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Message from the Minister

It's my pleasure to present this report outlining the work and collaboration of the food and fibre sector over the past year since the launch of the *Fit for a Better World – Accelerating our Economic Potential* roadmap. The sector continues to lead New Zealand's recovery from COVID-19, and we should all be proud of the challenges we have overcome together.

The sector has demonstrated resilience and adaptability in an unprecedented time. I commend you for keeping your businesses viable, ensuring your staff and community remain safe, and continuing to provide quality food and fibre to Kiwi and global consumers.

Fit for a Better World lays strong foundations for the future. The roadmap provides the opportunity to take action together and across industries, to adapt and respond to change. It offers a pathway to unlock greater value for the sector, create more jobs and build on our green reputation.



We are progressing well. We have placed more than 5,200 people into jobs through our Primary Sector Workforce Programme and campaigns such as Opportunity Grows Here. Work is under way on eight science priorities that will have a significant effect on our industry transformation plans, as well as other components of *Fit for a Better World*. The establishment of a national forestry service will help deliver on our tree planting ambitions and support Aotearoa to meet our carbon reduction objectives.

To date, over 130 projects have been co-funded through the Sustainable Food and Fibre Futures fund. I look forward to seeing the innovations that emerge from these projects.

I was also honoured to present the Ahuwhenua Trophy to Tataiwhetu Trust last month. The Trust is proof of the amazing efforts to improve our farm systems and practices, and to realise the potential of whenua Māori.

This 2021 Progress Update on delivery of *Fit for a Better World* highlights the significant progress that has been made to date and sets out critical milestones over the next year to reach the roadmap's ambitious goals. It demonstrates the Government's continued commitment to partnering with Māori, businesses, and communities to build a more productive, sustainable and inclusive food and fibre sector.

Hon Damien O'Connor Minister of Agriculture

Message from the Food and Fibre Partnership Group



Pictured left to right: Peter Chrisp, Nicky Hyslop (standing in for Andrew Morrison), Barry O'Neil, Mike Petersen (Chair), Jim van der Poel, Miriana Stephens, Craig Ellison, Ray Smith, Philip Gregan, Traci Houpapa, Vicky Robertson. Not pictured: Carolyn Tremain, David Rhodes, Andrew Morrison.

Our food and fibre sector is leading New Zealand's economic recovery from COVID-19. The sector is already on a transformation path, and the *Fit for a Better World – Accelerating our Economic Potential* roadmap provides ways to accelerate that effort.

The Food and Fibre Partnership Group (FFPG) is a strategic group brought together to drive these efforts. It brings together the food and fibre sector, Māori agribusiness, and the Government to co-ordinate transformation efforts, improve sector sustainability and wellbeing, boost productivity and profitability, and lift product value.

Underpinning this work is protecting the health of Te Taiao (our natural world) and helping to realise the potential of the Māori economy and its contribution to the sector.

The FFPG's membership includes Chairs and Chief Executives from across the sector, Māori agribusiness experts, and government Chief Executives. The FFPG also recognises the importance of moving forward together, and acknowledges the actions to deliver *Fit for a Better World* driven from within the sector.

To date, the FFPG has focused on several cross-cutting topics critical for the sector in the short-term and across the full 10-year time horizon of *Fit for a Better World*. Over the last year we've worked with Crown Research Institutes and government departments to prioritise the science research needs of the sector. We've engaged with the Climate Change Commission to inform a pan-sector view of emissions reduction efforts and how forestry contributes to our goals, and we've kicked off work on long-term skills capability and capacity planning.

As we move forward, we'll work closely with the food and fibre sector, and other bodies, especially those created through the implementation of *Fit for a Better World* – the Māori Primary Sector Forum, Te Taiao Steering Group, and the food and fibre sector think-tank, Te Puna Whakaaronui.

Our food and fibre sector has already made huge ground in a range of areas like growing product value and growing and farming more sustainably. The sector continues to show its resilience and commitment towards keeping New Zealand's economy and our rural communities ticking.

The FFPG is committed towards helping to drive these efforts.

The Fit for a Better World roadmap

In July 2020 the Government released the food and fibre sector roadmap, *Fit for a Better World* – *Accelerating our Economic Potential*. The roadmap sets out three ambitious targets to achieve a more productive, sustainable, and inclusive economy within the next decade.



Productivity:

Target: Adding **\$44 billion** in export earnings over the next decade through a focus on creating value.



Sustainability:

Target: Reducing biogenic methane emissions to 24-47 percent

below 2017 levels by 2050 and 10 percent below by 2030. Plus, restoring New Zealand's freshwater environments to a healthy state within a generation.



Inclusiveness:

Target: Employing **10 percent more** New Zealanders by 2030, and 10,000 more New Zealanders in the food and fibre sector workforce over the next four years.

Three principles taken from the Primary Sector Council's vision underpin the roadmap:

- **Te Taiao:** Our food and fibre sector is grounded in Te Taiao, a deep relationship of respect and reciprocity with the natural world that will ensure the long-term viability of our sectors and wellbeing of future generations.
- A zero-carbon future: We will help address climate change by moving to a zero-carbon society. Together we will restore the health of our freshwater and environments and reverse the decline in biodiversity.
- Quality products and a confident sector: We will support our food and fibre sector to meet increasing consumer
 demand for a secure supply of safe and healthy food, and for products that are produced and packaged
 ethically and sustainably.

The purpose of this update

We are still in the early stages of a 10-year work programme that will require sustained and co-ordinated action to achieve our objectives.

This 2021 progress update:

- provides an overview of the original Fit for a Better World roadmap;
- sets out the key challenges and opportunities facing the food and fibre sector;
- outlines how the Government, food and fibre sector, and Māori are partnering to take forward the roadmap;
- provides a snapshot of highlights to date; and
- shows how the sector is contributing to the roadmap vision over the next year.



Key challenges and opportunities

Overall, the food and fibre sector has performed strongly over the past year, despite challenges arising from COVID-19. These challenges, such as supply chain and food service disruptions and the tight labour market have been unevenly felt across the sectors. This contrasts strongly with 2018 and 2019, which saw broad-based growth across virtually every sector.

Food and fibre export revenue has been forecast to fall slightly in the year ending June 2021. The dairy, meat and wool, and seafood sectors were most affected by the pandemic, while forestry exports have been the fastest to recover to date.

The food and fibre sector continues to demonstrate its resilience, and has been recognised as leading the way in New Zealand's economic recovery from COVID-19, as one of the only sectors able to keep operating throughout the pandemic.

For the year ending June 2022, export revenue is expected to rebound as demand begins to recover for New Zealand's main export products and destination markets. In addition, labour supply is expected to improve as more skilled and seasonal primary industry workers enter New Zealand over the coming year, and disruptions in the supply chain are resolved.

