



Australian Government
Climate Change Authority

REVIEW OF THE CARBON FARMING INITIATIVE LEGISLATION AND THE EMISSIONS REDUCTION FUND

A CONSULTATION PAPER

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CONSULTATION PAPER

The Climate Change Authority has released this consultation paper to assist individuals and organisations to prepare submissions to inform the Authority's review of the Carbon Farming Initiative legislation and the Emissions Reduction Fund. It outlines:

- the scope of the work
- matters on which the Authority is seeking comment and information
- how to make a submission.

This consultation paper identifies matters that the Authority considers most pertinent to this work, but comments on any other issues that participants consider relevant are also welcome.

Key dates

Issues paper released
31 August 2017



Submissions close
29 September 2017



Final Report
December 2017

Submissions can be lodged

via email to: submissions@climatechangeauthority.gov.au

via post to: Submissions, Climate Change Authority, GPO Box 787, Canberra ACT 2600

All submissions except those made in confidence will be published on the Authority's website.

Contacts

For further information about this work or making a submission, contact the Climate Change Authority on 1800 475 869 or via email at enquiries@climatechangeauthority.gov.au.

Web site

<http://www.climatechangeauthority.gov.au>

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CHAIR'S FOREWORD

The Climate Change Authority is pleased to release this paper as a basis for consultation on its second review of the Carbon Farming Initiative legislation. The CFI Act was amended in 2014 to support and administer new arrangements for the Emissions Reduction Fund (ERF), which forms a central plank of the Australian Government's emissions reduction policy.

Last year, the Authority considered in some depth the role the ERF could play in helping Australia meet its Paris Agreement targets. In its *2016 Special Review on Australia's climate goals and policies*, the Authority recommended the ERF continue in its current form until other policies – like an Emissions Intensity Scheme or a Clean Energy Target and vehicle emissions standards – are put in place. The Authority sees an ongoing role for land based offsets as part of Australia's climate policy tool kit however and recommended that the ERF crediting arrangements should continue for the land sector into the future.

The Authority is of the view that its findings from the 2016 review (updated in some instances by its recent work with the Australian Energy Market Commission on energy policy) remain current and decided this review would focus on operational aspects of the ERF. The ERF has been in place for three years now so a review of its effectiveness and governance is timely.

Offset schemes to reduce emissions have inherent challenges for policy makers. Offsets need a clear and robust set of rules if they are to achieve genuine environmental outcomes. On the other hand, such schemes need to operate within market conditions that facilitate private investment in emissions reductions projects. Excessively restrictive rules and regulations can add unnecessarily to transaction costs and potentially reduce innovation and investment. That said, offset credits that are unregulated can lack integrity and may fail in their key objective of helping Australia meet its emissions reduction goals. The Authority's review into the ERF will examine whether current policy settings for the ERF have struck the right balance between market participation, administrative efficiency and environmental effectiveness.

The Authority encourages organisations and individuals with an interest in the ERF and Australia's emissions reduction policies to make a submission to this review by 29 September 2017.

The Authority greatly values such contributions from stakeholders, which are essential for identifying issues and formulating policy responses. Submissions on this paper will inform the Authority's final review report on the ERF, which is due by 31 December 2017.



Wendy Craik AM
Chair, Climate Change Authority

CHAPTER 1. BACKGROUND AND OVERVIEW

1.1 ABOUT THIS REVIEW

The Climate Change Authority is an independent statutory agency, established to provide expert advice on climate change policy. The Authority is required by the *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth) (CFI Act) to review the Carbon Farming Initiative (CFI) every three years. The CFI Act states that the Authority's review must cover the operation of the CFI Act, its regulations and other instruments made under the Act such as methodology determinations (known as methods) (Appendix A).

The CFI was an offsets scheme that covered the land and landfill waste sectors. The legislation that supported the CFI was amended to give effect to the Emissions Reduction Fund (ERF) in 2014 (CCA 2014a).

The ERF has three elements: crediting emissions reductions, purchasing emissions reductions and safeguards. This review covers the crediting and purchasing aspects of the ERF. The safeguard element of the ERF is implemented through the *National Greenhouse and Energy Reporting Act 2007* (Cth) (NGER Act) and will be covered in the Authority's review of the NGER Act in 2018.

The first review of the CFI was conducted by the Authority in 2014 (CCA 2014a). The second review must be provided to the Minister for the Environment and Energy by 31 December 2017.

1.2 APPROACH TO THIS REVIEW

The Authority considered the role that the ERF could play in meeting Australia's Paris Agreement obligations as part of its report *Towards a Climate Policy Toolkit: Special Review on Australia's climate goals and policies* (CCA 2016). In summary, the Authority recommended that ERF crediting and purchasing continue until other policies (such as an emissions intensity scheme or Clean Energy Target¹, a national energy efficiency savings scheme, an expanded safeguard mechanism, vehicle emissions standards and regulation for landfill waste and synthetic gases) are put in place. The Authority envisages an ongoing role for offsets in the land sector, using a continuation of ERF crediting, as a complement to other policy measures.

The Authority is of the view that its recommendations on the ERF in the *Special Review* remain current and its focus for this review will be on the operational aspects of the ERF. In particular the Authority will examine the extent to which the ERF is achieving low cost and real emissions reductions and whether it is being well administered. The review will consider if there are any improvements that should be made to the operation, administration, design and governance of the ERF.

The objective of this consultation paper is to outline the key features of the ERF and seek stakeholder views on how these are performing. The Authority will complete its review report on the CFI/ERF by 31 December 2017 following further research and consultation with stakeholders.

In doing so, the Authority will draw on relevant submissions on the Authority's *Action on the land: reducing emissions, conserving natural capital and improving farm profitability* issues paper

¹ The Authority (CCA 2017b) recommended that the Government consider a Clean Energy Target if it is unable to implement an emissions intensity scheme.

(released in March 2017) and on the Department of the Environment and Energy's (DoEE) 2017 Review of Australia's climate change policies.

The Authority is aware of a number of issues already raised by stakeholders in relation to the ERF. These views are generally not examined in this consultation paper to avoid pre-empting issues stakeholders may wish to raise in their submissions.

1.3 SUBMISSIONS TO THIS REVIEW

The Authority invites submissions from organisations and individuals on all issues relevant to this work. Those interested in making a submission should not feel constrained by the issues or questions in this paper, noting that the Authority will be consulting on the safeguard mechanism as part of its review of the NGER legislation in 2018. Submissions can be emailed to enquiries@climatechangeauthority.gov.au until 29 September 2017.

1.4 OVERVIEW OF THE EMISSIONS REDUCTION FUND

The ERF was established in 2014 and is the Australian Government's central climate change policy.

Key design features of the ERF include (Australian Government 2014):

- Lowest-cost emissions reductions: the ERF will identify and purchase emissions reductions at the lowest cost.
- Genuine emissions reductions: the ERF will purchase emissions reductions that make a real and additional contribution to reducing Australia's greenhouse gas emissions.
- Streamlined administration: the ERF was streamlined (compared to the CFI) to make it easier for businesses to participate.

1.4.1 CREDITING MECHANISM

Under the crediting mechanism, the ERF provides Australian Carbon Credit Units (ACCUs) to businesses, community organisations, local councils, individuals, and others that successfully undertake an emissions reduction project registered with the Clean Energy Regulator (CER). An ACCU represents one tonne of carbon dioxide equivalent (t CO₂-e) stored or avoided by a project. Projects registered with the CER must conform to approved methods developed by the DoEE. There are currently 34 approved methods under which projects can be registered in agriculture, energy efficiency, facilities, mining, oil and gas, transport, vegetation management, waste and wastewater management.

All methods under the ERF accredit emissions reductions or carbon storage that can be used to meet Australia's international emissions reduction commitments.

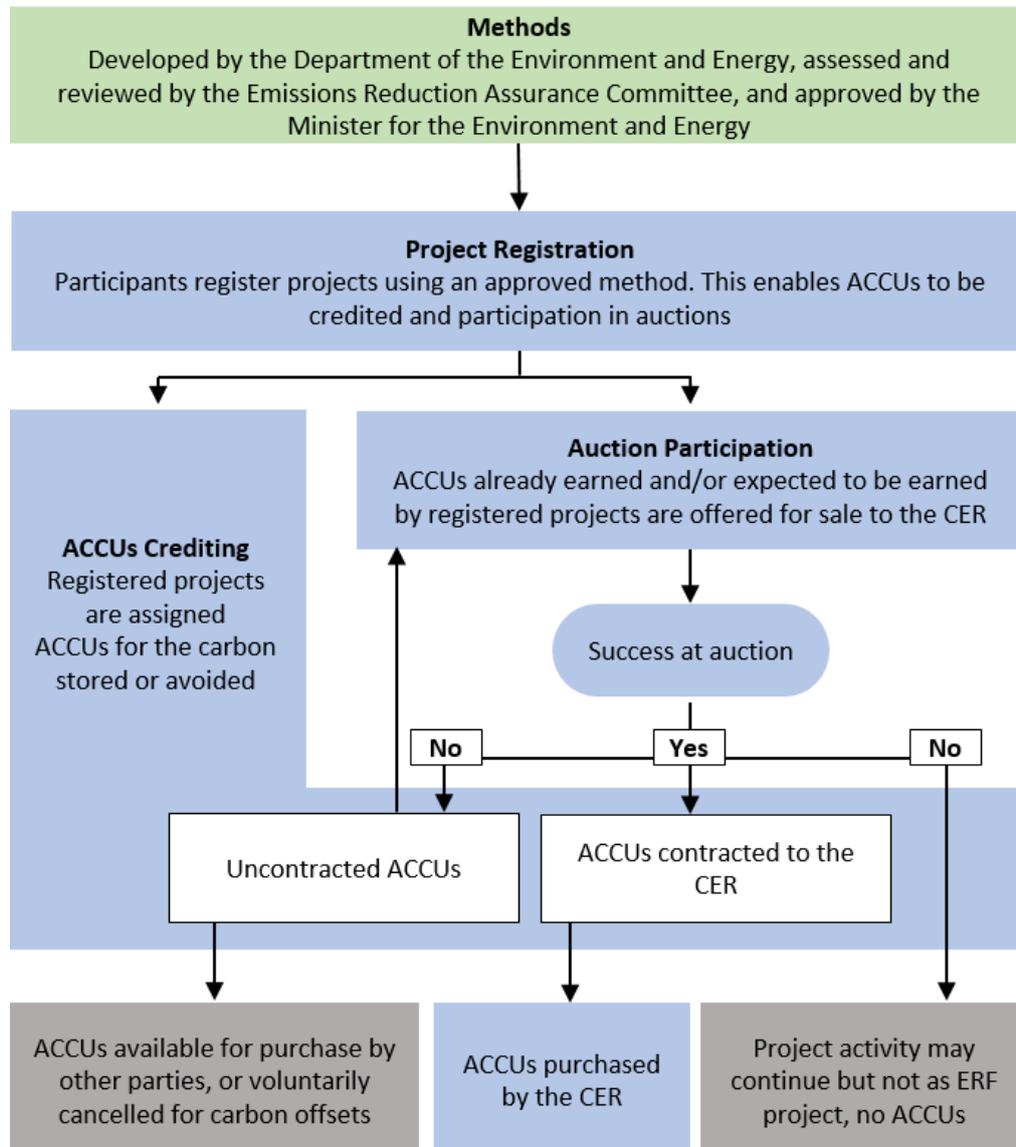
In this consultation paper, the Authority is examining a range of issues relating to crediting under the ERF that are important for the effective functioning of an offsets program including issues such as aggregation and addressing adverse impacts.

