Australian Government
Climate Change Authority

CARBON FARMING INITIATIVE REVIEW

Issues Paper

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ISSUES PAPER

The Climate Change Authority has released this Issues Paper to assist individuals and organisations to prepare submissions to the Carbon Farming Initiative Review. It outlines:

- the scope of the Review
- the Authority's procedures
- matters on which the Authority is seeking comment and information
- how to make a submission.

This Issues Paper identifies matters that the Authority considers most pertinent to the Review, but comments on any other issues that participants consider relevant are also welcome.

Key dates

Issues Paper
17 October 2014 › Submissions close
31 October 2014 › Final report
December 2014

How to make a submission

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

Submissions can be lodged:

via email
submissions@climatechangeauthority.gov.au

via post
Submissions
Climate Change Authority
GPO Box 1944
Melbourne VIC 3001

Contacts

For further information about the Carbon Farming Initiative Review or making a submission, contact the Climate Change Authority on freecall 1800 475 869 or via email at enquiries@climatechangeauthority.gov.au.

Web site

www.climatechangeauthority.gov.au

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APPENDICES

1. ABOUT THIS REVIEW

The Carbon Farming Initiative (CFI) is a greenhouse gas emissions offset scheme. It is a national, voluntary scheme that credits emissions reductions from eligible agriculture, legacy waste and land use, land use change and forestry projects.

This Issues Paper is part of the Climate Change Authority's first review of the CFI. The Authority will consider how the CFI has performed during its first two years of operation and options for improvement, taking account of the government's proposed changes to streamline and expand the scheme.

The Authority must report to the Parliament through the Minister and publish its findings by 31 December 2014.

This Issues Paper presents the Climate Change Authority's CFI Review. It highlights important issues to be considered in the Review and raises some core questions. This is intended to help stakeholders prepare any comments they want to make to inform the Review.

This section introduces the CFI Review. It sets out what the Authority must do when conducting the Review and how it plans to approach the task. Section 2 outlines the CFI, its history and the government's proposed changes to expand and streamline the CFI to form the Emissions Reduction Fund.

The paper then outlines the main issues the Authority thinks are important for this Review. Section 3 considers governance arrangements for the CFI, how to manage risks in the operation of the scheme, and issues that influence the effectiveness of the CFI, in terms of the quality and quantity of the emissions reductions it delivers. Finally, section 4 looks at how the CFI can and does interact with other policies, and considers how to help ensure that the CFI is effective in the long term.

1.1. The Climate Change Authority and the Review task

The Climate Change Authority is an independent statutory agency, established to provide expert advice on Australian climate change policy.

This is the Authority's first review of the CFI, required every three years by the *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth) (the 'CFI Act'). The Authority must report its findings and recommendations to the Minister for the Environment by 31 December 2014.

The Authority's work is guided by the principles set out in the *Climate Change Authority Act 2011* (Cth). 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 Authority proposes to assess the CFI against the Authority's guiding principles and the objects of the CFI Act, which are to:

- implement some of Australia's obligations under the United Nations Framework Convention on Climate Change and the Kyoto Protocol to that convention
- create incentives for people to carry on offset projects
- reduce greenhouse gas emissions in a way that protects Australia's natural environment and improves resilience to the effects of climate change.

The government has introduced a Bill to abolish the Authority; that Bill is before the Parliament. The Authority is proceeding with this Review so it can fulfil its existing statutory obligation to review the CFI by the end of this year. The Authority believes the Review can make a useful contribution to ongoing policy development and implementation.

It would not be sensible to review the CFI without considering the government's proposed changes to the scheme, and the consultation about them earlier this year. The CFI was originally designed as a complementary measure for the carbon pricing mechanism; while the carbon price has since been repealed, the CFI remains in place. The government plans to streamline and expand the CFI into the Emissions Reduction Fund (ERF), the central element of its Direct Action Plan to reduce Australia's greenhouse gas emissions. These changes have implications for the operation and effectiveness of the CFI and the Authority will consider them as part of this Review; it will also consider public submissions to the ERF consultation process where relevant.

The Authority will also build on its own previous work and consultation. The Authority's study *Coverage, Additionality and Baselines—Lessons from the Carbon Farming Initiative and other schemes*, released in April this year, benefitted from discussions with a range of stakeholders and has informed this Issues Paper.

Questions

Q.1. To what extent has the CFI met the objects of its Act over its first two years of operation?

1.2. Approach to this Review

In conducting this Review, the Authority recognises that the CFI is a relatively new scheme, with less than three years of operation. This is a short period from which to draw firm conclusions about the scheme's overall effectiveness. Nevertheless, useful observations can be made about its operation and the experiences of project proponents and government agencies.

In this Issues Paper, the Authority considers factors that influence both the quality and quantity of emissions reductions delivered by the CFI. That is, it considers whether emissions reductions are genuine (quality) and how many tonnes of emissions reductions are achieved (quantity). Both are relevant to the scheme's effectiveness. If, for example, the scheme delivered only a small volume of genuine emissions reductions, or if it delivered a large volume of reductions but these would have occurred anyway, it would be difficult to conclude it was environmentally effective or economically efficient.

As part of this Review, the Authority will assess the CFI's performance in light of the policy's objectives and the Authority's guiding principles.

Public consultation is central to all of the Authority's work. We invite input from interested parties on the Authority's proposed approach to the Review and on the effectiveness of the CFI. The Authority acknowledges that the time allowed for submissions (due date 31 October) is short and that this is likely to reduce the volume of submissions. However, we encourage interested stakeholders to put in even a short submission, particularly where they wish to raise issues not previously covered in submissions to the ERF consultation process. The Authority will not release a Draft Report before the Final Report of this Review is published in December 2014, but there will be opportunities to respond to the Authority's preliminary thinking during meetings in October and November. Interested stakeholders should contact the Authority for more information (see contact details on page i).

2. ABOUT THE CARBON FARMING INITIATIVE

The Carbon Farming Initiative (CFI) is part of the Commonwealth Government's response to climate change. It is a baseline and credit scheme: it establishes baseline scenarios for greenhouse gas emissions from certain activities—agriculture, legacy waste and land use, land use change and forestry (LULUCF)—and credits scheme participants to the extent that actual emissions are below those baselines.

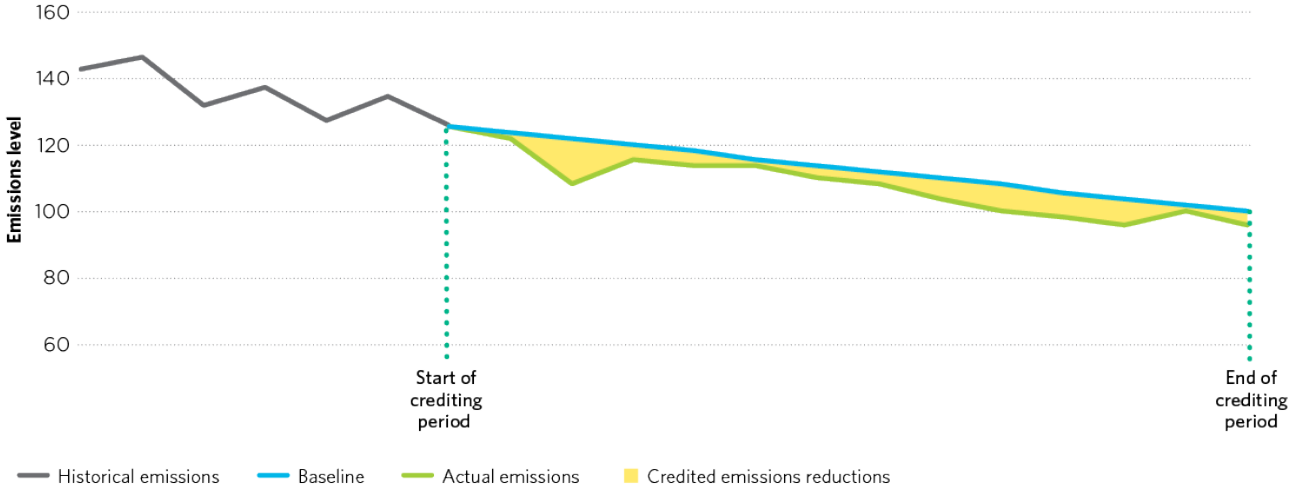
The CFI, introduced in 2011, was originally intended to provide offsets for businesses with liabilities under the carbon pricing mechanism. The carbon pricing mechanism was repealed in July 2014.The government now proposes to expand the CFI to form the Emissions Reduction Fund (ERF).

