Sustainability Report
The Power of Partnerships

Pūrongo Toitūtanga Te Mana o ngā Rangapū

2021/2022

dairy tomorrow

The future of New Zealand dairying.

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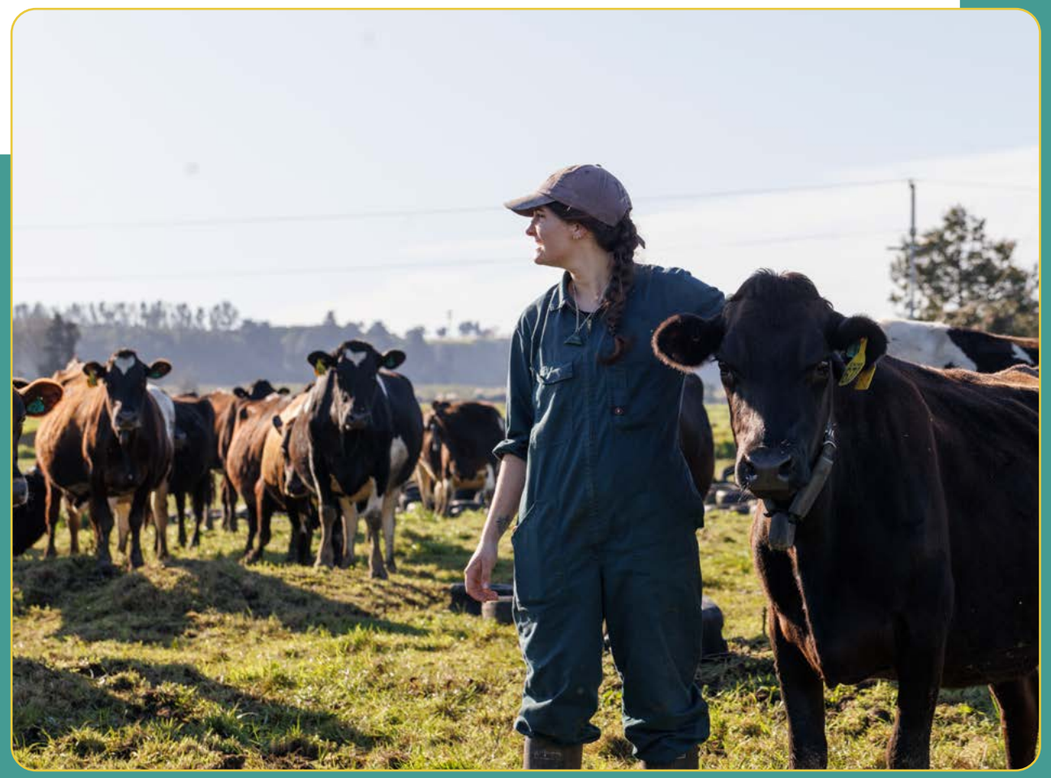
Ngā Ihirangi

1.

About this report and Dairy Tomorrow

He kōrero mō tēnei pūrongo me Huamiraka mō te Āpōpō

New Zealand's dairy sector is the largest and most strategically important contributor to the national economy.



"Dairy generated approximately $25 billion in annual export earnings in 2022 and $11 billion in annual GDP."

The dairy sector is critical to the health of our economy and local communities, but it must also continue to earn its social licence to operate, including by demonstrating its progress on a range of environmental and social issues.

This report has been coordinated by DairyNZ – the organisation representing all New Zealand dairy farmers – on behalf of Dairy Tomorrow, a broader sector group comprising the majority of the country's milk processors (Fonterra, Synlait, Open Country, Danone, Miraka, Mataura Valley Milk, Tatua, Westland and Oceania Dairy), the Dairy Companies Association of New Zealand, Federated Farmers, and the Dairy Women's Network.

This report is the first of its kind to specifically cover the 'behind the farm gate' sustainability journey of New Zealand's dairy farms. It also considers the common interests for all sector participants of food safety, biosecurity, and trade policy. It is a report born out of the commitment, on behalf of dairy farmers, to transparency, continual improvement and to monitoring and reporting against the issues that matter most to the country.

We have previously reported on environmental sustainability and on our performance in relation to the 2013 Sustainable Dairying: Water Accord. This report uses the word 'sustainability' in its broadest sense. We are talking about the dairy sector's contribution to environmental, social, and economic sustainability. The report's focus is driven by our assessment of the most material issues and sets targets and monitors progress against six core commitment areas, five of which are focused 'behind the farm gate'.

The purpose of this report is to demonstrate our commitment towards addressing the sustainability challenges that matter most to our communities and stakeholders. The report is a concise snapshot of the sustainability performance of the dairy sector based on a number of goals and metrics, using both qualitative and quantitative data.

It is complemented and supported by a range of other, more detailed documents that cover the broader sector, including the sustainability reporting of other organisations in the sector.

This report also marks the beginning of a journey for Dairy Tomorrow in which we report openly, transparently, and regularly to our stakeholders on our most material issues. This report will evolve over time, and we expect future iterations to incorporate new targets, measures and data.

The period covered by this report is aligned with the dairy production seasons and runs from the start of June 2021 to end of June 2022. Some financial data captured in this report may fall outside of this reporting period and some of the earlier targets stated in Dairy Tomorrow's 2017 report have been reviewed and some restated.

On an ongoing basis this report will be produced every two years.

2.

The power of partnerships
Te mana o ngā rangapū

The contribution of the dairy sector to the wellbeing of all New Zealanders and our economy has never been clearer than over the last few years.

The closing of our borders due to Covid-19 fundamentally altered our economy, almost overnight. With much of our tourism sector suspended, New Zealand's role as a producer and supplier of high-quality food to the world was critical to our relative economic success.

If there was any doubt about whether agriculture remains the bedrock of our economy, Covid-19 removed it. With dairy export earnings typically equalling the combined contributions of meat, wine, seafood, timber, and fruit, our dairy farmers take pride in their contribution to our country – particularly when it is most needed.

Our dairy sector is of strategic importance to our economic success and wellbeing, but with its scale and contribution comes responsibility, both in our local communities and globally.

We produce a milk volume equivalent to 2.5 servings of high-quality dairy products per day for approximately 90 million people. Our customers rightly have high expectations of us in terms of the quality of our dairy and the way in which we produce it.

This report shares the New Zealand dairy farmers' journey of continuous improvement. It provides an opportunity to engage with our customers, communities, and stakeholders around the work we are doing, the progress we are making, and the challenges we face.

There is much to celebrate in terms of our farmers' contribution to New Zealand and the level of environmental improvement that is continuing across our farms. Our commitment to continuous improvement means this work will never stop.

"Our best work is always delivered through partnerships."

Where we face challenges, we will own them, discuss them openly and transparently, and work with others to drive change and improve. Partnerships are the key to the success of our sector and to New Zealand realising its social, economic, and environmental potential.

Our best work is always delivered through partnerships. An example includes the Dairy Water Accord, which was developed under the oversight of the dairy farming community, including farmers, dairy companies, central government, regional councils, environmental NGOs, and the Federation of Māori Authorities. The outcome was over 11,000 dairy farmers working voluntarily to lift environmental performance and achieve positive outcomes for waterways.

Without diminishing dairy's impacts, we need to continue to work in partnership with local government and local communities to address our collective impact on water quality. While New Zealand is amongst the most GHG emissions efficient producers of high-quality dairy in the world, we are also committed to helping New Zealand meet its Paris Agreement climate change commitments.

Done properly, He Waka Eke Noa provides an opportunity to partner with participants across the sector, including Māori and government, to set up a practical and cost effective system to support farmers in reducing emissions at the farm level. Our research and science partnerships are delivering very promising results with methane-inhibiting technologies.

Effective partnerships not only enable the dairy sector to accelerate improvements in our performance and reduce our impacts, but they can also deliver profound benefits for our communities and economy.

Currently 88% of global dairy consumption occurs in markets that apply tariffs of more than 10% or impose significant non-tariff barriers on imported products. The cost of non-tariff measures imposed on New Zealand dairy products is estimated as being NZ$5.4 billion. The opportunity to continue removing barriers to the free trade of New Zealand dairy products is significant for our economy.

Similarly, maintaining New Zealand's world-leading food regulatory framework is critical to protecting the integrity and reputation of New Zealand's food exports. New Zealand has a risk-based approach and a model of shared responsibility for food safety, and the dairy sector is a strong advocate for continued investment in outcome-focused food safety standards.

The partnerships between our farmers and our processors are standouts within the sector. Our processors send clear signals from international markets back to our farmers, ensuring our products and practices continue to evolve ahead of global trends. We continue to make good progress on our commitments to animal welfare and the protection of waterways, both of which are actively supported by our processor partners.

