

dairy tomorrow

The future of New Zealand dairying.



The dairy industry strategy 2017 - 2025

Introduction

In 2013 the Strategy for Sustainable Dairy Farming was adopted, creating a framework of ten goals outlining what it means for dairy farming to be competitive and responsible. A further 16 ambitious targets for 2020 were set to track the progress being made, with annual reporting against those.

Fast forward to 2017 and much has changed in that short time. Strong progress has been made against the goals of the strategy launched in 2013, however much about our global and local operating environment is changing at a rapid pace; the Strategy needed to be refreshed to ensure that the priorities and their direction were calibrated with expectations of farmers, the sector and the wider stakeholder community. On many aspects the priority and focus has not changed; in other areas changing expectations or increasing pressure is highlighting a need to reset our aspirations and try new approaches.

Expectations of dairy farming in New Zealand continue to rise and new technologies are emerging in agriculture and global food value chains with the potential to significantly disrupt the status quo. Current trends and issues are already signaling what future consumers and customers might expect and value from New Zealand dairy.

Farmers and the sector are aware that perceptions of dairying by the New Zealand public have changed in recent years as the sector has grown and as urban and rural communities have become less connected. The

impacts of changing land use and the growth in dairy farming has put the spotlight on the sustainability of dairy farming in New Zealand.

Ongoing market volatility and a competitive international dairy market continues to put pressure on farmers to be cost-efficient and productive. New Zealand has a strong reputation for producing high quality food and the primary sector continues to play a critical part in the economic and social wellbeing of the country and rural communities in particular.

This Refresh has aimed to bring all the relevant factors together toward a shared vision for the future of sustainable dairy farming in New Zealand. In doing so it builds on the previous and existing Strategies that focused on improving the competitiveness of the dairy sector and fulfilling its obligations to act responsibly. Where previous Strategies have focused largely on shaping dairy's actions to achieve its priorities, this Refresh has highlighted that dairy's challenges and opportunities are just one part of a far broader context of our collective endeavour to define and work toward a future vision for New Zealand and its role in the world. Working alone will not solve our shared challenges or realise our potential, we must find new ways to partner and collaborate for our shared success.



The fundamentals

Our approach in this Strategy is informed by some fundamental beliefs and positions about dairy in New Zealand:

1 We believe that sustainable dairy farming has a critical role to play in New Zealand's future prosperity and wellbeing.

Sustainable dairy farming improves the lives of our consumers through continuing to provide them with safe and nutritious products that help them live healthy and fulfilling lives. Milk is a natural, highly functional and nutrient dense food source which plays an important role in global nutrition. Few other foods deliver such a range or richness of nutrients in an important matrix that has unique benefits for health.

Sustainable dairy farming also improves the lives of dairy people. We strive for profitable and productive farming businesses and to provide rewarding and enjoyable careers that enable everyone in the dairy value chain to grow, learn and develop, with a work environment that keeps them safe and well. We will work with farmers to realise the exciting possibilities that exist for the long term development of sustainable food and farming in New Zealand.

We are committed to ensuring that dairy also improves the lives of the people in our communities, both our neighbours and those in towns or cities, through the contribution of the dairy sector to the prosperity and wellbeing of New Zealand. Working with all those in our food and farming value chain, we can positively contribute to New Zealand being a great place to live.

2 We are committed to successfully farming within environmental limits

This Strategy commits the sector to working with farmers and other industry stakeholders to successfully farm within environmental limits. With respect to water, where

communities identify environmental limits have been reached, further contaminant loss is not acceptable and reductions in contaminant losses may also be required. We do not support growth or intensification where this will exceed limits.

New Zealand is well-known for our rich and diverse natural landscapes. Land use needs to be aligned to the specific capacity and characteristics of each area or catchment, with science and evidence supporting the determination of activities that should be permitted and/or controlled, and taking into account environmental, social and economic considerations.

We support outcome-based policies and a planned approach to land use. We do not support the blanket capping of production or cow numbers as the first-best solution. Elsewhere in the world where milk production has been limited by quotas, it has stifled innovation. New Zealand needs approaches that focus on driving innovation to achieve our desired outcomes.



The sustainable management of New Zealand's resources and protection of our natural environment is a shared responsibility that is bigger than any individual farm, community or sector. The dairy sector is committed to playing its part and we want to work collaboratively with government, regional and local councils and communities to protect and nurture the environment.