2.1. Credit schemes

The CFI is part of Australia's response to climate change. It is a baseline and credit scheme that creates financial incentives to reduce greenhouse gas emissions from certain eligible activities.

In broad terms, baseline and credit schemes identify, measure and provide incentives for activities that reduce emissions. Scheme participants' performance is measured against a specified baseline. If actual emissions are below the baseline, the difference between the two is considered to be 'additional' emissions reductions—that is, reductions that would not have occurred without the scheme. These reductions are eligible for credits (Figure 1).

Figure 1: Crediting in a baseline and credit scheme



Source: Climate Change Authority (2014a)

Baseline and credit schemes can be designed to achieve different objectives in different ways. Some baseline and credit schemes operate as an 'offset scheme'—participation is typically voluntary, and the scheme complements other policies that create a liability for emissions (for example, emissions trading schemes). Offset schemes can provide a way for liable entities to meet their liabilities at lower cost and drive emissions reductions in a wider set of sectors. Other baseline and credit schemes also include a penalty for entities whose emissions are above the baseline. Some of these kinds of schemes allow

one entity that earns credits to sell them to another entity that incurs liabilities. Others allow an entity to both earn credits and incur penalties for a single activity, and trade any surplus credits as necessary. The penalty and crediting baseline may be the same, or an entity may have different baselines for penalties and crediting.

Several kinds of activities can be covered by baseline and credit schemes:

- *Emissions destruction*—activities that destroy emissions. For example, capturing and burning greenhouse gases, such as methane from landfills.
- *Emissions avoidance*—where the release of emissions into the atmosphere is avoided, as it is when waste is treated before entering landfill to avoid methane emissions, or when energy is used more efficiently, reducing the quantity of greenhouse gases emitted for each unit of production.
- *Sequestering carbon*—activities that remove and store CO_2 from the atmosphere, such as establishing new forestry plantations.
- *Emissions displacement*—activities where the consumption of a more emissions-intensive output is displaced with a less emissions-intensive output. For example, using renewable energy in place of fossil fuel-generated electricity.

Baseline and credit schemes include rules and processes to help ensure the credited emissions reductions are real and genuinely additional to what would have occurred in the absence of the scheme. These can include very detailed and prescriptive methodologies that dictate which activities are eligible and how emissions reductions may be measured, verified and audited. These rules test whether the emissions reduction actually occurred (measurement and verification) and whether the activities create 'additional' reductions (for example, the activities are not common practice or required by law).

While providing assurance about the quality of emissions reductions under a scheme, these rules can—in some cases—act as barriers to participation. They can require significant investment to develop, and a high level of technical and administrative resources to implement. These elements of scheme design involve a trade-off between ensuring the genuine additionality of emissions reductions, and encouraging participation that may bring more projects and therefore more emissions reductions. In short, they involve a trade-off between the quality and the quantity of reductions. This issue is discussed further in sections 3 and 4.

Baseline and credit schemes have been implemented in Australia and other countries, and include the Australian Renewable Energy Target (RET), the New South Wales Greenhouse Gas Reduction Scheme (GGAS), and the Specified Greenhouse Gas Emitters Regulation in Alberta, Canada. The government’s proposed Emissions Reduction Fund (ERF) is also a baseline and credit scheme, with crediting arrangements based on an expanded and streamlined version of the CFI, and a 'safeguard' (or compliance) mechanism, which is under development.

2.2. The Carbon Farming Initiative

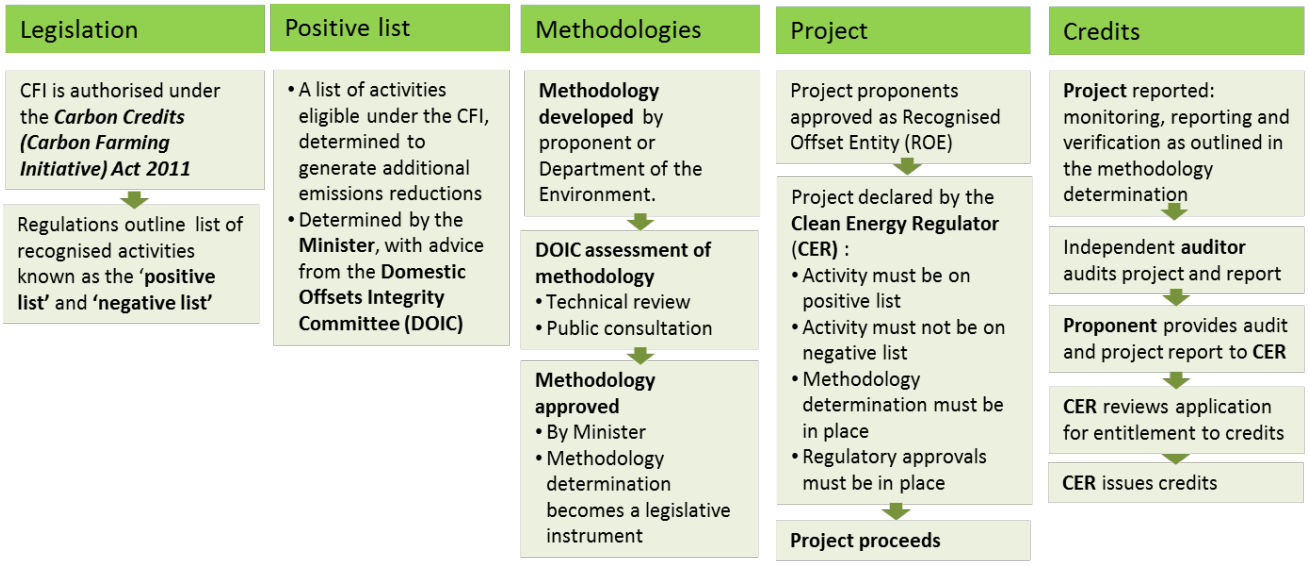
The CFI is a national, voluntary, project-based initiative that provides incentives for individuals and organisations to sequester carbon and avoid or reduce greenhouse gas emissions. The CFI was originally designed as an offset scheme to complement Australia's carbon pricing mechanism, which has since been repealed. The CFI focuses on sectors that were not covered by the carbon pricing mechanism—namely agriculture; legacy waste (emissions from waste deposited to landfill prior to

1 July 2012, when the carbon pricing mechanism was introduced); and land use, land use change and forestry (LULUCF). It commenced operation in December 2011.

The main elements of the CFI, as it has operated to date, are shown in Figure 2 and described below.

