

NEW ZEALAND ROUNDTABLE FOR SUSTAINABLE BEEF

ANNUAL REPORT

MAY 2023



ABOUT THIS DOCUMENT

This is the 3rd Annual Report produced by the New Zealand Roundtable for Sustainable Beef (NZRSB) since its inception in July 2020.

Despite the impact of Covid, weather events and the number of regulations over the last three years NZRSB is pushing forward to connect and collaborate with all contributors to the beef value chain. The NZRSB is still working towards delivering on the recommendations in the Final Public Report from our inaugural project, the New Zealand Beef Sustainability Proof of Concept Project (ANZCO Foods, Beef + Lamb New Zealand, Fulton Market Group, Greenlea Premier Meats, McDonald's and Silver Fern Farms Partnership, 2022). The project recommendations and our progress with them are found throughout this document and in the actions we undertake.

This report is to provide clarity and transparency around the work, intention and direction of the NZRSB. In every action, we reflect on the three key learnings delivered by our Proof-of-Concept study and apply our methodology to pursue continuous improvement in alignment with our Guiding Principles and our definition of Sustainable Beef.

SUPPLY CHAIN VERSUS VALUE CHAIN



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KIA ORA

The last 12 months have been challenging for everyone in the agricultural sector in New Zealand. We have had continued Covid19 related disruptions, inflation, labour shortages, rising costs of production, impending GHG regulations and extreme weather events. The East Coast of the North Island has been hit with two major cyclones and record rainfall. The result has been widespread devastation that will take a long time to recover from and our thoughts go out to everyone that has been affected.

The NZRSB has made some good progress as an organisation this year. One of the main things we have achieved is aligning our goals with the Global Roundtable Sustainable Beef (GRSB). The GRSB goals are around:

- · Animal Health and Welfare
- Climate
- · Nature positive production

Every country has different farming systems and so will have different interpretations of these goals and how they relate to them. In the annual report you will see how we have adapted these global goals to be more in line and relevant to our New Zealand agricultural systems.

We are slowly growing our membership base and have established relationships that will help us continue to grow. One of these relationships is with NZFAI (New Zealand Farm Assurance Inc) and we are now offering a free 12-month membership to NZRSB for all NZFAP Plus registered farmers. Farmers under similar assurance programmes may also apply for consideration.

The Life Cycle Assessment (LCA) by our member AgResearch, that was commissioned by our member, Beef and Lamb NZ, and the Meat Industry Association (MIA), has been completed. The results show that New Zealand beef and lamb is among the most carbon efficient in the world. We as an industry need to really use these results as a point of difference in the global markets but also our domestic markets. We also need to educate consumers and change the current narrative, that we not only produce some of the world's most sustainable beef, but it is also the most carbon efficient.

In November 2022, I had the privilege of representing the NZRSB at the GRSB conference in Denver, Colorado. There were 17 countries represented and a variety of presentations from all over the world. One of the standout observations for me was that the New Zealand beef industry is doing an excellent job with sustainability when compared to other countries. There is a summary of the conference available here: https://nz-roundtable.squarespace.com/news/2022-gcsb-report-rs

I would like to acknowledge and thank the current and previous NZRSB board members for their involvement, support, and effort. I would like to make a special mention and thank you to Susie Craig (past Board representative for McDonalds) who was one of the founding board members of the NZRSB. Susie's passion and enthusiasm for sustainable beef really guided the NZRSB to where we are today.

Special thanks to our Executive Officer, Louisa Icke, who has been the catalyst for all of our successes this year. She has worked tirelessly to help us achieve our goals this year.

I believe the NZRSB is continuing to make progress towards achieving its goals. I think as an organisation we have the opportunity to add value to our members and have a positive impact across our beef value chain.

Thank you,
Richard Scholefield
NZRSB Chair



VISION

New Zealand Beef will be recognised as the world's most sustainable beef, continuously improving outcomes that are environmentally sound, economically viable, and socially responsible.

MISSION

Our New Zealand beef value chain strives together to produce the world's most sustainable beef through strategic, collaborative, co-ordinated and transparent actions.