An area where we would like to see more of a partnership approach is in the development and implementation of on-farm regulation. We accept that regulations need to evolve, but the rate of change and the way they have been introduced over the last few years has taken a toll on farmers, their families, and rural communities. However, our farmers are committed to continuous improvement, and more of a partnership approach to on-farm regulation would ultimately deliver better outcomes.

Over the course of the Covid-19 pandemic our sector had to make some changes to the way we worked, with each part of the value chain successfully adapting to new circumstances and requirements. Across the pandemic, including lockdowns, our farmers and processors maintained the flow of high-quality dairy exports to the world without significant disruption.

There are real pressures on our rural communities right now that require our attention. We're committed to building healthy, vibrant rural communities and deeply appreciate the community support for our farmers from across the country and across our multiple stakeholders.

This report, and the transparency and openness that underpins it, is part of our commitment to continuing to earn trust and support and to building a dairy sector that continues to deliver for all New Zealanders.

We appreciate you taking the time to read it and welcome your feedback.

Dairy Tomorrow Partners

3.

By the numbers – The dairy sector at a glance

Ngā Tatau – He whakarāpopoto o te rāngai huamiraka

$22B

Dairy is our largest export earner, generating $22 billion in earnings in 2022

1/3

That's over one third of the value of all export goods

In 2022, dairy export earnings equalled those from meat, wool, forestry and seafood combined

Dairy export earnings were almost double the next biggest export (meat and wool)

130

Our dairy products are exported to over 130 countries and are equivalent to 2.5 serves of dairy per day for 90 million people

The dairy sector directly employs 50,000 people

50,000

with 36,000 working on-farm

36,000

Who are the country's top agricultural wage earners

25,000 kilometres of waterways have been fenced from stock over the last 10 years

25,000

95%

95% of dairy farms now receive reports of their biological emissions

Production per cow has increased about 50% over the last 30 years

50%

4.9M

The national dairy herd continued to shrink...

3.5%

...(4.84 million in 2021/2022, down 3.5% from the peak in 2014/2015)

Outside of dairying, one third of all other industries have dairy sector clients (processors, farmers) as top 10 purchasers

New Zealand's high-quality dairy is amongst the most GHG emissions-efficient in the world[1]

1. A recent paper (Mazzetto et al, J. Dairy Sci 2022) compared published LCA data from dairy producing nations. At 0.74kg CO_2e per kilogram of fat and protein corrected milk, New Zealand dairy farmers had the lowest footprint

4.

Dairy Tomorrow – Our commitments and principles

Huamiraka mō te Āpōpō – Ā mātou kī taurangi, mātāpono hoki

Through Dairy Tomorrow we are committed to a set of foundation principles and positions that guide our operations, the choices we make, and our advocacy and engagement.

This report is based on these principles and core beliefs.

Our guiding principles:

Bold

We will be bold in our aspirations and fronting our challenges.

Open

We will be open and transparent in our positions, progress, and performance.

Innovative

We will embrace new technology and new ways of working to solve our challenges and secure our opportunities.

Collaborative

We will partner and collaborate with other sectors and civil society.

Our beliefs and positions

- We believe that sustainable dairy farming has a critical role to play in New Zealand's future prosperity and wellbeing.
- We are committed to successfully farming within environmental limits.
- We are committed to maximising value from New Zealand milk while preserving the benefits of our pasture-based system.
- We take responsibility for caring for our people, animals, and the environment, and will not tolerate failure to comply with the rules that protect them.
- We are committed to greater transparency, openness, and working together.

5.

Dairy in New Zealand – Our most material issues

Huamiraka i Aotearoa – Ā mātou take nunui

We work to ensure our focus and our strategy aligns with the issues that matter most to our communities and stakeholders.

"However, across most of these material issues, a collaborative approach between the dairy sector and its multiple stakeholders helps deliver the most effective and enduring social, economic, and environmental solutions."

When we talk about stakeholders, we use a broad group: our farmers, customers, local communities, export markets, policymakers, and central and local government.

Over 2021/2022, the following seven core issues were deemed the most material across all of Dairy Tomorrow's partner group of stakeholders (listed in alphabetical order):

- Animal care
- Biosecurity
- Climate change
- Geopolitical developments / market volatility
- Government policy and regulation
- People wellbeing and capability
- Water quality.

Some of these issues are within the control of the dairy sector – for example, animal welfare and the contribution to improving water quality – while some are less controllable – for example, the related impacts of geopolitics, government policy and market volatility.

However, across most of these material issues, a collaborative approach between the dairy sector and its multiple stakeholders helps deliver the most effective and enduring social, economic, and environmental solutions.

6.

Commitment one:

Protect and nurture the environment

Kī taurangi tuatahi: Manaakitia, poipoia hoki te taiao

95%

of all dairy farmers know their biological emissions

2025

By 2025, all farms will be reporting under a farm environment plan

69%

of farms now have freshwater plans; 45% now have greenhouse gas management plans

94%

of farmers know their purchased nitrogen surplus

There's no denying that the development of New Zealand's dairy sector has had some significant environmental impacts, particularly during the period from the mid 1990s to early 2000s when the sector grew rapidly, and environmental standards and levels of awareness were far lower than they are today.

This is true of many sectors of the New Zealand economy. Environmental awareness has increased and therefore the standards and regulatory requirements have increased. By reducing impacts and operating at much higher standards, the dairy farmers of today are working to meet increasing customer expectations, redress the impacts of the past, and take pride in the natural environment we leave future generations.

Our farmers are committed to farming within environmental limits and to protecting and nurturing our natural environment. We are making continuous improvements against these commitments and welcome the opportunity to report to stakeholders across a range of initiatives, commitments, and metrics.

Our areas of focus

The three primary areas of environmental focus are:

1. Implementing and reporting against Farm Environment Plans
2. Reducing impacts on freshwater quality and enhancing biodiversity
3. Reducing greenhouse gas emissions from the dairy herd.

Our commitments

Farm environment plans, Good Farming Practices.

Commitment: By 2025, achieve all farms implementing and reporting under a farm environment plan.

The country's dairy farmers are making solid progress in the development of comprehensive and robust farm environment plans, which cover areas of environmental impact including:

- Greenhouse gas emissions
- Water quality and quantity
- Land and soil
- Biodiversity
- Mahinga kai
- On-farm recycling/waste minimisation.

Farmers are working through these areas in order of potential impact and, with two years to go until all plans must be implemented, are making particularly strong progress on greenhouse gases and water quality, as the table below shows.

It is important for the dairy sector that these farm environment plans earn the confidence of stakeholders and the communities of which these farms are a part. The majority of these plans are developed with support from an experienced practitioner. The plans are based on the dairy sector's 'Good Farming Practices' which set minimum standards for sustainable dairy farming in New Zealand across 10 key areas of environmental management:

- Nutrients (including phosphorous and nitrogen)
- Critical source areas
- Waterways
- Land and soil
- Effluent
- Water use and irrigation
- Hazardous substances
- Waste minimisation
- Biodiversity and mahinga kai
- Climate change.

These Good Farming Practices were developed by dairy companies and DairyNZ with input from experts across all environmental management areas. The Good Farm Practices build on original cross-sector guidance developed in 2018.

Farm environment plans, Good Farming Practices reporting and tracking

Target	Current State
By 2025, all farms have implemented and are reporting under a farm environment plan	• 69% have a freshwater farm plan as of December 2022 • 45% have a greenhouse gas management plan as at December 2022
By 2025, all farms have Good Farm Practices status reports that summarise progress towards meeting expectations for each farm management area	Dairy companies are developing systems to allow their advisors to assess whether farmers are meeting Good Farm Practices

Farmers reporting Purchased Nitrogen Surplus

Purchased Nitrogen Surplus (PNS) is the difference between nitrogen used for production (fertiliser, purchased feed) minus the nitrogen removed from a farm as finished products (for example, milk, meat and crops).

The greater the nitrogen surplus, the greater the potential that nitrogen could be lost from the farming system, including to waterways. Surplus nitrogen in waterways can stimulate the growth of plants and algae in the water, which can lead to a reduction of oxygen which impacts ecosystem health.

Working to reduce PNS makes environmental and economic sense. Dairy farmers are using a range of techniques to reduce and minimise losses, from reduced applications of nitrogen, altering the timing of nitrogen applications, and managing irrigation to reduce drainage and encourage plant uptake.

In March 2022 we introduced a benchmarking system and set limits that work to reduce PNS on dairy farms. Based on a three-year average of national data from 2019/20 to 2021/22, 25% of farms will have a surplus higher than the benchmark and need to reduce it to be at or below the limits.

The first limit is set out below – 80% of farmers less than the benchmark by November 2023.

Purchased Nitrogen Surplus reporting and tracking

Target/Limit	Current State
Collection of data for PNS calculation for the preceding season from 95% of dairy farmers by May 2021	94% of farmers received a PNS report as of November 2022
Purchased Nitrogen surplus limits: • 80% of farmers are less than the benchmark limit by November 2023 • 85% of farmers are less than the benchmark limit by November 2024 • 90% of farmers are less than the benchmark limit by November 2025 • 95% of farmers are less than the benchmark limit by November 2026	

"Dairy farmers of today are committed to reducing their impacts and operating at much higher standards."