- Legislation and regulations—specify the coverage and governing principles for the scheme. These are based on internationally accepted principles to help ensure that:
  - emissions reductions are measurable and verifiable
  - measurement methods are supported by peer-reviewed science and are not inconsistent with Australia's international greenhouse gas emissions accounts
  - measurement methods account for leakage and variability, and use conservative assumptions
  - emissions reductions are additional to what would occur in the absence of the project
  - carbon sequestration is permanent (carbon stocks maintained on average for at least a 100-year period)
  - projects avoid negative social or environmental consequences, including impacts on water availability, biodiversity conservation, employment and other values.
- The positive list—specifies eligible activities under the CFI. It is a list of activities that are not common practice in an industry, and are therefore considered to generate genuinely additional emissions reductions.
- Methodologies—rules for undertaking and monitoring a project and generating credits. A methodology is required for each kind of activity that can be credited under the scheme and must contain:
  - a description of the activity
  - a list of emissions sources and sinks affected by the project
  - monitoring, verification and reporting requirements
  - instructions for determining a baseline that represents what would occur in the absence of the project
  - procedures for measuring or estimating emissions reductions or sequestration relative to the baseline.
- Projects—activities that reduce emissions. To be approved, a project must be covered by a methodology, and be an activity both included on the positive list, and not on the 'negative list' (a list of activities that pose unacceptable risks to water, biodiversity, and so on). To undertake a CFI project, a person must become a 'recognised offsets entity'.
- Crediting—after emissions reductions or sequestration from approved projects are verified, Australian Carbon Credit Units (ACCUs) are issued by the Clean Energy Regulator (CER). All ACCUs can be traded or sold in Australia, and most can be exchanged for an equivalent number of Kyoto Protocol units and sold or traded internationally.

Figure 2: Overview of CFI process

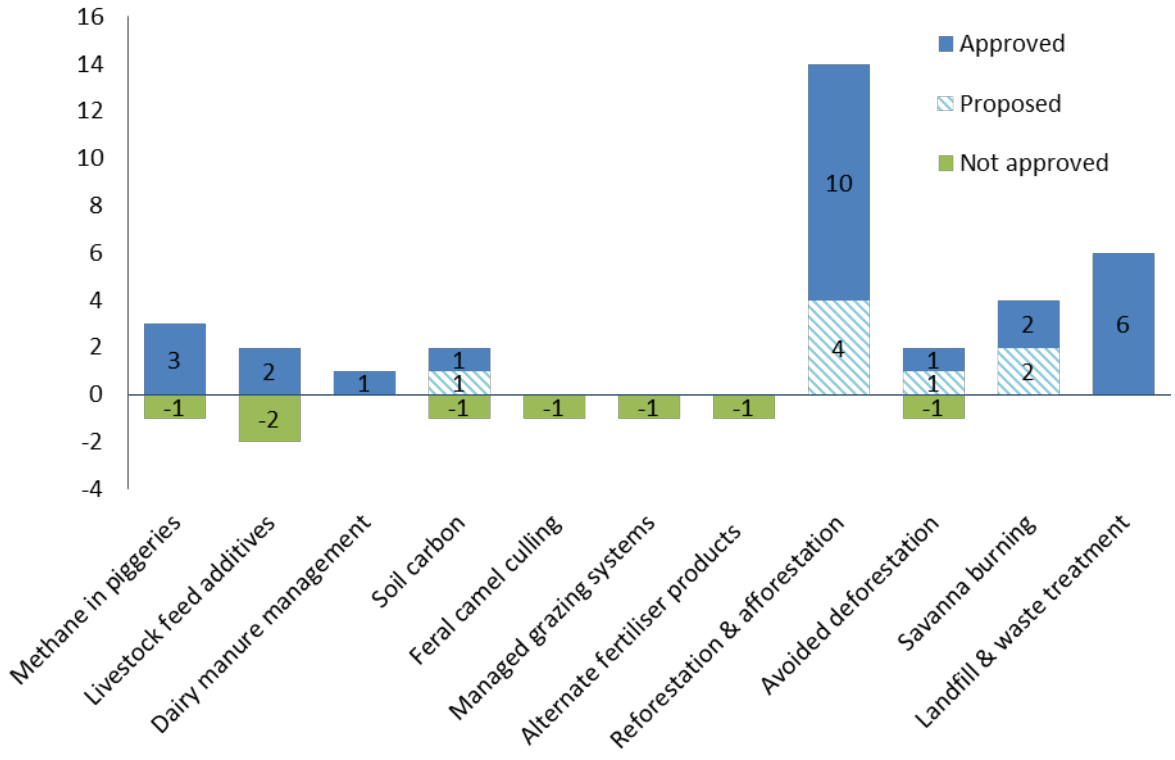


Source: Climate Change Authority based on Department of Climate Change and Energy Efficiency (2012).

The government's proposed changes to the CFI are described in section 2.3. Section 3.1 covers proposed governance changes in further detail.

The type and mix of methodologies approved under the CFI provide a good starting point to review the activities the scheme encourages. Many methodologies have been initiated and developed by industry, so they broadly represent the areas of greatest perceived opportunity within the current scope of the scheme and its rules. To date, 26 CFI methodology determinations have been made, the majority for activities in the forestry and waste sectors (Figure 3). To be approved, methodologies must satisfy legislated criteria, including the offsets integrity criteria (see Section 3.1).

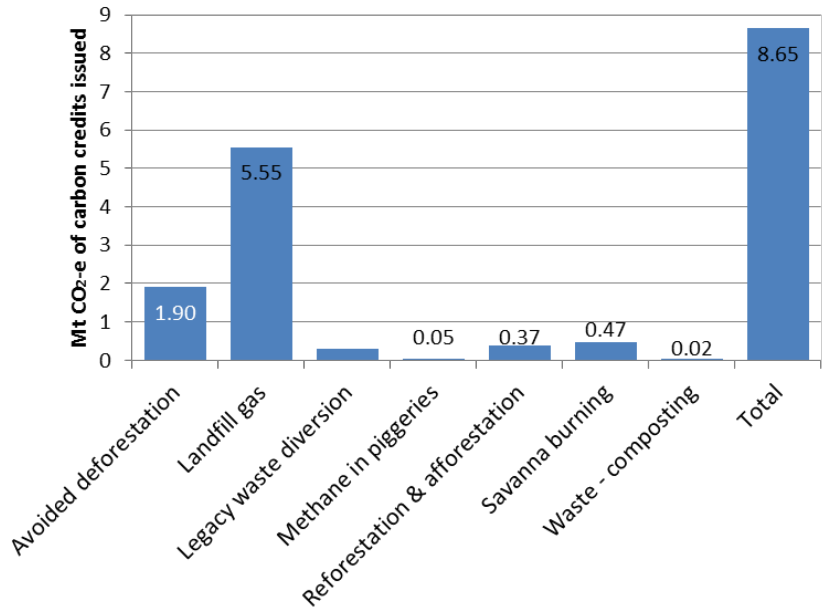
Figure 3: Number of methodologies by project type and status



Source: Climate Change Authority based on Department of the Environment (2014)

Since the release of the first CFI methodology in June 2012, 166 projects have been approved to create credits under the CFI. The total amount of ACCUs issued as at 30 September 2014 represented 8.65 Mt CO_2-e of emissions reductions; this has almost doubled from February this year. Most of these reductions (about 64 per cent) were generated from waste activities, principally from landfill gas capture (Figure 4).