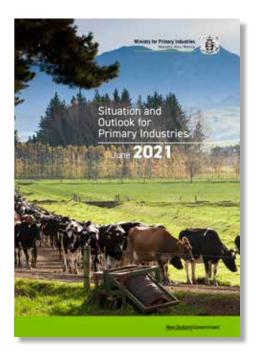
For more information on the year ahead, please see the 2021 Situation and Outlook for Primary Industries.

Success depends on how the food and fibre sector responds to a range of challenges and opportunities

The food and fibre sector operates in a complex and changing environment. Future success will depend on how it adapts and responds to a range of interrelated challenges and opportunities, including:

- an uncertain international context;
- · changing consumer preferences;
- · labour shortages and the increasing need for specialist skills;
- responding to climate change and protecting our freshwater, land, soil, marine environment, and biodiversity;
- availability of capital and investment;
- · building business and community resilience; and
- rapidly evolving science, technology, and innovation.

How we will measure progress is set out in Appendix 1.



Partnership in practice

We all have a role to play in building a more sustainable, productive and inclusive food and fibre sector. This includes central and local Government, food and fibre businesses and workers, Māori, industry organisations, environmental organisations, universities, Crown Research Institutes, investors and wider communities.

How we are working together

Three complementary strategic groups have been established to provide leadership and co-ordinate action across the Government, Māori, and the food and fibre sector.

The Food and Fibre Partnership Group

This strategic group is comprised of Chief Executives and Chairs from core food and fibre industries (dairy, sheep and beef, horticulture, seafood, forestry and wine), Māori agribusiness, and government agencies (Ministry for Business, Innovation and Employment, Ministry for Primary Industries, New Zealand Trade and Enterprise and Ministry for the Environment). Its purpose is to develop, promote and co-ordinate transformational initiatives, with a focus on the roadmap.

The Māori Primary Sector Forum

The Māori Primary Sector Forum has been established to advise the Government on how it can best grow the Māori primary sector economy and address the economic and social impacts of COVID-19 in line with the roadmap.

Te Puna Whakaaronui – The Primary Sector "Think-Tank"

Transformation of the food and fibre sector relies on purposeful leadership, alignment to a vision and an in-depth up-to-date understanding of the global context. Te Puna Whakaaronui brings insight and long-term focus to the sector by undertaking targeted inquiries.

Membership of these groups can be found in Appendix 2.

The role of Government

The Minister of Agriculture has overall oversight of the roadmap, working alongside Ministers who have responsibilities in relation to the food and fibre sector.

Several agencies have a role to play in supporting the food and fibre sector. Key agencies include:

- Ministry for Primary Industries
- Ministry of Business, Innovation and Employment
- Ministry for the Environment
- New Zealand Trade and Enterprise

Productive: our work to date

The roadmap builds on a range of work taking place to transform the food and fibre sector and since its release, good progress has been made on many initiatives. Highlights include co-investment supported through the Sustainable Food and Fibre Futures fund. Example case studies are outlined on the following pages.

Initiative	Action to date	
Water availability and security	 A technical review of current water supply, demand and allocation frameworks across New Zealand will be completed by the end of July 2021 along with a progress report analysing water availability and security strategies, implementation models, and supported by environmental and economic modelling. 	
Aquaculture	 The National Environment Standards for Marine Aquaculture came into force, and Fisheries New Zealand released guidance to support implementation. Significant investments have been made through the Provincial Growth Fund in critical wharf and hatchery infrastructure, including \$79.4 million for the Ōpōtiki harbour development, \$19 million to redevelop Sugarloaf Wharf, \$8 million to develop a salmon hatchery in Bluff, and \$6 million for the National Algae Research Centre. An initial constraints mapping exercise to identify the extent of marine space suitable for salmon farming in the South Island has been completed. 	
Horticulture development	 We are investing in Interim Post Entry Quarantine Greenhouses to increase capacity, while a long-term permanent solution is progressed. An Indicative Business Case for a new Plant Health and Environment Laboratory and permanent post-entry quarantine facility was approved at Cabinet and a Detailed Business Case is under way. MPI is talking to horticulture industry groups to co-develop Sustainable Food and Fibre Futures fund applications. We are revising the process for Import Health Standards. The priority Import Health Standards are fresh citrus, fresh pineapple, citrus germplasm, and avocado germplasm. We are co-developing a plant strategy with the sector, which will incorporate the horticulture science accelerator work. An early draft is due for completion in July 2021. 	
Research, science, innovation and Mātauranga Māori	 Widespread engagement via in-depth surveys is under way with food and beverage firms to help scope and refine the Industry Transformation Plan. Government agencies, in partnership with Māori, the Food and Fibre Partnership Group and relevant research providers have identified eight critical science priority areas and have co-developed an approach to deliver these priorities through Science Accelerator Plans. 	
New product development and revitalising the strong wool sector	 We are investing in projects including supporting the Strong Wool Action Group to produce a market insights report, a strategic roadmap for the sector and up to six investment cases for commercial opportunities. 	
Māori agribusiness	Seven projects are contracted under the Māori Agribusiness Extension programme to deliver approved work plans, with another 18 discussion groups approved.	
New bodies to drive transformation	 The primary sector "think tank", Te Puna Whakaaronui was established in December 2020 to provide thought leadership, insights and strategic analysis. The group is identifying two significant areas for inquiry this year. The Māori Primary Sector Forum has been established and had its first hui in May 2021. 	
Market Access	 Government agencies continue to negotiate preferential or equal market access conditions for our food and fibre products; maintain existing market access; and facilitate access for new products and technology. Key highlights include signing an Agriculture Co-operation Arrangement with Viet Nam in 2021 and continuing the dairy cooperation programme under the New Zealand-Thailand Closer Economic Partnership. 	
International trade	 We are working with other agencies and sector groups to advance trade negotiations and resolve trade barriers. Specific areas of focus include supporting the EU and UK Free Trade Agreements negotiations, ensuring New Zealand maintained trade access following Brexit. Working with government agencies to conduct consumer insights research of 14,000 consumers across China, Japan, Singapore, Australia, USA and UK to establish more precisely where there are premiums for specific food and beverage categories. Investing in digital e-commerce and online marketplaces to help New Zealand businesses respond to changes in shoppers' habits. Supporting the international in-market food and beverage branding campaign, Made with Care. 	
Flexible regulatory systems	 Animal welfare standards are continually being reviewed to improve animal management and care. Development of a discussion document for public consultation on the Biosecurity Act 1991 is under way. We have completed early consultation on export legislation and developed policy options to be released in a discussion document in late 2021. 	



- 3-year project totalling \$4.9 million
- \$1.9 million Government contribution
- the aim is to integrate sustainability into high value wool products that are better for the planet

Bremworth has its sights on developing more sustainable all-wool carpets and rugs.

This project focuses on developing hi-tech green production systems and processes for wool. Our investment will help keep woollen yarn and carpet manufacturing capacity in New Zealand, preserving jobs and protecting local communities and supply chains.



