



Change at Our Feet

Australian Agriculture's Role and Responsibility
in Mitigating Climate Change

Executive Summary

Australia is finally joining the international race to net zero 2050 as a more respected player, and although behind in emission reduction, stands out as a leader in mitigation and offsets.

The Australian Way to net zero 2050 counts on voluntary engagement and plans to reach emissions targets by focusing strongly on technological development and prioritising technologies that will help our nation cut emissions while creating jobs and growing the economy.

Agricultural land is our population's breadbasket, the most powerful regulator of atmospheric heating and the most promising agent for natural decarbonisation. As the caretakers and guardians of these places, our primary producers play a pivotal role in Australia achieving net zero carbon emissions.

The following whitepaper is a summary of discussion points and insights gathered during the recent roundtable discussion "Change At Our Feet". This meeting saw 10 members from various sectors of the agricultural industry join heads to explore the role that Australian agriculture can play in working through *The Australian Way* to net zero, as well as favourable developments that could contribute to ensuring that our agricultural sector continues to heed its own climate responsibility.

What became apparent during the discussion?

The need for appropriate policy support and clear financial frameworks to enable and encourage timely uptake of emission mitigation practices and participation of the entire agricultural sector and farms of all sizes; scalable legislative frameworks that reward pioneers; more educational support to ensure good land stewardship; as well as the need for our industry to speak with one voice to accelerate consolidated climate action.

If we become successful at creating the necessary tools and frameworks to achieve large-scale industry participation, Australia would be in a position to become a global leader in emissions mitigation, leading the way to a better future whilst protecting our unique landscape and industries.

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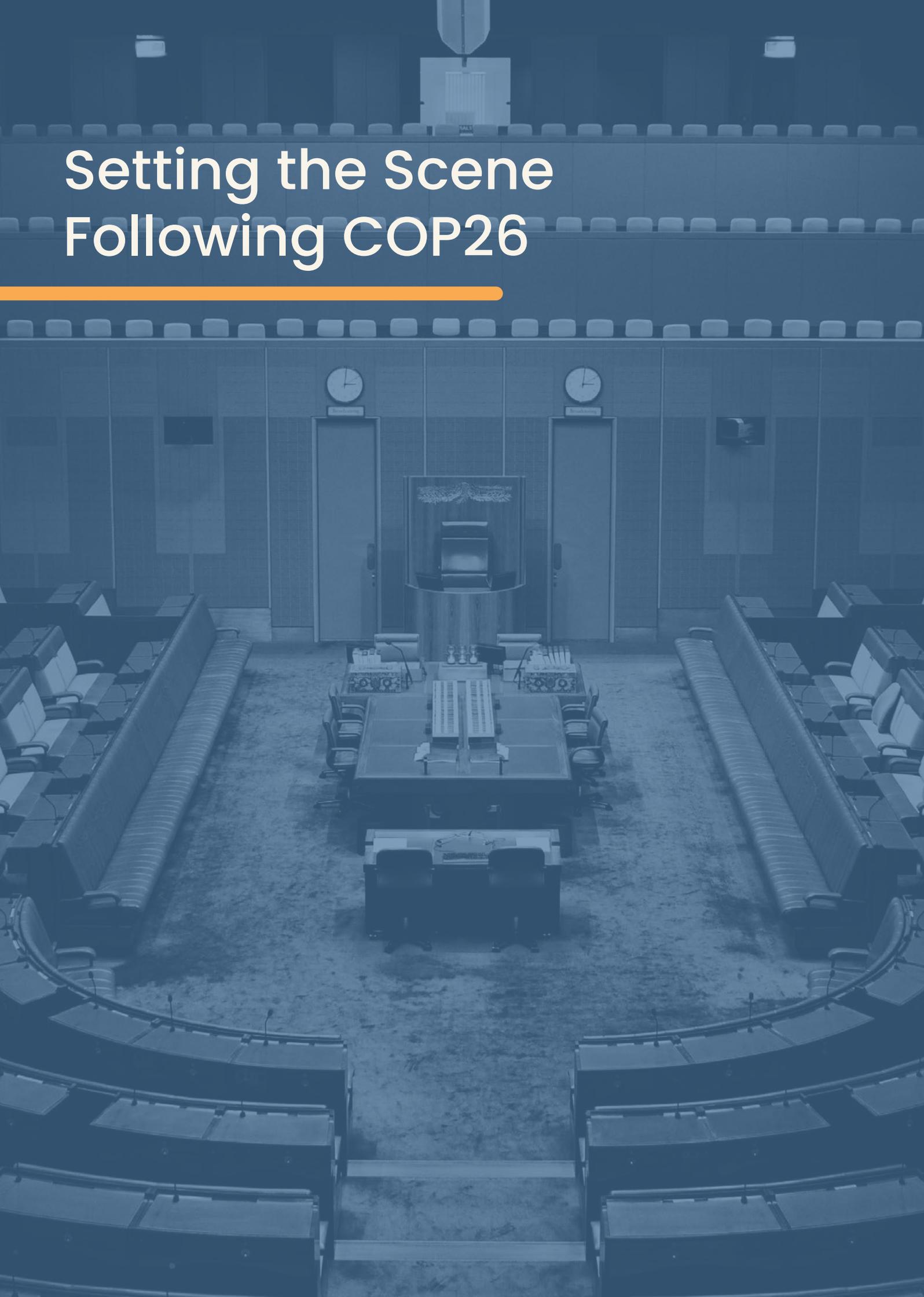