1.4.2 PURCHASING MECHANISM

The Australian Government can purchase ACCUs from scheme participants who have registered a project with the CER. The CER purchases through auctions (although the CFI legislation allows the CER to purchase ACCUs through other means).

Figure 1 outlines the project registration, crediting and purchasing mechanisms under the ERF.

FIGURE 1: THE ERF PROCESS



Source: Climate Change Authority analysis and ANAO 2016.

The ERF was allocated A\$2.55 billion in 2014 to purchase emissions reductions. Five auctions have been conducted between April 2015 and April 2017. The sixth auction will be held on 6-7 December 2017. The average price paid over the period was A\$11.83/t and about A\$300 million remains in the ERF. A total of 189 million tonnes of emissions reductions has been contracted so far (CER 2017b). Table 1 summarises the results from each auction. The Authority notes that a relatively lower volume of ACCUs was purchased in recent auctions and is interested in stakeholder views on future volumes of abatement that could be purchased through the ERF.

TABLE 1: ERF AUCTION RESULTS

AUCTION DATE	CONTRACTED ABATEMENT (MILLION ACCUS OR MILLION TONNES OF CO ₂ -E)	AVERAGE PRICE PER ACCU (A\$)	TOTAL COST (A\$ MILLION)
April 2015	47.3	13.95	660.5
November 2015	45.5	12.25	556.9
April 2016	50.5	10.23	516.2
November 2016	34.4	10.69	367.4
April 2017	11.3	11.82	133.0
Total	188.9	11.83	2,233.9

Source: CER 2017b.

1.4.3 SAFEGUARD MECHANISM

The safeguard mechanism is designed to ensure emission reductions purchased by the Government are not offset by significant increases elsewhere in the economy. Baselines, or regulatory limits, are set for facilities that emit over 100,000 t CO₂-e a year in the electricity generation, mining, oil, gas, manufacturing, transport, construction, and waste sectors. If emissions exceed the facility baseline, firms are able to purchase ACCUs to offset emissions above the baseline or reduce their emissions through other means (NGER Act).

The safeguard mechanism is established in the NGER Act and commenced on 1 July 2016. While an element of the ERF, the safeguard functions largely as a separate scheme and it will be reviewed by the Authority in 2018 as part of its review of the NGER legislation.

1.5 THE CFI TRANSITION TO THE ERF

The CFI, which ran between September 2011 and December 2014, was originally designed as a voluntary carbon offset scheme for the land sector to complement the carbon pricing mechanism (an emissions trading scheme). CFI projects covered the landfill waste, land, forestry and agriculture sectors.

Firms in the sectors covered by the carbon pricing mechanism (such as electricity generation, transport, manufacturing and industrial processes) could buy credits from CFI projects and use these to meet their carbon price liability. In 2014 the CFI was amended to become the ERF and eligible CFI projects transitioned into the new scheme. Project crediting under the ERF was also broadened to cover all sectors of the economy. The legislative amendments to establish the ERF created new arrangements for auctions and Government contracts, administered by the CER. The ERF amendments also sought to streamline or improve some CFI requirements such as reporting and auditing (Section 2.10).

1.6 GOVERNANCE OF THE ERF

The Clean Energy Regulator (CER), the Department of the Environment and Energy and the Emissions Reduction Assurance Committee (ERAC) all have a role in the governance of the ERF (Section 2.1 and Chapter 4).

1.6.1 THE CLEAN ENERGY REGULATOR

The CER is the primary body responsible for the day to day administration of the ERF, including key elements of the crediting and purchasing elements of the scheme. These include the registration of projects, the conduct of auctions and purchasing, the management of contracts and

the issue of ACCUs to participants. The CER is also responsible for monitoring and compliance with the rules of the scheme, as well as pursuing breaches of these rules if they occur.

1.6.2 THE DEPARTMENT OF THE ENVIRONMENT AND ENERGY

The DoEE develops new methods for inclusion in the ERF and is responsible for policy development for the scheme as a whole. In scoping and developing new methods, the DoEE seeks advice from the CER and ERAC. The DoEE also provides secretariat support for ERAC and is the point of contact for stakeholders in their dealings with ERAC.

1.6.3 THE EMISSIONS REDUCTION ASSURANCE COMMITTEE

ERAC is an independent, expert committee responsible for assessing whether methods developed by the DoEE meet the ERF's offsets integrity standards. ERAC conducts periodic reviews of ERF methods to assess their ongoing effectiveness, and provides advice to the Minister on whether a method should be made, varied or continue to be part of the ERF (Section 2.1) (CFI Act).

1.7 INTERNATIONAL CONTEXT

A number of international offset standards and markets currently exist. These include the Verified Carbon Standard, the Gold Standard, and the Clean Development Mechanism. In 2016 around 155 million tonnes of carbon credits were created globally under these markets (Gold Standard 2017; UNFCCC 2017; VCS 2017). Each offset market uses a different standard, however, all aim to produce real and additional emissions reductions. CFI/ERF methods were developed to meet Australian conditions and the offsets integrity standards under the CFI Act, however, international standards were considered by the Department of the Environment (DoE) where relevant (DoE 2015). All methods under the ERF are designed to be able to meet Australia's international emissions targets.

CHAPTER 2. KEY ISSUES FOR CREDITING

2.1 METHODS

The rules and requirements for ERF projects are set out in the ERF methods and the CFI legislation. ERF methods are legislative instruments similar to regulations, which means they give scheme participants more certainty than would be the case if methods took the form of non-regulatory guidance.

The methods specify the type of emissions avoidance or carbon storage² activities that need to be undertaken, the process for estimating emissions reductions from project activities and when to report to the CER. The methods must also meet offsets integrity standards, a set of principles that aim to achieve genuine and additional emissions reductions (Box 1).

BOX 1: OFFSETS INTEGRITY STANDARDS

The offsets integrity standards are set out in legislation and designed to ensure that credits issued under the ERF are for genuine emissions reductions that are additional to business-as-usual.

Under the standards, the emissions reductions are to be:

- additional – unlikely to occur in the absence of the ERF
- genuine – measurable, capable of being verified and conservative
- able to count towards meeting Australia’s international emissions reduction targets
- able to account for leakage (so that any material increase in emissions as a result of the project are accounted for)
- supported by clear and convincing evidence.

Source: Explanatory Memorandum, *Carbon Farming Initiative Amendment Bill 2014* (Cth).

There are currently 34 eligible methods across the following sectors: vegetation management, waste and wastewater, agriculture, energy efficiency, mining, oil and gas, transport and facilities (Table 2; Appendix B; DoEE n.d.a). There are projects registered under 27 of these methods, and seven methods currently have no registered projects (Table 2).³ Some new methods are also under development (see below).

² Emissions avoidance offset projects refer to those that avoid emissions of greenhouse gases. Storage (or sequestration) offset projects are those that remove or avoid greenhouse gases from the atmosphere by storing it in living biomass, dead organic matter or soil (CFI Act).

³ There are nine methods that currently have projects registered under them, but are no longer open to new project registrations.

TABLE 2: NUMBER OF ERF METHODS AND REGISTERED PROJECTS

SECTOR	METHODS		PROJECTS	
	NUMBER OF METHODS	NUMBER OF METHODS WITHOUT REGISTERED ERF PROJECTS	NUMBER OF REGISTERED PROJECTS	NUMBER OF REGISTERED PROJECTS WITH CONTRACTS WITH THE CER
Vegetation	9	2	374	226
Waste	4	0	134	104
Agriculture	9	4	41	20
Savanna burning	1	0	74	54
Industrial fugitives	2	1	14	11
Energy efficiency	6	0	49	11
Transport	2	0	7	3
Facilities	1	0	1	0

Note: Methods included in the first two columns of the table are those that are currently open to new projects. The last two columns include projects for methods that are now closed to new projects.

Source: Climate Change Authority calculation based on CER 2017f. Project data as at 31 July 2017, number of methods as at 28 August 2017.