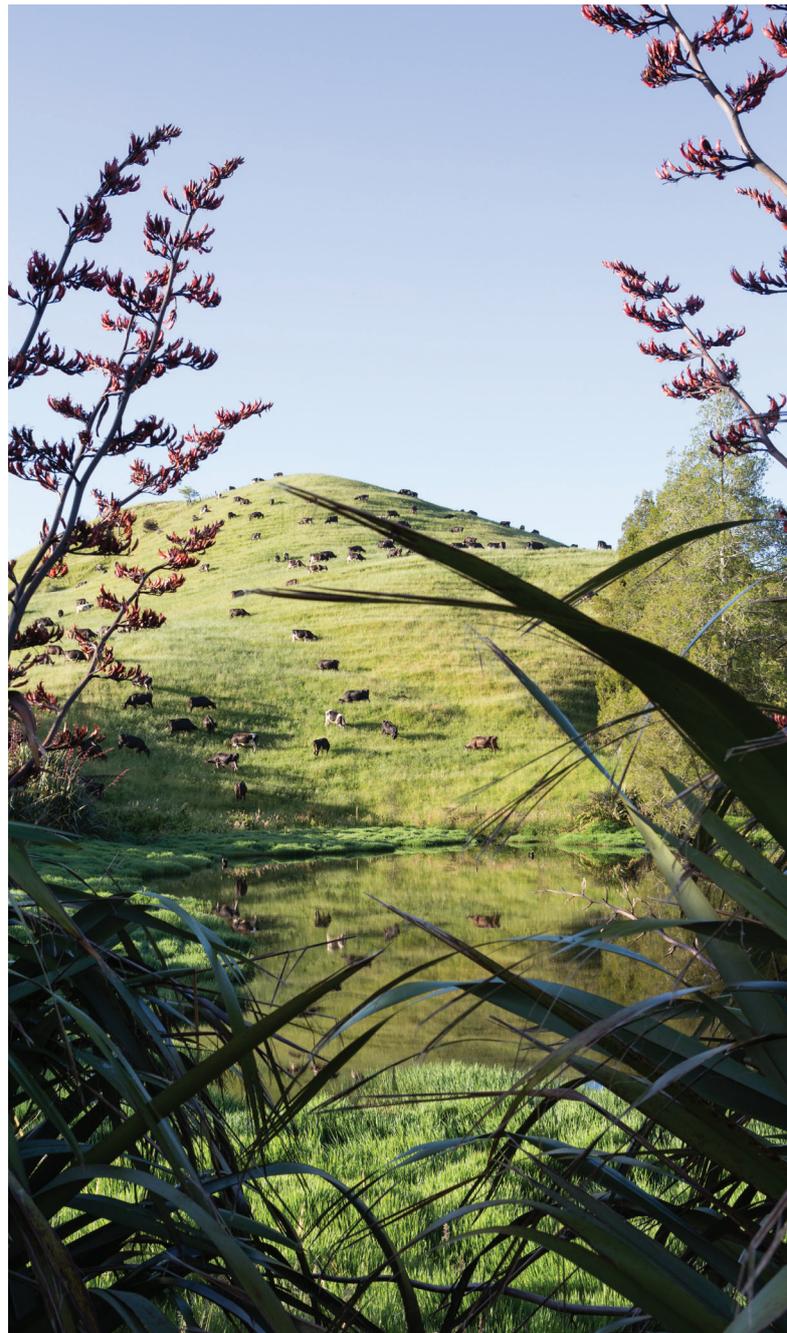
3 We are committed to maximising value from New Zealand milk while preserving the benefits of our pasture-based system.

New Zealand's pasture-based production offers natural competitive advantages for New Zealand dairy products on the world market, including cost efficiency, animal health and welfare and naturalness. Our pasture-based means that our production is unique in the world for its seasonality, with the most widely diverging production volumes across the season of any of the major dairy producing countries.

Only around 5% of milk is needed to meet our local requirements. The rest is sold on world markets, generating one in every four dollars of export returns to New Zealand that help us as a country pay for what we need to import, and contributing around 3.5% of New Zealand's total GDP annually to support a prosperous local economy.

With substantial investment in processing capability, product development and marketing, the sector has successfully been growing the share of milk being processed into non-commodity, specialty or consumer products which now utilises around 40% of milk.

While the share of milk used to make commodities is likely to reduce further over time, commodities will always be an essential part of the New Zealand dairy value chain. Commodities are products that are largely standardised, have a fairly uniform 'world' price and are largely used as an ingredient in other products. Commodity prices may be volatile, but this does not equate to low value, particularly for highly efficient producers like New Zealand. By being a supplier of high quality agricultural commodity ingredients, including whole milk powder, skim milk powder and butter to world markets, we can add value to every drop of New Zealand milk from our highly seasonal pasture base.



4 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.

New Zealand's strong regulatory frameworks and exposure to global competition have driven innovation and improved performance throughout the history of the sector. New Zealand has constantly strived to achieve high



standards of quality, safety, employment, environmental protection and human and animal health and welfare.

As a sector we take responsibility for the care of our people, animals and the environment. We also recognise that stewardship of the sector's reputation is the equal and shared obligation of every individual in the value chain. In the future of food there will be no room for poor performance.

Farmers who have participated in this process want to work collectively to ensure that we act responsibly and protect our reputation. They want to support other farmers who may be struggling to meet the relevant standards or regulatory requirements because of stress or other challenges.

We must hold each other to account as well as all those in our value chain. Stronger action should also be taken to address persistent or deliberate disregard for industry or regulatory requirements or standards particularly those for the protection of people, animals and the environment.

We are committed to further developing voluntary industry standards and actions, encouraging a culture of personal responsibility and accountability across the sector and taking stronger action to address non-compliance. We also call on local and central government to strengthen enforcement actions and, where necessary, regulatory frameworks, so that breaches are appropriately and consistently penalised and non-compliance strongly discouraged.

5 We are committed to greater transparency, openness and working together.

This Refresh process has provided the opportunity to listen to a broad range of stakeholders, officials, and experts, as well as farmers and other participants of the sector. What we have heard is the importance of working better together and that we need to be more open and transparent as a sector. We have heard from farmers and others that they want to maintain the close connections between farmers and rural and urban communities that have been an important part of New Zealand's heritage. We also know from our experience of implementing the Strategy so far that we are collectively more agile and adaptable to change when we can build on strong relationships and connections.

Our intent is for this Strategy to be a framework for sustainable dairy farming in New Zealand to guide and influence the actions of the whole of the dairy value chain, its partners and stakeholders. We are committed to working collaboratively, both locally and nationally, with government, other sectors and the wider community, to achieve our shared goals. We will build stronger connections with Māori across all areas of the Strategy and work together on our common aspirations, including with respect to kaitiakitanga, communities and a thriving Māori economy.

We will also provide transparency and openness on our positions, progress and performance on the key aspects of sustainable dairy farming that are the focus of this Strategy. To support this, we have adopted specific goals that will achieve greater transparency, and embedded openness and collaboration in the principles that we have adopted to guide implementation actions.