Carbon Count's goal is to create value through agricultural management, enabling the restoration of landscape, climate and community.

To achieve its vision, Carbon Count puts technology and science behind sustainable agriculture, facilitating natural systems science to conservation agriculture.

Carbon Count expresses its gratitude to all panel participants who have contributed to the report. A special thanks goes out to Katie McRobert from the Australian Farm Institute for moderating the session.

Setting the Scene Following COP26



“The United Nations Framework Convention on Climate Change (UNFCCC) 26th Conference of Parties (COP26) in Glasgow brought together 120 world leaders and over 40,000 registered participants, including 22,274 party delegates, 14,124 observers and 3,886 media representatives.

For two weeks, the world was riveted on all facets of climate change – the science, the solutions, the political will to act, and clear indications of action.”¹



COP26 had four main goals. These were to:

1. Secure global net zero emissions by mid-century and limit future warming to 1.5 degrees
2. Adapt to globally protect communities and natural habitats
3. Mobilise finance
4. Work together to deliver.

The conference focused on the identification of stronger interim (year 2030) targets to drive decarbonisation and thus mitigate climate impacts of greater than 1.5 degrees celsius.

The general consensus was that on-the-ground action must occur urgently to meet the longer-term trajectory of 90% of global emissions meeting the net zero 2050 goals.

In a seminar hosted during COP26 by the University of Sydney and University of Glasgow, Emeritus Professor Rattan Lal from Ohio State University (US) demonstrated that reducing greenhouse gas emissions (GHGs), primarily CO₂, by 2050 alone will not stop the atmosphere from heating up beyond 1.5 degrees.

Removal of GHGs currently in the atmosphere through offsetting and carbon drawdown to the terrestrial biosphere (soil and vegetation, in order of sequestration ability) is essential in both effective decarbonisation and slowing down of atmospheric heating.



The consequences if the global attempt to achieve net zero by 2050 fails are stark.

Amongst severe environmental and humanitarian consequences there is great risk in countries failing to produce enough food to feed a projected booming global population of over 9.7 billion people by 2050; 2.3 billion people more than we are today.² For the same time period, Professor Rattan Lal pointed out, the land available for agriculture is expected to decrease by 13% as a result of soil degradation and conversion to forest and urban use.

The implication of prioritising the sequestration of GHGs into vegetation and offsetting emissions by using biofuels is that there will be even less land for agricultural use. How will our primary producers feed the world?

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We cannot give up any more productive agricultural land if we are to feed 9 billion people soon.

– Robert Quirk, Sugarcane Farmer

“

There will be more food eaten in the next 50 years than in entire human history.

– Chris Russell, Australian Institute of Agriculture quoting Prof Megan Clarke AC, Former CSIRO Chief Executive

The Earth’s carrying capacity (the maximum population size that Earth can sustain) is conditional on the nitrogen (N) cycle, available quantities of phosphorus and atmospheric carbon concentrations.³

Although there is uncertainty in terms of just how much these individual factors will limit our carrying capacity, the majority of studies conducted in this space determine that Earth can sustain a maximum of 8 billion people.⁴ That is very close to where we are today. It’s safe to say that we have a problem.

The Australian Way

After decades of political turmoil, Australia is finally joining the international climate conversation as a more respected player. Though behind in emission reduction, our nation stands out as a leader in mitigation and offsets.

