

**Agriculture and Land Sector Plan**  
*Department of Agriculture, Fisheries and  
Forestry*  
**December 2023**

## Summary

Nutrien Ag Solutions (Nutrien) welcomes the opportunity to respond to the Australian Government's consultation for the Agriculture and Land Sectoral Plan.

Nutrien strongly believes that the agriculture industry is on a path to a more sustainable future while also striving to meet its goal for Australian agriculture to become a \$100 billion industry by 2030.

As a global supplier of farm inputs, Nutrien partners with farmers in Australia and across the globe to sustainably feed the world. Ensuring a steady supply of key farm inputs and products, while providing agronomic expertise and employing sustainable practices is central to Nutrien's purpose of 'Feeding the Future'.

In Australia, Nutrien is heavily invested in agriculture's sustainable and prosperous future with a newly developed commercial sustainability team which aims to support farmers to grow productivity and profitability whilst improving environmental outcomes. Nutrien is a trusted adviser for farmers across their farm businesses, from agronomy to livestock, and a natural extension of that is supporting our customers to reach their sustainability goals.

Nutrien is working to enable Australian farm businesses to capture commercial sustainability opportunities and to manage climate risk, while building digital and advisory solutions to allow farmers to measure and manage their sustainability footprint.

Nutrien sees opportunities in emissions reduction and avoidance, low emission agriculture certification, market access through sustainability certification and accreditation and natural capital market participation. Nutrien believes farmers' carbon assets will become increasingly important to farm businesses in managing their future climate risk. We are working to provide solutions to improve access to and reward for reducing on farm emissions and producing low carbon produce. Nutrien is investing in educational programs to ensure farmers receive appropriate advice regarding the management of their natural capital assets and climate risk.

Nutrien takes great pride in our network of trusted farm advisers, and we believe we have an important role to play in providing farmers trusted advice on the measurement, management and monetisation of their natural capital assets and greenhouse gas emissions.

Nutrien is concerned about the potential impact of certain forms of carbon market participation on the ability of Australian farmers to manage their future climate risk. The practice of developing permanent offsets and selling these to other emissions intensive industries reduces a farm business's ability to offset against their own greenhouse gas emissions (insetting) within their business or the supply chain.

Nutrien aims to be a leader in sustainable agriculture, and we are committed to working with government and industry to ensure Australian agriculture continues to grow in ways that improve food security, farm profitability and environmental outcomes.

Nutrien thanks the Australian Government for the opportunity to respond to the consultation and looks forward to working with government and industry to further strengthen Australian agriculture ability to be sustainable, productive and profitable.

## Recommendations

**Recommendation 1** – Fund development of a common framework, methodologies and measurement tools or GHG accounting in agriculture.

Ensure public funding to support a common framework, methodologies and measurement tools for greenhouse gas (GHG) accounting in Australian Agriculture. *The Know and Show Project* by Agriculture Innovation Australia (AIA) is almost complete, however it needs continued funding to ensure it remains operational and scientifically credible in the long-term. A publicly funded and independently governed framework and calculator is essential to ensure confidence in the Australian agriculture sector's approach to carbon accounting, to realise emission reduction efforts and strive to share these reductions with the supply chain.

**Funding proposed:** \$10 million over five years.

**Recommendation 2** – Invest in greater uptake of whole-of-farm GHG emissions profile work to promote carbon accounting in agriculture.

Nutrien is actively working with its existing customers to understand their whole-of-farm emissions profile. Nutrien sees this as the first critical step for a farmer to be actively engaged in a conversation about managing on-farm emissions, eventually leading to carbon accounting as a business-as-usual practice. Working with trusted partners to scale the rollout of this activity would build confidence, structure and understanding for the broader industry and government to then build quality policy and demonstrate market opportunities.

**Funding proposed:** \$10-\$30 million over five years.

**Recommendation 3** – Prioritise the development of a technology agnostic ERF Methodology for reducing methane emissions from ruminants.

