



3 June 2020

Climate Change Authority
GPO Box 2013
Canberra ACT 2601

Via email: submissions@climatechangeauthority.gov.au

Dear Secretariat

The National Farmers' Federation (NFF) welcomes the opportunity to provide a submission to the Climate Change Authority's 2020 review of the Emissions Reduction Fund.

The Emissions Reduction Fund (ERF) is a central policy for the land sector's participation in emissions reduction activities, and has provided substantial benefits for the sector since its inception. After 10 auctions, it is timely to review the operation of the ERF to ensure it is fit-for-purpose and the opportunities provided can be made for accessible to landholders, particularly in this current economic context.

The NFF looks forward to engaging with the Climate Change Authority once the review is complete.

Should you require any further information, please contact Warwick Ragg, General Manager Natural Resource Management, on 02 6269 5666 or wragg@nff.org.au.

Yours sincerely

TONY MAHAR
Chief Executive Officer



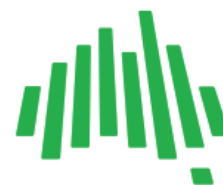
National Farmers' Federation

Submission to the Climate Change Authority 2020 review of the Emissions Reduction Fund

3 June 2020

NFF Member Organisations





The National Farmers' Federation (NFF) is the voice of Australian farmers.

The NFF was established in 1979 as the national peak body representing farmers and more broadly, agriculture across Australia. The NFF's membership comprises all of Australia's major agricultural commodities across the breadth and the length of the supply chain.

Operating under a federated structure, individual farmers join their respective state farm organisation and/or national commodity council. These organisations form the NFF.

The NFF represents Australian agriculture on national and foreign policy issues including workplace relations, trade and natural resource management. Our members complement this work through the delivery of direct 'grass roots' member services as well as state-based policy and commodity-specific interests.

Statistics on Australian Agriculture

Australian agriculture makes an important contribution to Australia's social, economic and environmental fabric.

Social >

There are approximately 88,000 farm businesses in Australia, 99 per cent of which are wholly Australian owned and operated.

Economic >

In 2018-19, the agricultural sector, at farm-gate, contributed 1.9 per cent to Australia's total Gross Domestic Product (GDP). The gross value of Australian farm production in 2018-19 is estimated to have reached \$62.2 billion.

Workplace >

The agriculture, forestry and fishing sector employs approximately 318,600 people, including full time (239,100) and part time employees (79,500).

Seasonal conditions affect the sector's capacity to employ. Permanent employment is the main form of employment in the sector, but more than 26 per cent of the employed workforce is casual.

Environmental >

Australian farmers are environmental stewards, owning, managing and caring for 51 per cent of Australia's land mass. Farmers are at the frontline of delivering environmental outcomes on behalf of the Australian community, with 7.4 million hectares of agricultural land set aside by Australian farmers purely for conservation/protection purposes.

In 1989, the National Farmers' Federation together with the Australian Conservation Foundation was pivotal in ensuring that the emerging Landcare movement became a national programme with bipartisan support.

1. Introduction

The National Farmers' Federation (NFF) welcomes the opportunity to respond to the Climate Change Authority's (CCA) 2020 Review of the Emissions Reduction Fund (ERF).

From the outset the NFF wishes to be clear that this debate includes several wicked problems for the landuse sector. There are concerns that there are perverse outcomes emerging from vegetative sequestration models that include lack of inclusion of smaller scale participants, poor feral animal and weed control provisions, and risks of too much transition to large tracts of 'offsetting' hectareage. The key concern is that, to maintain a grow and significant agricultural sector, there must be a balance to ensure that the farm sector does not transition to a provider of last resort of emissions reduction solutions. Multiple use landscapes, recognition for the need to utilise, particularly arable, private land for its most economically sustainable use and the adoption of innovation are key planks from which to take this debate forward. There is no support for proposals, for example, to reafforest 23 million hectares of private land or to reduce red meat production at all as a solution to climate change.