During COP26, Australia affirmed its net zero emissions by 2050 target and updated its [Nationally Determined Contribution \(NDC\)](#) to the UNFCC's secretariat. This included the statement that "Australia's emissions projections 2021 demonstrate that the nation is already on track to reducing emissions by up to 35% below 2005 levels by 2030".⁵

In an effort to balance the interests of significant national revenue and employment from the coal and LPG industry and the international requirement for emissions reduction, the Australian government focused on offsetting the carbon generated rather than reducing the emissions produced.

As the rest of the world focused on emission reduction, we focused on mitigating and sequestration of carbon. This resulted in Australia leading the way in science, regulation and authentication of emission offsets.



Australia's emissions reduction plan, *The Australian Way*, depicts a roadmap to net zero that depends on voluntary industry engagement and relies on exporting energy resources – more specifically fossil fuels – as an economic driver.

Australia's Energy Minister, Angus Taylor, MP stated that "[*The Australian Way* plan] will not shut down coal or gas production, or require displacement of productive agricultural land."

“

Our focus on carbon is in the wrong place. We need to be telling the right story. Increased resilience to drought, productivity and profitability increases are the tools to unlocking practice change.

– Peter McInerney, 3D Agriculture

Focusing strongly on technological development and prioritising technologies that will help Australia cut emissions while creating jobs and growing the economy,

***The Australian Way* plans to reach emissions targets by:**

1. Driving down the costs of low emissions technologies
2. Enabling deployment of these technologies at scale
3. Helping regional industries and communities seize economic opportunities in new and traditional markets
4. Fostering global collaboration on decarbonisation technologies.

10 leaders from various sectors of the agricultural industry joined the roundtable discussion “Change At Our Feet” to explore agriculture’s role in achieving *The Australian Way* to net zero.

The following is a summary of dialogues and insights that arose during the conversation, as well as recommended favourable developments that could contribute to ensuring that Australian agriculture continues to heed its own climate responsibility.

The industry roundtable held on 1 December 2021 featured the following panel experts:

Katie McRobert

General Manager of the Australian Farm Institute,
Meeting Chair

Chris Russell AM

Chair of the Ethics Committee, Australian Institute of
Agriculture

Doug McNicholl

Program Manager Sustainability and Innovation,
Meat and Livestock Australia

Natalie Williams

Managing Director, Natural Capital Co.

Peter McInerney

Principal, 3D Agriculture

Phil Mulvey

Founder and Managing Director, Carbon Count

Richard Dickmann

Principal, Apical Advisory

Richard Heath

Executive Director, Australian Farm Institute

Rob Quirk

Sugarcane Farmer

Tony Hegarty

Beef Producer

Carbon Count thanks the panel sincerely for their contribution.



The Road Ahead

The Australian Way commends Australian agriculture for being amongst those sectors currently doing the ‘heavy lifting’ in cutting our nation’s emissions.

Agriculture is estimated to generate around 13% of Australia’s greenhouse gas emissions, of which methane from livestock is a substantial portion.⁶

At the same time, carbon sequestration to soil and vegetation is considered one of the greatest hopes for achieving our emissions targets in Australia’s net zero plans.

Clearly, Australian primary producers have a major role to play on both sides of the net zero coin. The question now is; what more should we be doing?