Nutrien Ag Solutions is supportive of the industry led work of the Livestock Emissions Carbon Farming Working Group on a Carbon Farming Method Blueprint for Low Emissions Livestock from Feed Additives and Forage. This initiative has been informed by stakeholders from across the livestock industry and proposes a method that is inclusive of existing and emerging technologies.

Methane is the most significant source of GHG emissions from Australian agriculture. Feed additives and forage will be an important tool to reduce and manage emissions from livestock, particularly in feedlot and supplementary feeding farming systems. An ERF Method is vital to incentivising adoption of these technologies.

**Recommendation 4** – Prioritise the development of an ERF Methodology for reducing on-farm fertiliser related emissions in Australian cropping and pasture systems. Currently, there is no Emissions Reduction Fund (ERF) method available to recognise emission reductions resulting from improved management practices and Enhanced Efficiency Fertiliser (EEF) products in cropping and pasture systems (except in irrigated cotton).

- The application of inorganic fertiliser to crops and pastures results in nitrous oxide emissions to the atmosphere.
- The predominant source of emissions from the application of inorganic fertiliser is denitrification, a process occurring under anaerobic soil conditions where bacteria convert nitrate to nitrogen gases, including nitrous oxide.
- Management practices and the use of EEF's, such as nitrification or urease inhibitors, can reduce these losses.
- Currently the only crop type with an ERF method available is irrigated cotton, but this method does not recognise emission reductions from inhibitor use.
- There have been advancements in local research into the efficacy of inhibitor technology in reducing emissions in Australian cropping and pasture systems.
- The development of new methodology could incentivise the reduction of emissions associated with the use of fertiliser products on-farm.

**Funding proposed:** \$500,000-\$2 million over three years.

**Recommendation 5** – Expand the Climate Active Carbon Neutral Standard to include low-emissions agriculture, *or*, develop a new low-emission agriculture standard in partnership with industry to encourage decarbonisation, recognise farmers efforts to reduce emissions, and facilitate the sharing of emission reductions within agricultural supply chains.

There exists both opportunity and demand to recognise low emission agriculture businesses, products, and supply chains. The current Climate Active Carbon Neutral Standard and Climate Active's work plan to recognise sequestration and emissions reduction efforts on farm is positive progress in recognising carbon neutrality however it will not be fit-for-purpose for low emission agriculture.

Agriculture is recognised as a hard to abate sector, making carbon neutrality difficult to achieve for most enterprises without the purchase of offsets, particularly in the red meat sector. Expansion of the Climate Active standard or the development of a dedicated standard would encourage emission reduction activity on farm and create an opportunity for the supply chain to incentivise emission reduction activity through pay-for-outcome financial incentives.

**Funding proposed:** \$10 million over five years.

**Recommendation 6** – Supporting research, development and adoption of low emission technologies and practices.

Nutrien Ag Solutions is supportive of the Australian Government continuing its investments in grant-based programs to encourage research, development and adoption of low emission technologies and practices, including:

- Continuation of the Methane Emissions Reduction in Livestock (MERiL) program.
- Introduction of a grant program dedicated to supporting the reduction of nitrous oxide emissions in cropping and pasture-based farming systems.
- Introduction of a grant program dedicated to supporting the adoption of technologies on farm.
- Continuation of funding for the Carbon Farming Outreach Program to support knowledge building among farm advisors and farmers to support adoption on farm.

**Funding proposed:** \$50 million over 5 years.



## About Nutrien Ag Solutions

Feeding the world is at the heart of agriculture's purpose and an undertaking Nutrien takes very seriously as an important provider of crop inputs and farm services.

We have a unique global perspective through our operations across the United States, Canada, Brazil, Argentina, Chile, Uruguay, and of course here in Australia where our team of nearly 4,000 agricultural professionals support farmers through crop and pasture inputs, agronomy, livestock, finance, insurance, real estate, water, and sustainability.

The core of our business is to ensure farmers have the tools and inputs to produce the food that feeds the globe. We continue to work within our global network of input suppliers to ensure farmers have the access to the critical farm inputs, products, and advice, when and where they need it.