- 5-year programme totalling \$20 million
- \$8 million Government contribution
- the aim is to produce high-quality plant-based protein ingredients
- reduce the environmental impact of agriculture systems

People, animals and the environment will stand to benefit from developing technology to extract edible protein from green leafy crops.

The project builds on New Zealand's reputation as a trusted producer of high-quality protein through focusing on producing plant-based protein ingredients for use in a range of food products for human consumption. The products will meet the needs of a rapidly growing global market for plant-based foods. Leaft Foods will also co-produce an animal feed from the remaining plant matter to lower nitrogen losses and emission on farm.

Sustainable: our work to date

Initiative	Action to date		
Transform the forestry sector	 The Wood Fibre Futures project was commissioned to specifically identify internationally competitive technologies, develop products and systems to better utilise wood by-products and enable a bioeconomy. Identification of relevant technologies and products was completed in August 2020. The Timber Design Centre project will build an advisory service, resource library and tools for a range of users to encourage greater use of timber in the built environment. The launch of <i>Canopy</i>, a new website tailored for farmers, mana whenua and the forestry sector to provide up-to-date guidance on forestry. 		
Refocusing tree planting and partnerships	 Forestry Minister Stuart Nash announced the establishment of a planning and advisory function as part of Te Uru Rākau – New Zealand Forest Service. A cross-Government native nursery working group is being established to support the acceleration of native planting. Te Uru Rākau – New Zealand Forest Service continues to work with Te Tumu Paeroa to determine land use options for unproductive land blocks in Tairāwhiti. Launched the Trees for Schools initiative, offering every primary school the opportunity to plant five new native trees at their school or in their local area. 		
Regenerative farming and establishment of Te Taiao	 A 9-month workplan for the establishment phase of the Te Taiao project will produce an investment-ready business case for implementation. A Regenerative Agriculture Technical Advisory Group (TAG) has been formed to guide the establishment of an evidence base of regenerative practices and develop a Mātauranga and research plan. The TAG has created a vision for Regenerating Aotearoa. MPI has begun approving applications for research projects on Regenerative Farming after a call for proposals in December 2020. 		
He Waka Eke Noa	 He Waka Eke Noa met its first milestone to deliver Farm Plan guidance in December 2020 and good progress is being made against future milestones. Updated Farm Guidance has been released in March 2021 and work is ongoing to develop an Emissions Pricing mechanism for testing. 		
Freshwater and productive land	 We have worked with industry and regional councils to develop an Intensive Winter Grazing Module for farm plans to improve waterways, with the first module released in April 2021. The Government has worked alongside Māori, industry, NGOs and regional councils, to develop options for the freshwater farm plan regulations and the approach to implementing the Essential Freshwater regulatory package. We are investing \$500 million through "Jobs for Nature" to deliver freshwater restoration projects, provide jobs and improve the capacity and capability of freshwater management. 		
Fishing sector transition	 In September 2020, the Government announced support for the expansion of on-board cameras across the inshore fishing fleet subject to a business case and public consultation. In February, the Māui63 drone, a collaboration between WWF and MPI, was launched, using cutting edge technology to understand and protect Māui dolphins. A transition package was also announced to support fishers to shift to more dolphin friendly methods of fishing. 		
Business resilience	 We have been engaging with the finance sector to grow business resilience of our farmers and growers through development and implementation of a range of new services, including: A farm debt mediation scheme. Farmer hardship advice fund. Financial risk training for farmers. 		
Better data and decision support tools	 In December 2020, MPI engaged Manaaki Whenua to develop the Soil-Map database which will be a resource for Overseer or other decision support tools. All research under the Sustainable Land Management and Climate Change Fund is under way – a total value of \$14.4 million over 4 years. 		



- the aim is to shift from agrichemical pest management to agroecological crop protection
- 7-year Sustainable Food and Fibre Futures project
- \$27 million co-invested

Consumers are increasingly on the lookout for safe food based on strong environmental credentials.

There is an opportunity for New Zealand to become the world's preferred supplier of plant-based food products. That could mean a cost saving for farmers of \$1 billion from 2031 to 2040, compared to other higher cost solutions, and help significantly improve freshwater quality. It has brought together the horticulture, wine, and arable sectors to find ways to produce food using more sustainable pest management practices and move away from traditional crop protection methods.



- \$814,000 study into the commercial viability of Undaria for the export industry
- Government contribution of \$325.600
- Waikaitu Ltd is a Nelsonbased company, commercially manufacturing organically certified agricultural bio-stimulants, and crop protection products for a global market

New Zealand Undaria seaweed, *Undaria pinnatifida*, is a costly mussel-industry pest. However, it has the potential to become a sustainable, high-value global market resource.

Undaria can be used as a biostimulant, plant growth promoter and feed supplement. It is proven to increase plant growth throughout the growth cycle and increase the plants resilience to abiotic stress.

A study ran from mid-2019 to December 2020 in collaboration with global experts and New Zealand aquaculture groups to:

- explore global seaweed agricultural use;
- establish a training regime on best practice seaweed growing and harvesting to build workforce capability and share industry developments;
- create a pilot plant with scalable capacity to meet global demand; and
- conduct a feasibility study to plan a world-class finishing facility in the future.

Inclusive: our work to date

Initiative	Action to date	
New Zealanders in jobs	 The Opportunity Grows Here campaign was launched in July 2020 aimed at attracting New Zealanders to the primary sector workforce. According to job placement data provided, in the first eight months of the programme, 5,249 job placements have been achieved across the whole Primary Sector Workforce Programme. Key campaigns we have supported include Made with Care, Jobs for Nature and NZ Summerfruit. Through the Primary Sector Workforce Programme, eleven basic skills and familiarisation training courses have been delivered. We have partnered with Rural Women New Zealand on innovation activators to support rural women entrepreneurs. Four feasibility studies have been contracted to increase the uptake of Māori employment and productivity of Māori primary sector assets. 	
Safe and healthy food	 Five projects have been funded to build supply chain resilience. These projects span a range of services including an app that connects producers directly to consumers, and an online platform to support food rescue. New Zealand Food Safety is progressing a suite of initiatives to proactively detect, and respond to, food safety issues and work more with consumers to enable them to make good decisions about food. 	
Connecting rural New Zealanders	 Eleven rural community hubs have been established in remote communities. A number of government agencies are working together to deploy rural broadband at rural community hubs to increase access and deliver training, financial literacy and wellbeing programmes 	
Thriving rural communities	 Establishing an Office of Rural Communities and increasing capability to rural proof Government policies. Support for rural communities has continued through drought and recovery by: Establishing a national feed working group and stock feed transport support. Contracting regional recovery and resilience coordinators. Co-ordinating drought committees for effective regional response and readiness planning. 	



- \$2.5 million project over three years with the Foundation for Arable Research
- \$1.169 million Government contribution
- the aim is to lift the capability of our arable farmers through sharing expertise

A new industry extension programme is helping arable farmers to lift sustainable farming practices, and boost their efficiency and profitability.