Commitments and goals

The following commitments and goals set out our aspirations for what we want to achieve together as a sector and working collaboratively with others over the next decade and more. They reflect the key priorities for dairy farming in New Zealand to be sustainable for the long term, through being trusted and valued, productive and competitive. Proactive leadership in these areas will help to achieve our vision of the future where dairy contributes to New Zealand being the best place to live and is a celebrated part of the national identity and Kiwi way of life, where dairy generates returns and rewards for all dairy people and our communities, has a culture that people want to be part of and makes our dairy products the world's most preferred. These commitments and goals are aligned with the United Nation's Sustainable Development Goals and the Dairy Sustainability Framework and will support the New Zealand dairy sector to contribute to these global initiatives.

COMMITMENT 1: WE WILL PROTECT AND NURTURE THE ENVIRONMENT FOR FUTURE GENERATIONS

We will achieve this commitment by taking a leadership role in meeting the aspirations of New Zealand communities for their waterways and New Zealand's international commitments to combat climate change. To help shape the dairy farming systems of the future, we will engage with farmers, communities and other users of land and natural resources to develop a 50 year vision of sustainable land use in New Zealand. We will support dairy farmers to manage their environmental footprint in the context of their specific farm system, geography and regional priorities.

Goals

1.1 Lead efforts to improve the health of our rivers and streams and protect and enhance biodiversity, beginning in 2018 with collaboration with other rural and urban land users, central and local government and communities on strategies and actions toward achieving swimmable waterways.

1.2 Lead efforts on agriculture's contribution to meeting New Zealand's climate change goals through identifying and implementing strategies to reduce or offset greenhouse gas emissions from dairy farming.

1.3 With communities, government and other land users develop a blueprint for a 50 year vision of sustainable land use in New Zealand by 2025.

1.4 By 2025, achieve all farms implementing and reporting under certified farm sustainability plans.

COMMITMENT 2: WE WILL BUILD THE WORLD'S MOST COMPETITIVE AND RESILIENT DAIRY FARMING BUSINESSES



We will meet this commitment by investing in innovation and adoption to push out on-farm performance boundaries on research farms and in wide-spread practice, surpassing our international competitors and meeting the sustainability targets of our communities. We will assist individual farming businesses to be structured and managed in a way that provides resilience against volatility and change. We will work to reduce the risk to the farming business and New Zealand's natural resources from biosecurity incursions through a focus on promoting best practice systems and processes. We will leverage the benefits of new digital and other technologies, supporting farmers and the sector by enhancing data connectivity, decision making and transparent reporting.

Goals

2.1 By 2018, develop benchmarks and targets for international competitiveness, resilience, sustainability and community expectations for our future farm systems to achieve, and report annually from 2019 on the performance of research farms and the wider sector against these benchmarks and targets.

2.2 By 2020, join with government and industry investors to develop and implement a co-funded, sector-led 'National Science Challenge' for dairying to deliver the next generation of tested, cutting-edge science and technology solutions for future farm systems.

2.3 By 2025, 10% of dairy farms annually will have completed a whole farm assessment to identify and capture improvements in farm performance, with annual improvements in business performance and resilience measures reported from DairyBase.

2.4 By 2020, improve data connectivity so that farmers needs for valid data can be met by authorised data exchange between organisations.

2.5 Develop initiatives to reduce the risk, and impact on farm profitability and productivity, of biosecurity incursions.

COMMITMENT 3: WE WILL PRODUCE THE HIGHEST QUALITY AND MOST VALUED DAIRY NUTRITION



We will achieve this commitment by continuing to build consumer confidence in the safety and integrity of New Zealand dairy products. We will protect and enhance New Zealand's reputation as a producer of safe and high quality dairy products by working together to achieve recognition of the value proposition of New Zealand milk and pasture-based farming systems. We will support access of consumers to New Zealand dairy products through addressing barriers to trade and promoting the fair treatment of New Zealand dairy products in the market.

Goals

3.1 Maintain zero compromise on the safety or integrity of New Zealand dairy products.

3.2. Ensure consumers have the choice of New Zealand dairy nutrition by growing New Zealand dairy exporters' access to open dairy markets to equal 30% of global consumption.

3.3 By 2020, implement a strategy to promote the unique value proposition of New Zealand milk.

COMMITMENT 4: WE WILL BE WORLD LEADING IN ON-FARM ANIMAL CARE

We will achieve this commitment by building on the strong regulatory and voluntary frameworks in place in New Zealand for animal health and welfare to create a future-focused and dynamic framework for world leading on-farm animal care that supports continuous improvement. We will begin by defining (with input from farmers and national and international experts) what constitutes world leading practices and performance for animal care in New Zealand, and identify any measures, actions or further research that should be incorporated into the framework in order to respond to emerging issues or trends. Through the framework we will promote transparency about New Zealand dairy performance on animal care aligned to global indicators.

Goals

4.1 Develop and implement a Framework that ensures every animal is valued and treated with care and respect.

4.2 By 2023, achieve all farmers implementing and reporting under the Framework.



COMMITMENT 5: WE WILL BUILD GREAT WORKPLACES FOR NEW ZEALAND'S MOST TALENTED WORKFORCE

We will achieve this commitment by building a strong culture that values people and creates vibrant teams. We will make it a priority that all our people are healthy, well and get home safe every day. We will make dairy farming an inspiring profession that offers great career options for our people. We will improve our on-farm workplaces through implementing a Workplace Action Plan committed to a work-life balance that improves business performance while rewarding the individual. We will work with other primary sectors and education institutions to build integrated pathways that bring people into dairy careers with the skills and training needed for tomorrow's food and farming sector.

Goals

- 5.1 By 2025, ensure all farm businesses have best employment practices and quality work environments operated by vibrant and proficient farm teams.
- 5.2 By 2020, implement people initiatives to inspire, attract, grow and retain dairy talent.
- 5.3 Ensure everyone gets home safe and well every day.
- 5.4 By 2020, implement new programmes to support and integrate new entrants into the sector and our rural communities.