Globally, we service more than 500,000 farmers through our more than 23,500 employees across 13 countries. In Australia, we have more than 180 years' experience of servicing the Australian agriculture sector through our legacy companies such as Dalgety's, Landmark and Ruralco. Our network of around 400 retail store locations across the country means we have a presence and are part of the fabric of many regional, rural, and remote communities.

We are a significant investor in Australian agriculture with two leading crop protection, plant nutrition and animal health formulation facilities in Dandenong, Victoria, and Kwinana, Western Australia, as well as fertiliser import facilities in Kwinana. These investments reinforce our commitment to Australian agriculture and our commitment to service the needs of our farmers with products and advice when and where they need it.

The Australian business supplies around 2.4 million tonnes of fertiliser to Australian farmers each year and delivers that through our 55+ fertiliser facilities across the country. Our livestock team sells around 16 million sheep and cattle each year, while we sell more than 465,000 bales of wool each year. Our Real Estate business sells more than \$3b worth of regional property each year on behalf of our clients, and we support our farmers in trading more than 400,000ML of water each year.

## Growing our world from the ground up.



### Global

**500,000**  
GROWERS  
WORLDWIDE

Servicing more than  
500,000 growers  
worldwide

**23,500**  
PERMANENT  
EMPLOYEES

More than 23,500  
permanent employees

**13**  
COUNTRIES

Active in 13  
countries

### Australia

**180**  
YEARS

180 years'  
experience

**4000**  
AG EXPERTS

4,000 Australian  
employees

**700**  
LOCATIONS

A footprint across  
700 locations

**340**  
MEMBERS

~340 independent  
members including  
the CRT network

**2**  
FACILITIES

Two leading crop  
protection, plant  
nutrition and animal health  
manufacturing facilities

**1**  
GOAL

To help  
Australian  
farmers grow

### What we do

**40%**  
FOOD &  
FIBRE

We have a hand in around 40% of the food  
and fibre produced on Australian farms

**2.4M**  
TONNES OF  
FERTILISER

Around 2.4 million tonnes  
of fertiliser supplied to  
growers each year

**55+**  
FERTILISER  
FACILITIES

We have invested in 55+ fertiliser  
facilities in regional areas.

**16M**  
SHEEP &  
CATTLE

Around 16 million sheep and cattle sold  
each year on behalf of our customers

**465,000**  
BALES OF  
WOOL

Approximately 465,000  
bales of wool sold each year

**\$3Bn**  
REGIONAL  
PROPERTIES

We help customers buy and sell more  
than \$3 billion worth of regional  
property every year

**400,000**  
ML OF WATER

Every year, we help farmers  
trade more than 400,000 ML of  
water, vital to running their farms

**38,900**  
PROPERTY  
INSURANCE

We help 38,900 farmers protect their  
properties with insurance



## Nutrien's approach to sustainability globally

Nutrien is a strong believer in supporting and leading the agriculture industry to a more sustainable future. This belief is backed by our 2030 global commitments and other supportive climate action targets;

***Achieve at least a 30 percent reduction in GHG emissions (Scope 1 + 2) per tonne of our products produced from a baseline year of 2018.***

*Climate change is the top environmental, social and governance (ESG) risk identified by Nutrien's stakeholders. We are reducing greenhouse gases (GHG) emissions across our operations and are committed to setting science-based targets.*

\*Nutrien's Environmental, Social and Governance (ESG) report can be found at <https://www.nutrien.com/sustainability/esg-portal/esg-overview>