Figure 4: Quantity of credits issued and number of projects



	Number of registered projects
Avoided deforestation	26
Landfill gas	71
Legacy waste diversion	8
Methane in piggeries	7
Reforestation & afforestation	29
Savanna burning	20
Waste - composting	2
Total	**166**

Source: Climate Change Authority based on Clean Energy Regulator (2014b)
Note: Data current as at 30 September 2014

2.3. Relationship to the Emissions Reduction Fund

The government plans to expand and streamline the existing CFI to create its main emissions reduction policy, the ERF. The primary objective of the ERF is to achieve lowest cost emissions reductions across the economy. The Fund has three elements: crediting, purchasing, and 'safeguarding'. The government plans to streamline crediting under the CFI and expand it to cover most sectors of the economy. It also plans to purchase emissions reductions, and proposes introducing a legal obligation to ensure the largest emitters do not go above historical business-as-usual levels (the 'safeguard' mechanism). Legislation to amend the CFI and give effect to the crediting and purchasing elements of the ERF is currently before the Senate, having passed the House of Representatives, and the government is developing priority methodologies collaboratively with industry and other stakeholders through technical working groups. The safeguard mechanism is currently under development; the government has indicated that it will be introduced on 1 July 2015, to allow sufficient time for industry consultation.

2.3.1. Crediting and purchasing

Under the proposed ERF, existing CFI projects can bid into auctions under the government purchasing scheme, and also sell credits to non-government buyers.

Under the proposed purchasing scheme, the government will enter into contracts to buy emissions reductions through a ‘reverse auction’ where bids are ranked and accepted on a least-cost basis. New participants from other sectors will also be able to participate. The government will enter into contracts with successful bidders at auction. After those businesses have delivered emissions reductions, they

will be paid at the agreed price, for a contract period that the government has suggested should be five years. Should a project deliver fewer than the contracted volume of emissions reductions, project proponents will have to 'make good' using credits from other eligible projects.

The crediting element of the CFI will continue to operate under the proposed ERF. That is, even if projects are not successful at the reverse auction, proponents will still receive credits for eligible emissions reductions. These credits could be sold to other buyers, such as businesses seeking to offset their emissions, and proponents under the 'make good' arrangements.

Detailed transitional arrangements for existing CFI projects to operate under the ERF are under development, and the CER has issued guidance for existing CFI project proponents and applicants (Clean Energy Regulator 2014a). On passage of the legislation, existing CFI projects will automatically transition to the ERF, and most will immediately begin a new, seven-year crediting period. This is a once-off period, which cannot be renewed. Project proponents can continue to sell credits they accrue on the voluntary carbon market, and can bid into ERF auctions for the sale of future emissions reductions. Existing project proponents may also take advantage of increased flexibility in reporting and auditing requirements.

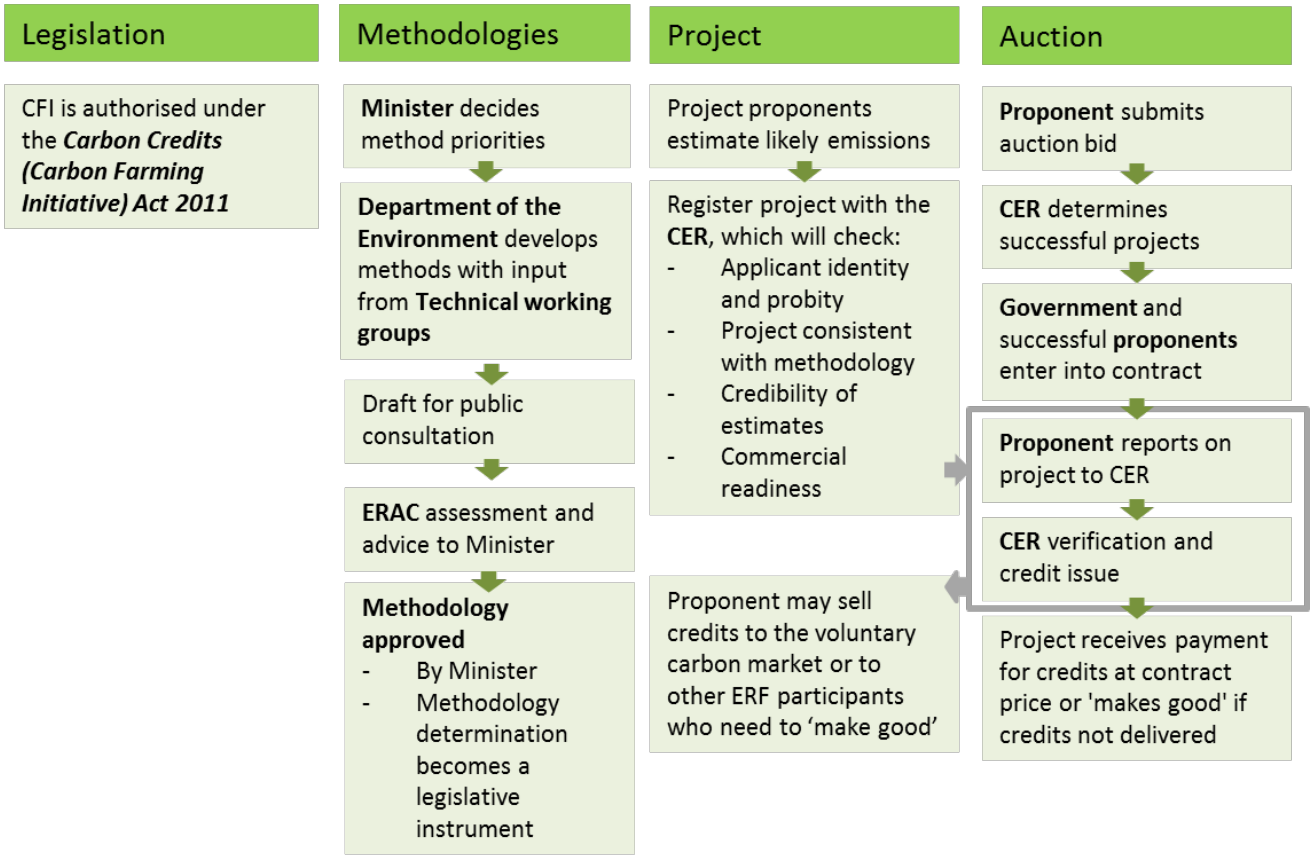
2.3.2. Streamlining and expanding the CFI

The government's proposed legislation would make changes to the operation of the CFI to streamline and expand its operation. These include to:

- expand the scheme to allow projects from new sectors, including upgrading commercial buildings, improving energy efficiency and reducing electricity generator emissions.
- allow both facility-wide and activity-level methodologies. This would provide a range of methodologies to cater to different sectors and activities.
- remove the positive list and focus additionality testing in methodology development. The government notes that this would simplify the process and grant greater flexibility, while retaining the concept of common practice as a useful additionality test.
- allow credits to be issued for improvements in emissions intensity as well as absolute emissions reductions. This would allow credits to be issued for improvements in the emissions intensity of production even where production is expanding and absolute emissions increase.
- introduce a new, 25-year permanence option for sequestration projects, with a 20 per cent discount on credits issued relative to the current 100-year rule. This is intended to address concerns that century-long restrictions on land use were a barrier to sequestration projects.
- replace the DOIC with an Emissions Reduction Assurance Committee (ERAC). Currently, endorsement by the DOIC is a prerequisite for Ministerial approval of methodologies; under proposed changes the Minister will have regard to a revised set of offset integrity standards and advice from the ERAC.
- provide greater flexibility in reporting and verification requirements. The government intends this change to allow project operators greater flexibility to manage cash flows and to minimise administrative costs.

