	<p>This will encourage uptake of land-based projects.</p> <p>The discount reflects the potential cost to government of replacing carbon stores if 25-year projects are discontinued.</p>

## 5. REVIEW

The Government has committed to review its international targets in 2015.  
The ERF will be reviewed towards the end of 2015.

Feature	Policy	Rationale
<b>Review of the ERF</b>	The 2015 review of the ERF will focus on operational elements of the ERF such as the conduct of auctions.	The 2015 review will occur after the first year of the ERF's operation.  Focussing on operational elements of the scheme that would benefit most from early review will maximise the usefulness of review.



# APPENDIX B: INITIAL PRIORITY METHODS FOR THE EMISSIONS REDUCTION FUND

## B.1 New methods being developed with technical working groups

The Government has worked with industry through technical working groups to identify key priorities for method development. These will be available for businesses to use in the initial period of the Emissions Reduction Fund.

### Facility-level methods

Facility methods will credit aggregate improvements in the facility-scale emissions-intensity of large facilities such as power stations, cement and aluminium production facilities, and oil and gas extraction plants. Facility methods are described in Chapter 2.

### Coal mine gas capture

This method will cover the capture and flaring and/or electricity generation at underground and open cut mines and, in time, Ventilation Air Methane (VAM) oxidation at active underground mines. It will use existing factors used under the National Greenhouse and Energy Reporting (NGER) Scheme to directly measure the amount of methane captured and destroyed.

### Transport

This method will cover emissions reductions from the transport sector due to technology upgrades, low emission vehicles and operational changes. It will rely on straightforward intensity metrics for air, sea, road and rail activities, for example emissions per tonne of freight per kilometre for freight and emissions per passenger per kilometre for passenger transportation.

### Waste

Three methods are being developed based on existing methods under the Carbon Farming Initiative to cover:

- landfill gas capture and flaring and/or electricity generation
- alternative waste treatment facilities, and
- methane capture at waste water facilities, including abattoirs and chemical processing facilities.

### Industrial energy efficiency

This method will use a generic engineering-type assessment to support a wide range of energy efficiency improvements in industrial facilities, such as process heating and the replacement of boilers and furnaces. This approach will be based on an internationally recognised protocol and standards for measurement and verification.

## Building energy efficiency

This method will support a wide range of energy efficiency improvements in the commercial building sector, including offices, retail, government and education facilities. The method will support partial and full retrofits of existing commercial buildings, including installation of co- and tri-generation. Emissions reductions will be derived from measuring energy use before and after the project, with proponents having the flexibility to use either the National Australian Built Environment Rating System (NABERS) calculator, or an engineering assessment to model the impact of the project. The Government will also look to build on state-based methods for aggregated domestic electricity consumption and precinct-based commercial energy efficiency.

## B.2 Methods under the Carbon Farming Initiative

### B.2.1 Sequestration methodologies

A number of existing Carbon Farming Initiative methods allow projects to be credited for storing (or 'sequestering') carbon in the land:

- human-induced regeneration of a permanent even-aged native forest
- native forest from managed regrowth
- native forest protection (avoided deforestation)
- permanent environmental plantings of native species using the CFI reforestation modelling tool
- quantifying carbon sequestration by permanent plantings of native mallee eucalypt species using the CFI reforestation modelling tool, and
- reforestation and afforestation.

In addition, further methods are being developed covering:

- increasing soil carbon
- expanded opportunities for environmental and carbon sinks, and
- reforestation.

### B.2.2 Emissions avoidance methodologies

Emissions avoidance projects generate abatement by reducing or avoiding emissions of methane (CH<sub>4</sub>) and nitrous oxide (NO<sub>2</sub>), or by converting methane into carbon dioxide (CO<sub>2</sub>) which is a less potent greenhouse gas.