The NFF notes previous inquiries it has contributed to, including:

- The CCA 2017 review of the CFI;
- The CCA 2017 review of Climate Change Policies;
- The CCA 2019 Updating the Authority's advice on meeting Australia's Paris Agreement commitments; and
- The 2019 King review.

The NFF also notes recent publications by the CCA, including *Prospering in a low-emissions world* and *Reaping the Rewards*, and that the CCA would be considering submissions to this inquiry.

In the current environment, it is unclear the extent of the economic challenge that will be presented by COVID-19. There are several significant challenges going forward:

- Restoring the economy following the pandemic;
- Addressing climate change as the country transitions to a low carbon economy; and
- Supporting ongoing resilience in regional communities, including fire and drought affected communities.

The NFF is of the view that these challenges should be addressed in parallel. The ERF is one mechanism that may be strategically reoriented to be part of the broader economic stimulus required to support ongoing recovery of the Australian economy. The relative maturity of the ERF and its existing infrastructure can be leveraged to meet this challenge.

It will be important to assess the ERF against various initiatives identified by the CCA that are currently underway in the context of where the ERF should be positioned in the future. The NFF is optimistic that the ERF can make a significant contribution to post-COVID economic recovery if appropriate changes are made to facilitate participation and uptake by individuals, and leverage greater private

investment. With governments likely to be more fiscally constrained due to the pandemic, private capital will be necessary to ensure a sustainable pathway for the ERF and, more broadly, a transition towards a low emissions economy.

It is the view of the NFF that a measure of success would be declining government participation commensurate with an increase in private market investment. The NFF notes the following areas of consideration in this review:

- Maintaining integrity and optimising governance.
- Managing risks to abatement.
- Opportunities for enhancing outcomes.

The NFF notes the guiding principles outlined in the King review:

- 1. Projects that reduce the stock of greenhouse gases in the atmosphere should be considered for an incentive if the actual or potential carbon benefit exceeds the incentive cost.*
- 2. Policy should be designed to favour economically productive activities or activities where there are co-benefits.*
- 3. Policies and institutions should be technology-neutral and complementary.*
- 4. Participation will be encouraged if solutions are conceptually and administratively simple, with an emphasis on balanced sharing of risk and minimising transaction costs.*
- 5. Technologies are at different stages of technical and commercial readiness, and incentives/ instruments should be designed to reflect this.*
- 6. Policies should be designed and administered in a participatory and transparent manner.*
- 7. Policy responses should be coordinated between federal, state and territory governments and undertaken in collaboration, where possible, with state and territory governments*

While these principles are a reasonable basis for progress there may be some difficulty in translating them into detailed and practical proposals.

The NFF also raises broader concerns about the National Greenhouse Gas Inventory reporting system that may be out of scope of the review. The NFF has concerns regarding the Intergovernmental Panel on Climate Change's (IPCC) use of the global warming potential (GWP) 100 methodology regarding the impacts of methane on climate change. The NFF is currently investigating whether a proposed new methodology, 'GWP*' would be a suitable replacement. We understand that the current methodology (GWP 100) significantly overestimates that impact of the methane produced by livestock on climate change, and recommends that the CCA support the New Zealand and UK request for the IPCC to evaluate 'the more accurate GWP* metric to measure the contribution of short-lived greenhouse gases to global warming. GWP* was developed by Oxford University as an alternative way to calculate the impact of greenhouse gases.

The NFF notes these results may have implications for the operation of the ERF and the broader carbon market. The NFF supports clearly defined universal metrics of measurement to ensure confidence in any accounting scheme, and the

ERF must be underpinned by a more accurate GHG reporting system that better reflects the agriculture sector's contribution to climate change. In this context, the reporting frameworks and systems including the ERF must be flexible and subject to continual review to integrate new knowledge about global warming, sequestration and emissions.

Government also has a fundamental role to play in ensuring market integrity and facilitating the development of methodologies in consultation with stakeholders. Research & Development (R&D) will play a key role in ensuring future methodologies can be developed, made commercially viable, and consistent with Australia's international obligations. This will drive long-term productivity of the sector and position the agricultural sector as a leader in sustainability as well as improve the ability to mitigate future uncertainty.