These proposed changes are discussed further in the following sections and the Authority will consider them when reviewing the CFI. Figure 5 summarises the proposed operation of ERF crediting and purchasing.

Figure 5: Overview of proposed CFI process under the ERF



Source: Climate Change Authority based on Australian Government (2014)

3. THE CARBON FARMING INITIATIVE IN PRACTICE

The environmental effectiveness of the CFI is a function of both the quality of emissions reductions and the quantity of emissions reduced. Choices made about scheme design and administration reflect choices on the right balance between quality and quantity.

Additionality is important for scheme quality—testing for additionality avoids paying for emissions reductions that would have occurred anyway. The CFI includes robust governance arrangements to ensure proper conduct of projects and to ensure that emissions reductions are genuinely additional. Rules are also in place to ensure that projects receive the right number of credits for their emissions reductions and sequestration.

Robust governance processes can impose substantial administrative burdens and it is important to strike a good balance between protecting scheme integrity and encouraging participation. Perspectives may differ on the right balance for the CFI and ERF, but an appropriate degree of flexibility for the scheme administrat**or** can help to manage risk.

Lowering barriers to uptake may help improve scheme effectiveness by increasing the quantity of emissions reductions delivered. Some barriers could be reduced through simplifying methodologies, adjusting crediting and payment schedules and providing greater flexibility to decision makers.

3.1. Governance arrangements

Sound governance is important for the CFI, as it is for all baseline and credit schemes. Purchasers of carbon credits require assurance that projects actually deliver emissions reductions and carbon sequestration. This requires clear rules for approval, monitoring, record keeping, reporting and verification. It also requires an institutional framework that can assure compliance with those rules and avoid fraud and misconduct.

Rigorous methodologies for measuring and verifying emissions reductions are a critical part of the CFI governance arrangements. Methodologies must meet ‘offsets integrity standards’, which require that emissions reductions are measureable and verifiable, using methods supported by peer-reviewed science and consistent with Australia’s international emissions accounts. Emissions reductions must be additional to what would occur in the absence of the project, and any sequestration must be permanent (Department of Climate Change and Energy Efficiency 2012, p 14). Under the CFI, some methodologies have been proposed by proponents, and the Department of the Environment has initiated others. There has not been any formal process to identify priority methodologies. Responsibility for approving methodologies rests with the Minister, on the advice of the Domestic Offsets Integrity Committee (DOIC).

Arrangements for the CFI are designed to increase transparency and minimise fraud or misconduct. Project proponents must pass a fit and proper person test. Credits can only be issued for emissions reductions or sequestration after they have occurred and been verified. The CER can enforce

obligations on project operators to monitor and report, and ensures that projects are audited before issuing credits. The CER tracks carbon credits in a national registry and has powers to oversee trading in credits.

Some of the changes required to implement the ERF will affect governance arrangements for the CFI (see Figure 6). The government has indicated it wants to streamline processes to reduce participation costs (Australian Government 2014, p 60). These changes include:

- Prioritised development of methodologies. The Minister now identifies priorities for methodology development. Technical working groups with broad industry representation have been working with the Department of the Environment to develop those methodologies in anticipation of the ERF scheme commencing (see section 3.3).
- Streamlined methodology approvals. The DOIC would be replaced with an ERAC; the new body would have an advisory role rather than an effective veto over methodologies. When approving a methodology the Minister would have regard to a revised set of offset integrity standards and to advice from the ERAC, which would be made public. Parliament retains its ability to scrutinise methodologies, as these would remain disallowable instruments.
- Greater flexibility in reporting and auditing. Audits would be mandatory in a limited range of circumstances and project operators could choose when to report to the CER on each project (six-monthly to every two years, or every five years for sequestration projects).

Figure 6: Overview of CFI governance, current and proposed

CURRENT ARRANGEMENTS

Parliament	Minister	Department of the Environment	Proponent/technical working groups	Domestic Offsets Integrity Committee	Clean Energy Regulator
Ultimate control of legislation	Approves methodologies, positive list and other regulations	Advises Minister on CFI, develops methodologies and supports methodology developers	Develops methodologies with Department of the Environment	Assesses draft methodologies; DOIC endorsement is a prerequisite for methodology approval	Implements CFI, regulates, enforces compliance; approves proponent and project; verifies emissions and issues credits

PROPOSED ARRANGEMENTS

Parliament	Minister	Department of the Environment	Technical working groups	Emissions Reduction Advisory Committee	Clean Energy Regulator
Ultimate control of legislation	Sets priorities for methodology development; approves methodologies and other legislative rules	Advises Minister on CFI, develops methodologies and supports technical working groups	Provides advice to Department of the Environment on design and practical application of the methodology	Assesses draft methodologies; advises Minister on whether ERF requirements are met	Implements CFI, regulates, enforces compliance; approves proponents and pre-qualifies projects; verifies emissions, issues credits and pays contract price for units issued

Source: Climate Change Authority

Questions

Q.2. Will the recent and proposed changes to the CFI's governance arrangements improve the performance of the scheme? What other changes should be made and why?

3.2. Managing risks

Several types of risks associated with baseline and credit schemes can be managed through appropriate governance arrangements, including:

- striking the right balance between crediting non-additional abatement and failing to credit additional abatement
- ensuring rigorous standards without creating (unnecessary) costs to government or costs to proponents that may create barriers to entry
- accidental or fraudulent non-compliance with rules.

These risks are affected by choices about scheme governance, such as the role and level of discretion for decision-makers, the level of detail and complexity that is built into methodologies, and the nature of audit frameworks. In each case, choices may involve trade-offs between encouraging scheme participation—to increase the quantity of emission reductions—and the quality of emissions reductions.

3.2.1. Role and discretion for decision-makers

The CER plays a key role in ensuring CFI projects comply with methodologies. At present, the CER has limited discretion when it comes to assessing projects. This can allocate more cost or project risk to proponents, which can create barriers to uptake and compromise the timeliness of project approval. Expanding the regulator's discretion (with bounds clearly codified in methodologies) may help speed up approvals without materially altering environmental integrity. For example, methodologies can be technology-specific, not allowing the regulator to assess projects employing an alternative (perhaps superior) technology. If this discretion were reflected in the methodology, it could allow methodologies to evolve and remain relevant as technologies improve.

The CFI relies heavily on the DOIC's assessment to mitigate risks associated with abatement estimates, baselines and additionality. Stakeholder feedback during the Authority's CFI study (2014a) suggested that this process was time consuming, lacked transparency and was overly rigid. The proposed ERAC would advise on methodologies, like the DOIC, but ERAC approval would not be required for the Minister to approve a methodology. This may, over time, assist with streamlining methodology approvals by reducing the layers of governance and in turn accelerate methodology development.

3.2.2. Approach to methodologies

Streamlining can bring trade-offs, particularly between ensuring baselines are robust and providing certainty to project proponents. The Authority has previously concluded (2014a, p 4) that the appropriate balance between simplicity and certainty will vary across different activities and sectors, so a flexible methodology-by-methodology approach is warranted. To this end, the inclusion of default factors or standardised sectoral approaches in methodologies may assist in striking the right balance and providing flexibility. In particular:

- Use of default factors can help reduce the complexity and resources involved in determining baselines and measuring emissions reductions. Risks of over-estimating abatement could be managed through the choice of conservative factors.
- Standardised sectoral approaches, such as common practice tests, may reduce costs for scheme participants and drive uptake but can risk crediting non-additional emissions reductions. These approaches may therefore be appropriate for homogenous activities where participants have similar investment incentives, similar access to capital and use similar technologies.