Emissions avoidance methods available in the Carbon Farming Initiative cover agricultural projects, savanna burning projects, and projects to avoid emissions from waste deposited at landfills before 1 July 2012:

- destruction of methane generated from manure in piggeries
- destruction of methane generated from dairy manure in covered anaerobic ponds
- destruction of methane from piggeries using engineered biodigesters
- reducing greenhouse gas emissions by feeding dietary additives to milking cows
- reduction of greenhouse gas emissions through early dry season savanna burning
- capture and combustion of methane in landfill gas from legacy waste
- avoided emissions from diverting legacy waste from landfill for process engineered fuel manufacture
- avoided emissions from diverting legacy waste from landfill through a composting alternative waste technology
- diversion of legacy waste to an alternative waste treatment facility, and
- enclosed mechanical processing and composting alternative waste treatment.

In addition, further methods are being developed covering reducing emissions from beef cattle.

# APPENDIX C: STAKEHOLDER SUBMISSIONS

## Submissions received in response to the Emissions Reduction Fund Terms of Reference

Aboriginal Carbon Fund	Australian Landfill Owners Association (ALOA)
ACV Designs	Australian Local Government Association
Australian Energy Market Operator	Australian Network for Plant Conservation
Aerochamber Pty Ltd	Australian Organics Recycling Association
AGL Energy Ltd	Australian Petroleum Production and Exploration Association
Alan Pears	Australian Pipeline Industry Association
Alinta Energy	Australian Rain Technologies
Alinytjara Wilurara Natural Resources Management Board	Australian Refrigeration Association (in association with Climate Friendly)
Altitude Energy	Australian Shipowners Association
Amgun Holdings Pty Ltd	Australian Soil Management (ASM) Pty Ltd
ANU Fenner School of Environment and Society	Australian Sustainable Built Environment Council (ASBEC)
APA Group	Australian Trucking Association
ATCO Australia Pty Ltd	Australian Industry Greenhouse Network
Colin Austin	Avia Oceania
Australasian Railway Association	BioAg Pty Ltd
Australian Institute of Refrigeration Air Conditioning and Heating (Inc.)	Biome5 Pty Ltd
Australian Academy of Technological Sciences and Engineering	Bosco International Renewable Energy Pty Ltd
Australian Aluminium Council	Brisbane City Council
Australian Association of Bush Regenerators	BSI Group ANZ Pty Ltd
Australian Automobile Association	BuildingSMART Australasia Incorporated
Australian Centre for Sustainable Business and Development	Burnett Mary Regional Group for Natural Resource Management Limited
Australian Conservation Foundation	Bus Industry Confederation
Australian Dairy Industry Council	Bush Heritage Australia
Australian Financial Markets Association	Business Council of Australia
Australian Forest Products Association (AFPA)	Business South Australia
Australian Geothermal Energy Group	Businesses for a Clean Economy
Australian Institute Of Petroleum	Cairns Regional Council
Australian Institute of Quantity Surveyors	Cangrowers

Cape York Institute for Policy and Leadership

Carbon Farmers of Australia

Carbon Market Institute

CarbonQuest Australia

Cement Industry Federation and National Lime Association of Australia

Centre for Energy and Environmental Markets, University of New South Wales

Centre for Resources, Energy and Environmental Law, Melbourne Law School, University of Melbourne

Certified Environmental Practitioner

Chamber of Commerce and Industry WA

Chevron Australia Pty Ltd

City of Melbourne

City of Sydney

Clean Carbon Pty Ltd

Clean Energy Council

Clean Energy Finance Corporation

Climate Action Network Australia

Climate Change Australia—Hastings Branch

ClimateWorks Australia

Corporate Carbon Advisory

Country Carbon

Colin Creighton

CSR Limited

Department of Science, Information Technology, Innovation and the Arts, Queensland

Devine Agribusiness Carbon Pty Ltd

DUT Pty Ltd

Eastern Alliance for Greenhouse Action

Eastern Melbourne Climate Action Group

Eastern Metropolitan Regional Council (EMRC)