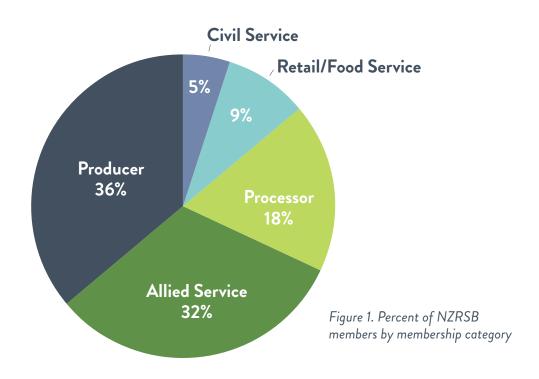


STRUCTURE

The NZRSB is currently led by 11 elected Board Members and contracts one Executive Officer. There are 3 vacant Board seats. There are 29 members in six membership categories including Producer, Processor, Civil Society, Retail or Food Service, Allied Service (which includes industry representation and research organisations) and Associate (1/10 vote). There is also a non-member Observer category to allow participants to trial their involvement for a period of up to one year.

To recognise that more than half of NZ beef is sourced from the dairy industry, we are working towards developing a stronger and more proactive dairy linkage for completeness, including direct and indirect dairy industry representation.

A new introduction to the 2023/2024 year is the automatic allocation of free Associate Membership to any farmer registered for NZFAI's NZFAP Plus farm assurance programme. Farmer producers currently registered under other assurance programmes may also apply for consideration. NZRSB acknowledges that a strong producer voice is necessary to further develop the value proposition for sustainable beef programmes and enhanced industry transparency around its practices and impacts.



As we continue to collaborate and embrace multi-stakeholder input, we acknowledge there are a number of value chain representation gaps to fill and invite you to engage with these members of industry to aid in the development of sustainable beef initiatives.

MEMBERS

Who's here

Starzen Co, Ltd
Lone Star Farms
Whangara Farms
Silver Fern Farms
Ngai Tahu Farming
Ridgeway Farms Ltd
DC & LJ Redmond Ltd
AgriFood Strategy Ltd
Fulton Marketing Group
Scargill Hills Farming Ltd
Beef + Lamb New Zealand
Greenlea Premier Meats Ltd
Fonterra Co-Operative Group Ltd
Craigmore Sustainable Proteins Ltd

SPCA
QCONZ
Alliance
Rabobank
McDonalds
AgResearch
ANZCO Foods
CJ & AM Allen
FarmRight Ltd
Kaike Farm Ltd
Te Karoa Farms
Alpine Pastures
Scholefield, R&K
Mangarara Farm

Who would we like to see?

Waste Livestock reps
Export Butcher industry
Logistics Supplier industry
Saleyards Meatworker unions
Transport Veterinarian industry

Packaging Environment/ecological societies

NZRSB BOARD



Richard Scholefield Whangara Farms NZRSB Chair



Steve Dickie ANZCO Foods NZRSB Treasurer



Megan Skiffington AgResearch NZRSB Secretary



Chris Allen Producer



Nikki Cameron Craigmore Sustainable Proteins



Kate Griffiths Alpine Pastures



Nick Beeby Beef + Lamb New Zealand



Matt LuxtonSilver Fern Farms



Ben Bell McDonald's



Jess Blair SPCA



Anthony DarkeProducer



Louisa Icke NZRSB Executive Officer

FOR THE BENEFIT OF THE NEW ZEALAND BEEF INDUSTRY



NZRSB HISTORY/BACKGROUND

In 2018, partners from the Red Meat Profit Partnership (RMPP) and other stakeholders formed the NZRSB steering committee (or New Zealand Chapter of the GRSB).

