National Farmers Federation

Periodic Review of the Soil Organic Carbon Method 2021

April 2025

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.

NFF Member Organisations

Table of Contents

About Us 2

NFF Member Organisations 2

Introduction 4

Assessment Against the Offsets Integrity Standards 4

1. **Additionality** 4

Measurement and Verification 5

Evidence 6

Conservatism 6

Usability, Uptake, and Administrative Efficency 7

Conclusion 7

11 April 2025

Emissions Reduction Assurance Committee
Department of Climate Change, Energy, the Environment, and Water
GPO Box 2013
Canberra ACT 2601
Australia

Via Email: ACCUSecretariat@dcceew.gov.au

RE: Periodic Review of the Carbon Credits *(Carbon Farming Initiative – Estimation of Soil Organic Carbon Sequestration Using Measurement and Models)* Methodology Determination 2021

To Emissions Reduction Assurance Committee Secretariat,

Introduction

The National Farmers' Federation (NFF) welcomes the opportunity to provide a submission to the Emissions Reduction Assurance Committee (ERAC) regarding the *Periodic Review of the Soil Organic Carbon (SOC) Methodology Determination 2021* under the Australian Carbon Credit Unit (ACCU) Scheme.

The SOC methodology is one of several tools that recognise and reward agriculture's role in meeting climate goals through improved land management. Soil carbon sequestration can deliver both climate benefits and on-farm productivity benefits, making it a valuable opportunity for the sector. The methodology has been well received, as reflected in the approximately 200 registered projects and the number of ACCUs issued to-date. The NFF supports this Review as an opportunity to strengthen the approach to additionality, modernise the method to reflect current science and practices, and address the administrative barriers that continue to limit participation.

The NFF understands that this Periodic Review will inform the development of the proposed Integrated Farm and Land Management (IFLM) Method. While this is supported, all methodology reviews, not just those focussed on soils, should contribute to the IFLM's design to ensure it reflects the full suite of agricultural practices. The IFLM was originally promised and intended to operate as a broad, whole-of-farm framework that integrates a wide range of agricultural activities under a single methodology. It was never intended to be restricted to specific land types or emissions sources. The Department and ERAC must ensure this core vision is upheld and not undermined by disconnected decision-making processes.

Assessment Against the Offsets Integrity Standards

Additionality

The Offset Integrity Standards (OIS) require projects to be *"unlikely to occur in the ordinary course of events"* without ACCU incentives. As specified in a March 2021 publication by ERAC, the Committee has stated its interpretation of this standard *"as requiring the*

substantial majority of the abatement likely to be credited under the method would not occur in the absence of the incentive provided by the Scheme"[1].

The NFF contends that, in the context of soil carbon projects, the business-as-usual scenario is one of minimal or conventional practice. Many of the practices assumed to be additional are already in use across some Australian farms due to the productivity and profitability benefits they provide. However, their uptake has been largely driven by commercial factors rather than by incentives under the ACCU Scheme. The fact that some practice change has occurred does not undermine additionality under the OIS, so long as that change was not incentivised or credited through the Scheme. We note that as a rule of thumb, any key interventions (such as cover cropping, improved grazing management, and the application of nutrients or soil amendments) tend not to be adopted at-scale without an economic incentive.

That said, financial incentives remain essential to driving broader adoption. These need not be limited to credit generation through ACCUs. Government could explore complementary mechanisms, such as targeted tax concessions or deductions for the purchase of enabling technologies and infrastructure, to support practice change on-farm and strengthen project viability.

We also note that the SOC methodology relies on assumptions about bulk density that are not applicable across all soil types. For instance, shrink-swell clays may lose bulk density over time, yet still support the growth of highly productive crops such as cotton, pigeon peas, and sorghum in rotation. If these soils are to be included under the methodology, then additional consideration should be given to moisture content and seasonal variation when determining sampling timing and methodology.

Measurement and Verification

Soil carbon sequestration can deliver both climate and on-farm productivity benefits. Methodological settings must not disincentivise participation or undervalue these outcomes.

The SOC methodology requires physical soil sampling to a minimum depth of 30 cm as part of the baseline measurement, with proponents given the option to sample deeper if they wish to claim carbon gains at depth. While this approach reflects scientific rigour, deeper sampling significantly increases the cost of participation. The methodology also requires project proponents report their results at least once every five years during the 25-year crediting period in addition to the initial baseline sampling. For many landholders, particularly those in remote or variable landscapes, even the baseline sampling process can be prohibitively expensive and resource intensive.