Gary Ellett

Elytic Networks

Energetics

Energy Awareness QLD

Energy Developments Limited

Energy Efficiency Certificate Creators Association Inc. (EECCA)

Energy Efficiency Council

Energy Networks Association

Energy Supply Association of Australia

Energy Users Association of Australia

EnviroCarb Pty Ltd

Environmental Clean Technologies Limited (ECT)

EnviroSure Organisation

Ernst and Young

Facility Management Association of Australia

Far North Queensland Regional Organisation of Councils

Fauna & Flora International—Australia

Federal Chamber of Automotive Industries

Forecast Climate Management Services and Engine Room Consulting

Forestry Corporation of NSW

Forests Alive Pty Ltd

Future Energy Innovations Pty Ltd

GAIA 2112 Pty Ltd

Gas Energy Australia

GBG Wastewater Management

General Electric

Global Renewables Eastern Creek Pty Ltd

Goulburn Broken Catchment Management Authority

Grattan Institute

Great Barrier Reef Marine Park Authority

Great Eastern Ranges Initiative

Green Building Council of Australia

Green Energy Option Ltd

Greenbank Environmental Pty Ltd

Greenfleet

Growcom  
 Healthy Soils Australia Ltd  
 Heart Foundation  
 Heatermate Controllers Pty Ltd  
 Roger Hewitt  
 Hi-Tech Consulting and Sustainable Industries  
 Development Institute  
 Housing Industry Association Limited  
 Hydro Tasmania  
 Indigenous Land Corporation  
 Institute of Chartered Accountants Australia  
 Insulation Council of Australia and New Zealand  
 Intelligas  
 InterGen Australia  
 Investor Group on Climate Change (IGCC)  
 Christopher Jay  
 Kara Kara Conservation Management Network  
 Kimberley Land Council  
 David Latimer  
 Lighting Council Australia  
 LMS Energy Pty Ltd  
 Ross Macaw  
 Magnegas Australia Pty, Future Energy Pty Ltd,  
 Select Carbon Pty Ltd  
 Magnetite Network (MagNet)  
 David Marsh  
 Phillip Marsh  
 MaurRoche Agriculture Pty Ltd  
 Melbourne Water  
 Mineral Industry  
 Minus 40 Pty Ltd  
 Monash Governance Research Unit,  
 Monash University  
 MRA Consulting Group  
 (Mike Ritchie & Associates Pty Ltd)

Murdoch University  
 Matt Mushalik  
 Myzer Electric  
 National Carbon Capture and Storage Council  
 National Farmers' Federation  
 National Generators Forum  
 National Indigenous Climate Change Project  
 National Rangeland NRM Alliance  
 NetBalance  
 New Forests Asset Management Pty Ltd  
 North East Catchment Management Authority  
 Northern Alliance for Greenhouse Action  
 NSW Department of Premier and Cabinet  
 Ocean Wave Technology Pty Ltd  
 Oil Mallee Association of Australia  
 Optare Oceania  
 Optimal Group Pty Ltd  
 Origin Energy Limited  
 Pacific Hydro  
 Peabody Energy  
 Plastics and Chemicals Industries Association (PACIA)  
 Potatoes South Australia Incorporated  
 Property Council of Australia  
 QANTAS  
 QGC—A BG Group Company  
 Queensland Murray-Darling Committee  
 Rangelands NRM Coordinating Group Inc.  
 Reputex  
 Ricegrowers' Association of Australia  
 Rio Tinto  
 Rural Climate Solutions  
 Santos  
 Select Carbon Pty Ltd  
 Sheepmeat Council of Australia