RMPP partnered with the steering committee for NZRSB and commissioned the New Zealand Red Meat Sector Sustainability Materiality Assessment (Red Meat Profit Partnership, 2021). The result of this assessment helped direct the formation of NZRSB and highlighted the importance of the Farm Assurance Programme, succinctly stating, "Stakeholders are demanding measurement and verification of sustainability and animal welfare issues and expect transparency throughout the supply chain." (Love, 2019, p. 29)

Utilising the outcomes of the materiality assessment the NZRSB's inaugural project, the New Zealand Beef Sustainability Proof of Concept Project, demonstrated that sustainable beef could be traced through the supply chain. This project created a practical verified sustainable model, enabled tracked mass balance reporting to the consumer and helped RMPP refine the NZFAP Plus farm assurance programme (RMPP later assigned to NZFAI) (ANZCO Foods, Beef + Lamb NZ, Fulton Market Group, Greenlea Premier Meats, McDonald's and Silver Fern Farms Partnership, 2022).

During this time, the NZRSB society was incorporated on 11 June 2020 by founding members: ANZCO, Beef + Lamb NZ Ltd, Greenlea Premier Meats, Fonterra, McDonald's, Silver Fern Farms, World Wide Fund for Nature (WWF), farmer food producers and AgResearch.

The NZRSB is an active National Roundtable member of the Global Roundtable for Sustainable Beef. We communicate the developments in the NZ beef industry while gaining awareness and insight from other international organisations, National and Regional Roundtables on shared issues and challenges and how we can cooperate to achieve goals.

GUIDING PRINCIPLES & KEY LEARNINGS

NZRSB will work:

- 1. PROGRESSIVELY,
- 2. COLLABORATIVELY &
- 3. WITH CREDIBILITY (ISEAL Credibility Principles)

Key learnings towards NZRSB's progress and success delivered by the Proof of Concept Project

- 1. LISTEN & LEAD.
- 2. BUILD A COMMUNITY & COLLABORATE,
- 3. PROGRESS OVER PERFECTION

METHODOLOGY

ALIGN, MEASURE, IMPROVE & REVIEW



ALIGN

Standards for the New Zealand beef value chain that align with the Global Roundtable for Sustainable Beef principles, and United Nations Sustainable Development Goals.

IMPROVE

Identifying gaps and opportunities for improvement and driving initiatives to bring about change.

MEASURE

Identifying indicators, metrics or practices that provide proof that our beef industry is meeting the defined standards and reporting these to stakeholders.

REVIEW

Constantly reviewing our progress by engaging stakeholders in continuous improvement conversations.

SUSTAINABLE BEEF

Sustainability is achieving balance between the three pillars of sustainability, being environmental, social and economic, which underpins all goals set and actions taken.

We define sustainable beef as an environmentally sound, socially responsible and economically viable product that prioritises the planet, people, animals and progress.



ECONOMIC VIABILITY

Figure 2. NZRSB Core principles for sustainable beef production and delivery as derived from GRSB's core principles for sustainable beef production and delivery (GRSB_Principles_F.pdf (grsbeef.org))



DEVELOPMENT GOALS

NATURE POSITIVE GOAL

The whole of the New Zealand beef value chain inputs will result in a net positive contribution to nature. All contributors to the New Zealand beef value chain are recognised as being environmental stewards.

With such a wide range of potential topics under the heading of Nature Positive, it has been in some ways a struggle to whittle down the possible goals to report on and in other ways a great pleasure to see the many ways New Zealand beef farmers are working hard in this space.

A key criterion being considered is looking for 'science-based land management practices.' This need for a science or evidence base has meant ensuring that any data chosen to represent the outcomes being targeted would be credible, repeatable and robust. In New Zealand there are many environmental data sets that offer insights into different environmental measures, however trying to focus on one that would represent the beef industry clearly has taken a lot of consideration. There is also a need to represent the stewardship beef producers deliver for their whole farm, as opposed to focusing on single point metrics.

Behind the farm gate, NZRSB have chosen data around farm plans as the best way to report on the industry's commitment to being nature positive. The plans that will be considered must be audited externally, and need to cover actions on areas including biodiversity, water quality and emissions. The NZFAP Plus programme has now been approved as meeting the standard the NZRSB require from a plan, and the board look forward to understanding further plans in the future. The number of farmers with an active farm plan that meets these standards will be an important part of future reporting.