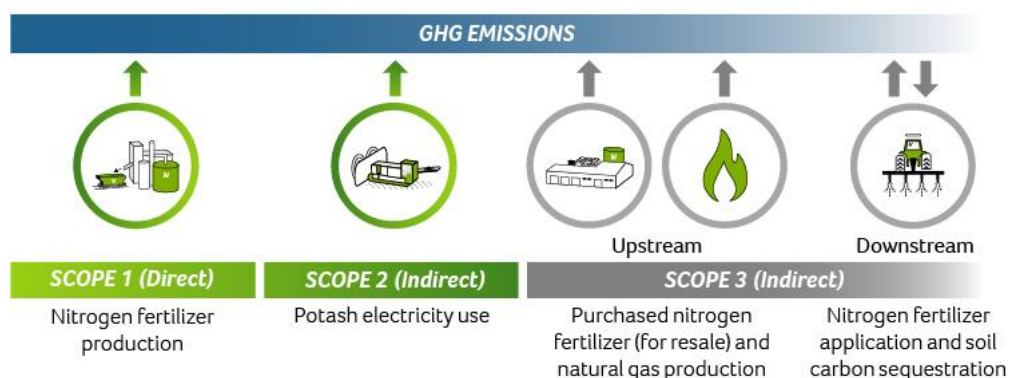
As a global business, the manufacturing of fertiliser accounts for approximately 95 percent of our total Scope 1 and Scope 2 emissions.

While conventional fertiliser manufacturing is one of the most important innovations for food and agriculture, it presents unique challenges to reducing emissions. The industry is actively working towards innovative, more sustainable methods of production, including low-emission processes powered by renewable energy. Though it will take time for these technologies to scale and be cost-competitive, we are exploring ways to improve the emissions intensity of conventional fertilizer production in the short term. Nutrien does not produce fertiliser in Australia.

For Nutrien, we believe a 30 percent reduction in our emissions intensity is achievable by implementing nitrous oxide (N<sub>2</sub>O) abatement at our nitric acid production facilities, energy efficiency improvements, carbon capture, utilization and storage (CCUS) at strategically located assets, and cogeneration projects that use natural gas for lower GHG electricity generation and waste heat recovery. Additionally, we will continue to look to our energy partners for options to procure low-carbon power, including from renewable sources.

Table 3:

### PRIMARY EMISSIONS SOURCES ALONG NUTRIEN'S VALUE CHAIN





## Nutrien's approach to sustainability in Australia

Nutrien Ag Solutions established a Commercial Sustainability Team in Australia in 2022. We are committed to ensuring our growers remain ahead of the pack in securing the financial and environmental sustainability of their farm businesses.

Nutrien is developing services and product offerings that support growers to measure, manage and market their sustainability credentials, supported by investments in digital, advisory and product solutions. To inform these initiatives we have conducted GHG farm emissions assessments on over 250,000 ha of farmland across Australia in 2023.

### Demonstrating opportunities

Nutrien is actively working with growers and supply chain partners to reduce greenhouse gas emissions in agricultural systems.

- We are conducting pilot work across business sectors including grains, livestock and horticulture.