Freshwater and biodiversity

Commitment: Lead the dairy sector's efforts to improve the health of our rivers and streams and protect and enhance biodiversity, in collaboration with other rural and urban land users, central and local government and communities on strategies and actions toward achieving swimmable waterways.

In the 10 years since the 2013 Sustainable Dairying Water Accord, dairy farmers have excluded cattle – largely through new fencing – from approximately 25,000 kilometres of waterways. Keeping stock out of waterways is one of the most immediate and material ways to improve water quality and biodiversity, but there are other science-led initiatives occurring across farms to improve freshwater quality.

We're working with partners to better understand dairy farming impacts on water across low-intensity dairy through to high-intensity dairy farming catchments, as well as the impact from urban environments.

Farmers are continuing to reduce their impact on water quality for future generations, improve biodiversity and implement good management practices to improve our waterways.

As part of this commitment, the sector has initiated a multi-year, multi-million-dollar joint project with AgResearch to better understand bacteria sources and mitigation options and inform future interventions in pursuit of better environmental outcomes. This is one project among many, including Southern Dairy Systems (options for reducing nitrogen loss by 30%), plantain (reducing nitrogen leaching using plantain) and the Low-N Project (researching ability to stack different reduction options).

Southern Dairy Systems

A four-year Southern Dairy Hub study is investigating future farm system options to help farmers reduce nitrogen loss by 30%.

Alongside this, the Participatory Research Project is calculating greenhouse gas footprints for each of the farm systems and looking at other water quality outcomes and how these relate to farm profitability.

Plantain

Plantain is a feed crop with a coarse root structure that has been shown to reduce the leaching of nitrogen. The national $22 million Plantain Potency and Practice Programme is focusing on proving plantain's effectiveness at reducing nitrogen leaching. It aims to give farmers confidence to invest in plantain.

The programme uses Ecotain® environmental plantain, and an evaluation system will be developed to assess the environmental benefits of all plantain types. Field trials and partner farms across the country are generating data on production and quality, which will help develop management guidelines.

Low-N Project

A seven-year research programme is underway to reduce nitrogen leaching from dairy farms. The programme includes modelling then testing farm system technologies within different catchments and regions to deliver transformational reductions.

Edge of Field mitigation research – wetlands, bioreactors and detainment bunds

DairyNZ, NIWA, and dairy companies are funding implementation and studies on the effectiveness of a range of 'edge of field' mitigation tools, to treat contaminants before they leave the farm.

We're partnering to monitor constructed wetlands throughout the country and supporting a number of bioreactor trials to determine how well they perform. Bioreactors are pits filled with bark that support denitrification – the process by which nitrogen from water is removed by naturally occurring denitrifying bacteria and then converted into harmless atmospheric nitrogen gas as part of the respiration process.

We're also working with partners to understand how detainment bunds can reduce sediment, Phosphorous, and bacteria levels.

Catchment based projects to care for our waterways

Below are some of the many examples of work underway by the dairy sector and partners to monitor and improve water quality.

01. Northland — Wairua River (Living Water)

Living Water and local hapū are sampling local water quality, and building capacity to grow this work.

02. Huraki — Pūkorokoro-Miranda (Living Water)

Together with a local catchment group, Living Water is reducing sediment loss to improve bird habitat.

03. Waikato — Peat Lakes — Lake Areare. Ruatuna. Rotomānuka (Living Water)

DOC community workers are planting, weeding and building tracks at Lake Ruatana.

04. Waikato — Waiomou

A joint pest plant removal and replanting project between Living Water, the regional council and Jobs for Nature.

05. Taranaki - Kaupokonui (Living Water)

Living Water is funding a fish ladder at a historic dam to help fish passage.

06. Hawkes Bay — Tukipo

A dairy farm wetland is showcasing affordable wetland options which remove contaminants.

07. Manawatū-Whanganui-Tararua

Tararua farmers and DairyNZ are testing how plantain can reduce nitrogen losses and improve local waterways.

08. Canterbury — Waikirikiri (Lower Selwyn)

A joint project with Landcare Trust to restore wetland biodiversity and show the value of farm wetlands.

09. Canterbury — Ararira-LII River (Living Water)

A range of work is improving freshwater habitats.

10. Canterbury — Selwyn Hinds

DairyNZ and over 400 farmers are working together to reduce their farm environmental footprint.

11. Canterbury

Through Synlait's Whakapuāwai programme their team is propagating and planting native plants on supplier farms.

12. Otago — Waipori (Taieri)

A joint project with iwi to build knowledge about mahinga kai and research water quality, plant and bird life conservation.

13. Southland — Awarua-Waituna (Living Water)

This is testing the value of structures to slow water flow and reduce sedimant and nutrient runoff into waterways.

14. Southland-Aparima

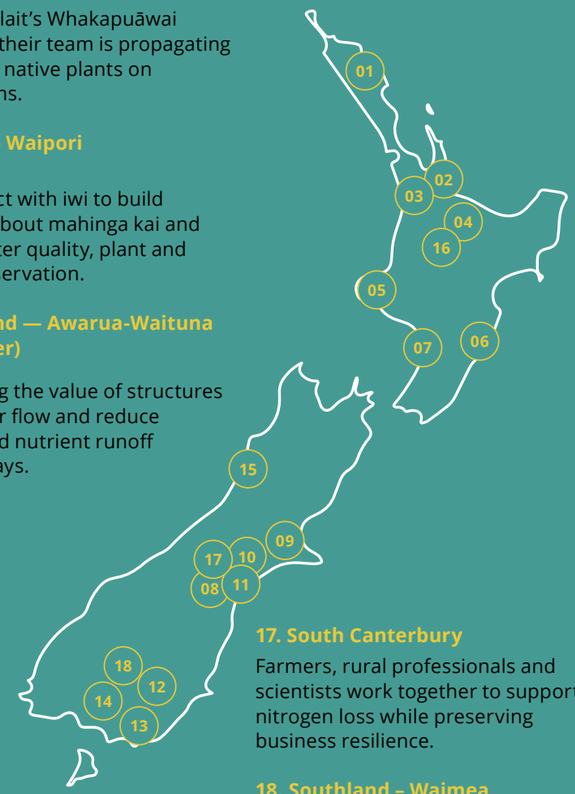
Local farmers are developing Farm Environment Plans to guide good farming practices to benefit the environment.

15. West Coast

A multi-partner project supporting the development of a catchment plan and resulting on-the-ground action.

16. Waikato – Pōkaiwhenua

Building, understanding and sharing Matauranga Māori and Western science understanding to support freshwater and biodiversity outcomes.



17. South Canterbury

Farmers, rural professionals and scientists work together to support nitrogen loss while preserving business resilience.

18. Southland – Waimea

Influential catchment partners demonstrating what can be achieved at farm-level to meet farm and community objectives and deliver cumulative environmental improvement.

Greenhouse gas emissions

Commitment: Lead the dairy sector contribution to He Waka Eke Noa, supporting New Zealand's climate change goals through contributing to the development of practices, knowledge, and technologies to support farmers to reduce their greenhouse gas emissions.

Data from 2021 shows methane from dairy cattle enteric fermentation and manure makes up approximately 22.7% of New Zealand's gross greenhouse gas emissions at 14,724 kt CO_2e. The sector is committed to playing its part in reducing on-farm emissions and supporting the country to meet its climate change commitments.

Emissions reductions start with good data: accurate measurement and reporting, and having a clear plan of action in place. The following targets have been generated through the He Waka Eke Noa Primary Sector Climate Action Partnership with government and are consistent with the programme's aim to measure, manage and reduce on-farm emissions.

A vital He Waka Eke Noa partnership is with the Te Aukaha Māori agri-business workstream which has brought the viewpoint of Māori landowners into the policy development process.

Target	Current State
By December 2022, and annually thereafter, all dairy farmers receive a report estimating their biological (methane and nitrous oxide) emissions	95% as at December 2022
By 2025, all dairy farmers have a written plan in place to manage greenhouse gas emissions	45% of dairy farmers had a written plan in place to manage greenhouse gas emissions as at December 2022, up from 26% in December 2021

The level of dairy farmers now measuring their emissions and having plans in place to actively reduce them represents a step-change within the sector and provides the foundation for emissions reduction. We have nearly reached our first target, with 95% of farmers receiving annual emissions reports at the end of 2022. We expect to reach this target over 2023.

The rate of adoption of greenhouse gas farm plans on our dairy farms is encouraging, with all farmers targeted to have these plans in place within the next two years, while also working towards legislated targets.

