

# Australian Dairy Caring for our environment

THRIVE  
TOGETHER  
WITH AUSTRALIAN DAIRY



Australian dairy recognises its part in protecting people and planet for future generations. Over a decade ago the industry made a promise to provide nutritious dairy for a healthier world.

The **Australian Dairy Industry Sustainability Framework**, the first of its kind worldwide, aligns with the United Nations Sustainable Development Goals and the global Dairy Sustainability Framework.

Since the inception of the Framework, the Australian dairy industry has become one of the global leaders in sustainable dairy production.

The Framework is based around four key commitments:

- Enhance economic viability and livelihoods
- Provide best care for our animals
- Improve the wellbeing of people and communities
- Reduce our environmental impact.

As part of a global movement to reduce environmental impact, the Australian dairy industry commits to four key goals vital to environmental health and high-quality dairy:

- Improve land management
- Increase water use efficiency
- Reduce greenhouse gas emissions intensity
- Reduce waste.

The program of work to meet these goals spans the supply chain and our activities are supported by regular tracking and measurement of targets and indicators that are published annually [dairy.com.au/sustainability](https://dairy.com.au/sustainability).

## Improve land management

Australian dairy farmers are stewards of the land, and as such, are committed to protecting the land for future generations. This includes protecting diversity of animals and plants on farm, caring for waterways and improving soil health.

In partnership with key organisations like the Environment Protection Authority Victoria, Dairy Australia delivers training to dairy farmers, to foster adoption of environmental best practise, ensuring the industry plays its role in protecting Australia's unique natural environment.

### Facts

**82 per cent of farmers** have documented and are implementing a biodiversity action plan.

**Our target is for 100 per cent** of dairy farmers to implement a soil management plan by 2030.

## Increase water use efficiency

Water is a critical resource for farming – using it efficiently helps protect our natural environment and helps ensure we can provide nutritious food for future generations.

Dairy farmers and processors aim to increase water use efficiency by improving water productivity, actively monitoring water consumption, using recycled water and developing water security management plans.

### Facts

**Member companies** of the Dairy Manufacturers Sustainability Council (DMSC), measure and submit water consumption and wastewater data for reporting and benchmarking.

**75 per cent of dairy farmers** recycle water used in their dairy sheds.

### Case study



#### Regenerative farming

Regenerative farming practices put conservation and rehabilitation at the centre of farming systems.

Doolan Farms in Victoria implemented a range of farm-level initiatives through a state government scheme that matched investments made by farmers. This enabled farm upgrades including: planting 1000 native trees to create shelter for cattle and foster biodiversity; installing solar panels; a 200-megalitre catchment dam for drought-proofing; switching to multi-species crops and more. The practices have not only contributed to better soil quality and protection of natural ecosystems – they've reduced operating costs too. Doolan Farms are one of many adopting these practises. The team continue to share their learnings with other farmers to promote adoption of regenerative farming practises.

### Case study



#### Smarter irrigation

The Smarter Irrigation for Profit project aims to enable irrigators to use water more efficiently and in doing so also raise their productivity and profit.

This federally funded project, was a collaboration across the agriculture sector. The project looked at research, development and adoption of new irrigation technologies including automated irrigation systems, sensors and advanced analytics to improve irrigation scheduling as well as strategies to reduce water evaporation. Dairy sites included in initial trials showed an average 11 per cent improvement in pasture production after water-saving modifications and practices were introduced as well as an average of 50 per cent improvement in the Gross Production Water Use Index (GPWUI) across the 10 sites.

## Reduce greenhouse gas emissions intensity

The Australian dairy industry has set a target to reduce greenhouse gas (GHG) emissions intensity by 30 per cent by 2030 across the entire industry, based on 2015/16 baselines.

Dairy Australia's Climate Change Strategy 2020–2025 is a sector-wide approach to adapting to climate-based challenges, preserving our low-emissions intensity, embedding action and investing in initiatives to help keep warming below 1.5 degrees Celsius.

### Facts

**Australian dairy companies** have cut GHG emissions by 25.5 per cent between 2010/11 and 2020/21.

**94 per cent of dairy farmers** are implementing some measures to reduce emissions on-farm.

**In 2021 the Australian dairy industry** adopted the National Farmers Federation (NFF) policy of net zero carbon across the Australian economy by 2050 (with conditions) – this also aligns with government commitments.

## Reduce waste

The Australian dairy industry is committed to reducing waste, including packaging waste, plastic and food waste.

Australian dairy, as part of the government's national packaging targets, has committed to 100 per cent of packaging being recyclable, compostable or reusable, by 2025. The Dairy Sustainable Packaging Roadmap was developed in collaboration with the Australian Packaging Covenant Organisation (APCO), to help the industry drive progress towards these goals.

The industry's Dairy Sector Food Waste Action Plan will increase transparency of dairy food waste across the supply chain, and provide a pathway for the industry to collaboratively tackle this waste challenge.

### Facts

**In 2020/21 DMSC members**, on average, reduced waste to landfill by 6.5 per cent compared to the previous year.

**The dairy industry** has set a target to halve food waste by 2030.

**The Australian dairy industry** aims for all silage wrap to be recycled by 2030.

### Case study



#### Reducing methane from cattle

Several additives and supplements in the diet of cattle have been shown to reduce their methane output.