#### SPOTLIGHT

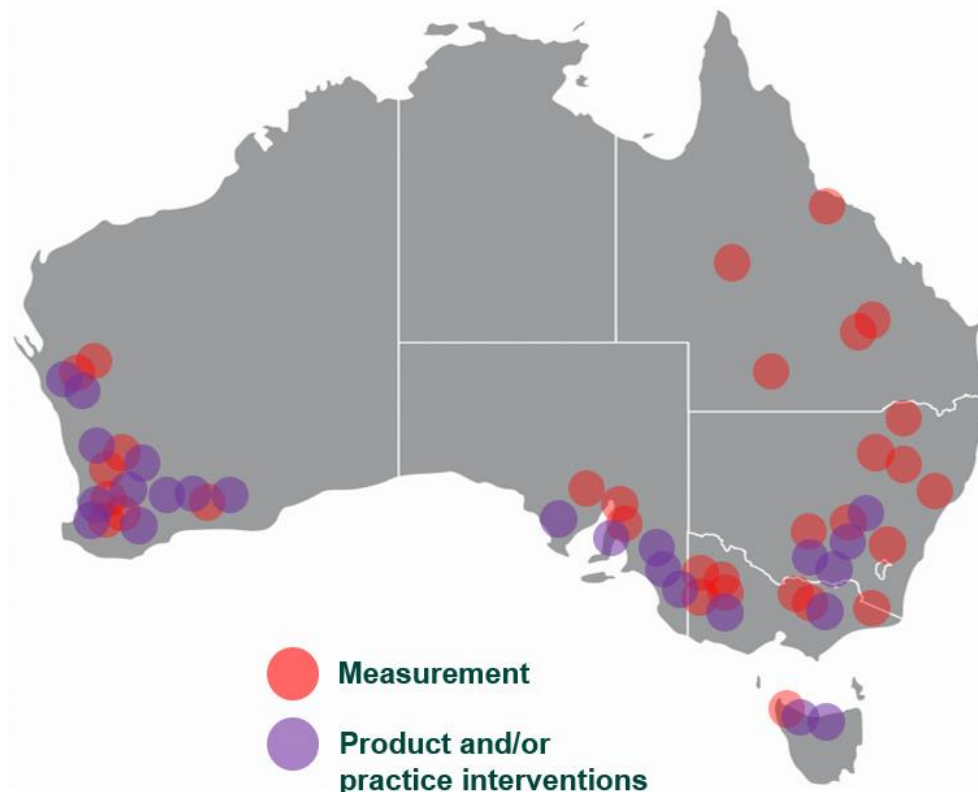
##### Low Carbon Canola Pilot Programs

Nutrien is collaborating with growers and supply chain partners to demonstrate on-farm reductions to greenhouse gas emissions in grain production. We have partnered with Cargill and 14 growers in eastern Australia to produce low-carbon canola. In South Australia and Western Australia, Nutrien has partnered with Viterro and 17 growers to produce low-carbon canola. These pilots employ products and practices, including nitrification and urease inhibitors, with a target of reducing emissions by 20-25%.

Nutrien's reduced-emissions programs bring together Nutrien's knowledge of on-farm nutrient management practices and technology, with the reach of global supply chain partners, to work with farmers who are interested in contributing towards decarbonising the agricultural supply chain. The pilots are focused on demonstrating a capacity to reduce emissions whilst maintaining or increasing yield and profitability.

For the pilots to reach scale, growers must realise value from the emission reductions they have achieved. Currently, these reductions are theoretical only. In order for growers to be rewarded for their efforts, we need to progress the research and development of EFs (emissions factors) and methods and standards that facilitate the generation of carbon offsetting or insetting credits. This may be either through the Emissions Reduction Fund or a standard such as the Climate Active Carbon Neutral Standard.

Potential market opportunities for low-carbon canola include sustainable aviation fuel, biofuels, international markets (particularly the EU) and developing domestic opportunities.



*Image: Location of Nutrien Ag Solutions' 2023 sustainability pilot programs*

### **Thought leaders**

Nutrien is working to inform growers of the developing opportunities and risks associated with decarbonisation in the agriculture industry.

- We have partnered with Melbourne University to help deliver their Carbon Neutral Agriculture Program to farmers and land managers across Australia.
- Our team has delivered the program to over 1000 industry participants in 2023, providing growers with the knowledge required to make informed decisions about emissions measurement and management and carbon market participation.

### **Creating value**

Nutrien is looking to provide value to growers by connecting improved environmental performance with increased productivity and profitability.

- We are trialing the performance of nitrification and urease inhibitors in reducing greenhouse gas emissions and their impact on yield and quality.
- We are piloting opportunities in the livestock sector to reduce emissions whilst maintaining productivity through improved management practices, animal nutrition and emerging feed supplement technologies.

## Agriculture and Land Sector Plan Paper Response

1. *What are the opportunities to reduce emissions and build carbon stores in agriculture and the land? What are the main barriers to action?*

Nutrien sees opportunities for farmers to reduce on-farm methane and nitrous oxide emissions through existing and emerging technologies and practices. Avoidance of these emissions may be encouraged through various incentives, including productivity gains, market premium opportunities, or carbon offset or insetting credits. Government investment and policy can help to remove barriers to, and encourage adoption of, these products and practices.