Report confirms New Zealand's greenhouse gas leadership

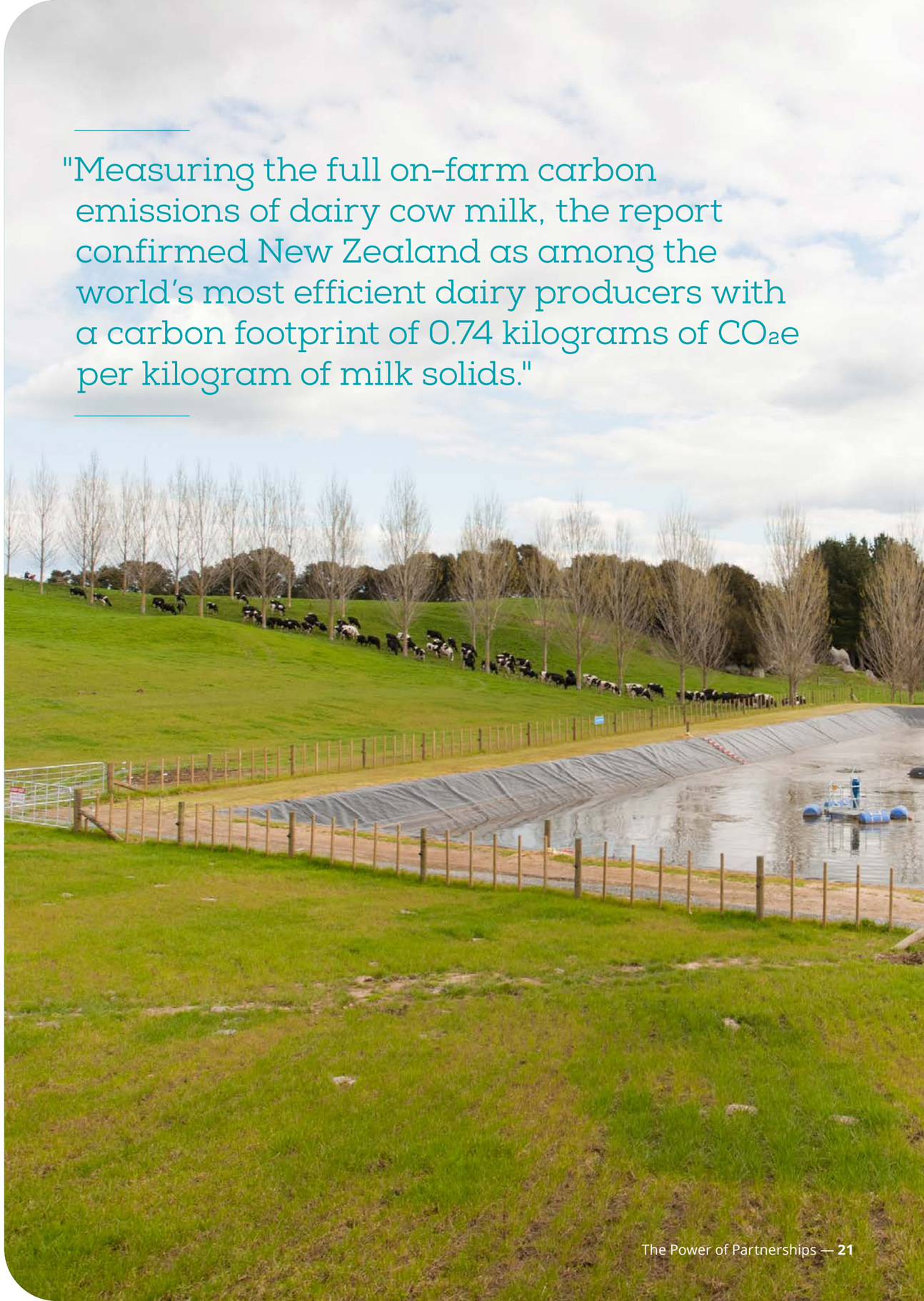
New Zealand's reputation as one of the most greenhouse gas emission-efficient producers of dairy is one the sector is committed to maintaining. In October 2022, Dairy NZ commissioned AgResearch to complete a research report into the carbon efficiency of 19 dairy-producing nations (collectively covering 58% of global milk production).

The report ranks countries using the GWP100 carbon footprint ranking system.

Measuring the full on-farm carbon emissions of dairy cow milk, the report confirmed New Zealand as among the world's most efficient dairy producers with a carbon footprint of 0.74 kilograms of CO_2e per kilogram of milk solids.

While these findings are welcome, it is important to note that efficiency does not always produce lower total emissions and so work will continue to reduce dairy's impact on climate change. The report also notes that continued innovation and improvement is required to drive emissions lower, particularly as countries with intensive indoor farming systems have emissions reductions opportunities available to them that don't translate to the pasture-based systems we have in New Zealand (for example, inhibitors that can be fed to cows regularly and effluent management systems that capture a greater proportion of dairy farm manure).

"Measuring the full on-farm carbon emissions of dairy cow milk, the report confirmed New Zealand as among the world's most efficient dairy producers with a carbon footprint of 0.74 kilograms of CO_2e per kilogram of milk solids."



Commitment two:

We will build competitive and resilient dairy farming businesses

Kī taurangi tuarua: Ka waihanga mātou i ngā pakihi pāmu huamiraka whakataetae, manawaroa hoki

Biosecurity preparedness and food safety focus remain critically important

16.5%

Challenge: On-farm inflation in 2022 was 16.5%

Investing in science and technology is driving continuous improvement

Challenge: Consistent, accurate data is key to productivity, profitability, and driving on-farm improvement

$41.7B

$36.5B

Dairy sector debt decreased from $41.7b in July 2018 to $36.5b in December 2022

As the foundation of New Zealand's economy, our dairy sector must protect its global competitiveness. We must continue to build a sector that is profitable and has the resilience to absorb market and trade volatility as well as the increasing prevalence of adverse weather conditions.

The profitability and resilience of our dairy farmers has a major direct impact on the health of our economy.

Access to global markets and food safety performance are also critical to delivering against this commitment, and these elements are covered in commitment three.

Our areas of focus

There are three primary areas of focus behind the commitment to building competitive and resilient dairy farming businesses:

- Protecting farm profitability and productivity from biosecurity incursions
- Data integration
- The Dairy Sector Science Strategy.

Inflation, regulation and adverse weather pressures

At an on-farm level, there are growing pressures for dairy farmers to manage. Our dairy farmers have generally coped well with significant adverse weather events over the last two years (such as droughts and floods), but these events test the physical and mental resilience of our farmers.

Farmers have also consistently raised concerns around the impacts generated by the scale and scope of on-farm regulatory change over the last three years.

While dairy returns and payouts have been strong over the past year, these returns have been eroded by on-farm inflation. National inflation ran at approximately 7.3% across the economy in 2022, which negatively impacts the profitability of all businesses. On-farm inflation – measured by the Producer Price Index (PPI) – has increased at more than double the general inflation rate, and the cost of capital has also increased sharply over the last 12 months.

Both of these factors significantly reduced farmer returns and increased pressure on the profitability and resilience of dairy farming. Generally, our dairy farmers are well supported by their banks and have adequate access to capital.

Dairy remains one of the most profitable primary sector land uses, but there are continual challenges and pressures to manage, including using science to increase productivity while reducing the environmental footprint.

While the following targets and commitments provide data on specific measures and areas of focus, all of the content of this broader report supports this commitment to our dairy farming businesses.

Our Commitments

Commitment: Develop initiatives to reduce the risk and impact of on-farm profitability and productivity from biosecurity incursions.

Our farmers depend on the effectiveness of our biosecurity systems, and this is an area of natural partnership between government and the primary sector. A current example of partnership in action is the dairy sector and its farmers working with MPI to advance the Mycoplasma bovis eradication programme towards a phase of long-term surveillance.

Following approximately five years of concerted work, there were two 'active confirmed' properties and 277 'cleared confirmed' properties as at 30 March 2023.

Over 2022, there was a Foot and Mouth Disease outbreak in the Indonesian cattle herd which led to an immediate response from central government and the primary sector. Led by an MPI Taskforce, and supported by Dairy Tomorrow partners, a comprehensive review and update of New Zealand's national Foot and Mouth preparedness and response strategy was quickly completed and is in the process of being implemented, for example with increased border screening.

The dairy sector invests in its own biosecurity preparedness. DBRIEF (the Dairy Biosecurity Risk Identification and Evaluation Framework) was created to understand and assess the implications of a wide range of biosecurity scenarios. Led by experts, this framework enables targeted programmes of surveillance and the potential for rapid on-farm response based on the potential scale of impact.

Commitment: Develop and implement a plan to enable efficient data integration, aggregation, and collation to effectively meet on-farm needs, community and regional measurement and compliance needs, and dairy sector performance monitoring and reporting needs.

Modern dairy farms are data-intensive organisations with increasing monitoring and reporting requirements including emissions, freshwater management farm plans, animal management, pasture growth forecasting, feed management, water use and irrigation, and nutrient and effluent management.