Skillset Ltd	Western Desert Lands Aboriginal Corporation (WDLAC)
Solar Energy Australia Group	Westpac
South East Forest Foundation Inc.	James Wight
South East Water Corporation	Wilmar Sugar Australia Limited
South Pole Carbon, Climate Friendly and Corporate Carbon Advisory	Dr Graeme Worboys
Stanwell Corporation Limited	Harley Wright
Sustain Northern Rivers—Energy Working Group	Wurri Dun Solar Pty Ltd
Sustainable Business Australia	WWF-Australia
Sustainable Energy Now	Wyndham City Council
Tasmanian Farmers and Graziers Association	Dr Peter Volker
Tasmanian Government, Department of Premier and Cabinet	Allan Yeomans
Tasmanian Land Conservancy	
The Centre for Tropical Environmental and Sustainability Science, James Cook University	
The Chamber of Mineral and Energy of Western Australia (CME)	
The Climate Institute	
The Cycling Promotion Fund, an initiative of Bicycle Industries Australia.	
The GENI Foundation	
The Middle Way Pty Ltd	
The Society for Ecological Restoration Australasia	
The Tom Farrell Institute, University of Newcastle	
Tindo Solar Pty Ltd	
Tipperary Energy Agency	
United States Studies Centre at the University of Sydney	
University of Queensland School of Land and Food Sciences	
VEBIZ	
Verified Carbon Standard	
Virgin Australia Airlines	
Wesfarmers Limited	
Western Alliance for Greenhouse Action	

## Submissions received in response to the Emissions Reduction Fund Green Paper

350 Perth, 350 Australia	Australian Paper
Aboriginal Carbon Fund	Australian Petroleum Production and Exploration Association
AGL Energy	Australian Property Institute
Air Conditioning and Mechanical Contractors' Association	Australian Rain Technologies
Alice Springs Town Council	Australian Sustainable Built Environment Council
Alinta Energy	Australian Sustainable Business Group
Altitude Energy Pty Ltd	Alan Baker (ASBEC)
Anangu Pitjantjatjara Yankunytjatjara	Ray Barbero
APA Group	Barwon Water
Marcus Archer	Bathurst Community Climate Action Network
ARREA	Bio Carbon Capture Pty Ltd
David Arthur	Julian Von Bibra
ATCO Australia	BoscoLighting Pty Ltd
Australia Pork Limited	Michael Bowden
Australian Aluminium Council	BP Australia
Australian Association of Bush Regenerators	Brisbane City Council
Australian Bureau of Statistics	Brookmin Pty Ltd
Australian Constructors Association	Brotherhood of St Laurence
Australian Council of Recycling	Bush Heritage Australia
Australian Council of Trade Unions	Business Council of Australia
Australian Dairy Industry Council	Evan Calford
Australian Financial Markets Association	Calix Limited
Australian Food and Grocery Council	Canberra Airport
Australian Forest Products Association	Carbon Market Institute
Australian Industry Greenhouse Network	CarbonQuest Australia
Australian Institute of Environmental Accountants	Cement Industry Federation and National Lime Association of Australia
Australian Institute of Petroleum	Chamber of Commerce and Industry WA
Australian Institute of Refrigeration, Air Conditioning and Heating	Andrew Chapman
Australian Manufacturing Workers' Union	Chevron Australia Pty Ltd
Australian Meat Industry Council (AMIC)	City of Darwin
Australian Organics Recycling Australia	City of Palmerston