Nitrous oxide is a potent greenhouse gas with a global warming potential 265 times that of carbon dioxide and remains in the atmosphere for approximately 114 years. The predominant source of nitrous oxide in farming systems is from denitrification, a process occurring under anaerobic soil conditions when bacteria convert nitrate to nitrogen gases. Warm, wet and alkaline soils are the most favourable condition for denitrification. Opportunities to reduce nitrogen losses (productivity benefit) and reduce nitrous oxide emissions (climate benefit) include the use of Enhanced Efficiency Fertilisers (EEFs), such as nitrification and urease inhibitors.

Methane is also a potent greenhouse gas, with a global warming potential 28 times that of carbon dioxide. However, unlike nitrous oxide and carbon dioxide, methane has a shorter lifetime in the atmosphere, breaking down after a decade into carbon dioxide and water vapour. The predominant source of methane in Australian farming systems is through the natural process of methanogenesis, occurring under anaerobic conditions in the rumen of ruminants. Opportunities to reduce methane production include production efficiencies such as maximising fertility, maximising birth rates, improving growth rates and improving animal health. Methane can also be reduced through emerging methane reducing technologies, including feed supplement technologies.

In order to encourage adoption of these technologies and practices, incentives must be provided to growers. Many products and practices, such as higher animal fertility or variable rate fertiliser application, deliver on-farm productivity benefits, which means farmers are already incentivised to adopt these in their farming systems. For other technologies, a significant cost is often associated with their adoption. A limited number of pioneer farmers or climate conscious producers may be willing to pay for these technologies, however robust incentive programs will ensure widespread adoption. To be effective, they must provide financial reward or market access benefits that adequately offset the cost of adoption.

Currently, emission reductions through many of the existing and emerging practices and technologies are theoretical only due to the absence of pathways for the reductions to be recognised. For those that can be realised (i.e. efficiencies in beef herd management through the ERF Beef Herd Management Methodology), significant barriers to participation exist (i.e. data quality, administrative burden, herd size and project scale). Our recommendation to address these issues are addressed under 'Opportunities to reduce emissions'.

2. *How can we progress emission reduction efforts whilst also building resilience and adapting to climate change?*

We believe many farmers are already extremely resilient and adapting to climate change. This is particularly true of farmers with efficient production systems within their farm business.

When it comes to progress on emissions reduction efforts for the agricultural sector, we believe that a successful system must focus on the farmer. When our farmers are profitable and productive, our experience is that the broader agriculture supply chain will also benefit.

A critical starting point for farmer uptake of more sustainable practices and products is developing an understanding of their farm emissions profile. Nutrien is working with farmers to understand their whole-of-farm GHG emissions profile and encourage emissions accounting and data collection processes. Our work prepares growers for future markets that will demand information about their on-farm emissions.

Our process utilises on-farm production data and scientifically verified, government and industry approved methods and models to quantify emissions occurring at each step along a production system. Data collected includes:

- Production data specific to each farming enterprise, be that cropping, livestock, dairy or horticulture
- Total energy and fuel use
- Total fertiliser and chemical application

Completing an emissions profile allows farmers to make informed decisions about reducing emissions while increasing productivity and profitability on their farm business, and therefore increasing their resilience.

Through our work with farmers, we have identified opportunities for emissions reduction on farm using existing and emerging technologies and practices. Without meaningful financial incentives, we will not see widespread adoption of these technologies and practices. Creating market opportunities for reduced emissions produce also naturally increases farmer interests and commitment to their emission reduction efforts.

Government can play a critical role in supporting the creation of a market environment in which incentives can be captured by farmers. For example, methane-reducing feed additives increase the cost of production in livestock systems but there are currently no widely utilised methodologies available to recognise and incentivise the emissions reductions.

***Building on existing effort and knowledge***

*There has already been significant action taken by industry, governments, First Nations peoples, local and regional communities to address climate change. This is explored in section 2.*

3. *Are there initiatives or innovative programs underway that could be applied or expanded on at a national scale?*

As mentioned earlier in this paper, Nutrien makes six recommendations of where it believes government can support the broader industry.

