



CUTTING VICTORIA'S EMISSIONS 2021–2025

Agriculture sector emissions reduction pledge

Minister's foreword

Victoria's agricultural sector is the nation's largest exporter of food and fibre products, and a vital part of the state's economy. The sector's future prosperity will be closely linked to the success or otherwise of global efforts to cut greenhouse gas emissions.

It is therefore vital that agriculture plays its part in achieving a net-zero emissions economy by 2050 – which is why the Victorian Government has an emissions reduction pledge for the sector.

Farmers across Victoria know too well the issues caused by climate change and are ready to work together to tackle the challenges. The Victorian Government will invest almost \$20 million in emissions reduction activities over the next four years, including flagship trials of leading research and technological innovations that help farmers reduce emissions while maintaining productivity and profitability. In this first pledge period to 2025, the government will partner with the agriculture sector to set the foundations to build farmer and industry capability to reduce emissions along the supply chain. This includes working with up to 250 farmers to develop and pilot on-farm action plans to reduce emissions and build climate resilience.

Victoria's farming community is already reducing emissions on-farm, including through improving the energy efficiency of their operations. The Victorian Government has already provided support to enable farmers to continue these practices through an additional \$30 million in funding committed for the *Agriculture Energy Investment Plan* in the *Victorian Budget 2020–21*. Farmers can also consider the role of revegetation on-farm, with support available through the *Victorian Carbon Farming Program*.

I look forward to working closely with industry, community and across government to support these programs and effectively transition the agriculture sector to a net-zero emissions economy. We aspire for Victorian farmers to be leaders in low-emissions agriculture, in line with *Strong, Innovative, Sustainable: A New Strategy for Agriculture in Victoria*.



The Hon. Mary-Anne Thomas MP
Minister for Agriculture and
Minister for Regional Development

Overview of the agriculture sector

The agriculture sector contributed 17 per cent (15.6 Mt CO₂-e) of Victoria's total greenhouse gas emissions in 2019 – the fourth-largest share of total emissions in Victoria behind electricity generation, transport and direct combustion.

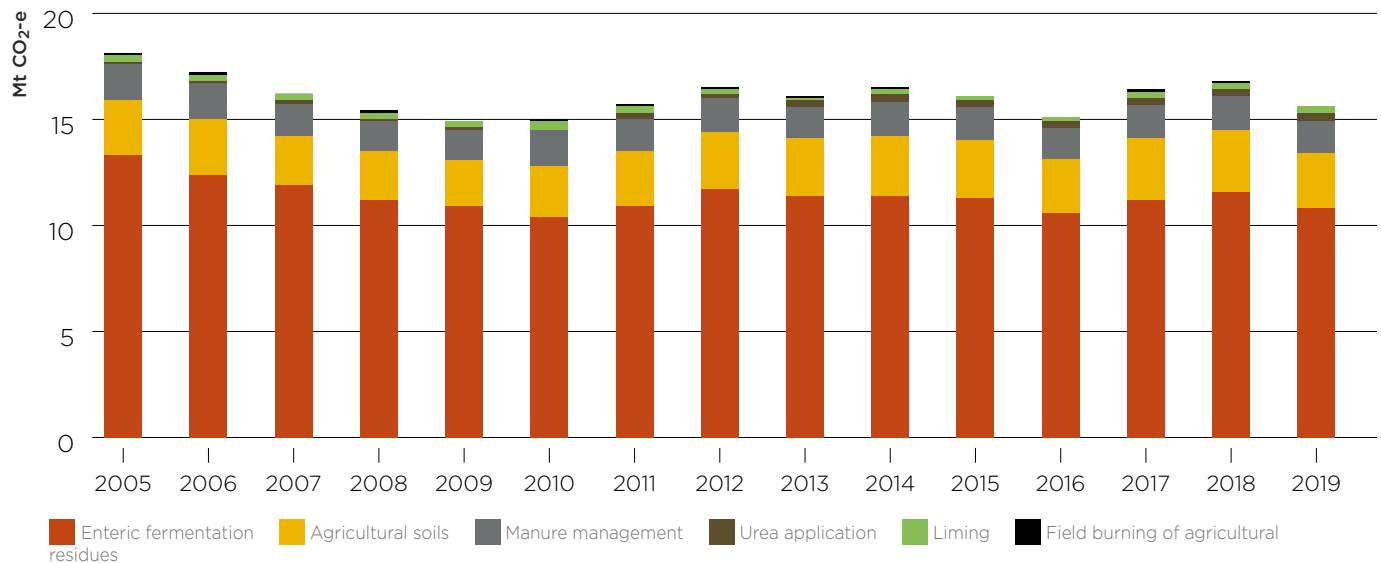
70% of the sector's emissions are methane emissions from livestock, particularly beef and dairy cattle. The remaining emissions result from fertiliser use and manure management.

Emissions from the sector fell by 2.5 Mt CO₂-e (14 per cent) from 2005 to 2019. However, strong international demand for agricultural commodities and recovery from the Millennium Drought are expected to increase production levels in the sector to 2030, which will increase emissions without intervention.