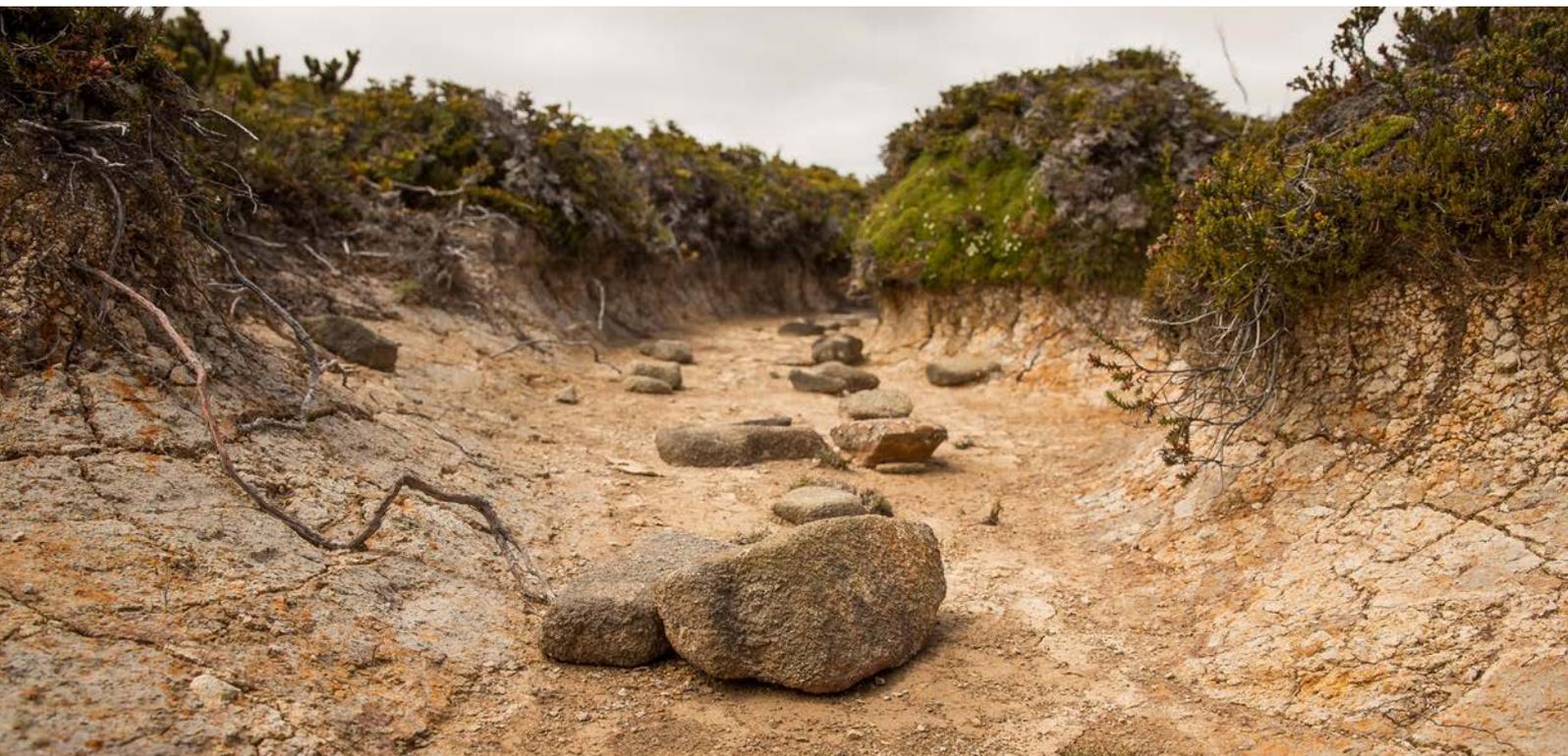
The risk of relying solely on voluntary engagement

There is a severe risk to placing a significant share of the responsibility for meeting set climate targets on voluntary engagement, on which *The Australian Way* is based.

To ensure mitigation targets are met, the Australian Government needs to provide clear leadership and government policy directives to drive the necessary action.

In turn, strong leadership, innovation and business acumen are needed by both business and civil society sectors to drive measurable action at scale.

The Australian Way can be seen as the community way; government, business and civil organisations working together.



Becoming a leader in setting global standards to protect our landscapes and industry

There is great benefit in Australia becoming a leader in setting global standards. If we can all work together, we will be able to do so.

Australia is making impressive progress in advancing our own carbon offsetting frameworks, but there is a significant threat in us not actively pushing to assume a global leadership role in shaping the frameworks of the future.

If Australia continues to play a passive role in the global conversation, it is increasingly likely that other countries, including our export markets, will develop and dictate carbon emissions compliance terms instead. Such external frameworks might not be suitable for the unique requirements of our landscapes and agricultural industry; we would have to accept what is provided.

Being proactive in emissions reductions as well as a leader in offsets should have a greater focus in our net zero planning in order to increase our trading position.

Spotlight on Australian carbon offset regulation

Perhaps more by accident than by intent, Australia has become a leader in developing carbon offset programs over the past 15 years. Our government's hesitation to change the practices of our industries, due to potential significant loss of employment in regional Australia, has brought together extensive government-backed research, regulation and policy development as well as private sector participation to create one of the most advanced and robust offset regulation industries worldwide.

The industry knows how strong it is. In its *Policy Advocacy Position Statement December 2021*, the Carbon Market Institute stated that Australia has "high integrity market mechanisms with effective governance systems and transparency to ensure market credibility and confidence as well as appropriate border adjustments or other mechanisms to address genuine carbon leakage concerns".⁷

On top of that, Australia has the technology which underpins the measurement and record keeping required to support carbon offset programs.

Is Australian agriculture perhaps not just in the box seat to improve our own environmental position, but to guide offset regulation modelling worldwide?

We have the policy framework, the human resources, the technology and the environmental position to be true world leaders.