**Recommendation 1** – Fund development of a common framework, methodology and measurement tools for GHG accounting in agriculture.

**Recommendation 2** – Invest in greater uptake of whole-of-farm GHG emissions profile work to promote carbon accounting in agriculture.

**Recommendation 3** – Prioritise the development of a technology agnostic ERF Methodology for reducing methane emissions from ruminants.

**Recommendation 4** – Prioritise the development of an ERF Methodology for reducing on-farm fertiliser related emissions in Australian cropping and pasture systems.

**Recommendation 5** – Expand the Climate Active Carbon Neutral Standard to include low-emissions agriculture, *or*, develop a new low-emission agriculture standard in partnership with industry to encourage decarbonisation, recognise farmers efforts to reduce emissions, and facilitate the sharing of emission reductions within agricultural supply chains.

**Recommendation 6** – Support research, development and adoption of low emission technologies and practices.

4. *How can the Australian Government bring together existing effort and new initiatives into one coordinated plan?*

The Australian Government requires a co-ordinated plan to balance agriculture's need to decarbonise its own supply chain, with the concept of supplying carbon offsets to other hard-to-abate industries. We must ensure that farmers have clear, transparent information to make informed decisions about engaging in natural capital markets, including carbon markets.

Agriculture is a unique sector in terms of decarbonisation because it is both a hard to abate source of emissions (predominantly methane and nitrous oxide) and a potential carbon sink through sequestration in vegetation and soils.

A coordinated plan should acknowledge these competing demands for agriculture's carbon sequestration and emission reduction potential whilst setting in motion a work program to remove existing regulatory, policy and scientific roadblocks to incentivising decarbonisation on-farm. Nutrien's recommendations to remove these roadblocks are summarised on *page 3*.

### **Opportunities to reduce emissions**

*Looking in more detail, there are technologies, practices and other measures that can reduce emissions and increase carbon stores. Some are established and others are still emerging. This is explored in section 3.*

5. *What are the most important options to be further adopted or supported, looking in the short and the longer-term?*
6. *What are the practical solutions to increase uptake?*

Options	How to increase uptake
Enhanced Efficiency Fertilisers (EEF) (inc. nitrification inhibitors)	Incentivise with <ul style="list-style-type: none"> <li>• Prioritisation and development of on-farm ERF method</li> <li>• Support studies to develop emissions factors for new and existing technologies across multiple crop types</li> <li>• Incorporation into Climate Active standard</li> </ul>
Methane reducing feed additives	Incentivise with: <ul style="list-style-type: none"> <li>• Adoption of ERF method</li> <li>• Incorporation into Climate Active standard</li> </ul>
Assessment and measurement technologies	Support development of common GHG accounting framework and measurement tools for agriculture.

### **Developing emissions pathways**

*The plan will explore different ways for agriculture and land to contribute to whole-of-economy emission goals, whilst also delivering on national priorities that include a profitable and productive future for agriculture, and sustainable management of Australian landscapes, in section 4.*

7. *How do you see the agriculture and land sectors contributing over the medium and longer-term? What are the opportunities to deliver emission reductions in parallel with wider goals?*

As discussed in Q4, a coordinated plan should acknowledge these competing demands for agriculture's carbon sequestration and emission reduction potential whilst setting in motion a work program to remove existing regulatory, policy and scientific roadblocks to incentivising decarbonisation on-farm.

### **Supporting and enabling change**

*The plan will explore ways in which the Australian Government can help to accelerate emissions reduction in agriculture and increase carbon storage in the land. This is considered in section 5.*

8. *How can the Australian Government better support agriculture and land sectors to:*  
 a) *drive innovation,*

Nutrien sees opportunities for government support of market and product innovation. Market innovation will occur once emissions reduction associated with commercially available technologies are properly recognized, which will generate the market signals needed to incentivise adoption. Product innovation could be delivered through funding research and development of new technologies, with an embedded pathway towards recognition of resulting emissions reductions.