In the past 10 years, policy uncertainty has been a significant barrier to investment or has constrained potential for greater investment. In principle, the NFF believes that policies which align with and can complement state policies, and vice versa, will provide greater certainty for potential participants and investors and contribute to economic recovery.

The NFF notes that AGMIN has tasked officials to develop an implementation strategy for a Climate Change Adaptation Strategy which it has endorsed. This development must be undertaken in consultation with industry to facilitate industry's support, to date this has been plainly and disappointingly lacking.

The NFF notes the Commonwealth's Memorandum of Understanding with the NSW Government's to implement their net zero emissions by 2050 plan as one approach that could be replicated with other states. It will be important to have a coordinated approach to developing the carbon market industry. The NFF is aware of state initiatives including the Queensland *Land Restoration Fund*, ClimateWorks' *Land Use Futures* program and the Commonwealth's Technology Investment Roadmap that could be further aligned to ensure there is a coordinated and aligned approach to improve the carbon market. **There is significant industry support to establish a robust carbon market**, and the Government could have a significant role in facilitating cooperation and coordination of various research efforts within and between government and industry.

2. Improving participation in the ERF

The NFF draws largely from the AgriFutures report *Improving Carbon Markets to Increase Farmer Participation*¹. The report identifies various motivators of, and barriers to, the uptake of agriculture-related offset projects, and considers various options to address barriers to participation. The King review recommendations also provide a solid basis to improve ERF outcomes, and are largely consistent with the AgriFutures report.

¹ Macintosh A, Roberts G & Buchan S (2019) *Improving Carbon Markets to Increase Farmer Participation*, report prepared for AgriFutures, pg. 84-96, available at <https://www.agrifutures.com.au/wp-content/uploads/2019/07/19-026-Digital-1.pdf>

The main barriers to participation include:

- Low carbon prices;
- Policy uncertainty and risk of rule changes;
- Third party consent;
- Uncertainty about future prices;
- Lack of trust in information providers;
- Challenges for small and medium scale farmers to participate because of scale thresholds;
- The cost of lost sequestered carbon caused by extreme weather events and natural disasters; and
- Lack of awareness.

The outcomes are reflected by the disproportionate uptake of specific methodologies, including vegetation projects, and the lack of uptake of agricultural methodologies. While the majority of emissions reduction projects have occurred in the agricultural industry, the uptake suggests they do not capture the full breadth of the sector and therefore there is potential to significantly improve participation. Of the agricultural methodologies, only methane destruction in piggeries has been used to a considerable extent.

Ten auctions have now been completed. The most recent two auctions have seen the lowest purchased abatement (tonnage) since auctions commenced, suggesting that earlier auctions have largely exhausted the supply of the cheapest supply of emissions abatement. Low prices combined with significant transaction costs through use of aggregators, amongst other issues, have restricted participation to mostly larger farm businesses who have a greater capacity to navigate the system and can deliver sufficient abatement to exceed aggregator modelled thresholds. As the market continues to mature, changes must be made to ensure there is greater participation in the ERF.

In the cotton industry, for example, options to reduce emissions tended to be around reducing nitrogen emissions and energy use, reflected in the 'Reducing Greenhouse Gas Emissions from Fertiliser in Irrigated Cotton' methodology under the Carbon Farming Initiative. There have been no projects registered under the methodology suggesting significant barriers to entry.

In 2014, the cotton industry conducted a case study² on the methodology and found a negative benefit cost analysis due primarily to uncertainty around the open-ended nature of project variation and auditing costs. Harmonised reporting and greater certainty about how many carbon credits they are eligible to claim when they are a multi-crop farm business would reduce the complexity deterring some growers from participating.

Furthermore, there is scope to expand the coverage of existing methodologies. Nutrient management methodologies are only limited to cotton, and can be expanded to other industries such as sugarcane.