City of Sydney  
 Steve Clark  
 Clean Energy Finance Corporation  
 Climate Change Australia—Hastings Branch  
 Climate Change Balmain-Rozelle  
 Climate Markets and Investments Association  
 Climate Sense  
 ClimateWorks Australia  
 CO2 Australia Ltd  
 Coffs Coast Climate Action Group  
 Committee 4 Sustainable Echuca Moama  
 Community Power Agency  
 ConocoPhillips Australia  
 Conservation Council SA  
 Consider Solar Pty Ltd  
 Construction, Forestry, Mining and Energy Union  
 Mark Cornelius  
 Coronium Pty Ltd  
 Corporate Carbon Advisory  
 Corporate Carbon Advisory on behalf of the  
 AWT Industry Working Group  
 Council of Capital City Lord Mayors  
 CPA Australia  
 Colin Creighton  
 Commonwealth Scientific and Industrial  
 Research Organisation  
 CSR Limited  
 Andy Cunningham  
 DBP  
 Department of Premier and Cabinet,  
 Tasmanian Government  
 Department of the Environment and  
 Primary Industries, Victorian Government  
 Charles Downie  
 Ian Dunlop  
 Eastern Alliance for Greenhouse Action  
 Eastern Metropolitan Regional Council  
 Ecofeet  
 EKOM USA LLC  
 Electrical Trades Union  
 Energetics Pty Ltd  
 Energy Efficiency Certificate Creators  
 Association Inc. (EECCA)  
 Energy Networks Association (ENA)  
 Energy Supply Association of Australia  
 Energy Users Association of Australia  
 Engineers Australia  
 Envestra Ltd  
 Environmental Farmers Network Inc.  
 Environmental Performance Australia  
 Environmental Sciences Australia Pty Ltd  
 E-Oz Energy Skills Australia  
 Ernst and Young Australia  
 Facilities Management Association of Australia  
 FPC Green Energy  
 Fuelacademy  
 Future Energy Innovations Pty Ltd  
 Gas Energy Australia  
 Gasco Pty Ltd  
 Michael Gill  
 Gippsland Climate Change Network  
 Global Change Institute, University of Queensland  
 Global Renewables Eastern Creek Pty Ltd  
 Grattan Institute  
 Green Building Council of Australia  
 Greenbank Environmental Pty Ltd  
 Greenfleet  
 Griffith University  
 Growcom  
 Housing Industry Association

Jeannie Hughes  
 Indigenous Land Corporation  
 Infrastructure Sustainability Council of Australia (ISCA)  
 Institute of Chartered Accountants Australia  
 Institute of Land Water and Society, Charles Sturt University  
 InterGen (Australia) Pty Ltd  
 International Emissions Trading Association (IETA)  
 Investor Group on Climate Change  
 Mike Johnston  
 Tony Kerr  
 Gillian King  
 Martin Knox  
 Anthony A Laven  
 Law School, University of South Australia  
 LEnergy  
 Lighting Council Australia  
 LJ Hooker Sustainable Real Estate  
 Tom Livanos  
 LMS Energy  
 Local Government Association of Queensland  
 Local Government NSW  
 Magnetite Network  
 Main Roads Western Australia  
 Major Energy Users Inc.  
 Mallee Catchment Management Authority  
 Simon Mathis  
 Mattila Lawyers  
 Joanna McCubbin  
 Robert McCulloch  
 Desmond Menz  
 Mid North and Yorke Peninsula Strategic Alliance  
 Minerals Council of Australia  
 Barry Murphy

Matt Mushalik  
 National Farmers' Federation  
 National Generators Forum  
 National Indigenous Climate Change Project  
 National NRM Regions' Working Group  
 National Rangelands Natural Resource Management Alliance  
 NDEVR Environmental Consulting  
 Neil L Longmore Planning Lawyer  
 Net Balance  
 New Forests Pty Ltd  
 News Corp Australia  
 North Australian Indigenous Land and Sea Management Alliance Ltd (NAILSMA)  
 NSW Independent Pricing and Regulatory Tribunal  
 NSW Irrigators' Council  
 NSW Office of Environment and Heritage, NSW Government  
 Nuclear Engineering Panel, Engineers Australia  
 Nursery and Garden Industry Australia  
 Ocean Nourishment Corporation Pty Ltd  
 Oil Mallee Association of Australia  
 Opower Inc.  
 Origin Energy Limited  
 Pacific Hydro  
 Patco Automotive Pty Ltd  
 Peabody Energy Australia Pty Ltd  
 Phoenix Energy Australia Pty Ltd  
 Van Thoi Phung  
 Pitt and Sherry  
 Plastics and Chemicals Industries Association (PACIA)  
 Lance Price  
 Pristine Forage Technologies  
 Property Council of Australia  
 QGC — A BG Group Business