5.5 By 2020, implement programmes to build and sustain our governance and management skills-base through diversity and leadership.

COMMITMENT 6: WE WILL HELP GROW VIBRANT AND PROSPEROUS COMMUNITIES

We will achieve this commitment through implementing this Strategy to ensure that dairy farming continues to create social and economic value for New Zealand communities both urban and rural. We will build stronger communities through strengthening community connections and leadership, and helping our regional communities secure infrastructure and services necessary for their economic and social wellbeing. We will build trust through being open and transparent.

Goals

- 6.1 Help strengthen communities through growing community leadership and building stronger connections, including urban-rural relationships.
- 6.2 Influence the delivery of infrastructure and services in rural areas that support regional economic and social wellbeing.
- 6.3 By 2025, be a highly trusted business sector in New Zealand.



About the refresh

The Strategy of 2013 is the foundation for the Refresh, which has been done in five phases. Firstly there were discussions with the Partners and leaders in the sector. This confirmed the need and scope of the Refresh and its purpose to maintain and strengthen the role of the Strategy in guiding industry and stakeholder activities and supporting a collaborative and integrated approach to achieving the industry's strategic objectives.

Secondly there was a research phase, beginning with a thorough review of implementation of the Strategy so far to understand where progress had been made or had been slow or difficult.

In addition, research was undertaken to scan both the local and international environment on the key factors impacting the dairy sector both in New Zealand and internationally.

This research first sought to understand what had changed since the Strategy was developed in 2013, examining how the operating environment for dairy had evolved in the four years. The research also looked ahead, identifying factors that were emerging in the near and far term and what potential influence these could have on the dairy sector. It also looked at what other dairy sectors around the world were doing.

The research phase also included discussions with a range of organisations, government officials and interviews with a small sample of stakeholders and representatives of international dairy organisations.

Aligned with the horizon scan, these interviews sought to get a sense of direction and importance of the types of factors that will or could impact the global and New Zealand dairy sector. While the horizon scan gave a long list of factors to consider, the interviews helped focus or amplify a smaller set of topics and gave a deeper understanding of a set of issues from the perspective of stakeholders who play a role in the governance and direction of the dairy and food sectors globally.

The outputs of this research were condensed and a set of key themes were synthesised that sought to describe - in a

high level manner - the ten key 'material aspects' that the strategy would ideally need to consider and respond to.

Phase three of the Refresh aimed to test these 'aspects' with a broad range of stakeholders in order to build a deeper understanding of the New Zealand perspective. Stakeholder workshops were held across New Zealand where stakeholders were asked to identify themes or factors that were missing or needed a New Zealand context and, taking the process one step further, stakeholders were asked to prioritise the material aspects relative to whether the aspects will have lower or higher pressure in the future versus the current actions being taken by the dairy sector. These materiality matrices were consolidated and used in the formation of the ambitions and goal setting in the strategy.

Phase four of the Refresh was to take what had been heard and discovered throughout the process and seek input from farmers directly.

Farmers, who are key partners in this strategy, were engaged from the outset of the refresh, both through the traditional channels of the Partners, as well as online surveys and face to face workshops. Farmers were asked to identify and prioritise the key aspects that they felt from their perspective needed to be addressed in the Strategy. Through the workshop process, farmers were then asked to build on the priorities, testing the possible core objectives and giving a critical practical 'on-farm' sense of what would be needed to make progress on each.

Given that there are over 11,000 farms in New Zealand, it wasn't going to be possible to engage with every dairy farmer but through the workshops, farmer networks and online surveying the feedback and topics were very consistent and discussions gave a good representation of the general ambitions and concerns of New Zealand dairy farmers.

The fifth and final phase of the Refresh has been to develop a set of commitments and goals that reflect what we have heard and learned, and to provide a framework for further action in the future.

The story so far

As outlined above, the first phase of the Refresh was to look at the implementation of the Strategy to-date to see where progress had been made, the challenges experienced and what had been learned. The full report is available [here](#).

Key lessons include the importance of investing significantly and for the long term to find solutions that support sustainability. Real progress has been made in key areas such as reducing nitrogen loss and reducing greenhouse gas emissions. Over time this research will provide farmers with options to maximise the efficiency of the resources they use while reducing negative environmental impacts.

A further lesson has been the challenge of responding to the ever increasing pace of change in expectations, regulation or requirements of dairy farming, in a complex biological system where making changes takes time. Innovation in science, technology and farming practices is going to be critical to the sustainability of dairy farming in New Zealand.

We have a rich 'number eight wire' heritage and tradition of challenging the status quo that we can build on. The review of implementation has highlighted where further

work is needed, for example to ensure that the sector has fit for purpose and joined up data systems to enable dairy farming to take full advantage of the benefits of the digital revolution. Such systems can help to drive improved performance as well as to be transparent and demonstrate our performance to consumers and others.

People underpin our success as a sector, and implementation of the Strategy has included developing two key initiatives. The first is aimed at attracting people to want to work in dairy and the primary sector (the Primary Industries Capability Alliance) and the second is making our farm businesses great places to work (the Sustainable Dairying: Workplace Action Plan). These are long term change programmes beginning with developing and rolling out foundational actions, programmes and tools.

Reviewing implementation of the Strategy so far has also highlighted that better outcomes are achieved where the sector is proactive, has well established relationships and collaborative frameworks and demonstrate leadership. Having targets and goals gives direction to investment and effort, and provides for transparency and openness about performance.