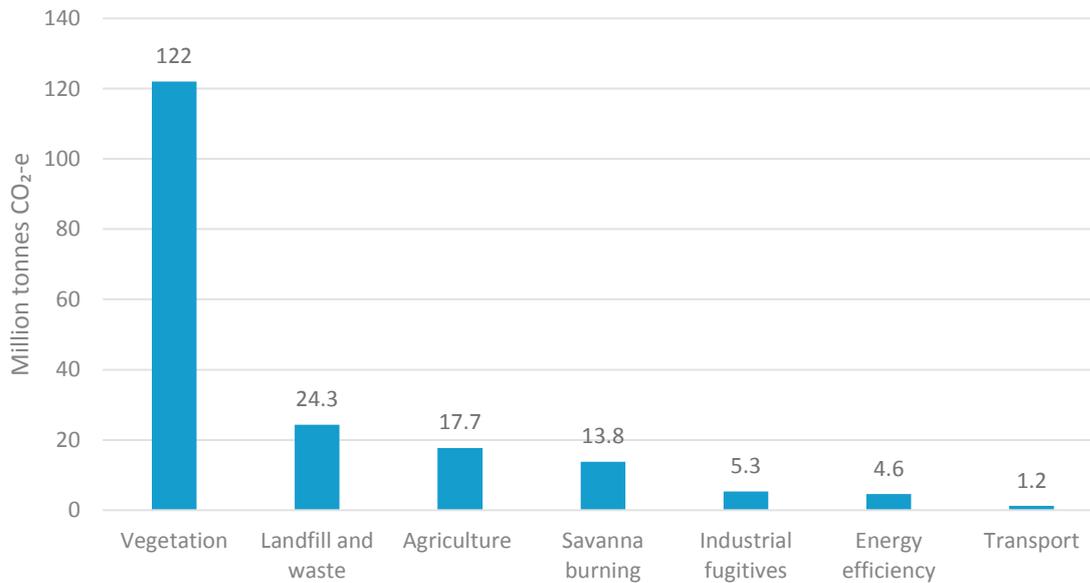
2.1.1 UPTAKE AND EMISSIONS REDUCTIONS FROM METHODS

Projects under a small number of methods make up the majority of projects registered under the ERF, as well as providing the majority of emissions reductions contracted by the CER (Table 2 and Figure 2). The greatest volume of emissions reductions under the ERF comes from vegetation management which accounts for 65 per cent of contracted abatement (Figure 2) (CER 2017f). These methods generally credit carbon storage arising from the regrowth of vegetation by removing stock or fencing off land, or from preventing land clearing. Other sectors that have high levels of uptake and success at auction include landfill waste, which accounts for 13 per cent of total contracted abatement and, agriculture, accounting for nine per cent.

The methods that cover the mining, oil and gas (industrial fugitives), transport, and energy efficiency sectors have the lowest levels of uptake, and together account for just under six per cent of total contracted abatement. Relatively low uptake in these sectors may be due to a number of factors. It is possible that market arrangements and service providers in the industrial sectors are less well established than in land and landfill waste, which benefited from being covered by the original CFI scheme from 2012.

The Authority is interested in stakeholder views on why uptake has been relatively low in the mining, oil and gas (industrial fugitives), transport, some agriculture and energy efficiency methods.

FIGURE 2: VOLUME OF CONTRACTED EMISSIONS REDUCTIONS UNDER THE ERF BY SECTOR (MILLION TONNES CO₂-E)



Source: CER 2017a. As at 31 July 2017.

2.1.2 DEVELOPMENT, APPROVAL AND REVIEW OF METHODS

Methods are developed by the DoEE and are assessed by the independent Emissions Reductions Assurance Committee (ERAC). ERAC provides advice to the Minister for the Environment and Energy, following public consultation, on the suitability of draft methods or variations to existing methods. The Minister for the Environment and Energy makes the final decision whether to make or vary a method (DoE 2015) and must take into account a range of factors including the advice of ERAC and the potential for adverse impacts (Section 2.7).

The Minister must not make a method determination if ERAC advises that a method does not meet the offsets integrity standards (CFI Act).

When developing methods, the DoEE works with technical experts including through technical working groups and stakeholders with knowledge of the methods.

Once the DoEE has prepared a draft method, it is considered by ERAC before being opened for public consultation. Organisations and individuals can make submissions on the draft legislative instrument.

Under the CFI, individuals or organisations could develop draft methods for use in the scheme. In practice, this created a resourcing burden on the Government to ensure the draft methods met the legislative requirements of the scheme (Australian Government 2014). Early CFI methods were often informed by particular business models and covered only a small number of possible project activities.

New methods for the ERF (including for previously uncovered sectors) sought to be broader in scope and simpler in form. This change aimed to ensure that method development achieved widely useable, activity-based methods that reduce scheme participation costs (Australian Government 2014). Methods are often long, complex legal documents and a question arises however as to whether the ERF methods are sufficiently easy to use.

Under the ERF, the prioritisation of new methods for development is determined by the Minister based on advice from ERAC, the DoEE and stakeholders (DoE 2015). Prioritisation is intended to focus on methods with the potential for greatest uptake and genuine abatement. There are currently some new methods under development including for savanna burning sequestration and industrial equipment upgrades (DoEE n.d.a). The Authority is interested in stakeholder views as to whether the process for method prioritisation and development is efficient and transparent.

ERAC reviews each method at least once every four years and can recommend to the Minister for his or her decision that a given method be reviewed more frequently (say a year after being made). ERAC review of methods is required to examine whether the method continues to comply with the offsets integrity standards. Members of the public can also request that ERAC review methods (DoE 2015). ERAC can suspend a method for up to 12 months where there is reasonable evidence that it does not comply with the offsets integrity standards. New projects cannot be approved if a method is suspended.

CONSULTATION QUESTIONS

- Q.1. Is the coverage of methods sufficient or should other emissions reduction opportunities that are consistent with the offsets integrity standards be included?
- Q.2. Are the existing methods fit for purpose, including with respect to the offsets integrity standards?
- Q.3. Would emissions reductions from some ERF offset projects be delivered more efficiently through regulation or some other policy?
- Q.4. Is the process for method development and ERAC assessment efficient and transparent?
- Q.5. Why do some methods have low uptake?
- Q.6. Should methods with very few or no registered projects be subject to less frequent reviews?

2.2 ADDITIONALITY

Additionality is a key element in the environmental integrity of offset schemes and necessarily involves judgement and trade-offs.

An additionality test assesses whether an ERF project or activity reduces emissions reductions relative to what would be expected in the absence of the project. If an additionality test is set too rigidly, the scheme may miss out on some abatement that is genuinely additional. If the additionality test is too lax, then the ERF will not receive value for money and the Government may need to take alternative action to find the emissions reductions it needs to meet its international targets.

To try to ensure emissions reductions are additional, the ERF has additionality tests in both the CFI Act and, for particular project types, in methods themselves.

2.2.1 ADDITIONALITY REQUIREMENTS IN THE CFI ACT

Within the CFI Act, there are three additionality requirements: newness, regulatory additionality and a government program requirement.

Under the newness requirement, the project must not have begun to be implemented at the time the ERF project is registered with the CER. The newness requirement was intended as a practical filter to ensure that only projects established in response to the ERF incentive would be eligible for ERF crediting and purchasing. Following consultations on the draft ERF legislation, however, a number of methods and projects established under the previous CFI legislation were allowed to transition to the ERF. CFI project proponents made the case that otherwise their investments would be stranded by changes in government policy (with the repeal of the carbon price mechanism) (Australian Government 2014). Some of these transitioning projects received credits previously from offset programs established in the early 2000s (like the NSW Greenhouse Gas Abatement Scheme or the Australian Government's Greenhouse Friendly Program) (CCA 2014a). Some of these methods are being reviewed by the DoEE and ERAC to determine whether the projects they cover should receive a further crediting period under the ERF.

The ERF also has a regulatory additionality requirement that aims to ensure that activities required under State, Territory or Australian Government regulation are not eligible under the ERF. For example, projects involving upgrading equipment to meet government health and safety requirements would need to occur anyway and are generally not additional (CER 2016j). The ERF legislation also states that if a regulation is removed, abatement activity that was previously covered by regulation remains ineligible for ERF crediting (CFI Regulations). This is to avoid creating an incentive for governments to exchange regulation for an ERF project, in effect cost shifting to taxpayers.

The government program requirement seeks to reduce the risk that projects will be non-additional as a result of other government incentives while also allowing for some co-funding of ERF projects to pay for non-emissions reduction benefits (like improving water quality in the Great Barrier Reef).

Unless government incentives are large scale, focused on emissions reductions and likely to directly support ERF project activities, ERF projects can receive co-funding from other initiatives like the Australian Renewable Energy Agency (ARENA). Large government programs that directly support ERF-type project activities are ruled out in legislative rules. As a further check, ERAC can assess individual methods to determine whether available government incentives would make projects non-additional.

The additionality requirements in the ERF were informed by experience with the CFI and other offsets initiatives including the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism.

Some of these schemes include a requirement for financial additionality where individual projects are assessed to determine if they would be financially viable without the financial support of the offset scheme. Financial additionality tests on a project-by-project basis are resource intensive and require a range of subjective assumptions to be made about individual financial behaviour and risk appetite.

The CFI was designed to avoid project-by-project assessment by incorporating a common practice test. The thinking here was that if a project activity was already widespread in a given sector or region, then it was unlikely to be additional. Activities that went beyond common practice were included in a 'positive list' and were eligible for a method to be developed. Stakeholder feedback on the CFI was that the common practice test was complex, administratively onerous and delayed the development of new methods (Australian Government 2014). The positive list was removed for the ERF and the concept of common practice is instead used to test for additionality in some methods.

2.2.2 ADDITIONALITY REQUIREMENTS IN METHODS

ERF methods contain a number of specific additionality requirements that are targeted to particular risks of non-additionality associated with a given sector, technology or other type of project activity. These specific method based additionality requirements recognise that technologies and practices in commercial use tend to have a business-as-usual rate of efficiency improvement, which will occur in the absence of ERF support. As such, the ERF tries to prevent ACCUs being earned for emissions reductions associated with business-as-usual improvements. These method specific additionality requirements generally supplement the ERF newness, regulatory and government program additionality requirements but in some cases, they are used as alternatives to the ERF legislation's additionality tests if the legislative tests are not well suited to the method's activities.

The Industrial Electricity and Fuel Efficiency method credits emissions reductions through activities such as upgrades to boilers and heating, ventilation and cooling systems or switching fuel sources. In some cases, these upgrades or improvements would be expected to occur as part of normal business decision making at some point in the future. To address the risk that the emissions reductions would occur anyway, project emission reductions are calculated against a baseline that discounts (or reduces the emissions reductions from the project) for energy efficiency improvements that are expected to occur as a result of technological change.

Under the Land and Sea Transport method emissions can be reduced by improving the emissions intensity of vehicles, including by replacing vehicles, modifying vehicles (fuel switching), and changing operational practices. In a similar fashion to the Industrial Electricity and Fuel Efficiency method, the baseline for calculating emissions reductions under the transport method also accounts for expected improvements (by reducing emissions reductions from the project) in the emissions intensity of each vehicle category over time.