Australian dairy farmers are using cottonseed, brewers' grains, cold-pressed canola, hominy meal, grape marc and experimenting with higher levels of wheat. Native red macroalgae has reduced methane emissions from beef cattle by up to 80 per cent. There are trials underway using seaweed in stockfeed on commercial dairy farms as well as parallel research to establish dosing, efficacy and safety. This approach will fast track adoption.

### Case study



#### Funding partnership supports manufacturers to innovate to address challenges

Offered in partnership with Food Innovation Australia Limited (FIAL), the Dairy Australia Technology Assessment (DATA) scheme has provided Australian dairy processors with financial assistance to assess commercial viability of new technologies or practices.

Technologies explored have included; conversion of dairy processing waste to bioenergy, advanced metering and monitoring to improve energy and water use while reducing waste, fermentation of whey to high value beverages, and increasing the content of recycled plastic in milk bottles.

# Mitigating and adapting to climate change

Here are some of the ways Australian dairy farmers are adapting to and mitigating climate change on their farms.

## Incremental and transformational adaptations

Adoption of short- and long-term strategies for the adaptation of farming systems to the impacts of climate change

## Increased vegetation on-farm

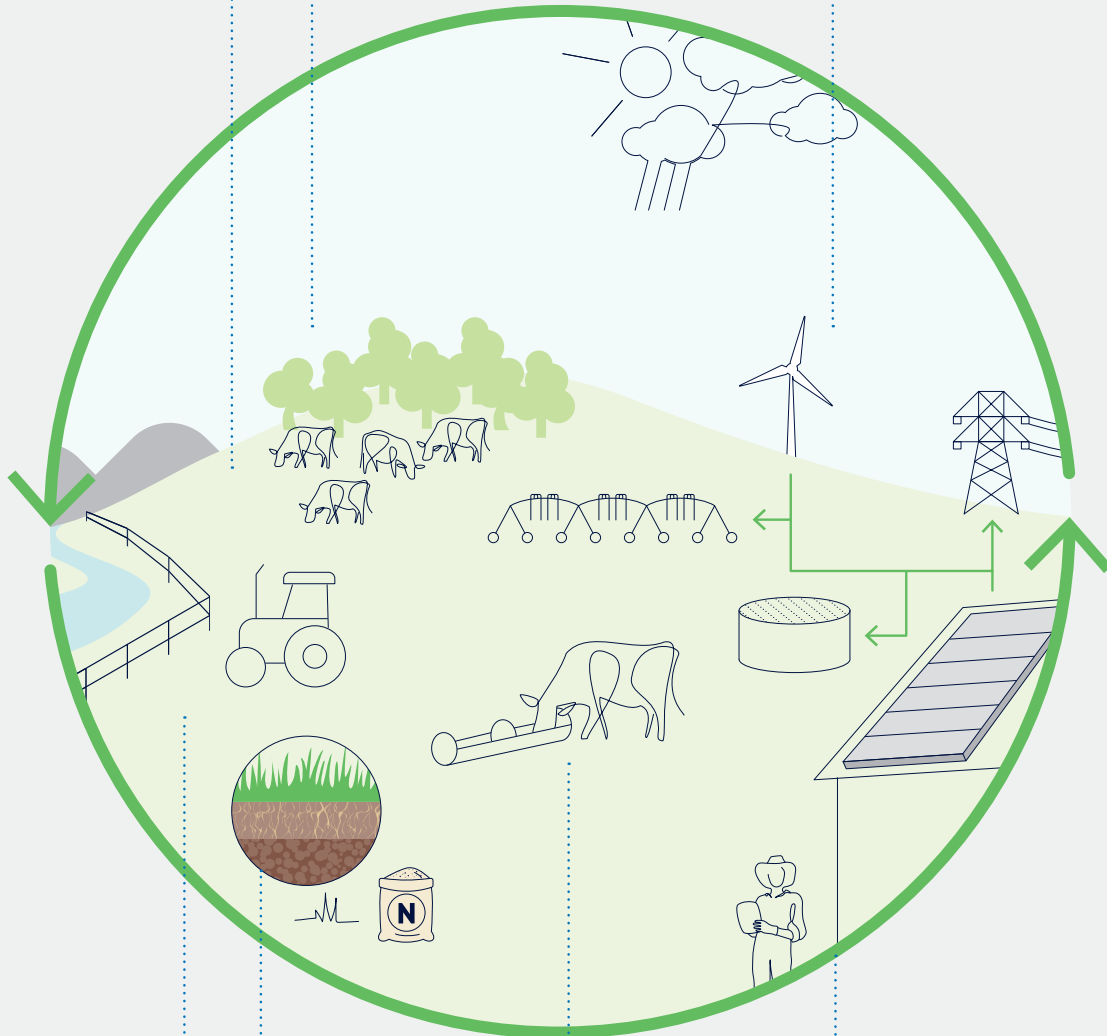
Improve shade and shelter for managing heat stress, as well as carbon sequestration

## Extreme events preparedness

Resilience and recovery from storms, fires, floods and drought

## Smarter energy use

Reduce energy demand, increase energy efficiency, on-farm renewables/ bioenergy



## Future forage alternatives

Establishment of alternative forages in response to changing soil moisture availability and increasing water stress

## Reducing nitrous oxide

New technologies and improved on-farm practices for nitrogen fertiliser use to reduce nitrous oxide losses

## Reducing enteric methane

Breeding for low-methane genes, improved rumen function through high quality feed, diets and vaccines

## Good business management

Skills and training for climate risk preparedness and adaptation

## More information

For additional information visit: [dairy.com.au/sustainability](http://dairy.com.au/sustainability)

### Disclaimer

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