17%

Agriculture is the fourth-largest source of emissions in Victoria

Agriculture sector emissions (2005–2019)



Source: State and Territory Greenhouse Gas Inventories 2019 (DISER 2021)



Emissions reduction opportunities

The Victorian Government is committed to action that will support the agriculture sector to reduce emissions across the supply chain. While several industries have proactively committed to net-zero targets, collaborative action with the Victorian Government is needed to ensure the sector-wide uptake of low-emissions technologies needed to transition to a net-zero emissions economy.

Working in partnership with industry to develop a shared vision and statement on agriculture and climate change will deliver a pathway for joint action by government and industry to reduce agriculture emissions, building on actions already being taken by industry. The Victorian Agriculture and Climate Change Statement will be shaped by the [Victorian Agriculture and Climate Change Council \(VACCC\)](#).

The products, technologies and practices that are likely to deliver significant emissions reduction in the agriculture sector are in various stages of research and development. Without government action to accelerate this research and ensure it is tested on Victorian farms now, these products and technologies may not be widely available for up to 20 years. Emissions reduction from the sector would therefore not go far enough, soon enough.

The Victorian Government is committed to delivering the support required. This includes providing information to farmers to build their capability and capacity to embed new technologies and practices in their businesses.



Emissions reduction pledge 2021–2025

Achieving substantial reductions in agriculture sector emissions will require technologies and management practices that reduce methane emissions.

The Victorian Government is focused on accelerating research in Victoria and strengthening the agriculture industry's capability to deploy low-emissions technologies and practices. Investment of \$3.9 million will focus on ground-breaking research trials in pasture-based grazing systems for two promising methane-inhibiting feed additives. This will ensure that high impact technologies and practices have been tested in Victoria prior to any broader rollout with Victoria's livestock sectors.

Findings of this research and the on-farm action planning pilot will inform the design of future policies and programs, including for the next round of sector pledges due in 2025.

ACTIONS

under the agriculture sector pledge
lay the foundations to achieve
substantial emissions reductions
later this decade and beyond



Emissions reduction actions

Partnering with industry to set a long-term vision for the sector's role in a net-zero emissions economy

The Victorian Government will work with industry to develop a shared *Victorian Agriculture and Climate Change Statement*. Actions in the statement will support the agriculture sector to agree to a collective path to be climate resilient and contribute to an economy-wide net-zero emissions target.

This statement will be shaped by the VACCC, which has been established to provide strategic advice to the Minister for Agriculture on how the agriculture sector can best respond to climate change. The VACCC is a key mechanism for identifying networks and approaches to engage stakeholders in the sector and ensure their perspectives are reflected in the Statement.

Delivering leading-edge research, innovation and deployment

The Victorian Government will accelerate research into technologies that are highly prospective, investing in a targeted primary production climate research initiative to support a pathway for emissions reduction for the agriculture sector. This will include:

- / Investing \$3.9 million in flagship research to evaluate methane-inhibiting feed additives such as 3-NOP and seaweed (asparagopsis) at Agriculture Victoria's [Ellinbank SmartFarm](#) research centre to test efficacy in Victorian farms
- / Leveraging and building on existing world-class research and industry partnerships to develop emerging emissions reduction technologies, tailored to the needs of the Victorian livestock sector, as well as supporting pathways to commercialisation
- / Collaborating with the Commonwealth and other states and territories to consolidate and enhance research and innovation efforts, improve how agricultural emissions abatement actions can be captured in greenhouse gas reporting, and improve access to financial support for landholders.

The Ellinbank SmartFarm research centre is on track to become the world's first carbon-neutral dairy farm, setting a demonstration standard for Victoria's dairy sector.

- / The farm is Australia's leading dairy innovation facility, fast-tracking innovative technologies in a research environment and showing them in a way that is accessible to the dairy industry and other agricultural industries
- / Agriculture Victoria is working to open the Ellinbank SmartFarm research centre to visitors later this year so farmers can see new technology in action.

Strengthening the agriculture industry's capability to reduce emissions

The Victorian Government will empower farmers to measure and reduce their on-farm emissions.

- / Investment of \$10 million will support a pilot of up to 250 on-farm action plans, providing up to \$5 million in grants for farmers to reduce their emissions.
- / The pilot program will use existing and new tools and information to support farmers understand the emissions profile of their operations as well as available technology and practices to reduce emissions on-farm, based on research and best practice
- / This program will pilot delivering these services in collaboration with industry service providers so that lessons can be applied across the sector and new technologies can be incorporated as they become available
- / The on-farm action plan pilot will improve emissions reduction advice being provided to farmers by independent advisers.

The Victorian Government will invest in tools and products that support up to date and highly localised decisions by:

- / Updating the *Victorian Land Use Information System* (VLUIS), providing industry and government with a current understanding of land use and land use change in Victoria
- / Building an *Agriculture Climate Spatial Tool* using updated VLUIS data. The tool will provide information to farmers at paddock and farm scale to help them adapt based on future climate change scenarios, strengthening emissions reduction and climate adaptation actions. Using the VLUIS data in the tool will be unique in an Australian context and provide landholders, industry and government with a rich source of land use data.

Establishing a network of champions and program of activities to promote change and on-farm action, informed by the VACCC.

- / VACCC members and other leading farmers and advisors will be identified to promote change in the sector and share their experience.

~\$20M
to accelerate
Victoria's
agriculture sector
response to a
changing climate

Acknowledgement

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.

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This instrument has been made to give effect to the requirements in Division 3 of Part 5 of the *Climate Change Act 2017*.

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