The story so far - key areas of progress:

- The Sustainable Dairying: Water Accord goals, with 6 out of 11 targets achieved, and another three on track, including nearly 100% of waterways now fenced
- The establishment of the Primary Industries Capability Alliance and launch of 'GrowingNZ', to promote careers in the primary sector, reaching more than 60% of secondary schools and 38,000 students
- The Sustainable Dairying: Workplace Action Plan to assist dairy farming businesses to adopt good workplace and people management practices
- Progress on research outcomes that are key to reducing dairy's environmental footprint, including reducing nitrogen loss and GHG emissions
- Building leadership and capability of farmers and rural professionals to respond to new expectations of farming, including through development programmes, training and certification



The local and global context

The Refresh is also underpinned by the research in Phase 2 and the findings from a scan of the key global and local trends and issues that are relevant to the Strategy. The full scan report is available here and a summary of the key global mega-trends is provided below. Key aspects of the current and potential future operating environment for New Zealand dairy farming identified by the scan include:

- Greater global political uncertainty, and for dairy of particular importance is the growing governmental focus on issues such as the environment (climate change, water and biodiversity), as well as food safety and security, food defence from fraud or criminal activity, public health, agricultural policy, sustainable production and consumption and animal welfare. In New Zealand these factors create potential for increasing constraints on milk production and higher compliance costs, with less public investment in science and technology solutions that historically.
- Slower economic growth and declining growth in trade characterise the global outlook while demographic changes anticipate a growing middle class in the developing world, and especially Asia, that will fuel growth in demand for high quality food products. Ongoing price volatility in global markets has put the focus on the farm systems and farm capabilities that best support resilience and competitiveness. New Zealand's economy is still closely linked to natural resource utilisation, and continues to be reliant on dairy as the largest industry.
- Changing social and cultural attitudes toward food and its attributes will drive further change in how food is produced and consumed. Social connectivity and technology empowers consumers to be hyper-connected and to scrutinise all aspects of food production. Increasing market complexity also requires a different, more highly qualified and more specialised skill base throughout the dairy value chain. Other social aspects include animal welfare, where there is evidence emerging of a potential shift to focusing more on animal well-being and natural animal behaviours, public concern about impacts of dairy on the environment and water quality in particular, the increasing competitiveness of labour markets and the connectivity of rural and urban communities.
- The adoption of new technologies, exploitation of growing data sets in precision agriculture applications, and further optimisation of cows, grass and farm systems (e.g. through robotics) will be needed to achieve necessary productivity and efficiency gains on farm. Information technology, big data and analytics will support industry's response to consumer and customer information, audit and verification requirements. New technologies are also likely to bring disruption to global food value chains, including innovative product development bringing new foods to market.
- Environmental and natural resource challenges are key concerns of global policy makers and business leaders. As well as policy development, voluntary evidence-based sustainability frameworks are being developed at an international and national industry level. Water scarcity around the world is set to increase, and New Zealand's natural abundance of water will increasingly provide advantage. However the degradation of waterways due, at least in part, to rapid growth of dairy, has put the dairy industry's action and government policy on water in the spotlight. New Zealand policy responses to achieving international climate change commitments and to adapt to climate variability are likely to be an ongoing priority.

New Zealand dairy is part of an active global dairy and food community working to address the challenge of sustainable food production. Global guidance is provided by the United Nation's Sustainable Development Goals that will influence government, civil society and the private sector actions on sustainable food production. Specific to dairy, New Zealand dairy sector representatives are actively engaged in developing the Dairy Sustainability Framework that sets out criteria with associated metrics on key measures of sustainability for dairy farming.

Discussions with representatives of the Dairy Sustainability Framework and the Global Dairy Platform highlighted the importance for dairy to be able to continue to effectively demonstrate, with evidence, the sustainability of dairy production and its nutritional value to the public and consumer.



- **Increased uncertainty & potential for political and economic disruption:** Possible growth of nationalist political sentiment and uncertain public confidence in benefits of trade liberalisation and globalisation more generally; increasing global income inequality and rising debt levels in the developed world; global conflicts and forced migrations putting pressure on existing national and regional institutional frameworks.
- **Increasing expectations of food production and attributes by consumers and the public:** Growing diverse consumer expectations of food relating to convenience, environmental sustainability, health and wellness, values and beliefs; government policy focus on sustainable production and consumption, public health, natural resource use; growing public concern about the impact of food production on water quality, climate change, biodiversity.
- **Greater connectivity and higher expectations of transparency driven by social media and digital technology:** technology better enabling efficient social mobilisation, grass roots activism and more diffuse channels for influence and information to inform consumer decision making and public opinion; less trust in traditional sources of advice such as experts, government and media.
- **The ongoing importance of the emerging economies of Asia, and China in particular, in shaping global food value chains :** Increasing share of global GDP in the developing world; growing middle classes of the developing world; urbanisation and creation of mega-cities, predominantly in Asia; competitiveness driving more integrated and complex global supply chains.
- **Likely rapid technological change with potential to radically re-engineer global value chains :** Digital technology already revolutionising data collection and use, communications, consumer connectivity; potential applications of new technology to food production, design and marketing: artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3-D printing, nanotechnology, biotechnology, materials science, energy storage, and quantum computing.
- **Constraints on natural resources available for food production, including water, and potential for disruption arising from climate change;** more people living in water scarce or stressed areas of the world; increasing energy demands (higher energy efficiency); climate change impacts (for New Zealand) include increased frequency of extreme floods and prolonged droughts, distribution of plant and animal species; warmer/dryer eastern areas; salination of coastal wetland areas

Stakeholder perspectives

Many stakeholders also gave very generously of their time to contribute to this Refresh. As outlined above, based on interviews with key stakeholder groups and review of the global and local operating context for dairy, eight material aspects were identified and explored with a broad range of stakeholders of the dairy sector in workshops in phase three of the Refresh. Those aspects were:

- Community Trust
- Environmental Impacts of Dairying
- Market Volatility
- Farm Economic Sustainability
- Natural Resource Constraints
- Consumer Trust
- Animal Health, Welfare and Quality of Life
- People Capability and Wellbeing

Common feedback from stakeholders with respect to the sector's approach to achieving sustainable dairy farming included:

- The importance of the dairy sector looking ahead to the future to understand how global food production and consumption might change over time, with a particular focus on the potentially disruptive technologies that could impact the dairy value chain and consumer choices and expectations. This included a need to stay close to consumer trends and perceptions and the importance of protecting New Zealand's reputation by addressing any risks or poor performance across the value chain.
- The need for the dairy sector to be adaptable and able to quickly develop and/or adopt new technologies to stay competitive globally, provide the transparency that consumers and the public are seeking and to find workable cost effective solutions that support sustainable and resilient dairy farming.
- The challenge for dairy to attract the people that it will need to respond to likely future changes in dairy farming and food production, in the context of an increasingly competitive employment market. The capability and resilience of people working in dairy

farming, and their physical and mental wellbeing, were often referred to as being critically important to the overall success of the sector. Immigration was recognised as being an important source of people capability for the sector, particularly in the South Island.