² <https://www.cottoninfo.com.au/sites/default/files/documents/Carbon%20farming%20case%20study.pdf>

The King review also provided a number of recommendations to reduce demand-side barriers to improve flexibility and facilitate greater uptake of methodologies, particularly for smaller landholders. The NFF notes these recommendations are also consistent with proposals within the AgriFutures report.

The NFF notes a proposal from AgriFutures report proposed changes to the government's purchasing platform to reduce demand-side barriers. Key design features include:

- *Participation would be limited to projects from the land, agriculture and 'small' waste sectors.*
- *The Government would offer to purchase ACCUs under forward contracts and sell put options for ACCUs from the included sectors.*
- *There would be three streams of activity:*
 - *Purchase of ACCUs under carbon-only forward contracts – where the Government would purchase ACCUs under forward contracts through a reverse auction process but with revised contract terms and auction processes.*
 - *Sale of ACCU put options – where the Government would sell put options, giving purchasers from the included sectors the right (but not the obligation) to sell ACCUs to the Government at a pre-determined price during a specified period.*
 - *Purchase of ACCUs under multiple benefit social impact bonds – where the Government would purchase ACCUs and other specified benefits (e.g. biodiversity, heritage, and water benefits) under forward contracts awarded through a tender process.*
- *The terms of forward contracts would be revised to:*
 - *Ensure contracted parties are required to pay full market damages if they default (fail to provide ACCUs in accordance with the contracted terms) – at present, market damages are capped at the contract price, meaning sellers may be able to profit from defaulting.*
 - *Limit the scope for contracted parties to supply ACCUs from projects other than those specified in the contract – at present, ERF contracts only require contracting parties to supply ACCUs, meaning they can come from any project.*

The proposal would improve certainty for offset providers, and gives Government an option to either retire Australian Carbon Credit Units (ACCUs) or sell them into domestic compliance markets. The three-stream purchasing platform would also ensure continued growth in supply of carbon offset projects. This would place carbon markets at an equivalency in terms of trade tools with many other existing agricultural commodity markets, allowing treatment by landholders of carbon offset enterprises in the same manner as other farm enterprises.

The NFF also notes that most demand for ACCUs comes from compliance obligations under the Safeguard Mechanism and the voluntary market. There is scope to consider changes to the Safeguard Mechanism to improve demand for ACCUs. The NFF notes the Carbon Market Institute's 'Transitioning the Safeguard Mechanism to a Baseline and Credit ETS: Design Options for Consideration' as one option that could be considered, particularly the option to reduce the baseline over time to align with 2030 emissions reduction targets.

Difficulty aggregating small projects

Most small to medium sized agricultural producers have a limited capacity to be involved in the ERF because their projects lack scale. This lack of scale has prevented thousands of producers from being involved in the ERF. For example, unless an individual landholder could sequester over 80,000 tonnes CO₂^e, they could not find an aggregator willing to spend the time and resources including them as a part of an aggregated project. It is essential that CCA develop a methodology that enable small to medium size agricultural producers to be a part of the ERF. Thousands of landholders in NSW and Queensland were impacted by State and Commonwealth native vegetation legislation that impinged their property rights and the emissions reduction directly related to the legislation are now being used to meet the Commonwealth's Kyoto and Paris emissions reduction targets.

A very small number of landholders were able to participate in previous ERF auctions and have received significant financial benefits while the majority of landholders impacted by the legislation and provided the bulk of the emission reductions were unable to participate due their size and scale. It is absolutely essential that this is fixed during the next scheme. This could include a specific section of the new scheme that allows an industry to receive financial incentives for emissions reduction the entire industry has achieved. For example, if in 10 years the cattle industry develops a technology that reduces the cattle herd's methane production by 50 per cent and is widely adopted by both big and little producers, the cattle industry collectively could be entitled to receive financial benefits.

Increasing landholder participation is essential and enabling as many landholders to benefit from emission reductions is also essential and the only way to maximise involvement is to create a mechanism that focusses on maximising the landholders involved and moves away from being based on what one (1) landholder can do but should consider what all landholders have been able to achieve.