Rangelands NRM  
 Pamela Reeves  
 Regional Development Australia—Central West  
 Regional Development Australia Orana  
 Reputex Carbon Analytics  
 Rio Tinto Limited  
 David Robinson  
 Malcolm Rositer  
 David Rossiter  
 Bruce Rowse  
 RS & A Davie Partnership  
 Rural Climate Solutions  
 Ryde Hunters Hill Flora and Fauna Preservation Society  
 Santos Ltd  
 Siddons Solarstream Pty Ltd  
 Simcoa Operations Pty Ltd  
 Simons Green Energy Pty Ltd  
 Genevieve Simpson  
 SkyNRG  
 Snowy Hydro Limited  
 South Australian Freight Council  
 South Australian Government  
 South East Councils Climate Change Alliance  
 South East Water  
 Southern Cross Venture Partners  
 Catherine Spence  
 Stanwell Corporation Limited  
 Sustainability Assurance Task Force of the APPC  
 Sustainable Business Australia  
 Sustainable Energy Association of Australia  
 Sustainable Energy Now (SEN)  
 Sustainable Living Tasmania  
 Sustainable Melbourne Fund  
 Telstra  
 The Australia Institute  
 The Australian Academy of Technological Sciences and Engineering (ATSE)  
 The Australian Industry Group  
 The Chamber of Minerals and Energy of Western Australia  
 The Climate Institute  
 The South Australian Wine Industry Association Inc.  
 The University of Melbourne  
 Tradeslot Pty Ltd  
 Allan Tully  
 United States Studies Centre, Sydney University  
 Veolia Environment  
 Verified Carbon Standard  
 Virgin Australia Airlines  
 West Arnhem Land Fire Abatement Project Limited  
 Wentworth Group of Concerned Scientists  
 Wesfarmers Limited  
 Western Alliance for Greenhouse Action  
 Western Australian Local Government Association (WALGA)  
 Western Desert Lands Aboriginal Corporation  
 Westpac  
 James Wight  
 Willoughby City Council  
 Wilmar Sugar Australia Pty Ltd  
 Wyndham City Council  
 Yarra Energy Foundation

# APPENDIX D: MEMBERSHIP OF EMISSIONS REDUCTION FUND EXPERT REFERENCE GROUP

Mr Danny Price, Managing Director—Frontier Economics (Co-Chair)

Mr David Green OBE, Chief Executive—Clean Energy Council (Co-Chair)

Mr Alex Gosman, Chief Executive—Australian Industry Greenhouse Network

Mr Neil Hereford, Head of Carbon Solutions—Commonwealth Bank of Australia

Mr Brendan Pearson, Chief Executive—Minerals Council of Australia

Mr Matt Linnegar, Chief Executive Officer—National Farmers' Federation

A/Prof Andrew Macintosh, Associate Director Centre for Climate Law and Policy—  
Australian National University

Ms Romilly Madew, Chief Executive—Green Building Council of Australia

Mr Cameron O'Reilly, Chief Executive—Energy Retailers Association Australia

Mr Adrian Palmer, Director—Exigency Management

Mr Matthew Warren, Chief Executive—Energy Supply Association of Australia

Ms Jennifer Westacott, Chief Executive—Business Council of Australia

Mr Innes Willox, Chief Executive—Australian Industry Group

Dr Alex Wonhas, Director Energy Transformation—Commonwealth Scientific and  
Industrial Research Organisation

Mr Burchell Wilson, Chief Economist and Director of Economic and Industry Policy (Acting)—  
Australian Chamber of Commerce and Industry (observer)