Nutrien believes additional innovation will be driven by market demands for whole-of-farm solutions to measure and manage a farmer's emissions profile. Nutrien believes those recommendations in Q3 would be positive and sensible areas of which government could look to support and engage.

It is imperative to any success in this area that government looks to engage with trusted advisors and partners of farmers to ensure farmer confidence and buy-in.

*b) build capacity,*

Nutrien sees a significant role for government to partner with industry players who have a high-level of farmer trust and the capacity to deliver innovative products to ensure best outcomes for farmers and government. Organisations such as Nutrien employ trusted advisers for farmers across their farm businesses, from agronomy to livestock, and a natural extension of that is supporting our customers to reach their sustainability goals. Government has an opportunity to leverage the networks and strong relationships which already operate in the agriculture sector.

Nutrien is also supportive of the continuation of the Carbon Farming Outreach Program and other efforts to inform and upskill advisers, farmers and other industry actors.

*c) ensure the system enables emissions reductions?*

Nutrien supports the work by the National Farmers' Federation and the Federal Government on the Australian Agriculture Sustainability Framework (AASF), as well as the various industry groups and RDC's working on commodity specific sustainability frameworks. Building those frameworks adds significant value and allows the industry to have some level of structure in a very complex area. Further investment and ongoing support in those frameworks would be well-received by industry and the supply chain. Continued collaboration between commodity groups will be vital to encourage farmer engagement. As outlined in our recommendations on *page 3*, there are decisions and investments that the Government can make to remove regulatory, policy and scientific roadblocks that would enable agricultural emission reductions at scale. Removing these roadblocks would unlock market-driven, pay-for-outcome incentives for farmers.

*9. What new initiatives could the Australian Government design that would support emissions reduction and carbon storage in agriculture and land and help ensure a productive, profitable, resilient and sustainable future for the sectors?*

Nutrien believes innovation will be driven by market demands for whole-of-farm solutions to measure and manage a farmer's emissions profile. Nutrien believes those recommendations on *page 3* would be positive and sensible areas of which government could look to support and engage.

It is imperative to any success in this area that government looks to engage with trusted advisors and partners of farmers to ensure farmer confidence and buy-in.

*10. A consistent and trusted approach for assessing and reporting emissions is often raised as a barrier to reducing emissions. Is there a role for the Australian Government in addressing this concern, and how can producers and land managers be supported?*



Nutrien believes that the Federal Government has a significant role to play in supporting the GHG Calculator (Know and Show Project) by AIA through on-going public funding. A publicly funded and independently governed framework and calculator is essential to ensure confidence in the Australian agriculture sector's approach to carbon accounting, to realise emission reduction efforts and strive to share these reductions with the supply chain.

*11. What skills, knowledge and capabilities do you think producers and land managers need to implement change? What information and data would help them make decisions about emissions reductions and sustainable land management in the short and longer-term?*

A critical starting point for farmer uptake of more sustainable practices and products is developing an understanding of their farm emissions profile. Nutrien is working with farmers to understand their whole-of-farm GHG emissions profile and encourage emissions accounting and data collection processes. Working with trusted partners to scale the rollout of this activity would build confidence, structure and understanding for the broader industry and government to then build quality policy and demonstrate market opportunities.

Quality, accurate field-level data is required and the sooner a farm business develops processes and implements system to collect, store and report on this data, the sooner they will be able to make informed decisions about reducing their footprint.

## Conclusion

At Nutrien, being a trusted advisor for Australian farmers is central to our business. We have been investing in our people and capabilities to ensure we can provide informed advice, innovative product solutions and advisory services to assist farmers to become more sustainable, productive and profitable.

We thank the Federal Government for the opportunity to respond to this consultation and help shape the Agriculture and Land Sector Plan. We welcome the ongoing engagement with the department and the broader sector as part of this consultation process.

For any further information, please contact Nutrien Senior Manager, Government and Industry Affairs, Tyson Cattle at [Tyson.cattle@nutrien.com.au](mailto:Tyson.cattle@nutrien.com.au)