For inspiration, we don't need to look any further than to our feet – to our soil.



Harnessing the Power of Soil Carbon

With the fundamental capacity to cool down the atmosphere, soil organic matter is a critical regulator of Earth's climate and its degradation a key factor of anthropogenic climate change.⁸

Increasing soil carbon boosts soil health, performance and resilience. It is not only critical to build from a drought resilience perspective, as it enables the holding of water at source, but from a productivity perspective to feed a booming global population.

Carbon drawdown to the terrestrial biosphere (soil and vegetation, in order of sequestration ability) is essential in both effective decarbonisation and slowing down of atmospheric heating. Reducing GHGs alone will not stop the earth from heating up.⁹

Reestablishing landscape health and soil organic matter (carbon) is thus imperative to avoiding a potential global climate crisis.

In view of this, it is essential for us to explore every potential mechanism for improving soil carbon and ensuring industry-wide uptake through government-financed research.

Putting carbon sequestration systems in a commercial context

It is important to recognise the cost to the farmer of investing in a systemic practice change in improving soil nutrition and building carbon-rich organic matter.

Farms are commercial enterprises, so carbon sequestration systems need to be both commercially viable and relatively easy and cheap to set-up and maintain. Cost of conversion from traditional mechanised practises to more regenerative practises may be significant and in the first several years, may incur a loss of revenue for farmers.

What's essential here is appropriate policy support and clear financial frameworks to enable and encourage timely uptake and participation of the entire agricultural sector and farms of all sizes.

To ensure widespread rapid uptake across the industries, more than just support to fund soil carbon measurement is required.

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Carbon isn't about carbon trading and dollars, carbon is about health. It's the key. Start with carbon in the soil and away you go. All the reasons to have carbon in the soil have been there all along. We need to have a wider view of carbon in the soil, not just about trading.

- Tony Hegarty - Beef Producer



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There was a big lack of interest from the industry into carbon until recently, now that carbon seems to be worth something. The danger lies in the research dollars now being spent on things that were proven 30 years ago, which would further delay our progress.

– Peter McInerney – 3D Agriculture

Raising the educational bar on soil health

Australia is a land of depleted, ancient soils. Nutrition is generated by the addition of phosphorus, nitrogen, potassium, zinc, and other elements to build soil organic matter that eventually is part of the equation to sequester carbon. These elements may be provided by organic amendments such as manures or fertilisers or conserved by good soil husbandry practice such as green manures and legumes in crop rotations.

Building soil health, which is a long-term strategy, is not top-of-mind in an agricultural sector laser focused on land management. Education programs that inform primary producers of their options to rebuild their soil's health, with a strong emphasis on low-emission methods, are essential if we are to achieve our climate goals.



Investing in further research of our nation's breadbaskets

We cannot seize the true potential of something we do not fully fathom. As stewards of the soil, the Australian agriculture industry needs to broaden the conversation and invest into deep study of our nation's breadbaskets; our agricultural soils.

Our strategy for achieving net zero must encompass phosphorus, soil retention and nutrition, water, landscapes, forests, and grasslands, as well as carbon sequestration; the greatest economic opportunity for agricultural communities.

The effect of nitrous oxide emissions from fertiliser application on greenhouse gas levels, the pros and cons of different approaches to measuring carbon, and how we manage land holistically, all need to be part of the conversation. Our regional industries and communities cannot take advantage of economic opportunities if we don't fully understand their potential.

“

I'm concerned that even if they hit our targets in terms of emissions, we still won't see an effect in terms of climate, especially agriculture in Australia, because we're not addressing things like transpiration, carbon in soil, all the things that change the small water cycle. We need to spread our research dollars to give ourselves more options than perhaps quixotically think we're going to change the climate by changing emissions.

- Chris Russell - Australian Institute of Agriculture



The Essential Role of Technology and Data Management

Whether it be *The Australian Way*, the [National Farmers' Federation \\$100bn by 2030 target](#) or the Prime Minister's [Digitalisation 2030 plan](#); it's clear that all our national sustainability and productivity ambitions rely on technological development.

Determining whether to develop new technologies or enhance existing solutions to bridge the sustainability gap is key to ensuring we move forward in a timely manner.

A boost to our progress towards the goals of *The Australian Way* can be expected from both the development of not-yet-conceived technologies as well as existing innovations. A clear technology development pathway is required to encourage growth through both short and long-term innovation.

Whilst exploring new ground could lead to fruitful innovation, Expanding and creating frameworks for existing innovations that are already improving outcomes for Australian primary producers, and are likely to successfully pivot according to future policy, is a plausible next step for us to be able to take action now, without wasting precious time.