Reducing supply-side barriers to participation

Significant transaction costs, upfront capital costs, scale and lack of cost-effective methodologies have been key barriers to participation for many landholders. The ERF typically favours landholders that have a greater financial capacity to participate and navigate the system — larger farm businesses as opposed to smaller landholders. The NFF believes there is greater opportunity to incentivise smaller landholder participation by addressing specific barriers to entry.

The NFF notes several recommendations from the King review that seek to address this issue.

The NFF strongly supports allowing certain ERF methods to award ACCUs on a compressed timeframe to address methodologies that have prohibitive upfront capital costs. The NFF recognises that these methodologies should be limited to

methods with high upfront costs and easily forecastable abatement, and require ongoing verification to maintain the integrity of the credits

The NFF notes a recent amendment of the *Carbon Credits (Carbon Farming Initiative—Plantation Forestry) Methodology Determination 2017* to allow ERF plantation forestry and farm forestry projects to proceed in higher rainfall areas in regions declared by the Minister to be a region where material risks to water availability are likely to be addressed.

The NFF acknowledges a recommendation to introduce a formal ‘duty of utmost good faith’ on ERF participants. The NFF accepts it as a mechanism that could reduce the need for restrictive project eligibility rules. However, further consultation would be needed to ensure this proposal is well-designed and won’t lead to perverse outcomes.

The NFF also supports the establishment of a fixed price purchasing desk for small projects under the ERF. This would address price uncertainty for smaller landholders and avoid marketing costs, however, the criteria should be strict to ensure only small projects and smaller landholders are targeted and to avoid any perverse and distortionary market outcomes.

The NFF strongly supports method stacking that would allow participants to apply for multiple methods in a single property. The NFF has successively raised that there has not been an easy way for farmers to bundle up and sell all the different sequestration and emissions reduction strategies that suited their farm and business model. Under this proposal, proponents would only have to submit a single aggregated offset report and an aggregated audit. While it is more difficult to aggregate measurement systems, this would significantly reduce reporting and auditing administrative costs. Furthermore, allowing multiple projects to be used on-farm would provide greater on-farm flexibility and capacity to take a whole-of-farm approach that aligned with landholders’ interests.

The NFF also supports the King recommendation to establish a process to provide third parties the opportunity to propose and prepare ERF methods. While the NFF recognises the significant departmental resources required to get methods up to standard, greater private industry engagement and investment in methodology development will reduce the ERF’s overall reliance on taxpayer funding into the future and ensure the program is sustainable. If broader changes to the ERF occur, there would be a higher potential for uptake to balance the resources invested by the Government and other stakeholders.

One important aspect of the ERF is the Research and Development (R&D) capacity in the agriculture sector which underpins the ability to develop cost-effective abatement technologies.

Research and Development will underpin the capacity for the agriculture sector to develop cost-effective abatement technologies. Underinvestment by public and private entities in R&D over the past 30 years have resulted in a dearth of mature, cost-effective abatement technologies concerning CH₄ and N₂O emissions from livestock and soils.

One area of improvement is the ability to attract public and private investment. The King review has proposed expanding the remit of ARENA and CEFC to support key technologies as well as:

Establish a goal-oriented technology co-investment program to accelerate the uptake of transformative, high abatement potential technologies that are not currently cost competitive.

Key design parameters would include the following.

- The program would focus on the 'hard-to-abate' sectors, for example heavy industry, freight transport and aviation, where capital costs are high and progress in driving down costs has been slow.*
- Safeguard and non-Safeguard covered projects would be eligible.*
- The program would target novel and ambitious technologies with the potential to transform key sectors.*
- The program would involve co-investment by the Government and industry, with Government funds provided substantially upfront.*
- The program would be undertaken in collaboration, and with co-investment, from state and territory governments where possible.*
- The program's design should provide assurance that funded projects are technically and commercially feasible.*

The NFF acknowledges the recommendations but notes that there should be criteria to ensure that technologies and researchers funded are considered value for money and with a reasonable prospect of utilisation.