To help arable farmers meet ever increasing market, consumer, and regulatory demands, this project will invest in demonstration farms and mobile resources to enable the sharing of information in the arable sector. Workshops, field days and other events under way are aimed at upskilling arable farmers and their advisors across agronomic, environmental, and financial management practices to increase growers' confidence to explore new ideas and technologies.



- \$883,500 project supported by Silver Ferns Co-operative Ltd, DairyNZ, Federated Farmers New Zealand, and Beef + Lamb New Zealand
- Government contribution of \$318,500 over three years
- the aim is to provide quality red meat protein to families in need

SFF Futures is backing an \$883,500 project set up during the first COVID-19 lockdown, aimed at putting food on the tables of hungry New Zealand families.

Community organisations like food banks and city missions have previously experienced challenges getting food supplies to the families they support, especially sources of protein such as red meat. Through Meat the Need, farmers supply livestock to meat processors who then provide the equivalent weight in mince to nominated community organisations at regular intervals. In the first year of operation Meat the Need donated 410,000 meals.

The project was co-founded by farmers Wayne Langford and Siobhan O'Malley.

Profiling the year ahead

Together we have made significant achievements since the release of the roadmap, however, we are still at the start of a multi-year work programme. Success will require sustained and co-ordinated action across the sector, and responsive, dynamic leadership.

The document has so far summarised key highlights and achievements to date. The following section discusses key outcomes and actions that will be taken to progress the roadmap over the next year.

The actions summarised in the following pages represent those that the Government is directly involved with, to contribute to the targets and themes of the roadmap.



Productive: Overview of the year ahead*

04Q1 **Q2** Initiative Q3**Q4** Water Availability Finalise water availability and security position and Security Establish partnership network and develop business case Regulatory options to enable open ocean aquaculture Accelerate the Aquaculture Strategy Explore open ocean aquaculture opportunities with Māori and iwi **Decisions and implementation work** Develop and publish roadmap for research and investment **Horticulture** nent plan based on the **Develop plant strategy Development** Targeted co-investment in a portfolio of projects to grow the horticulture sector Detailed Business Case to develop new Plant Health Lab Import/export treatment research programme strategy Conduct research programme Commencing work on new Import Health Standards Research, Science, Finalisation and implementation of the accelerator plans Science accelerator plans Innovation and Mātauranga Māori Ensure Mātauranga Māori within the primary industry science system Test and refine scope of Industry Transformation Plan **Consult and finalise Industry Transformation Plan New product** Strategic roadmap for strong development and revitalising the Strong Targeted co-investment in a portfolio of Strong Wool projects to lift the demand and value of strong wool **Wool Sector** Co-invest in innovation including the development of a new product or service **Identifying clusters of land blocks** Māori Agribusiness Developing and delivering work programmes as well as ongoing monitoring and evaluation Develop a comprehensive plan for the delivery of initiatives that will transform the Māori primary sector Te Puna Whakaaronui June output report **December output report** New bodies to drive Māori Primary Sector Forum ongoing governance and work programme delivery transformation Negotiating preferential or equal market access conditions **Market Access and** Maintaining, and reducing cost, of existing market access **Development** Facilitating access for new products, claims and technologies into new and existing markets **Free Trade Agreement negotiations International Trade** Target premium high value markets Phase 2 international brand campaign Digital e-commerce and online market place development Develop policy for Export Legislation Legislative design and consultation Flexible regulatory systems Consultation Policy analysis Legislative design **Review the Animal Welfare Strategy** Strengthen the food safety system



Water availability and security

Investing in water availability and security can:

- increase efficiency and effectiveness of available water:
- provide farmers and growers access to more land use options;
- encourage investment in high value products and supply chains with low environmental footprints;
- create opportunities for skilled employment; and
- build rural community resilience to challenges such as climate change.

Actions

- Delivering a departmental discussion paper in July 2021 setting the foundations for future strategic planning and investment in water availability and security.
- Establishing a formal partnership network across Government, Māori, regional leaders, rural communities and the food and fibre sector.
- Developing a robust business case by June 2022 to mitigate major risks to water availability and security.

Accelerate the Aquaculture Strategy

The Government's Aquaculture Strategy sets objectives and actions towards New Zealand becoming world leading in sustainable and innovative aquaculture. Accelerating the Aquaculture Strategy involves an early focus on:

- · maximising the value of existing farms; and
- extending aquaculture into the open ocean.

Actions

- Developing options for the future regulatory system to enable open ocean aquaculture.
- Working with Māori to develop options for early investment and participation in open ocean aquaculture.
- Developing and publishing a roadmap of research and investment priorities, and securing initial investment.

Horticulture development

The horticulture sector has grown significantly over the last decade, with high performers including kiwifruit and apples. There are strong opportunities for further growth in existing and emerging sectors.

Actions

- Drafting a plant strategy by mid-2021, identifying a small number of critical policy and investment priorities required to accelerate the growth of New Zealand's horticulture industry.
- Developing an investment plan to align the highest strategic priorities with funding opportunities over the next three to five years.
- Investing in new facilities to enable the importation of new plant genetic material and support new breeding programmes, including investment in short-term greenhouse capacity and longterm investment to replace Tamaki Plant Health Environment facilities.
- Streamlining processes to improve the timeliness of the development of Import Health Standards.

Research, science, innovation, and Mātauranga Māori

Science, research, innovation and Mātauranga Māori are cross-cutting themes that underpin all of the food and fibre sectors and related initiatives outlined in the roadmap.

Actions

- Developing 'Science Accelerator Plans' for eight critical priority areas by the end of 2021 through partnerships between science, industry, Māori, and government. Biological emissions reduction, open ocean aquaculture, new horticulture and diversifying protein are in the first tranche.
- Ensuring the primary industry science system includes and aligns with Mātauranga Māori. To enhance its recognition and value as evidence, contributing to improved decision-making and, ultimately, improved outcomes.
- Supporting the development of emerging food and beverage industries and products through the Food and Beverage Industry Transformation Plan, with drafting beginning in June 2021 and consultation expected in August through to November 2021.





New product development

SFF Futures supports problem-solving and innovation in New Zealand's food and fibre sectors by co-investing in initiatives that make a positive and lasting difference, including development of a new product or service, or a better way of doing something. As at 31 May 2021, 138 projects had been approved, with a total committed investment of \$249.9 million (including \$111.1 million MPI funding) over the life of the projects.

Revitalising the strong wool sector

In July 2020, the Vision and Action for the Strong Wool Industry report set out a pathway to lift the performance, increase returns and intergenerational resilience for the sector. The Strong Wool Action Group (SWAG) has been established to implement these recommendations and the group will deliver a strategic roadmap and investment cases in September 2021.

Actions

- Establishing a portfolio of co-funded strong wool projects across the value-chain by July 2021.
- Supporting industry to identify new commercial opportunities, develop business cases and secure industry and government funding support for implementation by December 2021.
- Supporting implementation of a long-term governance and funding framework by December 2021.