- The importance of the dairy sector acknowledging its impacts on the environment and demonstrating its commitment and actions to address these. Environmental aspects that were most important for stakeholders included water quality and use and climate change, while reflecting that New Zealand also needs to respond to and connect with emerging global frameworks that are defining expectations of sustainability for food producers and dairy farming. Stakeholders raised the importance of preserving New Zealand's reputation on environment and the value of 'brand New Zealand' for all our products and services on the world market.
- The importance of New Zealand having strong biosecurity risk management and responsiveness capability as critical to the profitability and resilience of dairy farming businesses and the country's economic and social wellbeing.
- The need for dairy to build stronger connections and cooperation with other sectors of the economy, in order to make the long term and impactful changes to land use in New Zealand and to be able to leverage New Zealand's unique value as a food producer on global markets. Closer engagement with Māori farming enterprises and community development activities was also highlighted.
- The importance of the sector doing more to engage and listen to New Zealanders and be transparent about its actions and performance to build trust. Stakeholders perceived that there is a growing divide between urban and rural communities that is also impacting on perceptions of dairy farming by the New Zealand public.

- The role of dairy farming in New Zealand and its economic and social contribution to both rural and urban communities and needing to shift to a greater focus on growing value rather than volume.
- The strength of New Zealand's systems and history of action on animal welfare issues with an awareness of the need to be ahead of potential shifts in consumer and public expectations or perceptions over time.

In the workshops there was a strong view that the areas that the sector needs to prioritise are environmental issues and building community trust, as being where the biggest gap lies currently between expectations and approaches of the sector to date.

While acknowledging positive performance and action on issues relating to people capability and wellbeing, consumer trust and animal health, welfare and quality of

life, stakeholders advice to the sector was that these are all priority areas that are likely to change significantly in the future. In these areas dairy needs to continue to grow and evolve its strategic actions to keep pace with change.

Stakeholders had some appreciation of the importance of profitability and competitiveness of New Zealand dairy farming, and the challenges of global uncertainty and market volatility, but generally felt that the sector was well experienced in this area and that it was important to continue the direction and approaches that the sector has been pursuing.

Investing in research and development, developing and adopting new technology, being adaptable to change, building people capability, improving transparency, engaging better with the public and showing leadership were elements that stakeholders saw as critical to the sector's approach in all the priority areas.



Farmer perspectives

The focus of this Strategy is Sustainable Dairy Farming so it was essential to understand what mattered to farmers as part of this Refresh. Three of the partners in the Strategy are farmer organisations, and many of the companies that participate through DCANZ are farmer-owned Cooperatives.

While the number of farmers we heard directly from is a small sample of the thousands of men and women who make up our dairy farming community, there was considerable consistency of the topics raised regardless if they were farming outside of Whangarei or Winton. Some of our workshops were held during calving and some of the wettest winter weather, and yet farmers still turned up at workshops or gave feedback through the website to have their voice heard.

Farmers' aspirations or concerns were no different to what we heard from our wider set of stakeholders, although perhaps felt more personally given their pride and connection to their land and their farming.

Overall, farmers were incredibly ambitious for the sector and the role it can play in a prosperous, sustainable New Zealand. There was recognition that there were plenty of opportunities to further improve, but also that there had been considerable progress on a number of issues such as fencing waterways, effluent management and lifting animal welfare standards that farmers are aware are less visible and take time for their investment and effort to have an impact.

Environment

Given that the engagement with farmers happened with the backdrop of a general election where environmental issues such as water and climate change were being discussed it was not surprising that it was a major focus of the discussions.

Many farmers spoke of dairy needing to take a greater leading role on specific environmental issues, with climate change and greenhouse gas emissions being an example where more leadership and information was needed.

Farmers also highlighted that the Refresh actions need to reflect that there are big challenges that go beyond what is within the control of any single farmer, such as the overall impacts of changing land use and urban expansion. Farmers want to know what they can do better on their farms, and to do their bit. But they also want to see a similar level of commitment from the sector as a whole, and other sectors, local and central government and communities when it comes to our bigger and more complex shared environmental challenges.

Other issues raised by farmers included the importance of R&D and potential for technology to identify solutions that support sustainable dairy farming, and that programmes and tools need to fit local circumstances and all farm system types. Farmers want to better understand what 'good' looks like and what levers they can use in the whole biological system of the farm, and to have more accurate and usable data to help them.

Nutrition

Pride farmers have in seeing their product on the shelves in New Zealand or abroad was raised consistently by all farmers engaged. There was a clear, strong link made by farmers from what happens on farm to what is put into the mouths of consumers. While there were differing views on who the target market should be for our products, it was overwhelmingly believed that dairy's future would rely on the quality of our products, that in turn relies on the quality of our farming.

Many spoke of looking and comparing the quality of New Zealand products while they were travelling abroad, and many had concerns about the future of dairy and competition from brewed milks and synthetic proteins. The general consensus was that the sector shouldn't be afraid of these new technologies, but instead learn from them and even potentially integrate them into the mix of New Zealand dairy.