Consistent, accurate data is key to increasing productivity and profitability, as well as providing third-party assurance, particularly on issues like environmental management. Having consistent data recorded across all dairy farms is a challenging integration exercise but progress is being made to set up systems and processes to record and then integrate consistent data from across the farm network.

More detailed reporting on this work and the progress made will be included in the next report.

Commitment: Lead, coordinate and implement a Dairy Sector Science Strategy that guides research and development investment to ensure we have the information needed to sustainably deliver on New Zealand and global expectations of our Dairy Farming Systems and Dairy Farming Businesses.

Dairy is a science-led sector. Much of the on-farm productivity gains over the past 30 years have been generated through science and technology, and science holds the key to dairy's future profitability, resilience, and continuous environmental improvement. The dairy sector sees that substantial gains are possible across environmental management, business innovation, and primary sector performance through greater and more strategic investment in science. This is why we are involved in Te Ara Paerangi.

We are actively contributing to the government's Te Ara Paerangi – Future Pathways programme to overhaul central government's research, science, and innovation system. Dairy sector representatives participate in the Food and Fibre Leaders' Group, a strategy group of primary sector leaders established in July 2020 to accelerate transformation of the food and fibre sector.

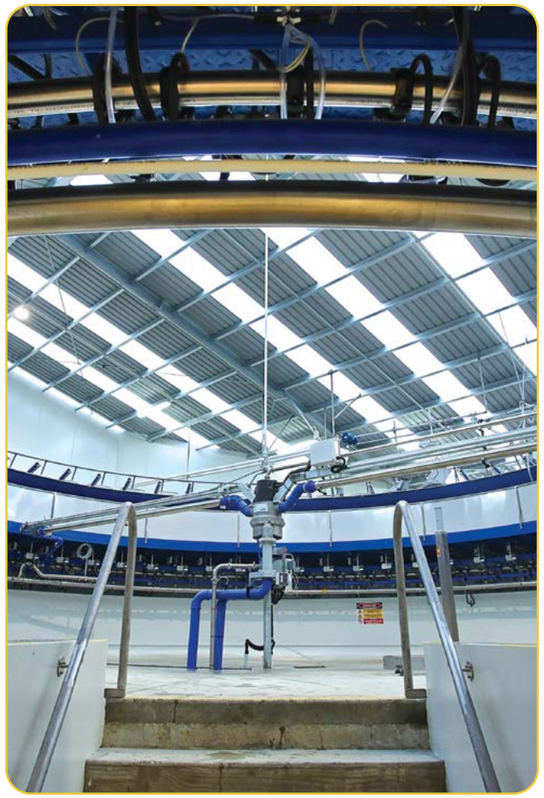
In the 2022 government Budget, $338 million was allocated over four years to accelerate and strengthen research and development into new technology to reduce on-farm greenhouse gas emissions. This investment will be administered through the Centre for climate action on agriculture emissions, with the Dairy Tomorrow partner organisations Fonterra and Synlait being investors in this group alongside other primary sector organisations (for example, Ravensdown).

Financial resilience

Although returns on dairy assets have improved, there are a number of growing pressures on farm businesses (such as rising costs of production). Dairy farmers have worked hard to increase the resilience of their businesses by cutting debt from $41.7b at its peak in July 2018, to $36.5b in December 2022.

As part of monitoring on-farm financial performance, we will report on the following averaged metrics and targets:

	Baseline (2016/2017)	Current (2021/2022)
Cost of production ($/kg MS)	4.7	6.5
Operating return on dairy assets	4.4%	7.6%



"Consistent, accurate data is a key to increasing productivity and profitability, as well as providing third party assurance."

Commitment three:

We will produce the highest-quality and most-valued dairy nutrition

Kī taurangi tuatoru: Ka whakaputa mātou i te taiora huamiraka kounga rawa, tino uaratia hoki

130

New Zealand dairy products are exported to over 130 different markets

90%

Dairy is the most internationally connected sector in the economy, earning over 90% of its revenue from trade

Robust food safety systems are a foundation of our export economy

Challenge: NZ dairy exports incur ~$5.4 billion in non tariff measures annually

$5.4B

The unique value proposition of New Zealand dairy is key to our exporting success

The New Zealand dairy industry's success is based upon its connection with customers and consumers globally. Being a preferred source of dairy nutrition requires access to markets and confidence that New Zealand's dairy story meets, and will continue to meet, the needs and expectations of customers for a reliable supply of high-quality, safe, sustainable products.

Dairy is the most internationally connected sector in the New Zealand economy, earning over 90% of its revenue from trade, and we have a long, proud history of exporting high-quality dairy nutrition to the world.

Over the past 170 years, New Zealand dairy exporters have developed a diverse portfolio of more than 130 different markets. In doing so we have carved out a reputation as a reliable producer of high-quality dairy products with strong commitments to free trade, the safety and suitability of our products, and efficient global supply chains.

Our areas of focus

In our goal to supply the highest-quality and most-valued dairy nutrition for global consumers, we collectively focus on the following three areas:

- Maintaining zero compromise on the food safety and integrity of New Zealand dairy products, through effective operation of the food regulatory and biosecurity frameworks that underpin dairy trade
- Ensuring consumers have the choice of New Zealand dairy nutrition by maintaining and growing New Zealand exporters' access to open dairy markets
- Ensuring the unique value proposition of New Zealand milk is understood by our stakeholders.

Maintaining our strong safety and integrity record

The food safety (regulatory) model that has supported New Zealand exporters' positions as trusted suppliers of safe, 'fit for purpose' food for domestic and international consumers is underpinned by robust science and risk-assessment processes, and features complementary roles and responsibilities for regulators, verifiers, and industry participants.

The Dairy Products Safety Advisory Council (chaired by DCANZ and attended by regulators, verifiers, and industry experts) meets quarterly. Over the past three years DCANZ and its member companies have also engaged actively with officials to provide feedback on the realignment of the Animal Products Act's secondary and tertiary regulatory instruments.

As the framework that dairy manufacturing and exporting companies work under to supply products to global markets, it is important that this legislative framework is effective and clear in applying food safety regulatory best practice to the dairy sector.

Covid-19 presented a unique set of circumstances requiring new operating protocols to maintain the safety of our teams while maintaining reliable supply to our global customers. A strong commitment to this goal from across the sector ensured a high level of operating continuity was maintained with dairy export volumes increasing.

New Zealand has been successful in taking an evidence- and science-based approach to risk management that enables us to consistently deliver outcomes that are important to our markets.

Like food safety, biosecurity is a shared responsibility between regulators and businesses. Through this lens DCANZ has played a leading role, supported by dairy companies and other industry organisations, in establishing the Biosecurity Business Pledge Initiative. This Pledge, which now has over 300 participants across the New Zealand economy, is growing the awareness and capability across the business community, including with Boards of Directors and CEOs, to better protect our businesses, economy, and lifestyle.

"Broader access to open markets also better positions New Zealand exporters."

Ensure consumers have the choice of New Zealand dairy nutrition by maintaining and growing New Zealand exporters' access to open dairy markets.

Trade in sustainably produced food is an important part of the solution to the global challenges of ending hunger and limiting climate change.

However, dairy markets are amongst the most protected and distorted of any traded market globally.

For example:

- 88% of global dairy consumption occurs in markets that continue to apply tariffs of over 10% or impose significant non-tariff barriers on imported products.
- New Zealand dairy exports are estimated to incur $5.4 billion in non-tariff measures annually.
- Agricultural subsidy payments that distort trade continue to grow globally.

Growing our exporters' access to open markets by bringing down tariffs, non-tariff barriers and trade distorting subsidies will allow more consumers the option to choose New Zealand dairy products and increase returns to New Zealand.

Broader access to open markets also better positions New Zealand exporters to navigate the turbulence that can occur in global trade from time to time.

The New Zealand dairy industry actively supports the New Zealand government negotiating high-quality Free Trade Agreements (FTAs) and engaging bilaterally and multilaterally to maintain and advance trade rules.

The 2022 signing of an FTA with the United Kingdom is an important addition to New Zealand's trade architecture. The UK is the world's second-largest dairy market (when intra-EU trade is excluded), with imports of approximately NZ$8 billion in 2022. This agreement sits alongside the China FTA as a model for high-quality FTA outcomes – both have end points of complete tariff elimination.

It is important that efforts continue to remove barriers into other protected dairy markets. For example, the internal EU market, which represents over 40% of cross-border dairy trade globally, will remain over 99% closed to New Zealand exporters even after implementation of the EU-New Zealand FTA.

The New Zealand dairy industry supports the New Zealand government taking action to ensure trade rules and commitments are upheld. In May 2022, New Zealand initiated dispute settlement proceedings against Canada under the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), challenging Canada's administration of its CPTPP dairy tariff rate quotas (TRQs).