3.2.3. Audit frameworks

The ERF White Paper (Australian Government 2014) has indicated that the ERF will use a 'risk-based' approach to assessing compliance with methodologies with the aim of maintaining a high level of environmental integrity, while significantly reducing the burden on participants.

The ERF White Paper has indicated that the CER will determine the level of assurance, frequency and scope of audits required for a project or type of project. The White Paper notes that project owners will be required to submit a minimum of three audits over the crediting period, and that additional audits would be determined by the CER using a risk-based approach. This could increase uptake and reduce compliance costs for small and large project proponents, but may also increase the administrative burden of the CER.

Questions

Q.3. Does the CFI (with the proposed changes) strike the right balance in managing risks? How could it be improved?

3.3. Environmental effectiveness

Environmental effectiveness relates to both the quality (additionality) and quantity of emissions reductions delivered. If, for example, the scheme delivered only a small volume of genuine emissions reductions, or if it delivered a large volume of reductions but these would have occurred anyway, it would be difficult to conclude it was environmentally effective and economically efficient.. Purchasing non-additional reductions would reduce both the environmental effectiveness and economic efficiency of the scheme.

3.3.1. Additionality of emissions reductions

Assessing additionality is a key element of all baseline and credit schemes and necessarily involves judgement and trade-offs. An additionality test assesses whether a project or activity creates more emissions reductions relative to a baseline of what would be expected in the absence of the project. Additionality can never be determined with certainty as it involves predictions of future events and circumstances. Costs and uncertainties can, however, be reduced with clear and consistent rules about matters such as common practice and the development of baselines.

In the CFI, additionality is currently considered at two stages: activity-level approval and methodology approval. At the activity level two requirements apply:

- The law must not require the activity—this prevents proponents from receiving credits for activities that they are already required to do.

- The activity must be on the 'positive list'—a register of emissions reduction activities that are not 'common practice' in an industry or region, and are therefore deemed additional. Broadly speaking, if the activity has less than 20 per cent uptake and adoption is not rapidly accelerating, the activity may be viewed as not being common practice, and therefore eligible for the positive list (Australian Government 2012).

At the methodology approval stage, additionality tests assess whether each individual project produces additional emissions reductions. For example, while a general activity may not be common practice, a given project proponent may already be undertaking the activity in a particular facility or location; in this case, the emissions reductions would not be additional.

The government's proposed changes to the CFI (see section 2.3) include removing the positive list and dealing with additionality principally in methodology development. The ERF White Paper (Australian Government 2014) notes that methods will be able to use a range of tools to ensure that credits are issued for genuine emissions reductions, signalling a potentially more tailored approach to assessing additionality.

3.3.2. Prioritising methodologies for development

To be effective, methodologies should be available for the most prospective opportunities for reducing emissions. Under the existing CFI, methodologies were not prioritised for development; under the proposed ERF, the Minister will decide on priority methodologies. This could help target government resources to important opportunities, improving scheme effectiveness.

3.4. Barriers to uptake

If barriers to the uptake of CFI projects could be removed while maintaining satisfactory environmental integrity, this could increase the volume of genuine emissions reductions achieved.

3.4.1. Breadth of methodologies

Excessively narrow methodologies may create unnecessary barriers to implementing projects. The Authority's previous CFI research noted that, in some sectors, methodologies were developed for specific activities that were not broadly applicable across like projects. Proponents with a similar project would have to develop a separate methodology if they wished to participate in the scheme, raising the costs of participation and reducing the likely emissions reductions. The government's proposed move to broader methodologies is likely to reduce instances of very similar approaches being developed separately. Building some discretion (see section 3.2) into a broad methodology could enable the regulator to assess whether the particular technologies and practices in a proposed project were additional, reducing potential barriers to uptake.

3.4.2. Complexity and cost of developing methodologies and projects

Developing a methodology can take a long time, and involve significant costs for consultation, technical input and rule development. Some part of the cost of methodology development is inevitable: methodologies establish additionality, which is critical to the integrity of any baseline and credit scheme. The question for this Review is whether there are unnecessary costs or complexity that create barriers to uptake, and which could be addressed while maintaining satisfactory trade-offs between the quality and quantity of emissions reductions.

Costs and complexity might be lowered several ways:

- Setting out clear and consistent rules for demonstrating additionality in methodologies. If rules are not clear in advance, it increases risks for the project proponent and could result in inconsistent treatment of projects.
- Government playing a more central role in methodology development, as is proposed under the ERF. This can reduce the cost to project developers and build greater certainty into the scheme. Centralisation may simply redistribute costs to the government and regulator, or, if it is more efficient, could actually reduce the overall costs. In either case, the costs to developers would be lower, which could reduce barriers to uptake.
- Using standardised approaches where feasible: for instance, using common practice tests in sectors with homogenous activities; centrally collecting regularly used data (for example, emissions factors, industry average data); and making that data publicly available, to minimise duplication of effort. This can reduce costs to project providers, but may increase costs borne by the scheme regulator.

3.4.3. Crediting periods, long-term sequestration requirements and payment schedules

The length of crediting periods and the timing and duration of payments for emissions reductions may be a barrier for some project types.

The permanence requirements for land sequestration projects may deter participation, as it can restrict the use of land for long periods. That said, sequestration only contributes to a long-term climate solution if it is maintained for a long time. To encourage participation, the government proposes including a 25-year permanence option for sequestration projects in the ERF in addition to the 100-year requirement in the current CFI. The number of Australian Carbon Credit Units issued for 25-year projects will be discounted by 20 per cent relative to 100-year projects. The government states that this discount reflects the potential cost to government of replacing carbon stores if 25-year projects are subsequently discontinued. The government has suggested, however, that in practice many carbon sequestration projects are likely to be retained as they will continue to deliver co-benefits for natural resource management and agricultural productivity.

Land managers will retain the option of undertaking 100-year projects, in which case they receive the full carbon value for their project. Existing CFI sequestration project proponents will be able to choose to move to the shorter permanence period. If credits have been issued they will have to relinquish credits in line with the discount factor.

The new permanence option will not affect the ‘risk of reversal’ buffer that currently applies to all sequestration projects. Under existing CFI rules, a risk buffer of five per cent is applied to such projects, meaning that for every 100 tonnes of carbon dioxide (CO_2) stored by a project, 95 Australian Carbon Credit Units are issued. This buffer means that a project proponent does not have to replace credits if carbon stores are lost because of natural events such as a bushfire. Nevertheless, project proponents must still take steps to re-establish carbon stores should they be lost to natural events, and may be required to relinquish credits should they fail to do so.

Paying for emissions reductions after delivery reduces risk for buyers but may be a barrier for some project types. Under the CFI, projects are credited for actual emissions reductions after it has occurred. Similarly under the ERF, all payments will be upon delivery of emissions reductions, with no up-front payments. While the payments themselves are not available, a contract with the government (under the

ERF) or approval from the CER (under the CFI) could help secure project finance, depending in part on the risk appetite of lenders.

The length of contract period under the ERF may also limit future uptake. Under both the CFI and the ERF, the crediting period is generally seven years, whereas many projects reduce emissions over a longer timeframe. The ERF White Paper (Australian Government 2014) indicates that the contract period—the period over which the government will guarantee to purchase emissions reductions—could be shorter than the crediting period, at five years. Once a project has been successful at auction, it will not be able to seek additional funding through a future auction, although it could sell credits generated beyond the contract period to other businesses. For activities with emissions reductions that build over time or extend over large time horizons, it may be difficult to recoup enough of the project costs through a five-year contract, especially during the early days of the scheme when participants are uncertain about the level of future demand in the secondary market. The government has indicated that it will undertake targeted market testing of contractual terms to assess whether alternate contract lengths are required.

