



# **2023 Review of the Carbon Credits (Carbon Farming Initiative) Act 2011**

**December 2023**



An aerial photograph of a river flowing through a landscape. The river is a light blue-grey color, contrasting with the surrounding land. The land is a mix of green, blue, and orange, suggesting different types of vegetation or soil. The river curves through the landscape, creating a winding pattern.

*The Climate Change Authority recognises the First Nations people of this land and their ongoing connection to Culture and Country. We acknowledge First Nations people as the Traditional Owners, Custodians and Lore Keepers of the world's oldest living cultures, and pay our respects to their Elders.*

*This report is printed on Ngunnawal Country*

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# Acknowledgements

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AgriProve	Business Council for Sustainable Development	Glencore
Alinta Energy	Australia	Grattan Institute
Australian Petroleum Production and Exploration Association	Business Council of Australia	Greenpeace Australia
Australian Renewable Energy Agency	Carbon Market Institute	Pacific HESTA
Arnhem Land Fire Abatement Northern Territory	Cattle Australia Cement Industry Federation	Kimberley Land Council
Australian Academy of Science	Citizens' Climate Lobby	Meat & Livestock Australia
Australian Conservation Foundation	Climate Council	Minerals Council of Australia
Australian Financial Markets Association	Climate Friendly Climate Resource	National Farmers Federation
Australian Institute of Landscape Architects	Climate Tasmania	Natural Resource Management Regions
Australian Pipelines and Gas Association	Climateworks Centre	Australia
Australian Pork Limited	CO2 Value Australia	Origin Energy
Australian Projections Pty Ltd	Corporate Carbon	Australian Parents for Climate Action
Bioenergy Australia	Doctors for the Environment Australia	PwC
BP Australia Pty Ltd	Eco Markets Australia	Qantas
Bushfire Survivors for Climate Action	Energy Efficiency Council	Queensland Conservation Council
	EnergyAustralia	Rabobank Australia
	Environmental Defenders Office	The Australia Institute
	Environmental Justice Australia	The Global CCS Institute
	Future Super	Wilderness Society
		Wilinggin Aboriginal Corporation
		Woodside Energy Limited
		WWF-Australia

The authority also received anonymous or confidential submissions from 12 organisations and numerous individuals. These contributions have improved the quality of the review and provided evidence to help inform the authority's recommendations.

The Department of Climate Change, Energy, the Environment and Water, the Clean Energy Regulator and other government agencies also provided technical input. The views expressed in the review are the authority's own and should not be taken as the views or positions of any of the entities listed.



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# Acronyms

ACCU	Australian Carbon Credit Unit
ANAO	Australian National Audit Office
CARB	California Air Resources Board
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAC	Direct Air Capture
DCCEEW	Department of Climate Change, Energy, Environment and Water
ERF	Emissions Reduction Fund
FullCAM	Full Carbon Accounting Model
GHG	Greenhouse Gas
FPIC	Free, Prior and Informed Consent
IPCC	Intergovernmental Panel on Climate Change
ITMOs	Internationally Transferred Mitigation Outcomes
NDC	Nationally Determined Contribution
NGER	National Greenhouse and Energy Reporting
NRM	Natural Resource Management
OIS	Offset Integrity Standards
SMC	Safeguard Mechanism Credit
tCO <sub>2</sub> -e	Tonne of carbon dioxide equivalent
UNDRIIP	United Nations Declaration on the Rights of Indigenous People
UNFCCC	United Nations Framework Convention on Climate Change

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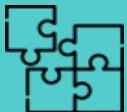
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# Summary

## Key points



While ambitious and urgent cuts to emissions are the priority, the Australian Carbon Credit Unit (ACCU) Scheme can help smooth the transition to net zero emissions.



The ACCU Scheme is fundamentally well designed, and the time is right to make some changes to ensure it remains fit-for-purpose.



Greater transparency and more regular reviews of methods for calculating abatement will bolster integrity and instil more confidence in the scheme.