Farmers saw opportunity to better promote dairy's nutritional value. They also saw the opportunity to make more of the story of New Zealand dairy and the advantages our pasture based dairy system has in quality compared to other systems found elsewhere. Some workshop participants went so far as to bring in some packaging from other food products to show examples of where the story was being told as part of the product's branding and quality.

Farmers also understand that there is much greater scrutiny now of farming and that they are very visible to anyone who wants to 'look over the fence'. Many want the sector to get smarter in how it engages with consumers to make them more aware of how we farm in New Zealand as well as dealing more effectively with any poor performance.

Animal Care

There was a shared consensus that having the highest standards of animal welfare was critical to the ongoing success of the sector. Farmers have a real pride in the way they treat their animals and they see that this should be a real point of difference that is valued by consumers both in New Zealand and internationally.

Any media reports of lapses in good practice, particularly in relation to bobby calves, were seen as real failures on behalf of the industry and there was consensus that more action to eliminate those incidents is needed. Farmers also saw that animal care went beyond the responsibility of those on farms, and needed to be a commitment from all those who handle animals, like the transport sector.

Farmers feel that the sector has made progress on standards and tools to support good animal care and it is important to be proactive in addressing any new issues. Options for making further improvements on animal care centred around support and education.

Community

The topic of local communities and their sustainability was one where there was a lot of passion and concern.

For those present, many felt that rural communities were struggling, not necessarily for jobs, but for keeping, let alone improving, the services and infrastructure required for a strong, resilient local community. Some also talked of how the recent down turn affected not just farmers but the small rural businesses that support them.

Changing farm ownership structures are seen as one of the factors in how relationships between farming and rural communities is changing. One example was that in the past farm owners were part of community for decades if not generations, now larger farms meant that workers tended to move on at a fast rate rather than settle in a community. Equally pressures on farmers as their businesses have become more complex mean they might have less time to be out engaging with the community than in the past or even connecting with neighbours

The rural urban divide was also a topic that concerned farmers and was seen being an issue also connected to being able to attract the right people to work on farm. Many recognised that 'townies' and 'cockies' had existed for quite some time, but that within some rural communities themselves there were growing divisions among the farming community as well.

Opportunities raised were a more concerted effort to connect with both new farmers and more established farmers, and to work harder to welcome and integrate newcomers to farming and communities. Existing social networks were discussed and it was clear that leveraging the existing networks held plenty of opportunity to build stronger connections in the community and between farmers and neighbours.

Workforce

Farming and the people who farm was a topic of passionate discussion and debate where ever we engaged farmers. Having great workplaces and talented people in the sector is where farmers generally thought that the most work needs to be done and should be a priority of the Refresh.

Continuing to build people capability in dairy farming, including in business, people and financial management as well as science and technical expertise, was seen as essential for the Strategy to address. Some farmers felt very strongly that people and a positive culture are fundamental to the success of dairy farming.

A recurring discussion was the concern that there aren't enough people who want to farm and this was a cause of stress for farmers who needed motivated, committed and healthy people to work on farm and across the industry.

While the early or long hours, potential isolation and manual labour were noted as a turn-off for some, there

was a real sense that decades of farming being seen as a last resort for many school leavers has damaged the sustainability of the sector, has under-valued the skills and expertise that farming activity requires and ignores the potential benefits for families of a farming life.

Farmers felt that dairy farming was not positioned in a way that accurately described the types of opportunities and potential for career development that farming holds, particularly in modern dairy farming where technology features just as much as manual labour. They are concerned that children and others have less exposure to farms and therefore are less likely to want to work rurally.

Drug use was also commonly raised as an issue – one that is common to many rural industries and communities. For some, there wasn't enough urgency or action by the industry or others to address methamphetamine use and there were many anecdotes of having workers not showing-up for work or not being in a state to work and the impact that has on the farmer owner or manager and safety concerns.

Well-being of farmers was also consistently raised, and while early in its discussion, there was a feeling that discussion and action on mental health and well-being was starting to improve and take steps in the right direction.

Competitiveness

The fundamentals of being in a farming business include being profitable and having adequate return on investment, and farmers talked about some of the key challenges being succession planning, the sustainability of rising debt levels when prices are low, managing the burden of new regulation, addressing biosecurity risks to farming and the costs of new technologies.

A theme that emerged in many discussions related to what type of dairy farm systems are most sustainable and profitable. Many farmers felt that there is room of all types of farming systems; some farmers were more strongly in favour of moving closer to organic farming;

some farmers emphasised that the focus for improvement needs to be on profitability rather production.

Farmers were also aware of some negative perceptions of bigger farms in the minds of the public or consumers. There was debate on opportunities for 'niche' production systems and a common desire to see more value for milk and recognition of excellence and good performance (whether in the milk price or other forms of recognition).

Common themes

Three common themes across all of these topics were leadership, partnership and dealing with poor performance.

Leadership came up as a common topic requiring attention – farmers were clear that they needed help from their leaders on what needs to be done on critical issues. They were not confining their comments on leadership just to the sector, and felt that more leadership on issues was needed from other sectors and government as dairy could not be expected to act alone if change and progress was to be achieved.

One stakeholder made the comment that this strategy should not be a 'lonely strategy' and this was backed-up by numerous discussions and input from farmers. Farmers saw the necessity of partnership with other members of the primary industry as well as with communities, government and NGOs. They saw that some of the challenges – and opportunities – were too big and too systemic to address successfully by themselves. Some farmers said they felt there was a need for more united approach as a country on many of these important issues.

At every point in the engagement process there were lengthy discussions and debates on what to do about under-performance and 'laggards'. Suggestions such as common standards, a license to farm and refusing to pick up milk were all raised, but it was recognised that this was a very difficult issue to address and needed wider discussion inside the industry and with government.