Questions

Q.4. Do the CFI governance and other arrangements (with proposed changes) strike a good balance between the quality and quantity of emissions reductions achieved? How could they be improved?

4. POLICY INTERACTIONS AND LONGER TERM ISSUES

This section considers how the CFI interacts with other policies and what those interactions suggest about the operation of the scheme in the future. CFI projects can create a variety of positive (and possibly negative) impacts while generating emissions reductions. Similarly, projects can be affected by a broad range of regulation and incentives from all levels of Australian government.

Several issues raised by these interactions are relevant to the Review, including:

- the factors relevant to deciding whether a CFI project should be eligible to benefit from multiple incentive programs
- how changes in regulation and industry practice that change the additionality of emissions reductions from particular activities should affect the ongoing eligibility of activities
- what role a baseline and credit scheme should play in Australia's longer term response to climate change.

4.1. Interaction with other objectives and policies

CFI projects are affected by other policies implemented by Australian governments at all levels. CFI projects may also attract incentives under other policies, such as those aimed at protecting biodiversity or increasing renewable energy generation. This raises questions about the appropriateness of the overall level of incentives—in what circumstances should a single project be eligible for multiple incentives? How can Australian governments ensure efficient and coordinated support for targeted activities so that desired policy outcomes are achieved efficiently?

4.1.1. Co-benefits of CFI projects

The principal objective of the CFI is to reduce greenhouse gas emissions, but other impacts of CFI projects (positive or negative) are also possible. The ERF White Paper notes that co-benefits of CFI projects can include environmental benefits such as improved water quality and soil health, and community benefits such as reduced fire risk to people and property (Australian Government 2014, p 58). Analysis from the CSIRO found that indigenous participation in carbon markets can allow indigenous people to maintain a physical and spiritual connection while working on 'country', to grow their knowledge and practices for future generations, and meet their local economic development aspirations. It can also bring benefits for the broader Australian community through mutual cultural exchange, capacity building, technology transfer, sustainable economic development and social well-being (Robinson et al. 2011, p 6). More broadly, carbon offset schemes have the potential to bring environmental, economic and social co-benefits, such as improved environmental management, increased employment, and capacity building (Salisbury, Edwards & Silke 2013, p 4).

Another objective of the CFI is to protect Australia's natural environment and improve resilience to climate change. The CFI's 'negative list' helps by prohibiting the registration of some kinds of projects,

ruling out emissions reduction projects that pose unacceptable risks in a range of areas, including availability of water, conservation of biodiversity, employment, or the local community.

Co-benefits are often raised in discussion of the scheme. The proposed shift to the ERF will mean a shift to a market where the government is the primary buyer of emissions reductions through reverse auctions. Under the proposed least-cost purchasing model, CFI projects would be successful at an ERF auction based on cost per tonne of genuine emissions reductions, without reference to co-benefits. Project proponents may also, however, sell their credits on the voluntary carbon market, where buyers may value co-benefits and seek credits from projects that achieve multiple beneficial outcomes.

As the CFI has been operating for less than three years, it is difficult to assess the extent to which projects have generated co-benefits and the extent to which the negative list has been effective in preventing negative impacts.

4.1.2. Interaction with other policies

Australian governments at all levels implement policies and impose regulations that can affect CFI projects. These impacts can affect the costs and additionality of CFI projects.

A range of climate and non-climate policies can potentially reduce the costs of CFI projects. Australian governments offer a variety of incentives for activities that promote positive climate, environmental or other outcomes; these incentives are potentially available to some CFI projects. These include:

- The Clean Energy Finance Corporation, which invests using a commercial approach to overcome market barriers and mobilise investment in renewable energy, energy efficiency and low-emissions technologies. Among other activities, it co-finances projects that convert municipal, commercial and industrial waste into energy.
- Renewable energy and energy efficiency policies increase support for a range of technologies. These include:
  - The Renewable Energy Target (RET) designed to ensure that at least 20 per cent of Australia's electricity comes from renewable sources by 2020.
  - The Australian Renewable Energy Agency, which coordinates support for research and development, demonstration and commercialisation of renewable energy technologies.
  - State-based energy efficiency schemes, which create incentives for reduced energy use.
- Land sector programs, such as the Victorian Government's BushBroker program, which credits projects that improve native vegetation, and the federal Biodiversity Fund.
- Policies that support or fund research and development of carbon sequestration techniques subsequently used in project methodologies under the CFI.

It is possible that a project proponent could seek support from one or more of these programs and also apply for credits for emissions reductions under the CFI.

The issue for this Review is whether policies interact efficiently, and in what cases assistance should be provided through multiple programs, so that projects receive an appropriate and efficient level of support to encourage the intended outcomes. This in turn affects the cost-effectiveness of the CFI. For example, a CFI project supported under both the CFI and Biodiversity Fund would be receiving two streams of payments for two separate benefits—emissions reductions and biodiversity enhancement. In contrast, a CFI project that generated renewable electricity and was supported by both the CFI and the

RET would be receiving two streams of payment for what is arguably the same benefit (emissions reductions delivered through increased renewable energy generation).

A range of other policies can influence the additionality of emissions reductions under the CFI. Emissions reductions can only be credited under the CFI where they would not have otherwise occurred as a result of regulatory requirements. For example, where landfill waste operators are required to treat methane emissions from landfill in a particular way, emissions reductions resulting from that treatment could not be credited under the CFI. If, however, a landfill operator undertook activities beyond those required by regulation, any emissions reductions that resulted from the additional activities could potentially be credited. In this way, regulation can act as a project baseline. Regulations differ across states, so activities may be eligible for crediting in one state but not another. Note that rule changes do not affect existing CFI projects. If a regulatory change meant an activity was no longer additional, existing projects could continue to generate credits until the end of their crediting period.

The proposed legislation to introduce the ERF aims to ensure that multiple government programs do not pay for the same emissions reductions twice. A project would not be registered under the ERF if it was to be carried out based on funding from another government program (including those of the states and territories). The CER will compile a list of programs that typically provide sufficient funding for emissions reduction projects, such as the New South Wales Energy Savings Scheme. In these cases, project proponents would need to choose whether to access funding from the ERF or one of the listed programs. In other cases, where multiple sources of funding were required for the project to be feasible, the ERF could potentially be one of those sources.

Requirements regulated elsewhere

The CFI arrangements include rules to avoid negative impacts. Currently, CFI projects must:

- hold all required water, planning and environment approvals at all levels of Australian government
- take account of regional natural resource management plans (this obligation will be removed under the proposed ERF)
- not include activities on the 'negative list,' which could pose social and environmental risks.

The CER takes these obligations into account when considering whether a project is eligible for registration. This creates the potential for overlapping responsibility between the CER and other regulators. Where a project is subject to specific regulation that affects how the project can be conducted—for example, if permits are required to conduct certain activities or use certain chemicals—the CER has adopted the approach that the other regulator should monitor and enforce the particular requirements. The CER uses information from other regulators to assess whether a project's registration or eligibility for units should be re-considered.

Questions

Q.5. Are the interactions between the CFI and other policies managed efficiently? How could interactions be improved?