There is also scope to leverage research that has occurred through various other research programs and bodies. This includes the Climate Research Strategy for Primary Industries (CRSPI), and the Government's Rural Research & Develop for Profit program. For example, there is potential to use research from the Cotton Industry's Smarter Irrigation for Profit project, led by the Cotton RDC, to improve existing methodologies under the CFI and potentially develop new projects. As new research outcomes are produced, there should be a mechanism between government and stakeholder to review methodologies as necessary to ensure they are up to date.

The NFF notes the importance of cross-sectoral collaboration between industries. The recent CRSPI review commissioned by AgriFutures Australia proposes significant changes to CRSPI partner collaboration and project design and may solve previous limitations to effective cross sectoral and commercialisation efforts. The NFF notes its submission to the 'Modernising the RDC system' review last December to provide collective industry recommendations that would drive greater cross sectoral collaboration between RDCs and thus, greater research outcomes for the industry.

The Government's Technology Investment Roadmap is also expected to provide a pathway for agriculture to drive new technology adopt and practice change.

Reaching a carbon neutral position will require large-scale adoption of technologies that assist in reducing enteric methane emissions, and the reduction in emissions are captured in the National Greenhouse Gas Accounts. Technologies and practices beyond land use change methods are currently not low-cost approaches given lack of economies of scale. CSIRO has estimated that a targeted investment of \$200 million into R&D over the next 10 years is required to further develop technologies for industry to achieve net zero emissions.

In addition to this, ‘Banding’ by technology category within the Emissions Reduction Fund presents potential to incentivise adoption of technologies and varying stage of development. This would help overcome potential shortfalls in supply of ACCUs, and mitigate against the risk of carbon credit being sold outside the ERF and potentially lost to the Australian Red Meat Industry’s and Australia’s GHG reduction initiatives.

A number of organisations support ‘banding’ or dedicated auctions, where projects of a similar type that offer co-benefits compete only amongst themselves rather than with the broader set of projects that would otherwise participate at auction. Stakeholders are of the view that projects in some sectors including those more likely to deliver co-benefits (such as reinstating wildlife habitat, improvements in soil health, cleaner waters in rivers, etc.) experience higher implementation costs than other project types and are disadvantaged at auction if the main purchasing criteria is least cost. This is detrimental to the development of a balanced portfolio of technology and practice change options for Australia to avoid GHGs emissions and store carbon in the land sector. This approach also stifles innovation.

The NFF recommends that Governments:

- Support development of methodologies tailored to smaller landholders.
- Consider the various King review recommendations outlined in his document.
- Supporting ‘banding’ or dedicated auctions where projects of a similar type that offer co-benefits compete only amongst themselves rather than with the broader set of projects that would otherwise participate at the auction.
- Support development of new, easily adopted method for industry as needed, in consultation with industry stakeholders.

3. Opportunities to enhance outcomes

The greatest opportunities to enhance outcomes come from the above changes in addition to expansion of the voluntary and co-benefits markets.

The NFF strongly supports efforts to develop the voluntary market as well that valuing co-benefits, noting recommendations under the CCA’s *Reaping the Rewards* report, including:

Recommendation 7

In future Emissions Reduction Fund method development, the Australian Government consider giving priority to other methods that could deliver genuine

multiple benefits, provided they also have potential for widespread, cost-effective uptake and robust abatement.

Recommendation 9

In consultation with other government and non-government stakeholders, the Australian Government develop an accreditation standard to support a private market for carbon credits that have genuine multiple benefits, commencing with biodiversity.

Recommendation 14

The Rural Research and Development Corporations and other relevant research bodies build on their existing extension programs to continue to offer guidance to landholders on how to reduce emissions and encourage natural resource management while further improving farm productivity. Rural Research and Development Corporations' work programs should consider including objectives for both emissions reductions and natural resource management as well as on-farm profitability.