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Technology provides a real opportunity to convert productivity improvement alongside emissions reduction.

– Doug McNicholl, Meat and Livestock Australia

There Is Immense Room for Technological Research & Development

The environmental benefits of pure technology such as RFID to map livestock movement, sophisticated rotational systems involving pulses and legumes, remote water monitoring and precision agriculture to improve accuracy of input delivery, are clear. After initial investments, such technologies are almost guaranteed to improve our sustainable outcomes and create financial reward for primary producers.

Studies into the effects of red seaweed (*Asparagopsis* sp.), which can significantly reduce methane levels in livestock, are looking positive. Investments to speed up this field would have major benefits for our environment.

Promising research into the effect of pulses and legumes on reducing carbon emissions from soil, as well as native bacteria that nitrify without formation of nitrous oxide, is also taking place.

This further begs the question of what genome sequencing or DNA-typing is being used to develop other seedstock and microbial rhizosphere communities, plus how we will measure the impact of CO2 equivalent emissions.

The continued exploration into whether hydrogen or battery powered vehicles will be agriculture's future modes of transportation must also be ensured. Though highly beneficial, replacing diesel or petrol powered vehicles in favour of an alternative green energy source would be an expensive exercise for a farm.

Transitional technologies, such as those that result in improved efficiencies and less release of NOX from diesel engines, should be considered for the near term to enable timely action. Again, we need to ensure the policy settings are in place so adoption matches innovation and makes it financially viable to switch over into greener technologies.



Establishing Data Sovereignty in Agriculture

One important area in need of investment, leadership and engagement –is data.

To create change, the scientific systems to measure, benchmark and monitor environmental progress are currently not where they need to be considering our pressing timelines.

As our Agtech sector continues on the innovation journey with more data being created by the second, the question of 'who owns the data' becomes more pressing.

Data sovereignty is something essential when clarifying matters of commercialization rights and access rights. The ownership of data has an impact in any situation.

What the industry seems to be most concerned about is our data being sold. What researchers seem to be struggling with is sufficient access to data. We need to strike a balance with data where farmers can benchmark it, where governments and researchers can use it for productive means, but where it can't be sold or locked away in private data pools.

To honour our objective of tackling climate change through global collaboration, we must democratise data. This will necessitate negotiations among primary producers, government and commercial research organisations to establish clear frameworks for how data can be accessed, used and shared globally.



**Big Challenges and
Opportunities Lie Ahead**



Mythbusting the price of measurement of soil carbon

The practice of increasing soil carbon and thus soil health is undoubtedly a positive thing. Not only does the practice decarbonise the atmosphere whilst simultaneously regulating Earth's climate, but it gives structure to the earth, stores water and makes for more productive land by improving plant nutrition. The benefits are well-defined even before we acknowledge potential additional revenue streams brought on by carbon trading.

So why is adoption of soil carbon improvement projects not higher?

One of the key barriers is a misconception surrounding the cost and time associated with soil carbon measurement, as well as a lack of understanding of commercial and environmental co-benefits.

In its net zero plans, the Australian Government sets a target of reducing the cost of measurement of soil carbon to \$3/hectare/per annum. Larger farms that benefit from economies of scale can already conduct testing cheaper than this and whilst smaller farms might not be at this price point yet, costs per hectare continue to decline.

However, debate around price per hectare is in many ways the wrong conversation to have. Cost is an overly simplistic metric.

We should instead be looking at relative cost as a percent of gross revenue. For example, the cost of running a 1000 hectare mixed farm in southern NSW is conservatively about \$1000 a hectare. If soil testing is even triple the current government targets, it remains less than 1% of business costs.

The risk of positioning carbon measurement as 'pricey' runs the risk of causing disengagement without real consideration to begin with; farmers opt against carbon farming before they've fully accessed the activity's financial viability.

Costs need to be put in a whole-of-farm context to encourage much needed adoption of carbon farming practices, if we are to meet our net zero goals.

The calls for more comprehensive on-farm carbon management frameworks get louder

Farmers that are reducing and offsetting emissions by running multiple on-farm carbon management activities simultaneously under approved methodologies, are missing out financially. This is due to the absence of regulatory schemes that honour and reward such approaches.

Similarly, innovators that have pioneered sequestration practices nationally and have recognised the versatile power of soil carbon even before frameworks have been created, are currently not being reimbursed for populating the practice and pushing the envelope of the industry. This seems like an unfortunate penalty for taking the early risks and bringing Australia to the forefront of carbon offsetting innovation.