Māori agribusiness

The Māori agribusiness initiative seeks to realise the potential of the Māori economy, through supporting the increased productivity and sustainability of whenua Māori.

Actions

Four key programmes are currently under way to support Māori agribusiness:

- Developing, as a core part of Fit for a Better World, a comprehensive plan for the resource and delivery of initiatives to transform the Māori primary sector.
- Supporting Māori agribusinesses to move along the supply and value chain, and maximise the value and return of Māori primary sector assets through increased trade and exports.
- Supporting individual Māori land management entities sustainably improve the productivity of their primary sector assets through the provision of advice and expertise.

- Using an extension approach tailored for the needs of whenua Māori delivered through clusters of Māori landowners and agribusinesses.
- Co-funding for Māori has been developed to realise innovation in the Māori agribusiness sector.
- Supporting Māori agribusiness to develop workforce opportunities and skills in the primary sector.

New bodies to drive transformation

A number of complementary strategic groups have been established to provide leadership and co-ordinate action across the Government, Māori, and the food and fibre sector.

Actions

- The primary sector "think tank", Te Puna
 Whakaaronui was established to bring insight and
 long-term focus to the food and fibre sector. Te
 Puna Whakaaronui will work on two major topics
 and up to four minor topics annually.
- The Māori Primary Sector Forum was established to advise the Government on how it can best grow the Māori primary sector economy. The forum will work with MPI to identify priorities for focus.

International trade and market access

As a small, developed, open and export-focused economy, international market access, a functioning rules-based multilateral trading system and strong relationships with our key trading partners play a large role in the economic performance of New Zealand's food and fibre sector.

Actions

- Negotiating preferential or equal market access conditions.
- Maintaining and reducing cost of existing market access.
- Facilitating access for new products, claims and technologies into new and existing markets.
- Developing a non-regulatory framework to address e-commerce opportunities and support the export of plant products and processed foods, until new export legislation comes into effect.
- Working to address tariff and non-tariff barriers through Free Trade Agreement negotiations.
- Working through the World Trade Organisation to secure global outcomes on the reduction of trade distorting fisheries subsidies and agricultural domestic support entitlements.

Flexible regulatory systems

The food and fibre sector interacts with a wide range of regulatory systems. We need to ensure these systems are fit for purpose, efficient and allow businesses to innovate.

Actions

- Reviewing the Biosecurity Act 1993, with a discussion document to be released for public consultation in late 2021
- Undertaking public consultation in the second half of 2021 on whether any changes are needed to the regulatory framework that underpins government export assurances.
- Reviewing New Zealand's 2013 Animal Welfare Strategy Animal Welfare Matters.
- Undertaking a programme of work to strengthen the food safety system.

Investment in Māori Agribusiness

Whenua Māori has huge potential for sustainable growth and development. The Māori Agribusiness programme is designed to help overcome challenges to realising this potential. Clusters of Māori-owned land blocks or agribusinesses are formed to enable collective learning to help implement land-use change.

Onuku Māori Lands Trust is a significant Rotorua bovine dairy, ovine dairy, forestry, honey and dry stock farming operation and former recipient of the Ahuwhenua Award for bovine dairy.

- The Central North Island Sheep Milk Collective is the recipient of \$700,000 from the Māori agribusiness extension fund to support growth on a commercial scale
- The collective is made up of more than 20 Land Trusts, including Onuku Māori Lands Trust
- \$60,000 funding to seed the development of the Central North Island Sheep Milk Collective
- \$15,000 Government funding to Onuku Māori Land Trust for a sheep milk business case



Sharing our stories with the world

To date the Made with Care campaign has had:

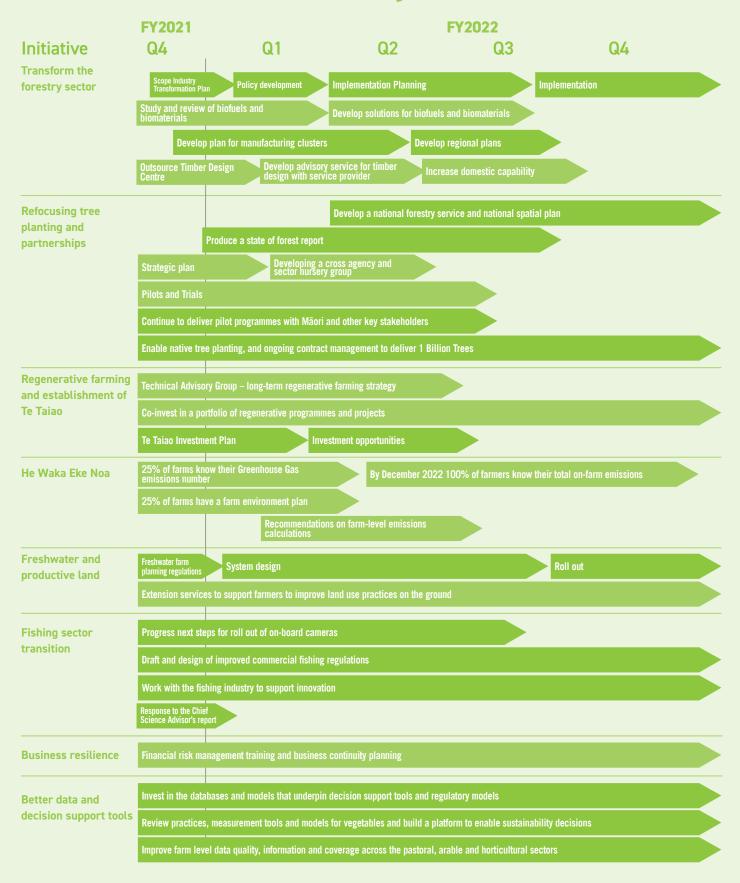
- 35 million video views
- 1,400 companies register to use the campaign toolkit

Made with Care is the biggest ever coordinated go-to-market food branding campaign. A collaboration between MPI, Tourism NZ, NZTE, NZ Story, MFAT, sector organisations and individual companies, the campaign is designed to grow awareness, preference and demand for New Zealand food and beverage products across the globe. There has been outstanding uptake from the campaign, highlighting the importance of storytelling in an international market when borders are severely constrained.





Sustainable: Overview of the year ahead*



^{*}These timeframes are indicative only. Note that some of the arrows outlined on this page reflect specific outputs produced in a particular quarter; other arrows reflect enduring work effort that spans multiple quarters.



Transform the forestry sector

New Zealand's wood resource provides significant opportunity to decarbonise operations in New Zealand, generate renewable bioenergy, and increase domestic processing of high-value wood products.

Actions

- Assessing which biofuel solutions are best for New Zealand and starting to attract and co-ordinate investment by July 2021.
- Developing plans for the first manufacturing cluster in late 2021, co-locating wood processing and other industrial plants to lift productivity, minimise waste and reduce emissions.
- Establishing a Timber Design Centre of Excellence to encourage greater domestic timber use.
- Working in collaboration with the industry, workforce and Māori, we are developing the Industry Transformation Plan for consultation in late 2021.