Implementation plan

The real work on the Strategy begins now.

Included in this Framework are principles to help guide implementation of the commitments and goals in a holistic way:

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

In addition the following outlines our approach to implementation:

Integrated approach: We will implement these commitments and goals in an integrated way, meaning that the priority will be given to actions and programmes that contribute to achieving multiple objectives and that there will be coordination and alignment of efforts across the goals to optimise resources and efficiency.

Local and regional approaches: We will work with farmers, local communities and local government to identify regional priorities for implementing this framework and engage them to develop solutions and actions for implementation that suit local needs and conditions.

Inclusive: The first phase of implementation of the Strategy will require broad engagement with farmers. We will also collaborate with a broad range of partners in the dairy sector, wider primary sector, local government, central government, NGOs and relevant international bodies to pursue the achievement of these commitments and opportunities to create mutual benefit. In particular we will create opportunities to engage directly with communities to understand and take account of their

perspectives and aspirations. In implementing this Strategy we will aim to coordinate and align with other the primary industries to find opportunities for integrated and effective sector-wide approaches.

Transparency: The Partners will lead implementation of this Strategy, aligned to their respective mandates and roles. The Partners will report annually and transparently on progress. Any activities by participants in the sector that contribute to achieving these commitments will be encouraged and recognised in that reporting. Leaders and partners in each commitment will develop the key milestones and reporting metrics for achieving the goals by June 2018. We will establish stakeholder and farmer reference groups to participate in the review and further development of strategies and actions to achieve these commitments and goals.

Data and information systems: We will continue to work to drive fit for purpose integrated data collection and reporting systems at the farm level and across the sector that are necessary to achieve these goals. We will participate in relevant international reporting frameworks, such as the Dairy Sustainability Framework, that enable New Zealand to be represented in global data regarding dairy sustainability and represented in the development of global sustainability measures.

Transition: We will continue with programmes and actions already underway through the current Strategy and provide for a phased transition in the first 18 months of implementation to reflect these commitments and goals.

Governance: The Chairs of the Partner organisations will continue to provide for governance and oversight of the implementation of the Strategy and will have a shared accountability for achieving progress towards the Goals, aligned to their respective roles and mandates. They will meet regularly, in conjunction with the Dairy Leadership Group, to review progress.

Conclusion

Entrepreneurial spirit, cooperation and a 'can do' attitude has been at the heart of New Zealand dairy since the first milk processing plants were built in the mid 1880's in Waikato and Taranaki, and the first refrigerated shipment of butter left New Zealand in 1882.

It has helped make us the world leader in dairy that we are today, and underpins the ambitious goals we are setting for ourselves for the coming decades. While a lot has changed, dairy in New Zealand is still made up of thousands of mostly small, family businesses and has pasture at its heart.

The dairy sector is founded on an audacious promise to every dairy farmer that, wherever they are in the country, every drop produced every day will be collected and processed before it perishes. Fulfilling that promise requires world leading logistics and processing capability that on any given day can handle more than 80 million litres of milk.

It requires an ever expanding web of relationships and connections around the globe through which our products must flow safely and efficiently to consumers in over 100 countries. It has been many years since our role ended when the container door was closed. We are part of an increasingly sophisticated and complex global food system. Digital technology has effectively connected every farm and milking shed to any consumer of our products, wherever in the world they may be.

New Zealand will continue to be unique in our export dependency and more highly exposed to global competitive forces, market volatility and uncertainty than any other dairy industry in the world.

While this Refresh has highlighted what is unique about dairy, it has also reminded us that in many other respects dairy farming is not special. Like all businesses, farms need to be profitable or they won't long be in business. It has highlighted that many of dairy's future challenges and opportunities are shared with other sectors and with all New Zealand. We are all in it together.

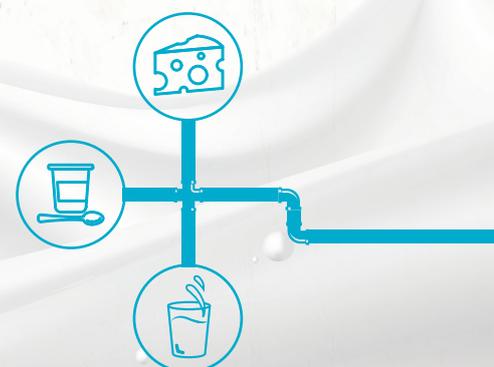
The feedback from both stakeholders and farmers has highlighted that there is a perceived urban - rural gap in New Zealand and that the connectivity between urban and rural communities is increasingly being broken down.

It may be overly simple to think of divisions only along urban and rural lines, because there are also many varied and diverging views among farmers, communities and within the wider agricultural sector.

Often the 'divides' are more of perception than reality. An insight from the Refresh is that there is more that we care about in common, than there is that genuinely divides us. In general we all need to do a better job of talking together, so that we can better work together, whether that is within the dairy sector at the farming level, the sector level and with others. Accordingly the Refresh highlights a number of areas where better conversation and collaboration to achieve a more broadly shared vision of our collective future in New Zealand is needed and where dairy can play its role.

Over the past 15 years the dairy sector has taken significant steps towards being more sustainable. But the job is not done as farmers, industry leaders and stakeholders have highlighted in the course of this Refresh. Many challenging issues and golden opportunities lie ahead of us. And just as there is a new generation of farmers coming into the industry, there is also a new generation of farming and of food that is emerging.

The next era of the dairy industry's collective strategic work aims to make progress where we know more is needed, some of which is on farm but some of which needs to be elevated to a higher level to engage all the parties who need to be part of enduring solutions. It also kick starts a longer term conversation with New Zealand about what our future farm and food systems could look like that will achieve our desired balance of environmental, economic, social and cultural outcomes while continuing to provide the natural, high-quality products that we are known and famous for the world over.



**dairy
tomorrow**

The future of New Zealand dairying.