If one can measure and prove progress, acknowledgement and encouragement through financial reward is important.

Reducing emissions from farm activities also still remains unrewarded. When benchmarking farm data, measuring carbon emissions is just as important as recognising reduced emissions through optimised farm activities. Both activities contribute to carbon mitigation, yet emissions mitigation is not financially rewarded.

A pilot project from the Federal Department of Agriculture, Water and the Environment (DAWE) is currently underway to trial market arrangements for farmers to create new income from plantings that deliver biodiversity improvements and carbon abatement on the same title of land.¹⁰ This is a positive initiative that can help resolve the issue around an ecosystem approach to farm practices.

To honour the urgency of our climate crisis and recognise agriculture's climate responsibility, rewarding farmers for reducing their carbon emissions as well as all sequestration and avoidance activities associated with their practices, would further encourage participation.

The DAWE pilot is a good start, and positive momentum should be derived from this activity.

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There is a lack of clear methodology or compensation for farmers for avoiding nitrification. Strong policy in this space would apply to a lot of agriculture.

- Richard Dickmann, Apical Advisory

Measuring and rewarding the mitigation of Scope 3 emissions

Agricultural supply chain emissions, also known as Scope 3 emissions, are upstream or downstream emissions not under direct control of the primary producer.

Under the current accounting rules Australia reports our agricultural sector's emissions to the UNFCC secretariat. Emissions generated during the manufacture and transport of agricultural inputs – such as fertilisers, herbicides, pesticides and agricultural machinery – are not included. Neither are emissions from fuel used by agricultural vehicles to transport produce or to generate electricity consumed on-farm.¹¹

Due to the complicated nature of such emissions, getting a grip on Scope 3 emissions in Australia has been put aside. In fact, as stated in the Government's National Greenhouse and Energy Reporting Scheme, there is currently no requirement to offset or track Scope 3 GHG emissions for any business activity at all.¹²

How can we truthfully measure our agricultural emissions if we don't know what they are? Especially for exporting industries, such as our agricultural, measuring and managing Scope 3 emissions is a crucial activity if we hope to see our progress transcend from paper to reality.

Measuring emissions from agricultural production and land use within farming value chains is difficult. Driven by complex interactions between natural and human processes, measuring agricultural emissions and estimating them with any accuracy requires data on agricultural management, soil and climatic factors to be gathered at the site of production.

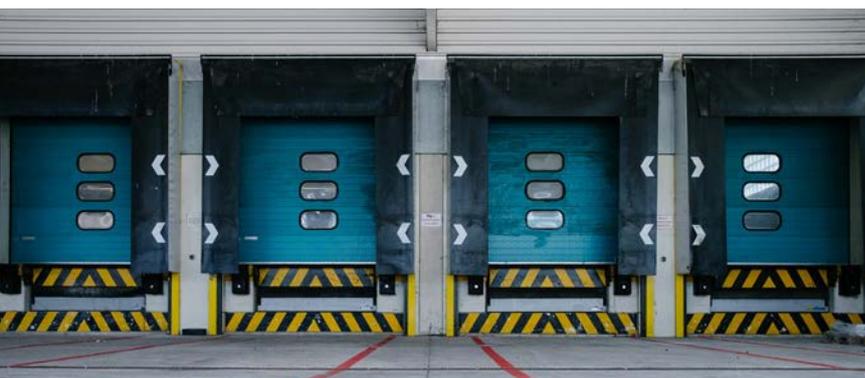
There are several GHG calculation tools and methodologies currently available to primary producers to optimise their practices. Still, this can be a daunting task for businesses producing multiple products and sourcing from potentially thousands of producers.¹³

Despite the significant contribution more climate conscious supply chain practices would make to our climate goals, mitigating scope 3 emissions is not in any way financially rewarded in Australia today.

Establishing financial levers to encourage Australian farmers to advance carbon conscious business operations would very likely encourage participation.

Enabling and encouraging our farmers to capture such carbon emissions data would also enable downstream enterprises (e.g. supermarkets) to reward them for such practices. If farming businesses can demonstrate such low-emissions practices to buyers, zero and low-carbon products can be sold at a premium.

Some agricultural companies are already recognising this and trade only with suppliers with the same corporate aims – for example, a zero-carbon focus. This movement will gain momentum if financially and structurally encouraged by the government.





Developing Supportive Policy to Accelerate Our Progress

To enable Australian agriculture to continue to heed our climate responsibility, strong and speedy technological innovation must be supported by progressive policy.