# GLOSSARY

<b>Additionality</b>	A requirement that a project or activity produce emissions reductions that are most likely to be additional to what would have occurred in the absence of the Emissions Reduction Fund.
<b>Australian Carbon Credit Units</b>	Emissions unit issued under the Carbon Farming Initiative that will be issued for emissions reductions under the Emissions Reduction Fund.
<b>Australian National Registry of Emissions Units</b>	A secure electronic system which tracks the location and ownership of emissions units and which was established through the Australian National Registry of Emissions Units Act 2011.
<b>Baseline</b>	A reference level of emissions from which changes in emissions can be measured.
<b>Benchmark price</b>	The maximum price that can be successful at an auction/tender.
<b>Best practice</b>	The performance, in terms of emissions levels, of leading facilities or technologies.
<b>Business-as-usual</b>	An estimate of the future greenhouse gas emissions under normal business conditions.
<b>Carbon</b>	Used to refer to the emissions of the six major greenhouse gases covered by the Kyoto Protocol.
<b>Carbon Farming Initiative</b>	A voluntary carbon offsets scheme that enables farmers and landholders to earn credits for reducing greenhouse gas emissions. The scheme was established through the <i>Carbon Credits (Carbon Farming Initiative) Act 2011</i> and is administered by the Clean Energy Regulator.
<b>Clean Energy Regulator</b>	The body responsible for administering the Renewable Energy Target, the Carbon Farming Initiative and the Emissions Reduction Fund.
<b>Coverage</b>	Which entities would be eligible to participate in a scheme, which entities a scheme may apply to, and what emissions would be included.
<b>Domestic Offsets Integrity Committee</b>	An independent expert committee which assesses proposals for methodologies under the Carbon Farming Initiative and advises on their approval.
<b>Emissions-intensity</b>	The ratio of emissions per unit of output.
<b>Emissions Reduction Assurance Committee</b>	An independent, expert committee which assesses whether methods meet the requirements of the Emissions Reduction Fund and provides advice to Government.
<b>Emissions reduction contract</b>	A contract between the Government and a project proponent, capturing the Government's promise to pay for emissions reductions and the proponent's promise to deliver them.

# GLOSSARY

<b>Fugitive emissions</b>	Greenhouse gases that are released in the course of oil and gas extraction and processing, through leaks from gas pipelines and as waste methane from black coal mining.
<b>Methods</b>	Emissions Reduction Fund methods set out the rules and instructions for undertaking Emissions Reduction Fund projects, estimating emissions reduction and reporting to the Clean Energy Regulator.
<b>National Greenhouse and Energy Reporting Scheme</b>	A reporting scheme for corporate greenhouse gas emissions and energy production and consumption established under the <i>National Greenhouse and Energy Reporting Act 2007</i> .
<b>New entrants</b>	Facilities that are new to Australia when the Emissions Reduction Fund commences operation.
<b>Permanence</b>	Arrangements under the Carbon Farming Initiative to ensure that credits issued for sequestration projects represent lasting removals of carbon from the atmosphere, which are equivalent to emissions reductions.
<b>Positive list</b>	A register of emissions reduction activities that pass the common practice test and are deemed additional and eligible under the Carbon Farming Initiative. The positive list aims to ensure credits are issued only for additional emissions reductions.
<b>Renewable Energy Target</b>	A legislated scheme which aims to source at least 20 per cent of Australia's electricity from renewable energy by 2020.
<b>Reverse auction</b>	A type of auction in which the roles of buyer and seller are reversed. The auctioneer buys the good or service from sellers who compete to provide the good or service to the buyer.
<b>Scope 1 emissions</b>	The release of greenhouse gas into the atmosphere as a direct result of an activity or series of activities (including ancillary activities) that constitute the facility.
<b>Scope 2 emissions</b>	Emissions released into the atmosphere as a direct result of one or more activities that generate electricity, heating, cooling or steam consumed by the facility, but do not form part of the facility.
<b>Sequestration</b>	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).