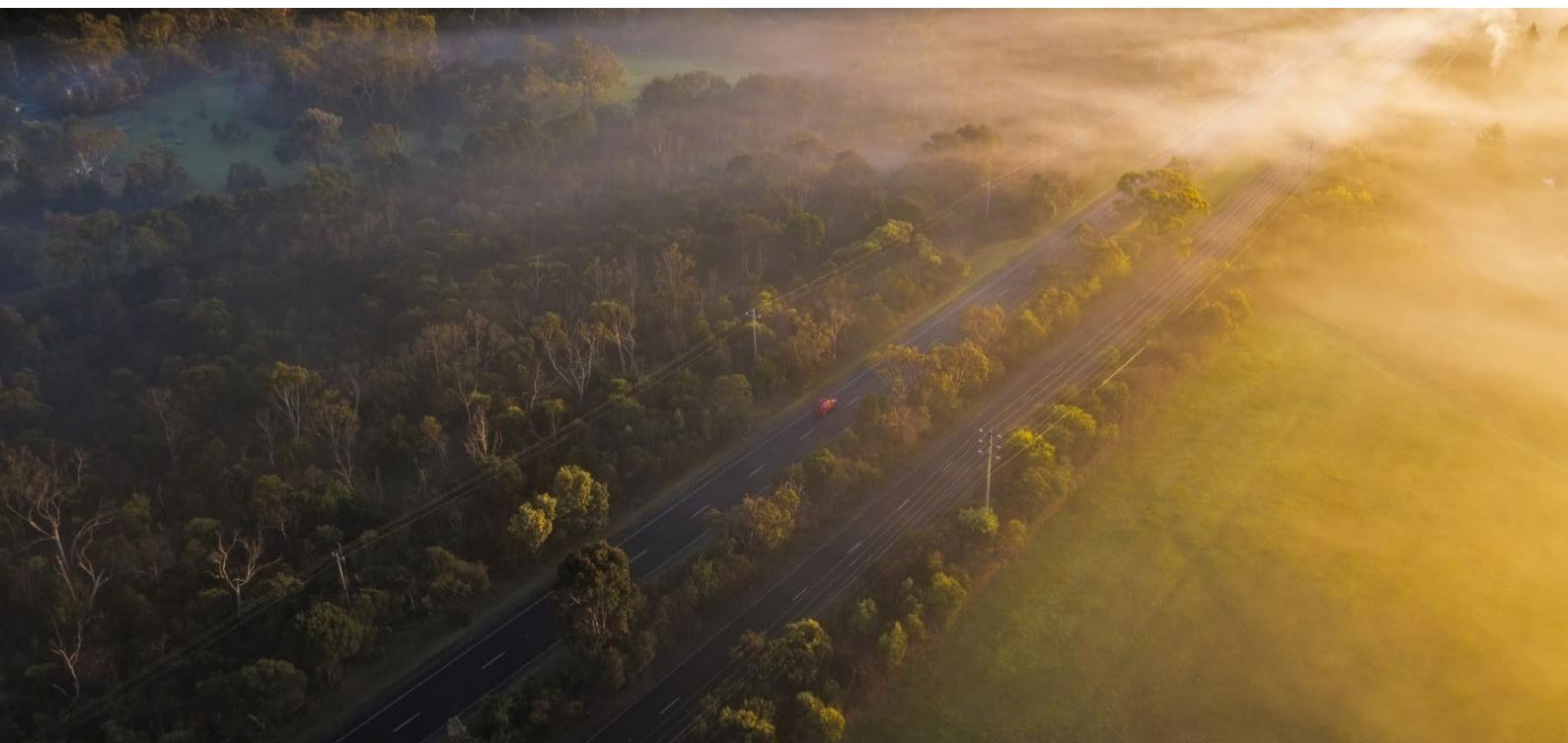
There's more the ACCU Scheme can do to support First Nations, rural, regional and remote communities.



It is in Australia's national interest to keep up with global carbon market developments.



Australia is well-positioned to be a leader in the global effort to remove carbon from the atmosphere and store it long-term.



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## **While ambitious and urgent cuts to emissions are the priority, the Australian Carbon Credit Unit (ACCU) Scheme can help smooth the transition to net zero emissions**

The authority framed this year's review with the question 'is the ACCU Scheme fit for purpose in the Paris Plus context?' The authority uses the term 'Paris Plus' to describe the various agreements, targets, cross-border instruments and other initiatives and behaviours that contribute to the goals of the Paris Agreement. With markets and governments reorienting to net zero emissions, it is timely to ask whether Australia's domestic climate change policies are fit for purpose in this post-Kyoto Protocol era of ambitious and urgent cuts to emissions and rapidly evolving international carbon markets.

