

# Submission

## Te Ara Paerangi – Future Pathways Green Paper

March 2022

### Introduction

We welcome the opportunity to comment on *Te Ara Paerangi – Future Pathways Green Paper* (the Green paper). We note that this Green Paper marks the start of a wide-ranging and open conversation about how to position New Zealand's research system for the future, and we look forward to being involved in the conversation as it progresses.

Fonterra is a co-operative owned by over 9,000 New Zealand farming families. Our farmers lead the world by producing high quality nutritious milk, quickly adopting technological advances, and increasingly enhancing and protecting the environment. Our strategy is to enhance people's lives through convenience, health and wellbeing by unlocking the goodness of New Zealand milk. To make this happen we have made three strategic choices – continue to focus on New Zealand milk, be a leader in sustainability and be a leader in dairy innovation and science.

Our business is built on a strong and enduring legacy of thousands of innovative and adaptable farmers who have made New Zealand a world leader in the dairy sector. The dairy sector creates wealth for New Zealand and New Zealanders. The money our farmers are paid for their milk and our Co-operative's profits remain in New Zealand. Since the creation of our Co-operative in 2001, dairy exports have grown from \$7.4 billion in 2001 to over \$20 billion for the year ended June 2021, and the benefits of this have flowed back into regional New Zealand, with over \$14 billion expected to flow back into rural New Zealand in 2022.

Fonterra has been conducting Research and Development (R&D) for 95 years and has one of the largest dairy innovation facilities in the world, home to over 350 scientists, engineers and researchers from more than 40 countries.

Fonterra invests more than \$100m per annum on innovation and has plans to increase this investment to around \$160 million per annum in 2030. Fonterra's R&D teams work with experts locally and globally and have joint activity with the CRI's in New Zealand. Over recent years projects have been undertaken with NIWA, ESR, Plant & Food Research and AgResearch with a number of projects active at any one time.

Fonterra is also a founding member of FoodHQ alongside Plant and Food, AgResearch and Massey University. FoodHQ is a collaborative partnership involving most of New Zealand's capability in food science-based innovation, and includes public and private sector research, education and industry organisations. It is headquartered in Manawatū with extensive national and international networks.

## Fonterra views on the Green Paper

Fonterra agrees with many of the observations in the Green Paper, which resonate with our own observations regarding the challenges and opportunities for the New Zealand Research, Science and Innovation (RSI) sector. These include:

- the value of connections across the RSI system within New Zealand and globally;
- the importance of world class capability in the workforce and in RSI facilities; and
- the need to make it easier for New Zealand businesses to access the full value of our science and innovation ecosystem.

We believe that while there are many aspects of the current system that work well, there are aspects that could be further improved. We have noted these in our comments on particular chapters of the Green Paper.

We note that the Crown Research Institutes have prepared a joint submission on the Green Paper in consultation with a number of leading NZ food and fibre companies, including Fonterra. We encourage further exploration of the concepts in this paper including the proposal to have National Priorities inform specific, time-bound “Missions” that target science and innovation specifically at key problems and opportunities and the proposal to use a “triple helix” approach of industry, government and the research sector to set National Priorities. We are also supportive of the comments on ensuring the research strategy is inclusive of Māori viewpoints, aspirations and interests.

### Importance of the research system in supporting the food and fibre sector

As is noted in the Minister’s Foreword to the Green Paper, our research system needs to build novel and transformative options for the new economy of the future while continuing to support current jobs and industries. Fonterra believes that the food and fibre sector will play a critical role in these novel and transformative options. While Fonterra is working toward novel options including complementary sources of nutrition, we see these as creating new value streams that sit alongside existing nutrition sources like dairy.

Fonterra believes in the importance of a vibrant agriculture sector in New Zealand and the opportunity to increase the value of this business, particularly through innovation. New Zealand’s current food and fibre exports are expected to top NZ\$50 billion for the first time this year, making them ~17% of New Zealand’s GDP. This should be protected and used as a platform for sustainable growth. Fonterra has plans to invest more than \$1 billion into innovation over the next decade, and sees the value in working alongside a strong New Zealand RSI community.

We are therefore concerned that there seems to be a lack of future focused support for primary industries in this proposal. The Green Paper refers to diversifying food and fibre as a key driver for the RSI sector. We would like to see recognition of the need to resolve critical RSI issues for existing sectors identified as another key driver. To drive New Zealand’s future prosperity and well-being, a future-focused research system for New Zealand will need to support addressing research challenges for current sectors (such as unlocking new nutrition applications for New Zealand’s food products or greenhouse gas emissions reduction for livestock) as well as looking to novel food options.