Our commitments

Commitment: The New Zealand Dairy story is maintained and utilised

The unique value proposition of New Zealand milk is critical to our exporting success and comes from a combination of characteristics and integrity factors.

The New Zealand Dairy Story has been developed in partnership between the Dairy Companies Association of New Zealand (DCANZ), Dairy NZ, Federated Farmers and the Dairy Women's Network, with support from New Zealand Trade and Enterprise. It comprises a wide range of high-quality resources, including presentations, research, and on-farm footage, to support the New Zealand dairy sector and promote it to global markets.

This campaign is supported by the Made with Care global marketing and awareness programme to help exporters most effectively market New Zealand products. Made with Care is underscored by the principle of Taiao – the interconnectedness of our people and the natural world. If the natural world is healthy, so too are the people.

"Growing our exporters' access to open markets by bringing down tariffs, non-tariff barriers and trade subsidies will allow more consumers the option to choose New Zealand dairy products and increase returns to New Zealand."

Commitment four:

We will be world-leading in on-farm animal care

Kī taurangi tuawhā: Ka arataki mātou i te ao mō te tautiaki kararehe ki te pāmu

Strong progress made in stock wintering practices, rapid adoption of animal pain relief

New framework developed to ensure every animal is valued and treated with respect

85%

At least 85% of farmers are reporting animal health and welfare performance data directly to processors

We stand for world-leading animal care

Animal welfare remains one of the core priorities for the New Zealand dairy sector. Consumers, both domestic and international, rightly expect our farmed animals to be treated with respect and well cared for.

Within the New Zealand dairy sector, animal welfare is an area where we seek to be world-class. How we care for our animals flows through to the high-quality reputation enjoyed by our dairy exports in all corners of the world. There is also a direct connection between the welfare and treatment of our animals and the wellbeing of farmers.

Over recent years, farmers have made strong progress in core animal welfare areas such as stock wintering and the use of pain relief for standard animal husbandry practices.

Our areas of focus

Figure 1: Defining world-leading animal care

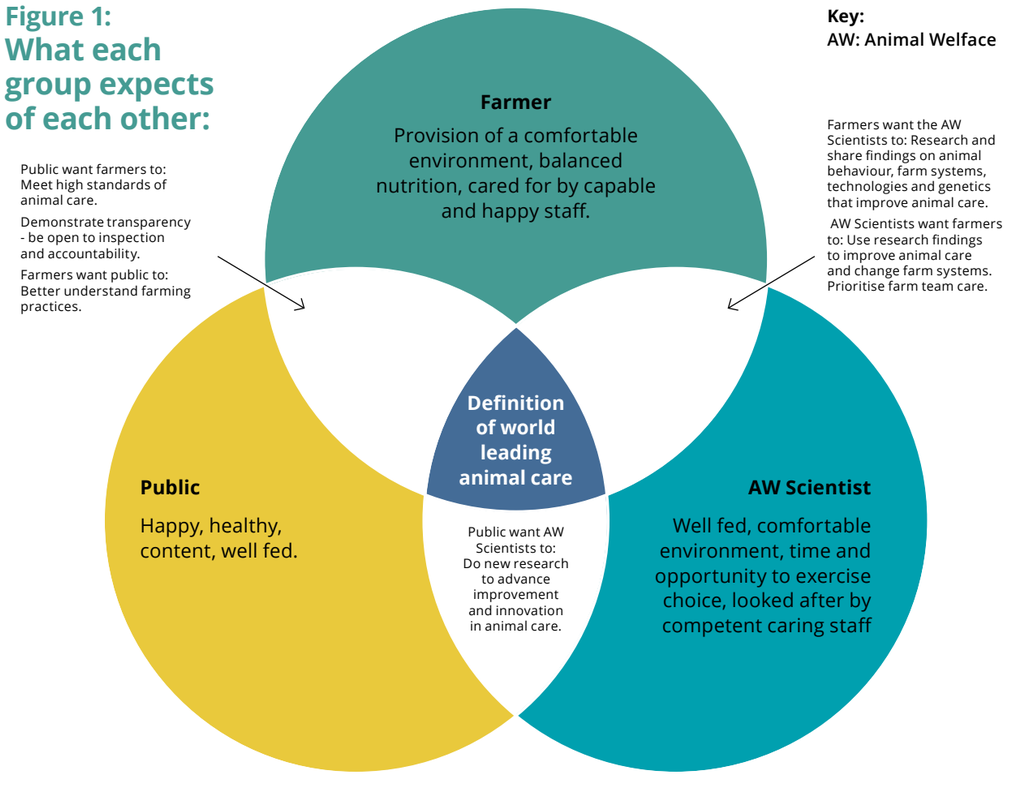
In standing for world-leading animal care, we started by defining what we meant by the term.

We developed a definition that reflected a wide range of viewpoints from a range of stakeholders, including the public, farmers, and animal welfare experts. We completed a phone survey of 1,000 members of the public and ran workshops with 350 farmers and 12 animal welfare experts to create this understanding (see Figure 1).

With care and respect at its centre, this framework commits dairy farmers to bringing together farm management practices, the views of the broader community, and the guidance and oversight of the agricultural sector experts, including veterinarians and central government agencies.

This approach is driving innovation and continual improvement in animal husbandry practices.

Figure 1:
What each group expects of each other:



Our commitments

Commitment: Develop and implement a framework that ensures every animal is valued and treated with respect

The following animal welfare framework (Figure 2) brings multiple stakeholders together in a practical system focused on our common animal welfare goals and commitments.

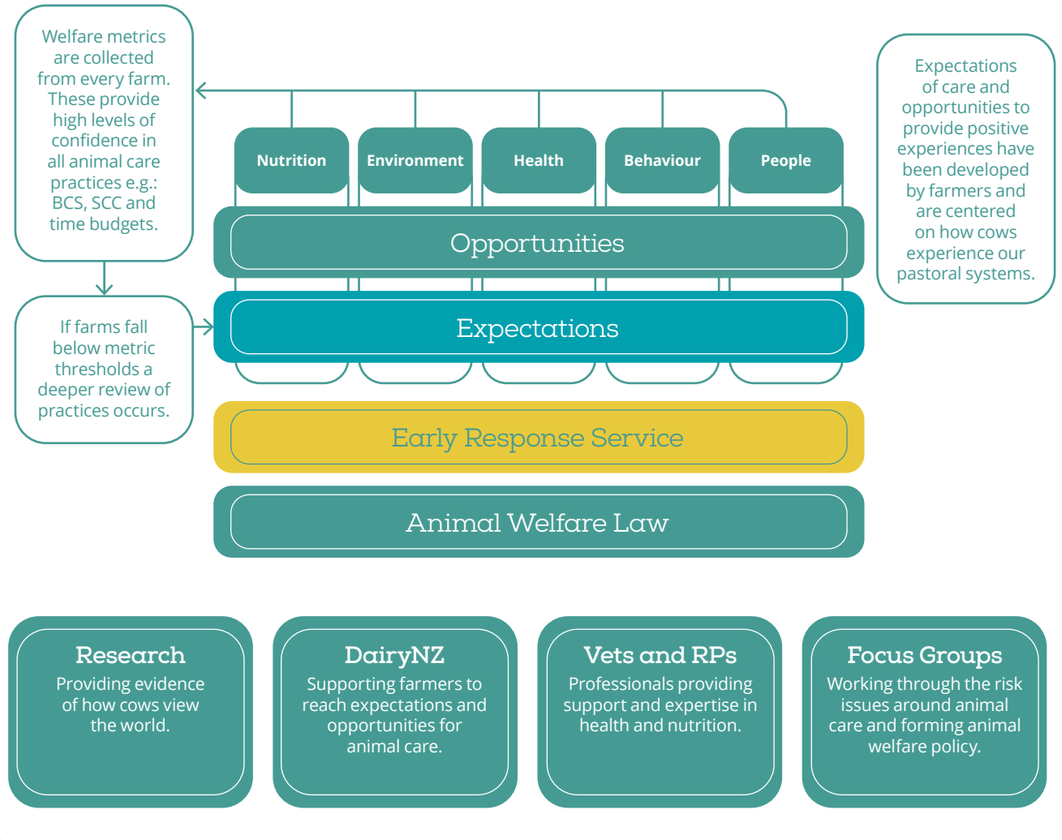
There is more work to be done to fully implement this system, but the vision is clear and the system is already driving change.

Commitment: By 2023, achieve all farmers implementing and reporting under the Framework

Currently, at least 85% of farmers are reporting animal health and welfare performance data directly to their processors, as required by their terms of supply. Most milk companies now have proactive animal health plans in place, signed off by a vet.

These are examples of how the milk companies, with their connections to international markets, work in partnership with farmers to support the process of continual improvement.

Figure 2:
Developing a world-leading system that ensures every animal is treated with care and respect.