This review of the ACCU Scheme together with the authority's concurrent review of the *National Greenhouse and Energy Reporting Act 2007* (NGER Act), and recent research into Australia's sequestration potential (published 17 April 2023), form a timely prelude to the authority's forthcoming advice to government on sectoral pathways to net zero emissions and Australia's 2035 emissions reduction targets, due for completion in 2024.

In the near term, while businesses reduce emissions and develop low or no emissions commercial substitutes, the ACCU Scheme can help address very difficult to abate emissions. By facilitating trade in offsets, markets can smooth the transition for businesses while they make the necessary changes. However, net zero plans will only be successful if offsets are deployed wisely, and not just to displace or delay the direct reduction of emissions. Ambitious and urgent cuts to emissions are the priority.

The ACCU Scheme could also play an important role in financing and scaling the removal of carbon from the atmosphere. Planting and regrowing forests are cost effective and relatively well understood ways to remove and store carbon, and an important part of the ACCU Scheme. New technologies are emerging and will be needed to store carbon in greater quantities and more durably in the transition to net zero emissions by 2050 and net negative emissions in the longer term.

## **The ACCU Scheme is fundamentally well designed and the time is right to make some changes to ensure it remains fit-for-purpose**

Last year the government commissioned an independent review of Australian Carbon Credit Units, chaired by Professor Ian Chubb (the Chubb Review), to ensure ACCUs and the carbon crediting framework maintain a strong and credible reputation supported by participants, purchasers and the broader community. The Chubb Review found the ACCU Scheme "was fundamentally well-designed when introduced" but could nevertheless still be improved. The authority agrees with this view.

Unlike most offsets schemes, which operate in a voluntary self-regulated system, the ACCU Scheme is established in legislation, with robust governance, compliance and enforcement structures. The governance framework of the ACCU Scheme incorporates the Clean Energy Regulator, the Carbon Abatement Integrity Committee (to be established in 2024, formerly known as the Emissions Reduction Assurance Committee), and the Climate Change Authority, each with a role to play in upholding integrity. This robust, regulated setting is a strength and a rarity in carbon offsets schemes.

Nonetheless, there will be opportunities for improvement as long as the scheme continues to grow and the world changes around it.

## **Greater transparency will bolster integrity and instil more confidence**

For the ACCU Scheme to function at its best, market participants such as project investors, ACCU buyers and the broader community must have access to sufficient information to support their confidence in the integrity of ACCUs. In addition to upholding the integrity of the ACCU Scheme, the government has a role in making that information available.

To this end, the authority recommends more information be made available about:

- method prioritisation
- ACCU projects
- the operation of measures within the Scheme that bolster integrity, and
- attributes of individual units such as vintage, project permanence and non-carbon benefits.

The new Australian Carbon Exchange, and the Unit Register, both anticipated to be launched in 2024, present opportunities to enhance the transparency of the scheme. They could pave the way for ratings agencies to enter the market to assess carbon unit quality and provide more information – which is starting to happen in the voluntary carbon market.

In addition to greater transparency, better guidance for project participants would strengthen existing integrity mechanisms, such as existing risk of reversal buffers and permanence period discounts, as well as tools and method development more generally. This would, for example, help farmers and land managers better understand their options as custodians of emissions reduction opportunities, hard-to-abate emissions, and sequestration potential.

#### **Methods for calculating abatement must be reviewed regularly and updates applied to all projects**

To ensure that the abatement credited under the ACCU Scheme continues to be real and additional, the methods for calculating abatement are reviewed and updated for developments in science, technology, government policies and markets. To provide greater confidence methods are working as intended over time, the authority recommends that methods incorporate deliberately sloping emissions baselines and shorter default crediting periods, and that method reviews be undertaken more frequently.

When a method is updated, projects operating under the old version should be required to transition to the new method within two years. Currently, there is no requirement for projects to move to the latest available method for their project activities until the end of a crediting period, which can be 25 years for some types of projects.