Fonterra also considers that, while food is called out in the Green Paper, it is the importance of nutrition, not calories that should be the focus as the Government looks to define research priorities. With a global pandemic driving a heightened awareness of overall health and wellbeing, New Zealand is well placed to provide high value sought-after nutrition to markets globally. We support the research system being designed to support a focus on sustainable, nutrition-rich food, taking advantage of our temperate climate, strong global reputation and history of innovation in the sector.

## Chapter One: Research Priorities

Fonterra supports the proposal to set research priorities that articulate areas of national importance. We also support the opportunity to reduce/remove duplication from the system and allow for more alignment and collaboration on priorities across the RSI landscape.

Fonterra would like to see more consideration of end users of research and public sector-private sector connections in both the system design and in setting the research priorities. The Green Paper is focussed on proposed changes with the CRI's and ensuring research priorities are appropriately driven. Fonterra would like to see similar consideration of how we can increase the opportunities for public / private partnerships in these same areas.

Fonterra would like the process of setting these priorities to include aligning with businesses that can help drive a successful RSI system and drive meaningful sustainable change and economic growth in New Zealand.

There is also an opportunity to align with industry to incorporate implementation and ultimately commercialisation of key priorities as part of the priority setting process.

As is noted in our introduction, Fonterra believes that the research priorities, and the process for setting the research priorities, should balance support for existing sectors and industries with support for novel sectors. The RSI system should enable relevant parts of the system to focus on leveraging New Zealand's competitive advantage in sustainable, nutrition-rich food, taking advantage of our temperate climate and strong global reputation.

In terms of specific research priorities, while there is a range of important issues to consider, the two areas most important for Fonterra are climate change (including biogenic emissions reductions) and nutrition.

## Chapter Two Te Tiriti, Mātauranga Māori and Supporting Māori Aspirations

Fonterra's Māori strategy Haea Te Ata is based on the three pillars of Tāngata, Taiao and Tuakiri. We recognise the importance of Mātauranga Māori in the science ecosystem and we look forward to learning more about how this will work in practice.

## Chapter Three Funding

Fonterra is supportive of the opportunity to provide more certainty for research and stakeholders, and to develop funding models that are aligned to this.

## Chapter Four Institutions

As is noted in the section on priorities, Fonterra is supportive of the opportunity to reduce or remove duplication from the system and allow for more alignment on priorities and projects across the RSI landscape.

Fonterra supports the intention to remove barriers to collaboration across all research organisations. Many businesses, especially Fonterra, carry out their own RSI work and also seek to coordinate with the CRI's to fully leverage the RSI landscape in New Zealand. This is an area we would like to see continue and strengthen.

The Green Paper quotes from the 2010 CRI Taskforce Report that "it is not clear if a CRI's objective is to create value for itself, as a company, or to generate value for New Zealand". Fonterra notes that we see challenges currently with the creation and commercialisation on Intellectual Property (IP) from the CRI's, as CRI's see the need to drive value from IP creation. This can stifle adoption and the opportunity to take innovations to market.

We also note the importance of accessibility of facilities and capabilities for businesses (from start-ups to frontier firms) to enable future growth.

## Chapter Five Research Workforce

Fonterra is strongly supportive of the opportunity to provide more certainty for the research workforce as a result of improved funding models, and a proactive focus on building capability and career pathways.

We support provision of enhanced career pathways for researchers and attracting more diverse talented young people into RSI related careers.

## Chapter Six Research infrastructure

Fonterra agrees that there is an opportunity for better coordinated property and capital investment through co-location or shared use of research assets. Efficient allocation of capital and operational expenditure on research assets should free up funding for new areas of research to be undertaken.

As noted in our comments under Chapter Four (workforce), we would also like to see consideration of the accessibility of facilities for businesses (from start-ups to frontier firms) to enable future growth.

## Conclusion

Fonterra recognises that the Green Paper is the first step in a longer process to consider the appropriate design for New Zealand's research system. We look forward to further engagement in this process as it continues. We are happy to offer further information on any of the points raised in our submission. Please contact Fiona Hutchinson, General Manager NZ Government Affairs at [Privacy - 9\(2\)\(a\)](#) for any additional information.