CONSULTATION QUESTIONS

- Q.7. Is the ERF delivering additional abatement?
- Q.8. Could the additionality requirements be improved?
- Q.9. Do any methods or projects raise particular additionality concerns?

2.3 ESTIMATION OF EMISSIONS REDUCTION OR STORAGE

The rules for calculating emissions and emissions reductions as a result of an ERF project are set out in the methods.

Abatement under the ERF is only eligible if it can be used to meet Australia's international climate change targets so ERF projects and methods must be based on activities and estimation processes that are consistent with the international estimation rules set by the UNFCCC and the Intergovernmental Panel on Climate Change (IPCC) (CFI Act).

A number of sectors (including energy generation, industrial processes, manufacturing, waste management and fugitive emissions) are covered by the National Greenhouse and Energy Reporting (NGER) scheme, which requires that firms above a threshold report on their energy and greenhouse emissions. NGER reports are an important input to Australia's national emissions inventory.

For sectors covered by the NGER scheme, the ERF method uses the NGER approach for estimating abatement where possible to reduce the reporting burden for businesses. The vegetation and agriculture sectors are not covered by NGER reporting and these methods use other emissions or sequestration estimation approaches including the sequestration modelling tool known as FullCAM, which produces vegetation and soil related estimates for Australia's inventory.

ERF methods rely on a number of other estimation models and calculators to quantify emissions reduction for a project. The purpose of these tools is to make the method easier to use by performing complex calculations as well as providing spatial data and mapping capabilities. In many instances, the use of the tool is mandated by the method. ERAC is responsible for assessing each method's models or calculators.

Emissions reductions are estimated by comparing emissions under the project against a project baseline. This baseline reflects the emissions that would occur in the absence of the project. Emissions reductions are generally calculated as absolute or on an intensity (emissions per unit of production) basis.

CONSULTATION QUESTIONS

Q.10. Are current emissions estimation approaches and tools fit for purpose? If not how can they be improved?

2.4 PERMANENCE

Sequestration projects store carbon in soils and vegetation, and represent 73 per cent of contracted abatement under the ERF. These projects are subject to a permanence obligation, which requires scheme participants to maintain the carbon stored by ERF projects over the long term, for either 25 or 100 years (CFI Act). This aims to ensure the carbon stored by sequestration projects is not lost in the future (Australian Government 2014). Emissions avoidance projects do not have permanence requirements because they stop emissions from entering the atmosphere in the first place.

The permanence obligation means that if a fire or other disturbance causes a decline in the amount of carbon stored, landholders must take reasonable action to re-establish carbon stores. Scheme participants will not receive credits until the carbon stores exceed their pre-disturbance levels.

Alternatively, if participants do not want to restore the carbon, ACCUs equivalent to the loss of carbon caused by the disturbance must be provided to the CER (Box 2).

BOX 2: POWERS TO ENFORCE THE PERMANENCE OBLIGATION: PENALTIES AND THE CARBON MAINTENANCE OBLIGATION

The CER has a range of powers to enforce the permanence obligation. If the CER suspects carbon stores have been lost it can use its monitoring powers to request information, conduct an inspection or audit a project. If the CER identifies that carbon stores have been lost, it can then use its enforcement powers (Figure 3).

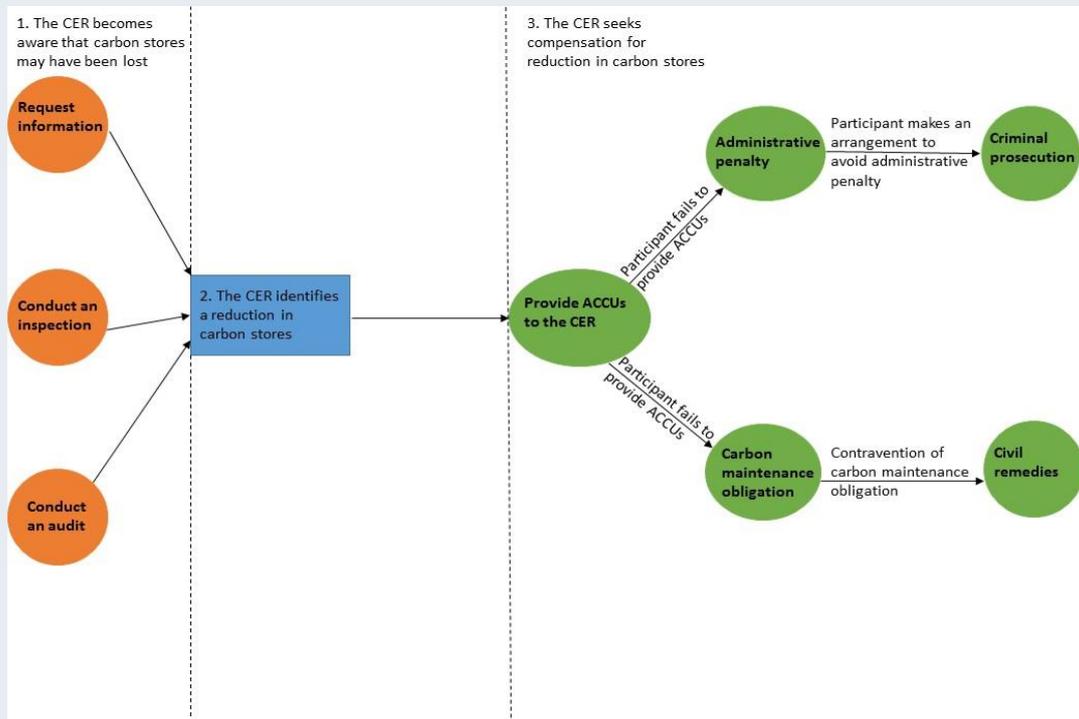
Firstly, it can issue a notice requiring the scheme participant to relinquish (or provide) ACCUs to the CER. If the participant fails to provide the ACCUs within 90 days of receiving the notice, the participant becomes liable to pay an administrative penalty to the CER. The administrative penalty is the higher of A\$20 per ACCU or twice the market price of ACCUs.

If the person does not relinquish ACCUs to the CER or pay the administrative penalty the CER may pursue this ERF participant in court. Further, if a person makes an arrangement (such as asset transfers) with a primary intention to avoid paying the penalty, the CER could refer them to the courts for criminal prosecution. The penalties for criminal prosecution are imprisonment for up to seven years, a fine of up to A\$420,000, or both.

The CER can also impose a carbon maintenance obligation on the landholder of a project area. This prevents action being undertaken on the land which would reduce the carbon stored on it. If the carbon is maintained, it does not prevent the land being used for other purposes. The CER can pursue civil remedies against persons who contravene the carbon maintenance obligation, including injunctions and financial penalties of up to A\$2,100,000 per contravention.

This compliance approach also applies to other circumstances where a participant with a sequestration project is required to relinquish (provide) ACCUs to the CER. For example, where the participant chooses to change or cancel their project to use the land for another purpose or the landholder does not take reasonable action to re-establish carbon stores following a natural disturbance (CFI Act). These penalties remain available to the CER over the 25 or 100 year life of the permanence period. To date however no known instances of non-compliance related to permanence have been detected.

FIGURE 3: ENFORCING COMPLIANCE WITH THE PERMANENCE OBLIGATION



Source: Climate Change Authority analysis of the CFI Act.

When the CFI transitioned to the ERF, the option of a 25 year permanence period was included (in addition to 100 years) to improve the uptake of sequestration projects (Australian Government 2014). 25 year projects are subject to a 20 per cent reduction in the number of ACCUs issued for the project unless a method specifies otherwise (CFI Act). This reduction aims to reflect the potential cost to Government of replacing carbon stores if these projects are discontinued (Australian Government 2014).

Participants that transitioned their projects from the CFI to the ERF could nominate to reduce the permanence period from 100 to 25 years. This required them to relinquish (or provide) ACCUs to the CER in line with the 20 per cent discount rate (CER 2016i). Out of the 66 CFI sequestration projects in 2014, four opted to move from a 100 year to a 25 year permanence period (CER 2017f).

2.4.1 THE RISK OF REVERSAL BUFFER

As well as the permanence obligation, sequestration projects are subject to a risk of reversal buffer. The risk of reversal buffer is intended to insure the ERF against residual risks that cannot be managed by the other permanence arrangements. These include the temporary loss of carbon stores because of natural disturbances or long-term losses that can occur as a result of a participant failing to re-establish carbon stores. All sequestration projects are subject to a five per cent reduction in the number of ACCUs issued for the project, meaning that for every 100 tonnes of carbon dioxide stored by a project, the CER issues 95 ACCUs (CER 2015f). While the risk of reversal buffer is intended to manage the risks of lost carbon stores for the Government, it does not protect ERF project proponents against costs in the event of a carbon loss. ERF participants must decide whether to make their own arrangements to deal with the financial risk of non-permanence.

CONSULTATION QUESTIONS

- Q.11. Are the ERF permanence arrangements fit for purpose? If not, how could they be improved?
- Q.12. Do 25 year and 100 year permanence timeframes raise particular issues?
- Q.13. Is the discount rate set appropriately for the 25 year permanence period and the risk of reversal buffer?
- Q.14. Is there sufficient information available to inform land purchasers about permanence obligations?

2.5 AGGREGATION

For the ERF, aggregation refers to bringing together or pooling the emissions reductions from multiple physical sites or different offset projects. It is a service offered by some carbon service providers. Aggregating multiple sites or projects can reduce administration and compliance costs, create economies of scale and enable participants to benefit from aggregators' technical expertise. It can also spread the risk of not meeting the contracted emissions reduction volume across multiple projects and provide greater delivery flexibility (CER 2015a).

Both projects and contracts can be aggregated under the ERF. Under project aggregation, activities that use the same method across multiple sites are pooled into a single project. Contract aggregation on the other hand combines projects using different methods into a single bid at an auction (CER 2015a). Most of the aggregation which occurs under the ERF is project based with less than five per cent of all contracts aggregated (CER 2017d).

Participation in an auction for a carbon abatement contract (Section 3.2) requires a minimum bid of 2,000 ACCUs a year on average over the term of the contract (CER 2017d)⁴. Aggregation can realise emissions reductions opportunities from projects which individually deliver less than 2,000 tonnes of emissions reductions a year. Aggregators can also encourage greater participation in the ERF by overcoming information barriers.