The effectiveness of key integrity mechanisms such as the risk of reversal buffer and permanence period discount should also be regularly and transparently reviewed.

The above measures should create a virtuous cycle of continuous improvement. However, they need to be implemented in a way that does not create so much uncertainty and risk that project proponents are deterred from participating in the scheme. This can be addressed through the development and implementation of a framework for risk sharing between the government and scheme participants and adherence to a set and published timetable for reviews.

#### **It is in Australia's national interest to keep up with global carbon market developments**

Carbon market rules under the Paris Agreement were agreed in 2021. The norms and practices within both regulated and voluntary carbon markets are evolving rapidly in response. These include approaches to promoting efforts to reduce, rather than offset, emissions, as well as ensuring additionality and supporting the long-term storage of carbon.

There is a risk Australia is lagging global norms on acceptance of older, 'vintage' carbon offsets for use in the Safeguard Mechanism and granting units for permanence periods less than 100 years. In this report the authority recommends steps to enable Australia to catch up and keep up.

Internationally, most carbon markets adopt 100 years as the period for which carbon must be stored (sequestered) to be considered valid for counterbalancing emissions. For sequestration projects under the ACCU Scheme, a permanence obligation helps keep carbon out of the atmosphere by requiring it to be maintained in trees and in soils. The ACCU Scheme currently credits projects with either a 25-year permanence period or a 100-year permanence period. The authority recommends encouraging projects with the shorter period transition to a 100-year permanence period, and considering further approaches to ensure the scheme-wide average storage duration is at least 100 years.

It makes sense – and it is in Australia’s national interest – to play a leading role in the development of a robust, liquid, high integrity, trusted and effective global carbon market, as the authority said in its 2022 Review of International Offsets. In its second Annual Progress Report, recommended the Australian Government develop and publish a National Carbon Market Strategy, reiterating a 2022 recommendation. The authority will continue to advise on the role of international carbon markets in its review of sectoral pathways to net zero and advice on Australia’s 2035 targets.

### **The ACCU Scheme can be much more than the sum of its tonnes**

Many ACCU projects contribute to positive environmental, economic and societal outcomes, creating opportunities for First Nations, rural, regional and remote communities and supporting biodiversity. However, reporting of non-carbon benefits is not regulated in the ACCU Scheme and voluntary non-carbon benefit reporting frameworks are immature. The lack of oversight of this part of the ACCU market leaves the scheme open to ‘greenwashing’ and creates risks to market integrity. The government can improve reporting and verification of non-carbon benefits associated with ACCU projects and ensure trusted information is available to the market.

The emerging Nature Repair Market presents an opportunity to align markets to operate together in a way consistent with the government’s biodiversity and emissions reduction priorities. With some additional support, regional Natural Resource Management organisations could also play a role to help ACCU projects align with other regional priorities.

The government could take some simple steps to amplify benefits for First Nations communities by supporting participation in the scheme, the processes of seeking and giving consent for projects on lands where First Nations rights and interests exist, and a self-determined approach for First Nations communities to verify and communicate non-carbon benefits.

### **Australia is well-positioned to be a leader in the global effort to remove carbon from the atmosphere and store it long-term**

Meeting the Paris Agreement objectives for limiting global warming is only possible with both rapid reductions in global greenhouse gas emissions and the removal of emissions from the atmosphere at a far greater scale than is presently the case. Indeed, it is increasingly likely that globally we will need to achieve net negative emissions. Furthermore, as economies approach net zero, emissions reduction opportunities should be exhausted, with the remaining emissions attributable to only the hardest-to-abate sources. The scope for trade in credits that represent emissions reductions, as opposed to removals, will narrow.

Opportunities to increase nature-based sequestration are limited, as nature-based technologies compete for land and water to varying degrees and become saturated over time. Greater focus needs to be placed on developing removals technologies that store carbon more durably than trees and soils can. That is, engineered removals such as direct air capture with carbon storage, and mineral carbonation.

The authority considers engineered removals to be the way of the future for offsets markets. Scaling-up engineered removals is a long game that Australia should commence as soon as possible. It is a nascent industry, current technologies are expensive, and government support is needed. However, Australia is