While physical sampling is currently considered the standard approach, it is constrained by practical limitations, including the depth and distribution of sampling points, and the considerable variability in soil carbon levels even within a single paddock. The current

[1] Clean Energy Regulator and Emissions Reduction Assurance Committee, March 2021: Information Paper: Committee Considerations for Interpreting the Emissions Reduction Fund's Offsets Integrity Standards

methodology's reliance on physical sampling is well-intentioned, but it does not reflect the growing availability of new technologies capable of providing equivalent or improved confidence in measurement outcomes. The methodology should evolve to accommodate a broader range of measurement technologies that improve accessibility without unnecessarily compromising integrity. While some technologies may introduce greater uncertainty than direct sampling, others may enhance confidence through greater spatial coverage or reduced sampling bias. Without such evolution, compliance requirements will continue to present barriers, particularly for smaller landholders who may rely on agronomic advice delivered through commercial extension services linked to product providers. While these services are often readily accessible, they may not offer the independent or specialised expertise required for soil carbon measurement and reporting. Broadening the range of approved technologies would not only reduce costs but enable landholders to engage more directly, especially when coupled with extension support available through initiatives like the Carbon Farming Outreach Program and the proposed Knowledge Bank.

The NFF, therefore, strongly supports a broadening toward benchmarked, more efficient, and lower-cost measurement approaches where practical, noting that some ground-truthing will still be necessary, including:

- Remote sensing and satellite-derived condition indicators and models;
- Precision agriculture technologies that monitor land-use change and soil condition indicators; and
- Hybrid measure-model estimation, which combines field sampling with predictive tools.

Evidence

Should adjustments to the methodology be considered, they must be informed by emerging evidence from Australian field trials and producer-led projects to ensure updates remain scientifically credible, practical, and grounded in real-world conditions. Those adjustments should recognise the need to grandfather existing projects so there is not a perverse outcome to the proponent.

Conservatism

The method currently applies multiple discount factors to manage over-crediting risk, including a 25% temporary withholding, a 20% permanence discount (25-year permanence requirement), and a 5% risk of reversal buffer. These measures are already overly conservative.

However, conservatism should not come at the expense of fairness. The NFF considers the cumulative impact of these discounts, particularly the application of a "buffer on buffer" approach, to be unnecessarily conservative. This duplication does not reflect the on-ground realities of delivering genuine sequestration outcomes and places an undue burden on landholders who are acting in good faith.

These discounts must be reduced. Farmers need clear incentives to participate, and projects must be financially viable if the Scheme is to succeed in driving real, long-term change across the landscape. This is especially important considering the current

underwhelming ACCU price, which limits the economic return available to project proponents.

While maintaining integrity is essential, we do not support any further discounting or restrictions. Additional erosion of crediting potential would discourage participation, particularly from smaller or more risk-averse operators, and risk undermining confidence in the Scheme, along with its broader credibility and emissions reduction goals.

Importantly, the SOC methodology underwent a key adjustment in 2021, when the temporary withholding was reduced from 50% to 25%. This reform was introduced to improve financial viability prospective project proponents without compromising integrity. As ERAC has itself noted, the change was designed to provide *"a sufficient incentive for uptake of soil projects while still meeting the Offsets Integrity Standards"*[2].

This adjustment, alongside broader reforms to the ACCU Scheme in 2022, saw a surge in project participation and ACCU issuance. This increase highlights that modest, well-considered reforms can significantly improve project uptake. Introducing further discounts or restrictions would risk reversing this progress, unfairly penalising landholders who achieve genuine outcomes and diminishing trust in the operation of the Scheme.

Usability, Uptake, and Administrative Efficiency

Any future changes to the method must balance scientific rigour with administrative efficiency. Efforts to improve measurement confidence or mitigate crediting risk must not come at the expense of practicality. Increasing uncertainty within the method, particularly around soil variability or model assumptions, often leads to more frequent sampling and heavier documentation requirements, which further alienates prospective participants. This trade-off must be carefully managed.

Conclusion

Please do not hesitate to contact Warwick Ragg, General Manager, Natural Resource Management, via e-mail: WRagg@nff.org.au at the first instance to progress this discussion.

Yours sincerely,

TROY WILLIAMS
Chief Executive Officer

[2] Clean Energy Regulator and Emissions Reduction Assurance Committee: Understanding Your Soil Carbon Project: Emissions Reduction Fund Simple Method Guide for Soil Carbon Projects Registered Under the *Carbon Credits (Carbon Farming Initiative – Estimation of Soil Organic Carbon Sequestration using Measurement and Models) Methodology Determination 2021*

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