2.5.1 HOW DOES AGGREGATION WORK?

Aggregation can work in a number of ways. The roles of the parties involved can be determined through an aggregation agreement. The parties to an aggregation agreement could include aggregators, site owners (or landholders) and service providers.

A project aggregation agreement could work as follows: Site owners contribute their land or assets to the project. A service provider, one of the site owners or the aggregator undertakes the project activities on the ground. An aggregator registers an aggregated project with the CER and receives ACCUs under the project. The aggregator can also sign a carbon abatement contract with the CER and is responsible for delivering the contracted ACCUs (CER 2015a).

⁴ This minimum bid size does not apply to projects that were registered under the CFI prior to 13 December 2014.

The aggregation agreement between the parties will also determine how the financial costs and benefits of the activity are shared including how the site owner is paid. It may include agreements on a range of factors including who is responsible for maintenance and reporting and how the risks and benefits of producing less or more ACCUs than expected are shared.

Depending on the terms of the aggregation agreement and the rights the participants have to the financial benefits of the project, an aggregated project and the associated aggregation agreement may involve dealings with financial products.⁵ If so, aggregators are subject to Australian financial services licensing, conduct and disclosure requirements (ASIC 2015).

Contractual arrangements for aggregated projects between carbon service providers and other project participants are commercial in confidence and are not made available to the CER. While this is in line with commercial arrangements in other sectors, the Authority is interested in stakeholder views as to whether greater transparency in these contracts could reduce the risk of contract non-delivery or unscrupulous business practices.

2.5.2 CODE OF CONDUCT FOR CARBON SERVICE PROVIDERS

Carbon service providers, including aggregators, play an important role in the ERF. As of July 2017, at least two-thirds of all emissions reductions purchased by the CER are contracted to carbon service providers. The carbon market is quite concentrated with about 60 per cent of the market (in terms of contracted abatement) serviced by three carbon service providers. The role of carbon service providers, including aggregators, has the potential to develop further as the ERF matures. The Carbon Project Developers Council is currently developing an industry-led voluntary code of conduct for carbon service providers. The code has a number of aims including to provide a best practice approach for engagement by carbon service providers. The Authority is interested in stakeholder feedback on their experiences with aggregators in the market.

CONSULTATION QUESTIONS

- Q.15. Is aggregation working effectively under the ERF? If not how can any issues be addressed?
- Q.16. Is concentration in the market an issue and how can it be managed?
- Q.17. Should contracts between carbon service providers or aggregators and other participants be made available to the Clean Energy Regulator?
- Q.18. Are there any barriers to entry for new carbon service providers?

2.6 THE ERF AND INDIGENOUS PARTICIPATION

The ERF can provide a range of important social, cultural and economic benefits to Indigenous communities. Savanna burning methods (Box 3) under the ERF can help to maintain Indigenous cultural practices, increase employment, build community resilience in remote areas and enhance environmental outcomes while reducing emissions (Price et al. 2012, Russell-Smith et al. 2013).

⁵ As defined in s763A of the *Corporations Act 2001* (Cth).

BOX 3: ERF SAVANNA BURNING METHODS

The savanna burning methods under the ERF involve changing the timing and nature of fire practices in northern Australia to reduce emissions from fires. In northern Australian savannas, in the absence of active management, higher intensity fires that release large quantities of methane and nitrous oxide gases predominate late in the dry season when vegetation is very dry. Emissions are avoided through the savanna fire management method by actively burning in the early dry season to reduce the occurrence and extent of late dry season wild fires. Savanna fire projects can also increase carbon storage relative to areas without early season fire management due to the cooler fires leaving more woody debris on the ground. By reducing the frequency of intense fires, the average carbon stock in the debris increases over time (Price et al. 2012, Russell-Smith et al. 2013, Smith et al. 2008). The Government is developing a new savanna burning method for crediting both the avoided (mainly methane) emissions from early dry season burning as well as increases in the storage of carbon as a result of savanna fire projects.

There are currently 74 savanna burning projects registered under the ERF, covering over 10 per cent of northern Australia. About 29 of these projects are considered Indigenous projects which have significant involvement of local Traditional Owners through control of the project, ownership of the land and participation in delivery of the project (Aboriginal Carbon Fund 2017).

Indigenous participation in the ERF is currently encouraged through Working on Country and Indigenous Protected Areas programs. These programs train and employ Indigenous rangers across Australia to protect and manage their land and sea country (DoEE 2017f, DPMC 2017).

2.6.1 PARTICIPATION IN THE ERF AND INDIGENOUS CONSENTS

Where native title over land has been determined, any participant registering an area-based emissions avoidance project (such as a savanna burning project) or a sequestration project, will need to obtain eligible interest holder consent from native title rights holders (CFI Act). Indigenous groups have secured financial or other benefits through negotiations on ERF consent requirements.

Currently, participants are not required to obtain consents from native title claimants whose claim has not been determined. This means that if native title holder claims are subsequently determined, they could miss out on economic benefits from the savanna burning project.

Land where native title has been determined or that is subject to native title claims can lead to administrative challenges for the CER in determining who has the legal right to undertake the project or whether appropriate eligible interest holder consents have been given (Section 2.8). There may also be challenges in assessing whether a pastoral lease or an Indigenous land use agreement covers proposed ERF projects in all circumstances.

The DoEE and the CER are currently developing guidance on what will satisfy legal right requirements in circumstances where exclusive possession of land does not exist.

2.6.2 THE GOVERNMENT'S PROPOSED CHANGES TO PARTICIPATION IN SAVANNA BURNING METHODS

The Government has proposed a range of amendments to the CFI Act which will have implications for savanna fire management projects in Northern Australia. The key proposals cover:

- Removing the requirement to obtain consent from eligible interest holders (including determined native title holders) from savanna burning projects. This would bring the Act in line with the original CFI Act, which required consent only for sequestration projects. This proposed change triggered concerns amongst some Indigenous groups who consider the ERF to be out of step with native title requirements in other pieces of legislation (Kimberley Land Council's submission to the Review of Australia's climate change policies).
- Clarification that consent is not required from Commonwealth or state or territory ministers for projects conducted on exclusive possession native title land.

Although the amendment bill (Carbon Credits (Carbon Farming Initiative) Amendment Bill 2017) (Cth) has not been passed by Parliament, it remains part of the Government's legislative agenda.

CONSULTATION QUESTIONS

- Q.19. What are the barriers to Indigenous participation in the ERF and how can they be addressed?
- Q.20. Are the eligible interest holder arrangements working effectively? If not, how could they be improved?

2.7 MANAGING ADVERSE IMPACTS FROM ERF PROJECTS

The ERF has a range of protections that seek to prevent projects from causing adverse social, economic or environmental impacts.

2.7.1 GENERAL ERF CRITERIA

When registering a sequestration or area-based project, scheme participants must state whether their project is consistent with any natural resource management plan which applies to the project area. The participant must also obtain any regulatory approvals required by state, territory or federal laws relating to land use or development, the environment or water (CER 2016n).

2.7.2 EXCLUDED OFFSETS PROJECTS ON THE 'NEGATIVE LIST'

ERF projects cannot include project types on the 'negative list' of excluded offsets projects. Certain activities have been ruled out or restricted in the CFI regulations because they may adversely impact water availability, biodiversity conservation, employment, the local community or land access for agricultural production. An example of an excluded offsets project is planting a known weed species.

2.7.3 METHOD-SPECIFIC CRITERIA

The methods can also contain restrictions on activities that could adversely affect the environment or carry high work health and safety risks. For example, ERF projects using the reforestation and afforestation method must not remove native forests. The methods can also specify how projects should be implemented to minimise adverse social, economic or environmental impacts. The method for reducing greenhouse gas emissions in beef cattle through feeding nitrate containing supplements defines the maximum rate at which nitrates can be fed to beef cattle to avoid poisoning the cattle.

CONSULTATION QUESTIONS

Q.21. Are the ERF arrangements to prevent adverse outcomes from ERF projects sufficient? If not, how could they be improved?

2.8 PROJECT REGISTRATION

To be eligible to receive ACCUs and bid in ERF auctions, participants must register their project with the CER. Before registering a project the CER will determine if the project proponent is a fit and proper person; the project meets all eligibility criteria of the CFI Act; and the project is consistent with an applicable method (CFI Act). Such an assessment aims to reduce the risk to the CER of contracting a project that could be non-compliant. An example of how a landholder could participate in the ERF is in Box 4.

Participants may also apply to the CER to vary a project area, conditions, the start date, the participant, or method or to withdraw a project. Participants may need to relinquish ACCUs if part of a project area is removed from a sequestration project that has already been issued with credits. This ability to vary projects can assist aggregators and other carbon service providers in managing their portfolio of projects. It does however generate administrative complexity and the Authority is interested to hear from stakeholders about its utility. Once a complete application is made to the CER, the CER must make a decision on the application within 90 days.

Some of the key criteria that must be met in order for the CER to register a project are outlined below.

2.8.1 FORWARD ABATEMENT ESTIMATE

All projects are required to estimate emissions reductions consistent with an approved method. These forward abatement estimates are used by the CER to assess whether the abatement volumes in the auction bids are reasonable and to determine their forward audit requirements.

2.8.2 LEGAL RIGHT

Under the ERF, participants must have a legal right to carry out a project. This means that the participant must have the right to carry out the project activities, and to the ACCUs that result from the project (CER 2016f).

Owners, lessees and carbon service providers may have an interest in an ERF project. For example, a lessee of a property may wish to undertake an ERF project, and might be required to

obtain agreement from the owner of the property for the legal right. Parties can also assign legal right to other parties such as aggregators or carbon service providers (CER 2016f).

2.8.3 ELIGIBLE INTEREST HOLDER CONSENT

If a participant is applying to register an area-based emissions avoidance project (e.g under the cotton fertiliser or savanna burning methods) or a sequestration project under the ERF, they must submit eligible interest holder consents from others with an interest in the land (CER 2016e). This could include native title holders, states or territories, or financial institutions. Consents are required before ACCUs are issued.

BOX 4: AN EXAMPLE OF HOW A LANDHOLDER COULD PARTICIPATE IN THE ERF

• A landholder becomes aware they can earn payments from the Australian Government for undertaking emissions reductions or storage activities on their land.