Commitment: Lead the development and implementation of a strategy to enable every calf born in a dairy herd to live a purposeful life

Consistent with this system framework, in 2022 a cross-sector group was formed to lead the development of a sector strategy for non-replacement dairy calves – typically the predominantly male or 'bobby' calves.

This is one of the sector's most significant challenges and the strategy development process is likely to take up to seven years to complete. While the strategy development is occurring, initiatives in this area continue regardless. New regulations around the handling and transportation of non-replacement calves are in effect and dairy processors are taking material steps in terms of their animal welfare requirements of farmers.

We will provide an update on this cross-stakeholder strategy development in our next report.

Good management of stock wintering and outdoor farming

Consistent levels of rainfall support the New Zealand dairy sector, however winter soil moisture levels and the need for winter feed supplements provide on-farm challenges for farmers.

Stock wintering can include using crops as a source of intensive cattle feed over the winter months. It is a common way to ensure the dairy herd receives the nutrients it needs in sufficient volume over winter, but in concentrating the herd into a single cropped feeding area, there are issues that can emerge, particularly when soil moisture levels are high following extended periods of rain. Careful and skilled management is required to ensure cows have a comfortable surface to lie on.

No dairy farmer wants to see their cattle in mud. There are significant implications for animal health if wintering is not well managed and there are also significant environmental impacts, particularly on freshwater, of having stock in mud.

Using the system in Figure 2 ensures every animal is treated with care and respect to deliver best practice stock wintering, and the dairy sector has been working with regional councils, MPI and other stakeholders to continually improve. We formed focus groups (including government representatives and farmers), undertook research, and supported farmers to achieve good outcomes and provide the basis for improved practices.

The Early Response Service is an anonymous service which allows stakeholders (for example processing companies) to report concerns around any on-farm animal management practices, including on-farm wintering.

New regulations came into effect in November 2022, ahead of the 2023 winter grazing period and farmers have achieved significant improvements well ahead of these regulations. MPI inspections over the period from July to September 2021 found 96% of farms operating at or above minimum standards, with only one inspection breaching standards and requiring further action.

Minimising the impact of painful procedures

As well as advocating for policy at a national level to support improved animal welfare outcomes, dairy farmers are committed to operating to best practice ahead of rules and regulations.

The disbudding – the removal of cattle horns at the very start of their growth – is a good case study. Disbudding is an important and routine animal welfare intervention that protects the dairy herd from harming each other. However, it needs to be done with a great deal of care to minimise discomfort to the animal.

The sector had already moved to more than 80% of farms using pain relief in this process as a matter of course prior to the introduction of the 2019 regulations.

The industry is looking to extend the availability of approaches to reduce the need for disbudding, including through genetics.

Commitment five:

We will build great workplaces for New Zealand's most talented workforce

Kī taurangi tuarima: Ka waihanga mātou i ngā wāhi mahi hira rawa mō te rāngai mahi tino pūmanawa rawa

Challenge: to attract and retain a more diverse workforce that better represents the population

There is much we can learn from a stronger Māori contribution to our workforce

Great people, great jobs, great workplaces – we are making it happen

By 2035 retention in sector of new entrants after three years is equal to the average workforce retention across New Zealand of 24%

On-farm safety has improved but continuous improvement is essential

The dairy sector, like many industries across New Zealand, has faced a difficult few years maintaining and growing the workforce we need to operate to our potential.

At best, on-farm careers in dairying can be highly rewarding, well-paid outdoor work in beautiful settings. At its worst, the hours can be long and locations isolated, leading to pressures on mental and physical wellbeing.

The sector is focused on how we do better to keep the people we have by offering jobs, careers and lifestyles that meet their needs. This is as well as meeting business needs, and working to ensure we stack up competitively compared to other sectors. We have an opportunity to better promote the opportunities and pathways in dairy and fill the gaps with a more diverse workforce.

We are proud of the hard work and innovative practices our people showed during Covid-19 as essential workers, however we remain short-staffed and this is concerning. Our dairy workforce could use an additional 2,000 workers. We recognise it is important to act now to ensure we develop the resilient workforce we need.

Our areas of focus

Great futures in dairying

The dairy sector is united in its understanding of this challenge and the importance of addressing it. In 2022, Dairy NZ and partners launched a 10-year strategy and action plan – Great futures in dairying: our plan for a resilient workforce.

It recognises three primary problems facing the dairy workforce:

- it is not keeping enough people with the right skills
- it is heavily reliant on people to operate
- it is not attracting enough of the right people.

Many of dairy's workforce problems are a consequence of shifting demographics – slowing population growth, an ageing workforce, and continued urban drift.

Figure 3: Dairy's evolving workforce

Figure 2: New entrants to the dairy farming workforce by year and source (Stats NZ IDI)

Our commitments

In responding to these workforce challenges, the focus is on three areas of commitment and action:

- Shape up – so we are competitive, and we grow and retain our people
- Change the job – to provide modern, productive and safe workplaces
- Look in new places – to attract a larger and more diverse talent pool.

Shape up

Commitment: Shaping up means we offer jobs that attract a talented workforce because they are competitive in the wider job market and offer great personal growth, lifestyle and career opportunities so they stay. Our on-farm teams have the capability required to ensure our businesses are profitable and sustainable.

While the challenges in our workforce have been apparent for a number of years, Covid-19 presented additional challenges and saw key metrics move backwards rather than forwards.

In seeking to build the dairy workforce we need to retain new workers beyond the first three years.

Target	Target (2018 cohort NZ average)	Current (2021)
Retention in sector of new entrants after three years is equal to the average workforce retention across New Zealand. To be achieved by 2035.	24%	22%

Dairy farmers' reputations as employers are essential to attracting new staff.

Target	Target	Current (2021)
80% of employees would recommend working for their employer to a friend	80%	78%

'Shape Up' is a key area of on-farm focus, particularly ensuring farmers know what it takes to be a competitive and desirable employer. In support of this, a great deal of work has also been undertaken to demonstrate the value of the dairy sector and its contribution to our economy and communities.

Change the job

Commitment: Changing the job means our workplaces are continually evolving to ensure they are modern, productive and safe places that people enjoy coming to and working in.

Health and safety performance is critical to dairy's reputation, social licence to operate, and ability to attract and retain its workforce. Looking back over the last five years, the majority of on-farm health and safety incidents occur in the spring calving period between August and October.

While injuries are typically sprains and strains, these are numbers that reflect the demanding physical nature of dairy farming, particularly during calving. We are committed to working with farmers and across our stakeholders to bring down this injury rate, including through working with ACC's Workplace Injury Prevention Programme to research the cause of sprains and strains on dairy farms, and develop solutions to reduce them.

Work-life balance must be an area of constant focus, for both staff and farm owners. We are piloting innovations and systems where people have more flexibility in choosing the number of hours they want to work and knowing that hours they do work will be paid at competitive rates.

Health and safety	2017/2018 season	2021/2022 season
Injuries resulting in a week or more away from work.	2,448	2,094

The role of technology

Farms are increasingly digitising to manage on-farm pressures and increase productivity. Broadband connectivity is now widespread across almost all dairy operations and the use of satellite connections, such as StarLink, is enabling the most remote operations to connect.

Technology, including reliable, fast internet, is critical to measuring, recording and then sharing the increasing volume of on-farm data that is required by processors and regulatory agencies.

New technology is beginning to be adopted to automate some of the core functions of a modern dairy operation and to increase efficiency. Technology is an important part of changing the job both to attract new staff and to reduce the demand on current farmers.

Supported by rigorous sector research and science, another initiative that is driving improvements in dairying is more flexible milking schedules. Being less regimented in when cows must be milked is generating greater on-farm flexibility and staff rostering options.

Look in new places

Commitment: Dairy farm employers can source the number of staff they need and farmers are open to employing people from diverse backgrounds, by looking in new places dairy farms are seen as great places to work for people from all cultures and backgrounds.

