

4. MARKET DYNAMICS

INDUSTRY DRIVERS

The 2015 Paris Agreement aims to limit global temperature increase to 1.5 - 2°C degrees Celsius, by the second half of this century. As a global treaty without an end date, the Paris Agreement provides a clear market signal that global emissions are now on an ongoing downward trajectory, towards a

What is driving our industry?

International Drivers

The Paris Agreement & Article 6: Adoption of the Paris Agreement in 2015 set a clear signal to the global economy that the ongoing trajectory of global emissions must be down. Critically, Article 6 of the treaty sets out how market and non-market approaches can be used towards these Paris goals, and so there is clarity that the use of carbon credits will be an important tool for governments and voluntary actors in the coming years.

Increased Climate Ambition: As the science becomes more clear, and the urgency of mitigating and adapting to the impacts of climate change becomes more immediate, governments are coalescing around the needs for net-zero emissions by 2050, and increasing the push for stronger 2030 and 2040 interim targets. With ambitious targets being set by more and more countries, climate repair solutions like carbon farming, are now a foundation of future global trade and economic development.

International Trade Implications: With many of the world's largest economies setting net-zero targets, including Australia's top 10 two-way trading partners, there is pressure on the Australian government to increase its climate ambition and set (at least) a net-zero by 2050 target, with interim targets and policies that outline how to get there. Increasingly countries are investigating and implementing carbon border adjustment mechanisms (CBAMs) to protect local decarbonising industries from emissions-intensive products from global laggards like Australia. Such mechanisms are due for implementation by the European Union, and are under investigation by Japan, Canada and the United States of America.

Global Sectoral Leadership: Mature global industries that transcend national borders, are driving sectoral action to ensure viability in a carbon constrained future. The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is aiming for carbon neutral growth of civil aviation from 2020; and the International Maritime Organisation is developing a strategy to reduce emissions from the global shipping industry by at least 40% by 2030, and 50% by 2050.

Domestic Drivers

Corporate & Investor Leadership: Investors, emissions intensive industries and other corporate entities are demanding clear policy signals that enable stable, long-term investment in decarbonisation activities and assets. These entities are also being driven by the above international pressures, and so are looking to take a leadership position amongst their competitors. In doing so, the private sector is moving rapidly ahead of domestic policy settings, and investing in not only carbon farming activities, but the other technology, finance and other ancillary industries that will be needed to deploy these solutions at scale.

New & Diversified Income Streams: Carbon farming delivers financial returns for landholders and agricultural enterprises - particularly for unproductive/degraded land. Carbon income is an important additional revenue stream for farmers, providing added opportunities to re-invest back into agricultural enterprises.

carbon-constrained future. With the world moving further into a post-Paris Agreement world, demand for land-sector carbon is increasing, and from a range of new and emerging sources, including from compliance and voluntary carbon markets.

Scaling Australia's young and rapidly evolving carbon farming industry, requires an understanding of these demand drivers - both the international and domestic policy and market factors that will shape the pathway ahead.

Investor Pressure: New climate risk measurement, disclosure and management frameworks, such as the recommendations of the Taskforce on Climate-Related Financial Disclosure (TCFD), are being embraced by investors globally. With climate change now identified as a critical risk to trillions of dollars-worth of long-term assets and returns, alignment of investment portfolios with the goals of the Paris Agreement is now a priority. This includes setting ambitious net zero and interim emissions targets; demanding climate action be taken by businesses they are major shareholders of; divesting from carbon-intensive and fossil fuel assets from their portfolios; and prosecuting these issues to global business and government leaders.

Corporate Net-Zero Action: Corporates are moving quickly to become climate leaders, setting net-zero targets that reduce climate and governance risks, and enhance their social licence to operate. Implementing net-zero strategies increasingly include offsetting plans and components, with a focus on high quality domestic carbon farming activities with co-benefits.

Future Compliance Risk: Companies already covered by Australian and international carbon compliance mechanisms, those aware of potential future emissions liabilities, are increasingly engaging in longer-term offtake agreements with carbon project developers. These activities enable companies to directly invest in carbon farming activities and secure abatement at an agreed price, for development and future delivery.

Demand for Carbon Neutral Products & Services: Consumers are increasingly demanding carbon neutral products and services as a way of taking individual action, and the scrutiny of any claims made by businesses carry a range of reputation and other risks. Corporates are therefore increasingly investing in carbon farming-based offsets that have high environmental integrity; align with consumer and company values; and enhance their social licence to operate. This includes Australian ACCU-generating projects, and those with clear environmental, economic, social and cultural cobenefits.

Increased Farm Productivity: Carbon Farming methods that improve soil health and change livestock feed can also improve agricultural productivity.