• The landholder has a look at the CER and DoEE websites to learn more about the ERF and the types of activities they can do that might be eligible.



• The landholder identifies a particular method they want to use and familiarises themselves with broader eligibility criteria to register a project with the CER.



• The landholder makes an estimate of the expected costs and returns of the project and seeks legal and financial advice. They may also contact a carbon service provider.



• The landholder registers a project with the CER and provides an estimate of the amount of emissions reduction the activity will create.



• The landholder bids at a CER auction and wins a contract with the Government for the purchase of the expected number of ACCUs generated by the project. If the landholder was not successful at auction they could still choose to continue the project and sell the ACCUs on the secondary market.



• The landholder undertakes the project and arranges for audits using a registered greenhouse and energy (NGER scheme) auditor. A list of registered auditors is available on the CER website www.cleanenergyregulator.gov.au.



• The landholder submits reports to the CER and is credited with ACCUs. The landholder provides the ACCUs to the Government in line with the contract and is paid the price bid at auction.

CONSULTATION QUESTIONS

- Q.22. Is the guidance provided for participation in the ERF user friendly and easy to understand?
- Q.23. Are there administrative barriers that are preventing participation in the ERF?
- Q.24. Could the process for project registration and variation be improved?
- Q.25. Do scheme participants feel that enquiries about project registration or other administrative matters are dealt with efficiently?
- Q.26. Is CER decision making consistent, transparent and timely?

2.9 CREDITING

The CER credits one ACCU for each tonne of carbon dioxide equivalent stored or avoided by a registered project by making an entry in the Australian National Registry of Emissions Units. The ACCUs issued can be used to meet Australia's international emissions reduction commitments (CFI Act).

The CER credits ACCUs after it verifies the scheme participant's report to the CER. The report outlines their emissions reductions and how they have been calculated (CER 2015b). Participants can submit project reports as frequently as every six months except large projects, which can submit monthly reports (*Carbon Credits (Carbon Farming Initiative) Rule 2015 (Cth)*).⁶

2.9.1 THE CREDITING PERIOD

The crediting period is the maximum period for which a registered project can earn ACCUs. Limiting crediting periods aims to ensure credits are not issued if they are no longer additional (Australian Government 2014). Crediting periods range from seven to 25 years and generally reflect the nature of the projects – sequestration projects tend to have longer crediting periods than emissions avoidance projects reflecting the length of time required to achieve a rate of return. The exception is savanna fire projects, which were given a longer crediting period (and opportunity to earn revenue) to reflect equity concerns for Indigenous communities.

The ERF draws a distinction between the length of time that ERF projects can generate credits and the period of time for which ERF projects can receive payment under a government contract (Table 3). Restricting contract periods is intended to manage the Government's liability for ERF contracts.

⁶ Large projects are those that submit a project report for over 2,000 t CO₂-e net abatement.

TABLE 3: ERF CONTRACT, CREDITING AND PERMANENCE PERIODS - DEFINITIONS

TERM	DEFINITION	LENGTH
Crediting period	Period over which a registered ERF project can earn ACCUs.	7 years for emissions avoidance projects other than savanna burning. 15 or 20 years for avoided deforestation projects. 25 years for savanna burning and sequestration projects except avoided deforestation.
Contract period	Period over which ERF projects receive payment from a Government contract in exchange for delivery of ACCUs.	7 years for emissions avoidance projects except savanna burning. 10 years for savanna burning and sequestration projects. other shorter contract periods to give flexibility (Section 3.2).
Permanence period (Section 2.4)	Period over which scheme participants must maintain the carbon stored by ERF projects.	25 or 100 years for carbon storage projects.

Source: CFI Act; CER 2016l.

For sequestration and savanna burning projects, the crediting period is longer than the maximum contract length. Government policy is that once a project has been successful at auction it will not be able to seek additional funding through a future auction (Australian Government 2014). Scheme participants can sell credits earned outside of the contract period on the secondary market (see Section 3.3).

ERAC assesses whether a method is still additional and should have its crediting period extended. Each method can only have its crediting period extended once. Landfill waste methods and projects are currently undergoing this assessment. Following consideration by ERAC, the Minister for the Environment and Energy will decide whether to extend crediting periods (DoEE 2017a).

CONSULTATION QUESTIONS

Q.27. Are the ERF crediting arrangements fit for purpose? If not, how could they be improved?

2.10 AUDITING

ERF projects must satisfy audit requirements before the CER credits them with ACCUs. Audits are required to provide a reasonable level of assurance that projects meet legislative requirements (including methods) and reported emissions reductions are accurate. This is done through a range of activities including, for example, interviews with project participants, analysis of the procedures used by the participants to measure and calculate emissions reductions, and site visits (CER 2017c). A registered and independent greenhouse and energy auditor must prepare the audit. Auditors must not have any conflicts of interest, for example they must not participate in the ERF themselves (CER 2016b). The CER conducts an inspection program of registered greenhouse and energy auditors to determine the quality of their audits and whether the assurance provided in the audit report was supported by a sufficient evidence basis (Spencer et al. 2017).

For each project, an initial audit report must accompany the first project report.⁷ The initial audit assesses whether the project was implemented in accordance with legislative requirements and, in particular, whether legal right and eligible interest holder consent requirements are met (Section 2.8). Subsequent scheduled audits⁸ cover a minimum period of 12 months (CER 2015d).

The CER may require additional audits when:

- a project report claims emissions reductions over 100,000 t CO₂-e
- emissions reductions claimed vary from either the project's forward abatement estimate, similar projects, or the emissions reductions profile of the method used, or
- a previous audit report included a qualified audit opinion, for example because some evidence was unobtainable (CER 2016b).

The CER can also initiate compliance audits or expand the scope of an audit if it suspects that the project does not meet legislative requirements (CER 2015d).

When the CFI transitioned to the ERF, auditing requirements were streamlined and new scheme participants were no longer required to submit an audit report with every project report. The changes aim to decrease transaction costs and encourage participation in the ERF (Australian Government 2014).

CONSULTATION QUESTIONS

Q.28. Are the ERF reporting and auditing arrangements and guidance fit for purpose?
If not, how could they be improved?

Q.29. Are there any opportunities for further streamlining reporting and auditing while maintaining the integrity of the scheme?

⁷ The first project report for emission avoidance projects must be submitted between six months to two years from the date the project was registered. For carbon storage projects, the first project report must be submitted between six months and five years from project registration.

⁸ Audits are scheduled by the CER based on the size of estimated abatement. All projects are subject to a minimum of three audits across the crediting period and larger projects in terms of estimated abatement are subject to a greater number of audits.

CHAPTER 3. ERF PURCHASING

3.1 PURCHASING PRINCIPLES

The CFI Act sets out the principles for ERF purchasing. These principles are:

- to purchase emissions reductions at the least cost
- to maximise the volume of emissions reductions that can be purchased
- to conduct the process in a manner that ensures that administrative costs are reasonable
- to conduct the process in a manner that ensures its integrity
- to encourage competition
- to provide for fair and ethical treatment of all participants in the process.

3.1.1 ERF AUCTIONS

In each of the auctions conducted so far the CER used a single round, pay-as-bid, sealed bid reverse auction process. Participants bid the volume and price of ACCUs they are willing to sell. The sealed bid element means that participants have no knowledge of what others are bidding and provides an incentive for bidders to bid in at the lowest price. The pay-as-bid nature of the auction means that participants successful at the auction receive the price they bid into the auction and the Government pays the minimum amount bidders are willing to accept, which aims to maximise value for money.

Two design elements determine which bids are successful: the benchmark price and the variable volume threshold. The benchmark price is set by the CER prior to the auction and sets a maximum price the CER is prepared to pay (CER 2017g). A non-disclosure clause applies (which forbids participants from disclosing their bid prices) to protect the confidentiality of the benchmark price (CER 2015c).

In the ERF White Paper the Government recognised there were trade-offs in choosing to reveal or maintain confidentiality around the benchmark price (Australian Government 2014). Revealing the price gives greater certainty to the market but also may encourage bidding at or just below the benchmark price by participants with much lower project costs. The Government decided that the benchmark price would remain confidential but the average price of successful bids would be published after each auction to provide some information on price to future participants and support investment in new projects (Australian Government 2014).

The variable volume threshold determines the volume of emissions reductions under the benchmark price that is purchased. For the first auction, a fixed volume of 80 per cent of emissions reductions below the benchmark price was applied (CER 2015g). In the second and subsequent auctions, the variable volume threshold allows the CER to vary the volume purchased between 50 and 100 per cent of emissions reductions under the benchmark price (CER 2015h). The variable volume threshold is intended to add uncertainty as to whether bids will be successful and foster competitive pricing in ERF auctions.

The ERF White Paper indicated that auctions were planned to be held four times a year (Australian Government 2014), but have been held twice a year to date.

3.1.2 ALTERNATIVE PURCHASING PROCESSES

The CFI Act allows the CER to purchase emissions reductions outside auctions. In August 2016, the CER released a 'market sounding' paper seeking stakeholder views on a 'direct abatement offer', or purchasing emissions reductions outside the auction process (CER 2016h). The CER paper sought to test whether direct abatement offers could reach previously untapped segments of the market and deliver large volumes of emissions reductions at a low cost (over 250,000 t CO₂-e per year, or over 1.25 Mt CO₂-e in total) (CER 2016g). However, submissions in response to the CER paper did not meet criteria for ERF purchases outside of auction (CER 2016h).

The CER concluded that the auction process remains the preferred purchasing mechanism and there is limited appetite in the market for the out-of-auction approach (CER 2016h).

CONSULTATION QUESTIONS

- Q.30. Are the purchasing principles fit for purpose? If not, how should they be changed?
- Q.31. Is too much emphasis placed on the least cost principle?
- Q.32. Is the contracting and auction process fit for purpose?
- Q.33. Are there improvements that could be made to the auction design or contracting process?

3.2 CONTRACTS

Participants who are successful at an ERF auction enter into a standardised carbon abatement contract with the CER. The standardised agreement aims to 'reduce transaction costs, increase transparency and ensure projects compete for funding at auctions on equal terms' (Australian Government 2014).

3.2.1 CARBON ABATEMENT CONTRACT TYPES

There are three types of carbon abatement contracts: a standard contract, short-term contract and immediate delivery contract (CER 2016l). The shorter-term contracts provide flexibility and allow the CER and scheme participant to minimise the risk of contract terminations. The trade-off is a reduced period over which the volume and price of ACCUs is fixed.