4.2. Longer-term issues

The efficiency and environmental integrity of the CFI will be diminished if it provides credits for activities that are no longer additional, or that could be better encouraged through alternative policies. A broader

consideration is the potential role of international emissions reductions, which could complement domestic emissions reductions.

4.2.1. Deciding when a methodology is no longer suitable

The Authority has previously concluded that the additionality of an activity needs to be periodically reviewed so activities that are no longer additional are no longer eligible for crediting (Climate Change Authority 2014a, p 4).

One way in which activities stop being additional is if they become common practice. This could be due in part to a successful baseline and credit scheme: a well-designed scheme could reward early movers and encourage additional uptake of a practice to the point that it becomes widespread. After this point, the funds used to incentivise uptake could in some cases be better directed elsewhere.

While the current CFI does not involve explicit regular review, under the proposed ERF the Minister will request the ERAC review each method at least once every four years. This would provide an opportunity for regular review of additionality in the scheme. The DOIC (or, in future, the ERAC) could also advise the Minister to remove a methodology at any time. The conclusion of a crediting period provides another point at which additionality could be reviewed. Under the current CFI, a previously eligible project could be refused another round of credits because the activity covered by the methodology had become common practice. This is not relevant under the proposed ERF, as projects are only eligible for a single crediting period.

Another way in which activities could stop being additional is if they were to become required by law. While many factors affect regulatory decisions, the pre-existence of a CFI methodology may in some cases act as a disincentive for introducing legislation to compel a practice, even if this would be a more desirable overall approach.

Questions

Q.6. Does the operation and design of the CFI encourage 'graduation' of activities to more appropriate policy treatment if they are no longer additional? How could it be improved?

4.2.2. Role of a baseline and credit scheme in context

The Authority has previously concluded (Climate Change Authority 2014a, pp 25, 32) that baseline and credit schemes do not suit all emissions reduction opportunities, and are likely to be most effective as part of a broader suite of policy measures. Experience in Australia and overseas shows the bulk of emissions reductions from baseline and credit schemes tend to arise from relatively large emissions sources that have low cost emissions reduction opportunities, established or readily available technologies, and for which baselines are easily established. Another policy tool may be more appropriate when baseline and crediting:

- is not feasible in a sector—for example, determining credible baselines for household purchasers of light vehicles.
- is feasible, but less desirable than an available alternative—for example, regulating versus crediting particular waste treatments.

Expectations about the longevity of policy are also important—some activities with high upfront costs and/or long payback periods require confidence that incentives will continue over the long term.

One important area where opportunities could be included in a baseline and credit scheme but might be better covered elsewhere is where the barriers to uptake are not financial. If barriers are not financial, then a crediting mechanism may not be the most effective or cheapest policy option to drive the emissions reductions. Measures that directly target particular barriers, such as appliance and building standards, information campaigns and demonstration programs may be more cost effective. Both the Authority (Climate Change Authority 2014b, p 38) and the government (Australian Government 2014, p 40) have argued that the importance of non-price considerations and the difficulty in setting baselines for private purchasers mean that light vehicle standards would be a more efficient measure for reducing emissions from light vehicles, and could complement the government's proposed ERF.

Another opportunity is for Australia to complement its domestic efforts by purchasing emissions reduction units from overseas. The Authority has previously recommended the government establish a fund to use international units to bridge any gap between domestic emissions reductions and Australia's 2020 target (Climate Change Authority 2014c).

Questions

Q.7. What emissions reduction opportunities are best suited to the CFI and proposed ERF, and what is the scale of these opportunities? What implications if any does this have for their role in Australia's suite of emissions reduction measures?

APPENDIX A LIST OF QUESTIONS

GLOSSARY OF TERMS

Term	Definition
additionality	A requirement that a project or activity produces emissions reductions that are additional to any that would have occurred in the absence of the project or activity.
agriculture emissions	Emissions resulting from livestock digestive processes (enteric fermentation), manure management, nitrous oxide emissions from cropping and pastureland soils, prescribed burning of savannas and burning of agricultural residues.
Australian Carbon Credit Unit	A type of emissions unit issued for verified emissions reductions under the Carbon Farming Initiative and held in the Australian National Registry of Emissions Units.
baseline	A counterfactual scenario of future emissions that would have occurred without the emissions-reducing activity.
business-as-usual	Emissions that would occur without any additional policy intervention.
baseline and credit scheme	These schemes identify, measure and provide incentives for activities that reduce emissions. This general name covers a large variety of schemes.
Carbon Farming Initiative	An Australian emissions offset scheme that credits emissions reductions from certain sources, such as forestry and agriculture, which are 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 Clean Energy Act and applied to Australia's biggest emitters (called 'liable entities'). It was repealed in July 2014.
common practice	A project or activity that is normal business practice.
coverage	Which entities would be eligible or required to participate in a scheme, and which emissions would be included.
Direct Action Plan	The government's policy to reduce greenhouse gas emissions and establish a clean-up and environment conservation program. A central element of the plan is the Emissions Reduction Fund.
Domestic Offsets Integrity Committee (DOIC)	An independent expert committee that assesses proposals for methodologies under the Carbon Farming Initiative and advises the Minister for the Environment on their approval.
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	An independent, expert committee that would assess whether methodologies meet the requirements of the Emissions Reduction Fund and provide advice to government.
Emissions Reduction Fund	A fund to allocate money through reverse auctions to projects that reduce emissions.
emissions trading scheme	A market-based approach to reducing emissions that places a limit on emissions allowed from all sources covered by the scheme. Emissions trading allows entities to trade emissions units with other entities. In general, trading can occur at the domestic, international and intra-company levels.
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.
Kyoto Protocol	An international agreement adopted under the United Nations Framework Convention on Climate Change in 1997. It includes binding national targets for developed countries and flexible mechanisms including the Clean Development Mechanism (CDM).

Term	Definition
Kyoto unit	Emissions units eligible for compliance with Kyoto Protocol targets—these include assigned amount units (AAUs), certified emission reduction units (CERs), emission reduction units (ERUs) and removal units.
land use, land use change and forestry (LULUCF) emissions	Emissions associated with human-induced changes in land use, such as deforestation, afforestation and forest management.
offset scheme	A scheme, typically voluntary, that complements a policy creating a liability for emissions, such as a carbon tax or cap-and-trade scheme. Offset schemes can provide a way for liable entities to meet their carbon tax or cap-and-trade liabilities at lower cost and drive emissions reductions in a wider set of sectors.
positive list	A register of emissions reduction activities eligible to earn carbon credits under the Carbon Farming Initiative. The positive list aims to ensure credits are issued only for additional emissions reductions. A methodology cannot be approved for use under the Carbon Farming Initiative unless it relates to an activity on the positive list.
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 that are not addressed through existing regulations and planning regimes.
Renewable Energy Target	A Commonwealth Government scheme that places a legal obligation on electricity retailers and large electricity users to buy a certain proportion of their electricity from renewables-based generation.
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.

ABBREVIATIONS AND ACRONYMS

Term	Definition
ACCU	Australian Carbon Credit Unit, issued under the Carbon Farming Initiative
BAU	business-as-usual
CER	Clean Energy Regulator
CFI	Carbon Farming Initiative
CO_2-e	carbon dioxide equivalent
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DOIC	Domestic Offsets Integrity Committee, Carbon Farming Initiative methodology review body
ERAC	Emissions Reductions Assurance Committee
ERF	Emissions Reduction Fund
LULUCF	land use, land use change and forestry
Mt	megatonne (mass, one million metric tonnes)
RET	Renewable Energy Target
UNFCCC	United Nations Framework Convention on Climate Change

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