Resilience & Risk Management: Afforestation activities that include active land management can allow for plantings that also provide shelter for livestock, wind breaks, targeted salinity reduction, and greater resilience to drought, flooding, and fire.

Protection of Indigenous Land: Methods such as savanna burning can protect sacred sites through appropriate fire management practices and can leverage the traditional ecological knowledge of Indigenous people.

Support Remote Communities: Carbon farming can provide regional and remote communities with jobs and a way to maintain land management practices and local businesses.

OPPORTUNITIES & CHALLENGES

Australia is well positioned to scale up the domestic carbon farming industry, with a number of opportunities that can work in favour of increasing participation and scaling up investment. In addition, there are also a number of important challenges that will need to be addressed for the industry to move forward. Challenges are addressed here at a high level, but the specific actions to be taken are outlined in the Stakeholder Action Plan (page 5).

Opportunities

- Australia has a well-designed and well governed carbon offset market, with the legal and regulatory frameworks already in place necessary to scale up market activity.
- Australia's emissions reduction target of 26-28% below 2005 levels by 2030, will require significant investment in domestic abatement from the land sector.
- State governments are implementing net zero emissions targets, investment programs, and market development operations, which will be important for driving demand for land sector credits.
- Policy and market mechanisms such as the Safeguard Mechanism are already in place, and if adjusted, could be the framework for a market mechanism necessary to drive domestic demand for carbon farming activities.
- Contractual obligations under the ERF are now more flexible, allowing sellers of ACCUs to contract part of their supply to the Commonwealth whilst keeping the remaining stock for either private contract, or for sale on the secondary or spot markets.
- A highly skilled carbon services sector exists with deep knowledge and understanding of how to engage with new and innovative markets. Furthermore Australia's mature and modern agriculture industry with large land masses could support a significant scaling up of carbon farming projects.
- Development of new methods, revisions to existing methods will engage new project participants, unlocking new sources of supply. Innovation and science (R&D) will drive potential new methods, practices/efficiencies and there are numerous opportunities for the private sector to directly invest in, or co-finance, R&D and support development of new carbon farming methods and activities.
- If domestic policy evolves to allow the export of ACCUs and expertise, Australia is well-placed to engage given its high-integrity approach to carbon credit creation and verification, low sovereign risk, defined land tenure and ownership processes, scientific expertise, and biophysical capacity.
- Carbon neutral certification, particularly with premium carbon offset units, provides high-profile branding and marketing opportunities for companies as well as increased customer and employee engagement.



Challenges

- Policy uncertainty at the federal level is preventing the large-scale investment necessary for Australia to meet its 2030 emissions reduction target.
- There are complexities with state policy and regulation, with competing initiatives among environmental and agricultural markets creating barriers to investment.
- The benefits of carbon farming are poorly understood among banks, insurers and other financial institutions, with an absence of financial products to incentivise investment.
- Many carbon farming projects are too small to attract large scale finance and investment, with new metrics for quantifying benefits and new models for aggregation needed.
- Many single-activity agricultural ERF methods are not economically viable, as they don't take into account the practical realities of farming systems. A whole-of-farm method should be developed to enable increased uptake by landholders, and increased abatement generated.
- Farmers and landholders are unaware of the benefits of carbon farming, and how projects align with their traditional agricultural practices. There is also a perception that contracts 'lock up' land for long periods and that carbon farming is an exclusive use of land rather than something that can work alongside a traditional agricultural enterprise.
- Complex methods and a lack of digestible information remain a barrier to increasing participation for farmers and land managers.
- There is uncertainty among farmers and indigenous communities around who to trust, as well uncertainty with respect to the legal and commercial risks associated with carbon farming projects.
- Complexities in navigating carbon project development must be addressed to increase meaningful participation among Indigenous landholders and communities.
- Carbon markets are relatively opaque, which for early-stage or new market participants makes it difficult to find information on price, supply, demand. Transparency and accountability around the roles and responsibilities of buyers, sellers and intermediaries is needed to ensure markets for carbon farming credits are effective, efficient and liquid.

MARKET INTEGRITY

It is critical that the evolution and expansion of Australia's carbon market is built on a foundation of integrity, transparency and accountability - ensuring that there is ongoing trust in both the quality of the abatement delivered by industry, and in the behaviour of carbon market participants.



Environmental Integrity Considerations

The historic Paris Agreement recognises the possibility of voluntary cooperation among Parties (nations) to allow for higher ambition and sets out key principles to ensure that emissions reductions are real and contribute to the overall goals of the treaty. In addition to transparency and robust accounting, environmental integrity is of paramount concern, particularly in the use of market-based approaches such as carbon credits. In broad terms, this means that any action, (e.g. carbon farming), must result in real and absolute emissions reductions benefits, rather than meet any other artificial intensity or percentage reduction targets.