The maximum contract length is 10 years. Sellers may choose to enter into immediate delivery contracts if their registered project has already earned ACCUs (CER 2016l).

3.2.2 PURCHASE

The contract specifies the price and volume of ACCUs the CER will purchase and the timing of the purchases (CER 2016m). The price is a single price per ACCU, which remains the same for the duration of the contract. The CER only pays for emissions reductions once they have been delivered (CER 2015c).

3.2.3 DELIVERY

The contract does not restrict the source of ACCUs to a specific project. This means that if a registered project associated with a contract does not generate sufficient ACCUs to meet a contract milestone, the seller can use ACCUs generated by another project or purchased in the secondary market (the 'make-good' provision). Only ACCUs can be used to make good (CER 2016m). This flexibility is intended to allow emissions reductions to be delivered in the most cost effective way and help ERF participants to meet their emissions reduction commitments regardless of changes in individual projects (Australian Government 2014).

3.2.4 CONDITIONS PRECEDENT

Some carbon abatement contracts have conditions precedent whereby delivery and payment obligations will only come into effect if certain conditions such as financing or regulatory approvals for the project are fulfilled or waived (CER 2016m). The contract specifies which party can waive or defer a condition precedent or whether agreement by both is required (CER 2016m).

Conditional declarations for the project can be reflected in the conditions precedent for the contract. In these cases a failure to obtain all relevant consents or approvals may mean that the contract comes to an end without delivery of ACCUs or payment.

3.2.5 VARIATION

With the CER's agreement some aspects of the ERF contract may be varied. For example, the seller can vary the delivery schedule and deliver ACCUs early. However, under normal circumstances, neither party can vary the total volume of ACCUs or extend the final date of delivery (CER 2016d). This ensures that contracts deliver the expected emissions reductions (Australian Government 2014). Contract variation creates administrative complexity and the Authority is interested to hear stakeholders' views on its utility.

CONSULTATION QUESTIONS

Q.34. Are the ERF contracting arrangements fit for purpose? If not, how could they be improved?

3.3 SECONDARY MARKET

The secondary market is the market for the sale and purchase of ACCUs outside of a contract with the Government (CER 2016a). There are three possible sources of demand for ACCUs on the secondary market – 'make-good provisions in ERF contracts', safeguard mechanism facilities that exceed baselines, and the voluntary market.

Facilities covered by the safeguard mechanism, which exceed their prescribed emissions baselines may decide to purchase ACCUs on the secondary market to meet their obligations under the scheme (Section 1.4) (CER 2016k). It is unclear what level of demand this will create as safeguard obligations on facilities have not yet fallen due.

There is also a voluntary market for ACCUs with demand from firms seeking to offset their emissions, for example through the National Carbon Offset Standard (NCOS) and Carbon Neutral

Program (Australian Government 2015). Between 2010-11 and 2015-16, Carbon Neutral Program participants offset around nine Mt of CO₂-e. Only about two per cent of the credits used for this purpose in 2015-16 were ACCUs (DoEE 2017b).

To assist with transparency and with support from the DoEE, the Carbon Market Institute developed an online market platform for Australian carbon credits including ACCUs, with a focus on the voluntary market. The Carbon Marketplace provides a description of the project used to generate the credits, including any co-benefits it generates, and contact details for the owner of the credits (CMI n.d.).

The CER maintains project and contract registries, which prospective buyers can use to identify potential sellers of ACCUs. These registries provide information about the volume of ACCUs supplied. For example, of the 39 million ACCUs credited as of July 2017, 23 million were delivered to the Government under contract (CER 2017e). It is unclear how many ACCUs are available to be traded on the secondary market.

For a secondary market to function well, it should be transparent and liquid. The Authority is interested in stakeholders' views on whether this is occurring.

CONSULTATION QUESTIONS

Q.35. How has the secondary market been operating?

Q.36. Is the secondary market sufficiently transparent and are any changes needed to increase its effectiveness?

CHAPTER 4. GOVERNANCE, COMPLIANCE AND OTHER ISSUES

4.1 GOVERNANCE

The Clean Energy Regulator (CER), Department of the Environment and Energy (DoEE) and the Emissions Reduction Assurance Committee (ERAC) all have a role in the governance of the ERF (Section 1.6).

Effective operation of the ERF requires a range of risks to be managed. These include ensuring consistency with the requirements of the CFI Act such as environmental integrity and value for money as well as managing direct risks associated with non-compliance such as fraud and workplace health and safety. These risks are managed by the administrators of the ERF as they develop guidance, policy and undertake regulatory functions.

The Authority is interested in hearing from stakeholders about their experience of how the ERF is administered including for risk and would welcome feedback on these matters.

CONSULTATION QUESTIONS

Q.37. Could the current governance structure of the ERF be improved? If so, how?

Q.38. In what ways could transaction costs be minimised for ERF participants while maintaining environmental integrity?

4.2 COMPLIANCE

The CFI Act provides the CER with powers to monitor and enforce a participant's compliance with the requirements of the ERF including methods, project reporting and auditing, and relinquishment of ACCUs to the CER where, for example, over-crediting has occurred (CER 2017e). Effective compliance is a key element for the environmental integrity of an offset scheme.

The CER has a compliance, education and enforcement policy, which outlines how it will interpret and apply its compliance powers (CER 2016c). The CER uses a risk-based approach to compliance, focusing on the likelihood and consequences of non-compliance and the costs associated with making sure participants are meeting their legislative requirements.

The CER monitors ERF projects and participation. Information provided to the CER by scheme participants and a range of Commonwealth regulatory agencies assists in that process (CER 2015e). Where the CER suspects a breach of the CFI Act has occurred or may occur, the CER may use its investigative powers under the CFI Act to audit a participant or use other methods to further investigate compliance or request additional information (CER 2017e).

Where a scheme participant has failed to satisfy their legal obligations, the CER will consider the nature of the non-compliance when determining how it will deal with the matter (CER 2016c). The CER has a range of graduated enforcement options it can call on. For example, where the participant has accidentally failed to comply with an obligation, and is taking steps to rectify this, the CER may guide the participant on how to best address the non-compliance. Where there is deliberate non-compliance with evidence of a criminal or fraudulent intent, the CER may initiate

investigations, pursue civil action or refer matters for criminal prosecution. The CER can also revoke the registration of an ERF project, enter into an enforceable undertaking with the project proponent or seek court injunctions to prevent or require action to occur (CER 2016c).

Where the CER has made a decision, the CFI Act provides that for many of those decisions, the person affected by the decision can apply to the CER to have that decision internally reviewed. The CER will then either affirm, vary or revoke that primary decision. Where the CER varies or affirms its original decision, the person affected by the decision may apply to the Administrative Appeals Tribunal for a review of that decision. The *Administrative Decisions (Judicial Review) Act 1977* (Cth) also applies to the ERF.

The ERF permanence obligation poses particular compliance challenges for the scheme (Box 2). This is partly because the financial benefit for an ERF project to a landholder lasts in effect for the life of the ERF contract (or possibly for the crediting period assuming proponents can sell into the voluntary or secondary markets) but the obligation to maintain the carbon stores lasts for 25 or 100 years. A question arises as to whether the CER (or a successor agency in the future) has sufficient compliance and detection tools in its armoury to enforce compliance many years down the track. The Authority is interested in hearing from stakeholders as to how compliance with other long-lived legislative obligations (for example land based conservation covenants) is enforced.

CONSULTATION QUESTIONS

- Q.39. Is the current compliance regime effective including for relinquishment of ACCUs in cases of a lack of permanence?
- Q.40. What would improve its effectiveness?

4.3 INTERNATIONAL LINKAGES

International trade in emissions reductions can help to achieve domestic and global emissions reductions at lower cost by allowing countries to import carbon credits from overseas if they are cheaper than reducing emissions domestically. Providing the emissions reductions underlying any carbon unit are genuine, international emissions reductions have the same effect in reducing emissions as domestic reductions.

The ERF does not currently allow for international units to be surrendered to meet contractual obligations under the ERF. This restriction aims to direct ERF funds towards Australian emission reductions, improve the productivity of Australian businesses and support the domestic carbon market (Australian Government 2014).

The Authority has previously examined the benefits and risks of using international units. Allowing the use of international units would lower the cost of delivering on contractual obligations under the ERF. It could also reduce the extent and pace of structural change in the Australian economy towards low emissions production. There are also risks around ensuring international emissions reductions are genuine and backed by real emissions reductions (CCA 2014b).

Under the ERF, exports of ACCUs to foreign registries are not allowed. While the export of ACCUs may increase demand and spur investment in ERF projects, ACCUs that are exported do not count towards meeting Australia's emissions reduction targets and would make the task of meeting Australia's targets more difficult (Australian Government 2014).

CONSULTATION QUESTIONS

- Q.41. Should the Government allow the export of ACCUs or imports of carbon credits to meet contractual obligations under the Emissions Reduction Fund?
- Q.42. How can Australia ensure that ACCUs would be eligible in future international markets?

4.4 THE FUTURE OF THE ERF

The ERF is the Government's central climate change policy. Over the five auctions that have been run to date, 88 per cent of the allocated funding for the purchasing mechanism has been committed leaving around A\$300 million (Table 1). The CER has announced that the sixth ERF auction will be held on 6-7 December 2017.

The Government is currently reviewing its climate change policies including the ERF and this review is due to conclude by the end of 2017 (DoEE n.d.c).

The Authority recommended future arrangements for the ERF in its *Towards a Climate Policy Toolkit: Special Review of Australia's climate goals and policies* (CCA 2016). The Authority is interested in hearing from stakeholders about alternative, possible transitional arrangements for the ERF that would allow Australia to meet its Paris targets, provide greater certainty for ongoing investment and help ensure a well-functioning secondary market (noting that it is likely to be needed for the voluntary market and make good arrangements for a while into the future).

CONSULTATION QUESTIONS

- Q.43. What role should the ERF play in meeting Australia's future international targets?
- Q.44. How would this affect its crediting and purchasing elements?
- Q.45. To what extent (if at all) is uncertainty around the future of the ERF affecting investment decisions in offset projects and the secondary market?