Refocusing our tree planting partnerships

Contributing to New Zealand's climate and environmental objectives by accelerating the rate of native propagation and planting and reducing the cost of growing and planting native trees.

Actions

- Doubling native planting rates from 4000 hectares/pa to 8000 hectares/pa in 2021/22.
- Improving planting outcomes on marginal and erodible land as well as developing alternative methods of plant establishment.
- Scoping the market opportunity for native planting that extends beyond permanent forests.
- Establishing a forestry advisory service by September 2021 to develop a national spatial plan and provide support to landowners to access resources and information related to tree planting.

Regenerative farming

There is an opportunity to design a New Zealand-based regenerative approach to farming that could contribute to improving profitability and sustainability.

Actions

Working with a Technical Advisory Group to provide farmer, scientific and Mātauranga perspectives on where efforts could be prioritised for regenerative practices that suit our soils, climate, and production systems.

- Co-investing through the SFF Futures fund in a portfolio of regenerative programmes and projects.
- Funding a farmer-led initiative (Quorum Sense) to provide advice and support to other farmers wanting to develop regenerative farming systems.

Te Taiao

Te Taiao is focused on bringing together Mātauranga Māori, conventional knowledge, practices and measurement frameworks across four pathways – on land and sea, in catchments, across the value chain, and in-market. The work is grounded in principles, pathways and practices enabling the sector to achieve regeneration and wellbeing of Te Taiao.

Actions

 Funding the Te Taiao Group to co-design with industry and Mātauranga Māori experts, a completed six-year business plan by the end of November 2021.

Te Uru Rākau - New Zealand Forest Service

The launch of Te Uru Rākau – New Zealand Forest Service signals a greater focus on transforming the forestry and wood processing sector to meet New Zealand's climate and economic goals.

It enhances planning and advisory services, with specialists working with Māori, private landowners, farm foresters, local councils, processors, training institutes and other forestry organisations.

Forestry is the third largest primary industry by export value and expert forestry planning, management, and advisory services are key to driving regional economic development and skills training, and help support New Zealand's drive towards a zerocarbon future.







He Waka Eka Noa

He Waka Eke Noa is a primary sector climate action partnership striving to implement a framework by 2025 to reduce agricultural greenhouse gas emissions and build the sector's resilience to climate change. He Waka Eke Noa aims to empower farmers and growers to meet the following milestones:

- For 25 percent of farms to hold a documented annual total of on-farm greenhouse gas emissions, using methods and definitions accepted by the He Waka Eke Noa Steering Group by 31 December 2021, and 100 percent of farms by 31 December 2022.
- Twenty-five percent of farms have a written plan in place to measure and manage their greenhouse gas emissions by 1 January 2022; and for 100 percent of farms by 1 January 2025.

Actions

- Developing and implementing by 2025 an appropriate on-farm pricing mechanism for emissions to apply to farm-level accounting and reporting for 2024 agricultural emissions.
- Providing options for an alternative pricing system including sequestration and reporting to Ministers in March 2022.

Freshwater and productive land

Freshwater Farm Planning

The Government introduced an amendment to the Resource Management Act in 2020 that provides for mandatory and enforceable freshwater farm plans. Freshwater Farm Plans will need to be certified and will likely be situated in the environmental section of a farmer's or grower's Integrated Farm Plan. Detailed regulations are required to give effect to this legislation, and to deliver a credible and robust freshwater farm planning system to deliver improved freshwater outcomes.

Actions

- Working towards developing credible and robust freshwater farm planning regulations, with input from primary and regional sector stakeholders, environmental NGOs, Māori, and farm planning specialists. The regulations are intended to come into effect by May 2022.
- Designing the content of freshwater farm plans, with policy options for regulations due for public consultation mid-2021.

Productive Land

MPI is supporting farmers to achieve productive and sustainable land-use through extension services, helping farmers to lead projects via catchment-groups that improve decision-making around land-use practice, economic, environmental, and farmer wellbeing in rural communities. Support is also being provided to the advisory sector to ensure producers have access to the advice they need.

Actions

- Delivering catchment-based activities and events showcasing innovation, good practice, and celebrating success. Scientific projects are also being developed to fill knowledge gaps.
- Empowering farmers and catchment groups to lead projects to improve freshwater quality, farming practices, and community resilience.
- Developing a national certification scheme for high quality farm environment plan advisers.
- Supporting rural professional development on key issues such as Freshwater, Winter Grazing, Basic Climate Change/Greenhouse Gas Mitigation and cultural capability.
- Providing research in mid-to-late 2021 on how the advisory sector can be improved.

Fishing sector transition

There is an opportunity to strengthen and modernise New Zealand's fisheries management system, driven by improved technology and innovation, and sharing the benefits across the sector.

Actions

- Progressing next steps in the rollout of on-board cameras.
- Improving commercial fishing rules to incentivise better fishing practices.
- Working with the fishing sector to support innovation that drives environmental performance and creates value, with a particular focus on reducing seafloor impacts.
- Supporting the Government's response to the Prime Minister's Chief Science Advisor's report The Future of Commercial Fishing in Aotearoa New Zealand.

Business resilience

We will support businesses to manage future disruptions, encouraging the sector to prepare for future challenges, including climate change adaption, managing disruptions to supply chains, and responding to consumer preferences.

Actions

 Supporting small and medium sized food and fibre sector businesses through financial risk management training and business continuity planning.

Better data and decision support tools

Decision support tools

This initiative will improve decision support tools to enable farmers and their advisors to examine nutrient use, transfers, and losses within a farm system to help optimise production and improve environmental outcomes.

Actions

- Conducting scientific field trials for nutrient losses from horticulture and expanding national coverage of an online spatial soil database.
- Trialling mitigation techniques that improve freshwater quality using known farm technologies and practices which protect waterways and wetlands by reducing nutrient run-off and leaching.

Better data

The four year Farm Monitoring & Benchmarking Programme will collate farm level data to provide a baseline of farms' performance.

Actions

- Collaboratively working with industry groups to build on sector knowledge and existing farmer relationships, adapting known data collection, management, and systems.
- Bringing together detailed farm level information in one place at scale across all land-based agriculture and horticultural sectors, to enable the collective analysis of financial, physical, and environmental performance across approximately 2,500 farms.