Environmental integrity is the foundation of the Australian carbon market, underpinned by Australia's offsets integrity standards - the legislated criteria that all ERF methods must meet¹⁹ in order to be used to generate ACCUs. Carbon farming activities using ERF methods are therefore subject to these same criteria, which are outlined below. Applying these principles ensure that the emissions reductions claimed are additional, can be measured and independently verified, and contribute to emissions reduction activities as required by Australia's obligations under the Paris Agreement.

These principles are also important for buyers of carbon credits, who can reduce their exposure to a range of material reputation, legal and financial risks by ensuring that what they purchase is of high quality, and can stand up to the increasing scrutiny of corporate actors that make carbon neutral or emissions reduction claims.

Behavioural (Participant) Integrity Considerations

Emissions reductions activities are inherently complex and technical, and require a level of knowledge and expertise of not only project implementation, but a broad range of scientific, legislative, regulatory, financial and other market and stakeholder engagement considerations. As this sector expands and evolves, risks emerge due to:

- **asymmetry of information** - that those with more information may seek to use this knowledge to take advantage of those with less information; and
- **absence of information** - that new market entrants with low knowledge levels may undertake activities poorly, and in doing so negatively impact other market participants.

In both cases, these behaviours may undermine the credibility of, and trust in the carbon farming industry, potentially leading to increased regulation and litigation, and a decreased investment in the sector.

Managing the behavioural integrity of the carbon farming industry, requires increased transparency and accountability. In Australia this is supported by a range of complementary regulatory and legislative structures, including: oversight of the ERF crediting mechanism by the Clean Energy Regulator; financial market regulations under the Australian Securities and Investments Commission (as ACCUs are regulated financial products under Australian law); and the industry-led Australian Carbon Industry Code of Conduct that monitors the behaviour of carbon service providers with their clients.

THE AUSTRALIAN CARBON INDUSTRY CODE OF CONDUCT

The Australian Carbon Industry Code of Conduct (the Code) is a world-leading domestic consumer protection code for Australia's carbon industry.

It is the first voluntary consumer protection code of its kind globally, focused on improving integrity, transparency and accountability of a national (domestic) carbon industry.

The Australian Carbon Industry Code of Conduct is administered by the Carbon Market Institute. The Code is supported as a third party assurance system by both the Queensland and New South Wales Governments, as formal Government Partners.

Carbon service providers who satisfy the rigorous requirements of the Code, can use the Signatory brandmark to confirm they support best practice integrity, transparency and accountability.

Look for the Code of Conduct's signatory brand mark whenever you procure carbon services.



Australian
Carbon Industry
Code of Conduct
SIGNATORY

About the Code

Administering the Code

Launched in July 2018, this voluntary and industry-led Code aims to promote market integrity, consumer protection and appropriate interaction with carbon project stakeholders, including Native Title Holders, representative bodies, land managers and project owners.

Signatories to the Code are carbon service providers committed to developing and conducting their business in line with industry best practice and interacting with their clients and other stakeholders in a professional and ethical manner.

The Code Administrator monitors signatory behaviour, provides education and training, and where necessary enforces sanctions and penalties.

Protecting Consumers

Consumers (clients) have rights when choosing or working with carbon service providers. Signatories to the Code of Conduct are held to a higher standard of client engagement, ensuring that consumers are provided with enough information to make informed decisions, are contacted early and appropriately, and are engaged in a meaningful and transparent way. Consumers and clients may be on the supply-side of the market (dealing with projects on the ground), on the demand-side of the market (purchasing carbon credits), or may engage with providers across both sides of the market.

The Code Administrator actively protects consumers through the handling and investigation of consumer complaints made against signatories, and educating the consumers on the rights, roles and responsibilities of different actors in the carbon industry.

Offsets Integrity Standards

- **Additionality:** activities should result in carbon abatement that is unlikely to occur under 'business as usual' operations.
- **Measurable and verifiable:** the sequestration, reduction or avoidance of greenhouse gases should be measurable and capable of being independently verified.
- **Eligible carbon abatement:** activities should provide abatement that is able to be used to meet Australia's international mitigation obligations.
- **Evidence-based:** any emissions reduction claims should be supported by clear and convincing evidence.
- **Project emissions:** Material greenhouse gas emissions emitted as a direct result of the project should be deducted.
- **Conservative:** where an activity involves an estimate, projection or assumption, it should be conservative to account for any margins of error.



visit carbonmarketinstitute/code to learn more.



¹⁹ Emissions Reduction Fund Offsets Integrity Standards, <http://www.cleanenergyregulator.gov.au/ERF/method-development/emissions-reduction-assurance-committee>, Accessed September 2021