APPENDIX A: GUIDING PRINCIPLES FOR THIS REVIEW

The principles established in the *Climate Change Authority Act 2011* guide all of the Authority's work. These include that measures to respond to climate change should:

- be economically efficient, environmentally effective, equitable and in the public interest
- support the development of an effective global response to climate change, and be consistent with Australia's foreign policy and trade objectives
- take account of the impact on households, businesses, workers and communities.

The objects of the CFI Act provide specific direction for this review. The objects are to:

- remove greenhouse gases from the atmosphere, and avoid emissions of greenhouse gases, in order to meet Australia's obligations under international agreements
- create incentives for people to carry on offset projects
- increase emissions reductions in a way that protects Australia's natural environment and improves resilience to the effects of climate change
- authorise the purchase by the Commonwealth of units that represent emissions reductions.

APPENDIX B: OUTLINE OF METHODS UNDER THE EMISSIONS REDUCTION FUND

METHOD FAMILY	ACTIVITIES TO REDUCE EMISSIONS OR STORE CARBON
Vegetation and soil management	There are 10 methods that promote the enhancement of carbon storage in vegetation and soils, including through the protection of existing native forests, re-establishment of native forests, establishing or increasing rotation length in plantations and building soil carbon stocks by changing management practices in grazing and cropping systems.
Savanna burning	Early dry season burning and other fire management activities in savannas that reduce methane and nitrous oxide emissions.
Enteric fermentation in cattle	Beef cattle herd management to improve productivity and reduce methane emissions. Replacement of urea lick blocks with nitrate lick blocks for pasture-fed beef cattle to reduce methane emissions. Provision of dietary additives (for example, canola meal) to milking cows to reduce methane emissions.
Manure management	There are three methods that incentivise the capture and combustion of methane from piggery and dairy effluent lagoons. Diversion of manure waste to engineered biodigesters and subsequent capture and combustion of biodigester methane.
Synthetic fertiliser application	Improved efficiency of synthetic fertiliser use in irrigated cotton systems by changing the rate, timing or type of fertiliser applied to reduce nitrous oxide emissions.
Landfill and wastewater gas	Flaring or producing electricity from landfill methane or methane generated by wastewater treatment.
Waste diversion	There are two methods that incentivise diverting waste that would otherwise go to landfill and recycling or composting it to reduce methane emissions.
Mining, oil and gas extraction	There are two methods that incentivise flaring either coal mine gas methane or methane from oil and natural gas production.
Energy efficiency	There are a suite of six methods that promote energy efficiency improvements in industrial, commercial and residential equipment and buildings, including through improving the efficiency of industrial equipment, commercial appliances, commercial buildings and lighting, refrigeration and ventilation fans, and aggregating improvements from small energy users.
Transport efficiency	Reducing emissions intensity of land and sea vehicles through a range of practices including replacing or modifying existing vehicles and fuel switching. Improving the efficiency of air transport through practices including modifying existing planes and changing energy sources or the mix of energy sources.
Facilities improvements	Reducing the emissions intensity of a facility (that reports under the NGER scheme) through a range of measures. There is flexibility in the activity undertaken, which may include upgrading turbines or reducing industrial process emissions.

Source: Based on CER n.d and DoEE n.d.a.

APPENDIX C: CONSULTATION QUESTIONS

- Q.1. Is the coverage of methods sufficient or should other emissions reduction opportunities that are consistent with the offsets integrity standards be included?
- Q.2. Are the existing methods fit for purpose, including with respect to the offsets integrity standards?
- Q.3. Would emissions reductions from some ERF offset projects be delivered more efficiently through regulation or some other policy?
- Q.4. Is the process for method development and ERAC assessment efficient and transparent?
- Q.5. Why do some methods have low uptake?
- Q.6. Should methods with very few or no registered projects be subject to less frequent reviews?
- Q.7. Is the ERF delivering additional abatement?
- Q.8. Could the additionality requirements be improved?
- Q.9. Do any methods or projects raise particular additionality concerns?
- Q.10. Are current emissions estimation approaches and tools fit for purpose? If not how can they be improved?
- Q.11. Are the ERF permanence arrangements fit for purpose? If not, how could they be improved?
- Q.12. Do 25 year and 100 year permanence timeframes raise particular issues?
- Q.13. Is the discount rate set appropriately for the 25 year permanence period and the risk of reversal buffer?
- Q.14. Is there sufficient information available to inform land purchasers about permanence obligations?
- Q.15. Is aggregation working effectively under the ERF? If not how can any issues be addressed?
- Q.16. Is concentration in the market an issue and how can it be managed?
- Q.17. Should contracts between carbon service providers or aggregators and other participants be made available to the Clean Energy Regulator?
- Q.18. Are there any barriers to entry for new carbon service providers?
- Q.19. What are the barriers to Indigenous participation in the ERF and how can they be addressed?
- Q.20. Are the eligible interest holder arrangements working effectively? If not, how could they be improved?
- Q.21. Are the ERF arrangements to prevent adverse outcomes from ERF projects sufficient? If not, how could they be improved?
- Q.22. Is the guidance provided for participation in the ERF user friendly and easy to understand?
- Q.23. Are there administrative barriers that are preventing participation in the ERF?

- Q.24. Could the process for project registration and variation be improved?
- Q.25. Do scheme participants feel that enquiries about project registration or other administrative matters are dealt with efficiently?
- Q.26. Is CER decision making consistent, transparent and timely?
- Q.27. Are the ERF crediting arrangements fit for purpose? If not, how could they be improved?
- Q.28. Are the ERF reporting and auditing arrangements and guidance fit for purpose? If not, how could they be improved?
- Q.29. Are there any opportunities for further streamlining reporting and auditing while maintaining the integrity of the scheme?
- Q.30. Are the purchasing principles fit for purpose? If not, how should they be changed?
- Q.31. Is too much emphasis placed on the least cost principle?
- Q.32. Is the contracting and auction process fit for purpose?
- Q.33. Are there improvements that could be made to the auction design or contracting process?
- Q.34. Are the ERF contracting arrangements fit for purpose? If not, how could they be improved?
- Q.35. How has the secondary market been operating?
- Q.36. Is the secondary market sufficiently transparent and are any changes needed to increase its effectiveness?
- Q.37. Could the current governance structure of the ERF be improved? If so, how?
- Q.38. In what ways could transaction costs be minimised for ERF participants while maintaining environmental integrity?
- Q.39. Is the current compliance regime effective including for relinquishment of ACCUs in cases of a lack of permanence?
- Q.40. What would improve its effectiveness?
- Q.41. Should the Government allow the export of ACCUs or imports of carbon credits to meet contractual obligations under the Emissions Reduction Fund?
- Q.42. How can Australia ensure that ACCUs would be eligible in future international markets?
- Q.43. What role should the ERF play in meeting Australia's future international targets?
- Q.44. How would this affect its crediting and purchasing elements?
- Q.45. To what extent (if at all) is uncertainty around the future of the ERF affecting investment decisions in offset projects and the secondary market?

GLOSSARY OF TERMS

TERM	DEFINITION
additionality	Emissions reductions that are additional to what would have occurred in the absence of a policy-induced project or activity.
Australian carbon credit unit (ACCU)	A type of emissions unit issued for verified emissions reductions under the Carbon Farming Initiative and the Emissions Reduction Fund, and held in the Australian National Registry of Emissions Units.
baseline	A counterfactual scenario of future emissions that would have been expected to occur without the emissions-reducing activity.
business-as-usual	Emissions that would occur without any additional policy intervention.
Carbon Farming Initiative (CFI)	An Australian emissions offset scheme that credited emissions reductions from certain sources, such as forestry and agriculture, which were not covered by the carbon pricing mechanism.
carbon pricing mechanism	An emissions trading scheme that put a price on Australia's greenhouse gas emissions. It was introduced under the <i>Clean Energy Act 2011</i> (Cth) and applied to Australia's biggest emitters (called 'liable entities'). It was repealed in July 2014.
contract period	Period over which ERF projects receive payment from a Government contract in exchange for delivery of ACCUs.
crediting period	Period over which a registered ERF project can earn ACCUs.
emissions intensity	A measure of the amount of emissions associated with a unit of output; for example, emissions per unit of gross domestic product.
emissions reduction	The act or process of limiting, restricting or sequestering greenhouse gas emissions.
Emissions Reduction Assurance Committee (ERAC)	An independent, expert committee that assesses whether methods meet the requirements of the Emissions Reduction Fund and provide advice to Government.
Emissions Reduction Fund (ERF)	A scheme resulting from the expansion of, streamlining and other changes to the CFI in December 2014. The ERF involves purchases of ACCUs by the Government.
environmental integrity	The attribute of whether (and the extent to which) credits issued under the CFI or ERF are based on accurate measurement, are additional, permanent and do not cause an increase in emissions outside of the project (no leakage).
greenhouse gas	Any gas (natural or produced by human activities) that absorbs infrared radiation in the atmosphere. Key greenhouse gases include carbon dioxide, water vapour, nitrous oxide, methane and ozone.
method	A type of project that a scheme participant can choose to undertake as part of the ERF.
negative list	Identifies types of projects that are likely to cause adverse impacts to one or more of the following: the availability of water, the conservation of biodiversity, the local community, and land access for agriculture production. The negative list is designed to address residual risks from ERF projects that are not addressed through existing regulations and planning regimes.
Paris Agreement	An international agreement adopted under the United Nations Framework Convention on Climate Change in 2015.
permanence period	Period over which scheme participants must maintain the carbon stored by ERF projects.
positive list	A register of emissions reduction activities eligible to earn carbon credits under the CFI. The positive list played a role in trying to ensure that credits were only issued for additional emissions reductions. A method could not be approved for use under the CFI unless it related to an activity on the positive list.
safeguard mechanism	An element of the ERF that establishes regulatory limits for large emitters that exceed a defined baseline.
sequestration/ storage	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).
transaction costs	The costs of participating in a market. In the case of the ERF, transaction costs are all costs involved in developing, approving and administering projects apart from those costs directly associated with implementing and maintaining the project itself. Transaction costs also include costs to

government and project proponents for method development, reporting and verification.

United Nations Framework
Convention on Climate Change
(UNFCCC)

An international treaty that commits signatory countries (Parties) to stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous human-induced interference with the climate system.

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