It is increasingly clear that, while the focus on carbon emissions has provided a useful mechanism for landholders to deliver public good benefits, carbon emissions is only one of the broader environmental benefits that landholders consider that may be a limiting factor which may not be adequately reflected in the ERF architecture. Further, research into voluntary markets has shown that private offset purchases look further than simple emissions reduction, but also environmental, economic, social and cultural benefits.

The lack of these criteria and the realised negative social and environmental outcomes from least cost only abatement strategies have drawn criticisms from a number of NFF member organisations and continues to be an aversion factor in regional communities.

The NFF notes the King review's recommendation to encourage the emergence of 'exchange-traded markets' for certifications to support private quality branding of co-benefits associated with different abatement units and to assist in the development of voluntary participation in offset markets.

The NFF also believes the ERF could be expanded to support resilience, including drought resilience. While the objective of the ERF is to fund low cost abatement, deriving resilience benefits from the scheme would create an incentive linking resilience to delivering emissions reduction outcomes and resilience outcomes and thereby reducing the risk of unintended consequences. Long-term reliable income from emissions reduction projects may be an option for some farmers and could be integrated on a long-term basis with the right methodologies and administrative costs are not onerous.

Separately, the NFF has supported consideration of biodiversity and a natural capital market in its 2030 Roadmap and its submission to the *Independent review of the Environment Protection and Biodiversity Conservation Act 1999*. The NFF is also involved in the Government's \$34 million Agricultural Stewardship Package which was announced in the 2019-20 federal budget.

The NFF has been working with CSIRO to develop demonstration of the opportunities that a natural capital market can provide for farmers. Through the fund, and in collaboration with CSIRO, the NFF seeks to:

- collaborate with interested parties to deliver a digitally enabled set of metrics for sustainable farm practices and biodiversity indicators that are presented in a reliable and useable way to allow a market to be designed around them.
- conduct a project to design market rules to provide the finance sector with an understandable and trusted framework to invest in these outcomes.
- collaborate with the Department to develop a grants program that would be consistent and also provide parallel feedback to this research project on priority areas for initial investment from the farmer perspective.

The Farm Biodiversity Certification scheme will analyse, evaluate and develop a trial system of verification/certification for agricultural biodiversity and sustainability. Given the diversity of industries and differing priorities, a consultative approach is being adopted in all phases. The project will run from December 2019 until mid-2022 and will be delivered in three phases. It will also aid in informing the federal government on most effective capital, market-based incentive and market access approaches.

Another component being considered as part of the NFF's work to establish a natural capital framework is the need for a robust natural capital accounting framework that provides the right data at the right spatial and temporal scales, accessible at a reasonable price and relevant to individual enterprises. The NFF is seeking to develop federated data sets that will contribute to the broader and long-term impact of a natural capital market by motivating and informing producers of natural capital investment opportunities. This would build on Federal government efforts to develop data infrastructure consistent with the needs of environmental economic accounting, while ensuring the needs of farm enterprises are met. Without easily accessible, credible data, farmers are unlikely to be able to identify or realise private benefits from natural capital investment.

If the project is successful in developing a framework for a standardised set of biodiversity and/or sustainability metrics then adoption of these by ERF programs would enable lower transactional costs and reporting burdens for producers. This standardisation would also augment market support systems for co-benefits by allowing transparency and validity to co-benefits schemes.

The NFF suggests that the development of a multiple benefits market under the ERF could draw on learnings and findings from this certification. There will be a need for greater coordination and alignment between industry stakeholders and Departments and other relevant organisations to ensure efficient outcomes can be delivered.

The NFF also supports the consideration of negative emissions technologies, including R&D and methodology development for inclusion in the ERF through the Government's Technology Investment Roadmap.

The Carbon Market Institute's *Carbon Farming Industry Roadmap* also notes several of these options and would be a useful guide for this review.

The NFF recommends the Government:

- Expand the ERF to consider broader outcomes including co-benefits and resilience outcomes.
- Review of State and Federal Government support mechanisms to ensure they can be coordinated and can drive new technology adoption and practice change is needed.