Funding through the Hill Country Erosion Programme has achieved:

- the establishment of approximately 1000 hectares of exotic and native forestry
- 60 kilometres of fencing to retire land
- the completion of 3,500 hectares of new farm plans
- 600 hectares of planted poplar and willow trees



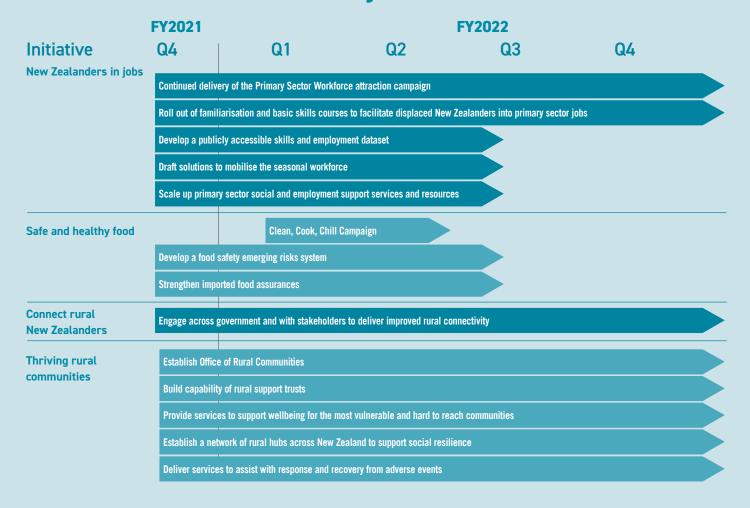
The Sustainable Land Management Hill Country Erosion Programme supports farmers to make good land management decisions, helping retain productive soils and reduce sediment loss.

South Taranaki and Regional Erosion Support Scheme

The South Taranaki and Regional Erosion Support Scheme highlights just one of the regional initiatives under way to reduce erosion and the movement of sediment through catchments. The scheme encourages the adoption of more sustainable land use practices and will enable farming businesses to mitigate against the effects of severe weather events, the loss of soil and its productive capacity.

It is estimated this will reduce 700,000 tonnes of sediment per square kilometre/year. Planting also contributes to Government's goal of planting one billion trees by 2028.

Inclusive: Overview of the year ahead*



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New Zealanders in jobs

To meet long-term workforce demands and build resilience it will be necessary to attract, train and retain school leavers, university graduates, and other new workers. This initiative aims to:

- attract a larger, more diverse talent pool by ensuring that primary sector employment and education opportunities are widely understood, respected, and sought after by New Zealanders;
- equip New Zealanders who have been displaced from other industries with the basic skills and knowledge needed to enter primary sector jobs;
- upskill the current and future primary sector workforce at all career stages across the value chain; and
- mobilise and support New Zealanders to maintain year-round employment in the primary sector.

Actions

- Partnering across the sector to continue the Opportunity Grows Here campaign. Read more about this campaign on page 25.
- Facilitating displaced New Zealanders into primary sector jobs.
- Developing a publicly accessible skills and employment dataset to help forecast and prepare for future demand.
- Developing solutions to mobilise the seasonal workforce.
- Scaling up primary sector social and employment support services and resources.

Safe and healthy food

Clean, Cook, Chill Campaign

To improve food safety behaviours in the home and minimise rates of foodborne illness, the clean, cook, chill campaign has been launched to better reach consumers with information on food safety issues so that they can proactively make informed food choices.

Preventing Food Waste and Supporting Primary Sector Production

The closure of many food outlets in New Zealand's Level 4 lockdown led to an accumulation of food within the supply chain that was at risk of being wasted. Two projects were initiated to address these issues:

- Trialling a platform connecting fishers direct to consumers with a focus on sales of by-catch.
- Supporting the development of an online retail app connecting growers, consumers and transport providers with a particular focus on cost-effect transport to rural areas.

Proactively detect, and respond to, food safety issues

Developing improved capability to detect emerging food safety risks through improved international connections and environmental scanning and horizon scanning in New Zealand.

Thriving rural communities

Rural communities need to be thriving to provide the workforce, skills and support services that underpin New Zealand's primary sectors and contribute to our productivity and wellbeing as a nation. However, rural communities are faced with an increasing pace of issues and challenges, including social isolation, challenges accessing services, and increased complexity in managing environmental issues such as climate change.

Actions

- Establishing an Office of Rural Communities to raise the quality of rural proofing across government through better tools and engagement.
- Building capability of Rural Support Trusts to provide support to rural communities.
- Implementing complementary services that provide wellbeing support for the most vulnerable and hard to reach communities.
- Implementing community-led development and investment, working with communities to establish a network of hubs across New Zealand to support social resilience.
- Developing services to assist with response and recovery from adverse events and to build future resilience.

Connect rural New Zealanders

There is a need to work collaboratively across government and non-governmental organisations to accelerate digital connectivity for all New Zealanders. This will enable resilient rural communities that can actively participate in New Zealand society and the economy.

Actions

- MPI is working closely with other Government agencies on the Rural Broadband Initiative. The rollout of rural broadband is on target to ensure 99.8 percent of the population is covered by 2023. There are now 63,000 rural homes and businesses that have access to improved broadband, which is 74 percent of those in scope for the programme.
- Several government agencies are working to deliver the Government's digital strategy by November 2021. MPI is ensuring that the strategy and corresponding digital services are inclusive of rural New Zealanders.

The Opportunity Grows Here advertising and marketing campaign was launched in July 2020. Through this campaign, MPI is working with industry to attract 10,000 New Zealanders into jobs in the primary industries over the next four years.

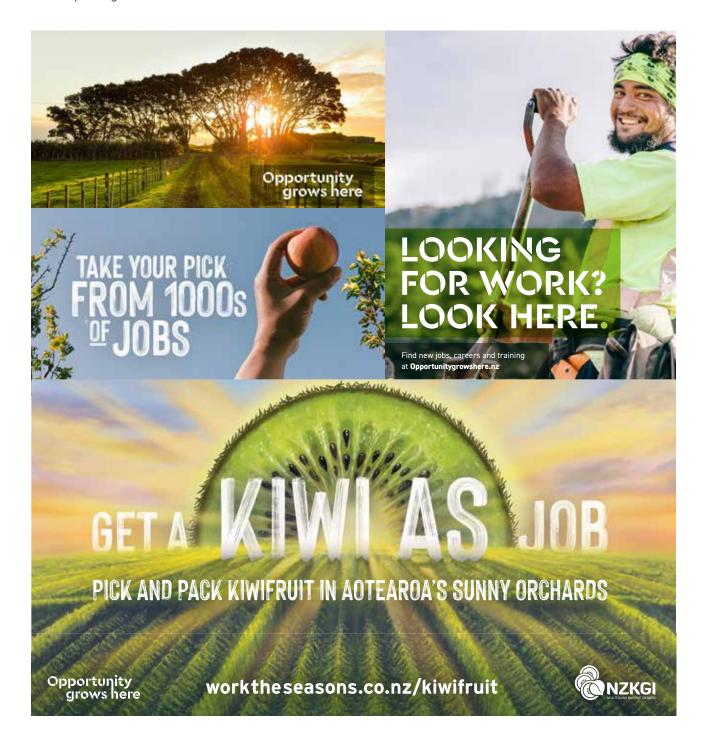
The campaign brings information on careers, training and job vacancies together on one website, and is part of a wider MPI workforce programme to attract New Zealanders to work in the primary sector.