Diversity of workforce

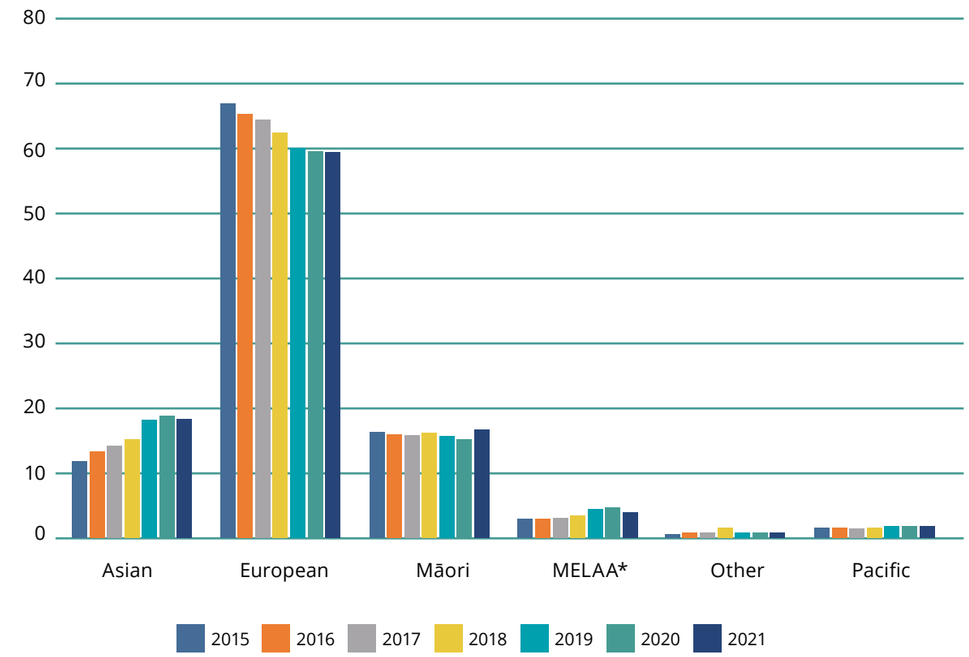
In acknowledging the historic reliance on migrant labour and in working to attract more skilled staff, we have an opportunity to attract and then retain a more diverse workforce that better represents the population of New Zealand.

For context, by 2043, half of New Zealand's working-age population will identify as Māori, Pacific Peoples or Asian. Our workforce will transform over the coming decades, and we need to actively build inclusive workplaces that support greater participation from across the New Zealand population. In building a more diverse workforce, we increase our resilience.

As a sector there is much we can learn from a stronger Māori contribution to our workforce. Te Ao Māori recognises the fundamental interconnectedness between people and the natural environment, which is deeply relevant for the continued evolution of our sector. As well as the sector benefitting greatly from the growth of Māori agribusiness, this growth also provides employment and business opportunities, encouraging whānau to return to their whenua, exercise their role as kaitiakitanga and reconnect with their communities.

Currently women make up approximately 33% of the on-farm dairy workforce and there is a significant opportunity to encourage more women into paid dairy careers. The use of technology and the introduction of more flexible milking schedules can also help make dairy careers more family-friendly as well as attractive to young people.

Figure 4: Ethnicity of on-farm employees over time



*MELAA: Middle Eastern/Latin American/African

The percentage of farm staff aged between 20 and 30 has been steadily declining for the last decade. The on-job training available for young people within a rural lifestyle is an attractive proposition that as a sector we are promoting more widely. Upskilling the next generation of farmers is also an opportunity to expand dairy's contribution to the country and economy.

A young person entering a position on a dairy farm can rapidly learn a wide range of skills to support multiple future careers from animal husbandry to environmental monitoring, staff leadership, and the science and technology of modern farm management.

> "Te Ao Māori recognises the fundamental interconnectedness between people and the natural environment of which we are a part, which is deeply relevant for the continued evolution of our sector."

Commitment six:

We will help grow vibrant and prosperous communities

Kī taurangi tuaono: Ka āwhina mātou ki te whakawhanake i ngā hapori ngangahau, taurikura hoki

55%

55% of dairy farmers/workers experienced a mental health issue in the last 12 months (down from 62% in 2020)

Changing regulations, public/media perception of the sector, and financial concerns are the major drivers of wellbeing issues

55–59%

Percentage of public with a positive impression of the sector has increased from 55% to 59%

Challenge: The quality and resilience of infrastructure are critical issues for rural communities

Our final commitment area brings together all of our previous commitments to build a sector that maximises its social, economic, and environmental contribution to New Zealand's communities.

Dairy is the cornerstone of many rural communities. Contributing to building vibrant, prosperous communities requires the sector to deliver on all its commitments: nurturing our environment; building resilient businesses; producing the highest-quality dairy; providing world leading animal care; and building a diverse and representative workforce.

This commitment requires effective advocacy and leadership, for example, in ensuring investment in resilient infrastructure in rural communities and policy recognising the contribution of rural communities to the country's wellbeing.

Our areas of focus

In February 2023, Cyclone Gabrielle highlighted the importance of modern, resilient infrastructure for the Northern and Eastern areas of the North Island, particularly rural communities. The quality and resilience of our roads, flood protection systems, water infrastructure, and electricity and communication networks are all of critical importance to rural communities.

Significant investment is required in many rural communities as they experience the impacts of more frequent adverse weather. We must also work to ensure we are heard as a sector on broader rural policy issues.

The dairy sector is acutely aware of the importance of actively managing its reputation, telling its stories and being transparent about its commitments and progress. We monitor public perception of the sector and the issues that are most material across stakeholders. Public and media perception of the dairy sector are major contributors to mental wellbeing challenges amongst farmers and their staff.

Public perception of the dairy sector

	2019	2022
Percentage of New Zealand public with a positive overall impression of the sector	55%	59%

Managing the pressures on rural wellbeing

In the 2021 Dairy NZ report 'The View from the Cow Shed', the pressures on the mental wellbeing of dairy farmers and their teams were highlighted.

55% of dairy farmers said they or a person in their team had experienced a mental health issue in the last 12 months. This number was down from 62% in 2020. The three major reasons given for mental wellbeing issues on farms were changing government regulations, the public/media perception of the dairy sector, and financial concerns.

Over two thirds of respondents did not feel as though there was enough support for farmers experiencing mental health problems.

Since 2021 the pressures farmers face have continued to increase, including the scope and pace of the regulatory load, financial pressures, and Covid-19.

Across the rural sector many organisations, including the dairy processors, Dairy NZ, Federated Farmers, Rural Women New Zealand, and the Rural Support Trust, are working to better support farmers' mental wellbeing. Dairy NZ has been working alongside these agencies in publicly advocating for better mental health services and funding for rural communities.

While we have welcomed increased funding for mental wellbeing, our concern and ongoing focus is on ensuring this translates into improved access to services for farmers.

Infrastructure

To assist in efforts to improve rural connectivity, Federated Farmers (a partner of Dairy Tomorrow) runs its rural connectivity survey each year. Surveying farm businesses on their experiences of internet connections, mobile coverage, and landline voice calling services helps us understand where and what the connectivity issues might be.

This work also helps secure government funding for both upgrading the capacity of many rural towers as well as more targeted investment in delivering connectivity to those with no or poor connectivity on farm.

Connectivity plays a big part in ensuring the health, safety, and wellbeing of our rural communities. Good quality connectivity helps rural people overcome the struggle to seek help or advice, to join social groups, or take up support services. Telehealth services, as an alternative to in-person appointments, help rural people avoid potentially long travel times when it is often difficult to take time away from what needs to be done on the farm.

Case study: Bringing community, conservation and wellbeing together

A case study that demonstrates the interconnectedness of dairying's operations and its potential to drive positive change is the Tarere conservation project in the Taranaki.

Just 30 years ago, kiwi could be found running through the paddocks in and around Tarere Conservation Park.

"I've heard one got picked up for a school show-and-tell back then – that's how common they were," says local dairy farmer Damian Roper. "I'm told you could also hear them when checking on the cows at night."

Avid conservationists, Damian and his wife Jane own a 273-hectare farm in Alton, which backs onto Tarere Conservation Park. They're part of the Pātea River Community Catchment Group, which has a core membership of eight (most are dairy farmers), with other local farmers, iwi and communities also involved.

The group's pest and predator control project aims to restore kiwi numbers across the top end of the park. The group has an existing trapline, checked fortnightly, and over the next three years, will add another 1,200 GPS-linked traps across the area's ridges and gullies, targeting ferrets, stoats, rats, and hedgehogs.

It's just one of many projects spread over 14 catchments and overseen by Taranaki Catchment Communities (TCC), an MPI-funded initiative formed in 2021. Pātea farmers are trapping pests and helping bring kiwi back, in one of many catchment projects helping Taranaki locals farm in harmony with the environment.

"TCC supports Taranaki's rural sector towards a more environmental, economic and socially sustainable future, plus projects aimed at improving farmers' mental health and financial literacy," says TCC project lead Paul Turner.

As well as providing Paul with an office, DairyNZ donates time and expertise for the kiwi project, alongside Beef + Lamb NZ, Federated Farmers and Venture Taranaki.

"DairyNZ's credible and far-reaching channels are helping get the group's message out there, which is leading to more collaboration and better traction with farmers," says Paul.

Damian and Jane are thrilled about how the kiwi project is bringing farmers, iwi, and the wider community together in a big way. "We've had a whole lot of people come out of the woodwork because they share the same passion for biodiversity, for wildlife and the protection of our conservation park," says Damian.

"We have to protect our valuable flora, fauna and our environment and combat climate change," he says. "Not just the farmers, but all of our community."

Find out more at **www.taranakicc.nz**

7.

Contacts and directory

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dairy tomorrow

The future of New Zealand dairying.