An increase in adoption of currently available industrial science, coupled with an ecosystem that attracts innovators to ensure measurable improvements of climate outcomes, is needed to stay on-track to meet emissions targets.

There is a clear policy gap that needs to be filled, especially considering that *The Australian Way* is dependent on voluntary participation.

To secure the agricultural sector's imperative participation in our climate quest, strong regulatory frameworks are needed that financially compensate producers investing in technologies that improve environmental outcomes and enable decarbonisation of the atmosphere. This is particularly crucial when there is no immediate financial payoff from a beneficial practice, as currently is the case with carbon sequestration frameworks.

Currently, the government favours simple grants to encourage technology adoption.

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Government policy needs to let innovators flourish and build links to land managers to keep them practical. We need immediate strong policy with solid long term vision.

– Tony Hegarty, Cattle Producer.

“

Whilst the investment in change is manageable, farmers need more incentives. A HECS style loan-system supported by the government could be worthwhile.

– Phil Mulvey, Carbon Count

Let's take the HECS model as an example. Over the past 20 years, the share of the Australian population that holds a degree at a bachelor level or above has increased by more than six fold; reaching 50.2 percent in 2021.¹⁴ While this can be attributed to many factors, the ease at which funding is obtained for tertiary education via the HECS model, is a clear factor.

With HECS a low interest loan is provided to university students to fund their education. The loan is paid back once a threshold of income is reached.

A similar model could be considered to support adoption of sustainable agricultural practices and technology, whereby the government provides low interest loans to support adoption which producers pay back once a financial benefit is achieved.

Transitioning from traditional practices to more sustainable/regenerative practices involves not just new infrastructure, but a new way of thinking.

Hence, further education and training needs to be provided to farm managers. Without major adjustment, the HECS scheme could accommodate first steps in this transition.



Speaking With One Voice to Accelerate Climate Action

Let's look again at the topic of soil carbon. How do we encourage farmers to embark on a soil carbon improvement project when costs are perceived to be high?

Unfortunately many producers' understanding of project costs is currently coloured by those who oppose the technology or fundamentally benefit from the confusion. False claims in cost are as harmful as overly exaggerated claims of carbon that can be sequestered.

Ultimately, you can't manage what you don't measure, but perhaps the greatest challenge for our climate responsibility is misinformation or an absence of a trusted truth centre. If we, as an industry have a true interest in tackling our climate crisis, speaking with one voice is essential.

Convolved messaging causes confusion and delay in action, eating up valuable time that is quickly running out. The technology already exists that can bring down the cost of measurement for soil carbon. For some producers, the cost will already be \$3 a hectare or less. Sequestration rate based on climate zone and soil charge can be scientifically calculated and exaggerated estimates need to be exposed to build trust.

More research and government support needs to be focused on agricultural extension on the value of adopting sustainable farming practices for the farmer and the community, as well as developing policy and funding that supports the transition to carbon farming practices.

Creating vague and tenuous price per hectare targets will do nothing to increase take-up at the farmer level and may encourage purveyors of false information to flourish.



Moving Australia Towards Net Zero

Australian agriculture's maximum participation is essential in order for us to meet our net zero 2050 targets.

Our primary producers play a critical role in mitigating and offsetting our GHG emissions and rebuilding our soils to mitigate atmospheric heating and feed our world's booming population.

Establishing *The Australian Way* to net zero 2050 has been a big step in the right direction. The true challenge now, however, lies in creating systems that are scalable and measurable, with as few barriers as possible that provide well-structured support and attractive incentives to encourage large-scale and timely adoption.

To further support and shape positive agricultural change and enable the sector to continue to excel, strong policy frameworks that foster and fund innovation and adoption and reward the pioneers need to be created.

We further recommend championing our early adopters, innovators and other agricultural leaders to publicly steer a narrative that shapes farming policy, practice and public perception.

As a society we need to start working together and speak with one voice; *The Australian Way* is a community way. We need the policy, the social, economic and environmental drivers that empower every farmer to create carbon sequestration and emissions systems relevant to their farm, whether that be a 70,000 hectare grazing property in the Northern Territory or 5 hectares of cultivated arable horticulture land with an irrigation license in southern New South Wales.

With time and the right incentives, Australian agriculture could exceed its targets, lead the world on climate responsibilities and pave the way to a much brighter future for ourselves and generations to come.

The result of our efforts will be improved landscape health, a prosperous agricultural community and ecosystem diversity, which will benefit us all.



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