As well as the overarching campaign, MPI has worked alongside industry to run targeted campaigns in seafood, forestry harvesting and planting, summerfruit, kiwifruit picking, grape picking and winter pruning.

Since the start of the campaign, the Opportunity Grows Here website has had over 400,000 total page views. Recent research also found that 41 percent of our target audience said the appeal of working in the primary industries had increased in the past year.

Meanwhile 42 percent of people recalled seeing the campaign, with 33 percent thinking about the possibility of working in a food and fibre sector job.

Through the Primary Sector Workforce Programme and campaigns such as Opportunity Grows Here, over 5,200 people have been placed into primary sector roles.



Enabling investment

Building a more productive, sustainable, and inclusive food and fibre sector over the coming years will require significant participation and investment.

Encouraging private investment in capital expansion, technological innovation and product development will be critical to overcoming the challenges present in this uncertain COVID-19 environment.

We are continuing to work with the financial sector to increase options to access capital.

Actions

Conducting research to deepen the understanding of New Zealand's capital markets and their role in influencing the food and fibre sector's performance. Research will consider the:

- capital landscape of the food and fibre sector;
- capital environment in a COVID-19-constrained world;
- role for alternative (non-debt) sources of capital;
- · constraints and barriers to capital for the co-operative sector; and
- appropriate balance and role for foreign direct investment in the primary sector.
- Government co-investment of over \$112 million administered by Kānoa
 Regional Economic Development & Investment Unit
- construction of Harbour Walls and dredging of the river (\$79.4 million)
- construction of a marina and wharf (\$8.8 million)
- expansion of mussel processing factory (\$24.85 million)



These aquaculture projects are in partnership with Whakatōhea and Te Whānau-a-Apanui, local government, and the commercial sector, and will unlock significant investment into marine farms already consented along the Ōpōtiki coast. The projects are expected to act as a catalyst for the creation of over 1000 new jobs by 2040, and put Ōpōtiki on a stronger pathway towards a productive, sustainable and inclusive future.

 MPI is actively working with industry to progress potential projects identified through workshops with food and fibre sector leaders

Twelve intensive sector workshops were held with 115 food and fibre sector leaders late in 2020 and are expected to lead to multi-milliondollar partnerships.

The workshops explored opportunities and challenges across the value chain, and shared ideas about how these could be resolved.



Photo: Kieren Scott

Three follow-up workshops were held in March 2021, focusing on common cross-industry themes, including by product utilisation, data, automation and robotics.



- increasing the adaptability and resilience of the sector
- connecting fishers to business advice, counselling and opportunities for training and mentoring
- providing help with access to innovation funding

In 2020, the Government announced funding of \$4.6 million over three years to enable Fisheries New Zealand to support the establishment of a national seafood sector support network in response to the impacts of COVID-19.

The new network was established as a charitable trust in March 2021 and will operate under the name FirstMate New Zealand. FirstMate New Zealand will operate ground-up at a regional level, via a number of locally-based advisers who will connect those seeking advice and support to the appropriate services.

The network will support the adaptability and resilience of the sector, helping fishers, aquaculture farmers, and their whānau access the support they need to manage the pressures and challenges they are facing.



- to date the Energy Efficiency and Conservation Authority has released \$27.8 million in co-funding
- to help 16 food and fibre sector organisations transition away from fossil fuels

One of the biggest opportunities to reduce industrial emissions in the food and fibre sector is through the decarbonisation of process heat.

Industrial process heat generates around 8 percent of New Zealand's greenhouse gas emissions from manufacturing products, and is the second largest source of energy-related emissions after transport.

Process heat is generated for a number of purposes including converting milk into powder, wood pulp into paper, and chemical production.

While Government is working through a national direction on industrial greenhouse gas emissions, the Government Investment in Decarbonising Industry (GIDI) fund has also been scaled up for three years to accelerate the decarbonisation of process heat.

Appendix 1 - How we will track progress

We will regularly measure and review progress being made against milestones, key deliverables, and expected outcomes.

The following indicators will be used to track progress against our targets.

Target	Indicator	Source
Adding \$44 billion in export earnings over the next decade through a focus on creating value.	Food and fibre sector exports	Situation and outlook for primary industries reporting (bi-annual)
Reducing biogenic methane emissions to 24–47 percent below 2017 levels by 2050 and 10 percent below by 2030.	Greenhouse gas emissions	Ministry for the Environment, Greenhouse gas inventory (Annual). Projections for Emissions Reduction Plans.
Plus, restoring New Zealand's freshwater environments to a healthy state within a generation.	Water quality	Ministry for the Environment, Environmental reporting on freshwater
Employing 10 percent more New Zealanders by 2030, and 10,000 more New Zealanders in the food and fibre workforce over the next four years.	Employment	Job matching data from Ministry of Social Development monthly, and from course providers at the end of each course.



Appendix 2 – *Fit for a Better World* strategic groups

Food and Fibre Partnership Group

The Food and Fibre Partnership Group is a pansector leadership group tasked with developing, coordinating and supporting a progressive work programme to implement the sector's vision, and continued evolution and transformation of core industries. It includes the following members:

- Mike Petersen
- Ray Smith
- Carolyn Tremain
- Vicky Robertson
- Peter Chrisp
- Traci Houpapa
- Miriana Stephens
- David Rhodes
- Andrew Morrison
- Barry O'Neil
- Jim van der Poel
- Craig Ellison
- · Philip Gregan

More information on the Food and Fibre
Partnership Group is available at:
https://www.fitforabetterworld.org.nz/food-andfibre-partnership-group

Māori Primary Sector Forum

The Māori Primary Sector Forum will provide strategic advice towards policy solutions and opportunities for how participants in the Māori primary sector can best realise the potential of their whenua, communities and primary sector economy. It includes the following members:

- Traci Houpapa
- Nadine Tunley
- Te Kapunga Dewes
- Tanira Kingi
- Dr Riri Ellis
- Bob Cottrell
- Richard Manning
- Ray Smith
- Ingrid Collins
- Tane Bradley

Te Puna Whakaaronui

Te Puna Whakaaronui is a future-focused thought leadership group that will undertake inquiries in a similar way to the Productivity Commission. Its purpose will be to generate new strategic thinking and develop pathways to transform existing primary industries and create new ones. The Food and Fibre Partnership Group and Primary Sector Forum will help identify priority inquiries. Te Puna Whakaaronui is hosted by MPI.

Te Puna Whakaaronui Governance group includes:

- Sir Brian Roche
- Lain Jager
- Ray Smith
- Dr Caralee McLiesh
- Peter Chrisp

Te Puna Whakaaronui thought leaders group includes the following members:

- Lain Jager
- Neil Richardson
- Nick Hammond
- Debbie Birch
- Murray Sherwin
- Andrew Ferrier
- Rob Hewitt
- Juliet Gerrard