Farmers coming together as communities around environmental stewardship is also seeing the formation of catchment groups who are working together on locally relevant topics and how they can understand and address them. Recognising the value and importance of these groups the NZRSB would like to report on them as another metric showing farmer commitment to being nature positive.

Post farm gate, the contributions of processors and retailers are also important to consider. Working with the members that represent these sectors of the value chain, goals around waste minimisation and increased utilisation are also being developed.

Next steps are to finalise and produce an initial report on the metrics in the nature positive space, as this reporting is built on this will form a key window into the efforts of the New Zealand beef value chain to contribute positively to nature.

CLIMATE GOAL

Introduction

Over the last year the Climate Working Group has been working on a climate change goal for the NZRSB and we were pleased to be able to publish a draft goal, objectives, and targets for consultation alongside the nature positive, animal welfare and organisational goals at the beginning of the year. This climate goal aims to provide an avenue for the New Zealand beef value chain to demonstrate that it is achieving the climate goals set by the GRSB while also playing its part to meet the Paris Agreement targets.

GRSB Goal

The Global Roundtable for Sustainable Beef has a climate goal of reducing by 30 percent the net global warming impact of each unit of beef by 2030, on a pathway to climate neutrality. This recognises that an appropriate target for the beef sector is climate neutrality, defined as a point where no new warming is being added to the atmosphere.

Development of NZRSB Goal

The starting point for the climate goal was to understand how different parts of the value chain are tackling climate change and build a goal that brings these together. A second important part of the process was to set goals that are measurable, which meant understanding what data was available and where it was stored. Thirdly, the NZRSB climate goal is also designed to utilise current initiatives to demonstrate achievement rather than adding additional requirements to the sector.

New Zealand is already making significant headway on agricultural climate change through the He Waka Eke Noa (HWEN) Partnership with industry organisations representing farmers and processors both involved in the partnership alongside Government and Māori.

Through the HWEN partnership, targets were set for farmers to understand their emissions by the end of 2022 and have a plan in place to manage emissions by 2025. Processors have also been a key part of supporting this process by holding 'know your number' workshops with farmers.

Companies further along the value chain are also in the process of setting their own Paris aligned targets and reporting publicly on progress.

The Goal

Bringing all of this together, a NZRSB climate goal was proposed: "Reduce the GHG footprint on the pathway to climate neutrality across the beef value chain." OR "New Zealand's beef industry is climate neutral by 2030."

This aligns with the GRSB Climate goal and recognises that an appropriate target for the New Zealand beef sector is climate neutrality, where no new warming is added to the atmosphere from beef production. It sets similar objectives for measuring and managing for emissions across the entire beef supply chain.

A second objective was to support industry wide investments in research and development and incentivise climate smart beef production throughout the value chain. This includes robust targets for companies to transition away from coal use and towards more environmentally friendly forms of energy. It also aims to reduce emissions from transport by reducing the kilometres travelled per animal, a target that also positively affects animal welfare.

Measuring progress

Data sources to measure the agricultural sector's emissions are available through both Ministry for the Environment and Beef + Lamb NZ reporting, although there are some challenges separating beef and dairy emissions when beef comes from animals of dairy origin.

In terms of measuring specific actions taken to achieve this goal, the HWEN partnership will provide ongoing public reporting, such as on the number of farmers who know their GHG number and have a plan to measure emissions.

Companies will be responsible for setting their own climate targets and reporting on them.

The NZRSB will then be able to use these sources of data, along with official emissions reporting by the Ministry of Environment to demonstrate progress towards the NZRSB climate goal.



ANIMAL HEALTH AND WELFARE GOAL

The Animal Health and Welfare development goal is "Continually striving towards improvement in animal care and quality of life."

NZRSB remains committed to New Zealand beef cattle being raised in a way that ensures the animals are well cared for, within an environment that allows them to thrive. We recognise that the continuous improvement of animal health and welfare from farm to processor is an integral part of New Zealand being recognised both domestically and internationally as a producer of sustainable beef.

The health and welfare of livestock directly impacts not only the sustainability of the animal but also the financial viability of the producers themselves. This starts with appropriate genetics and includes best practices in disease prevention, health and welfare treatment measures, and low stress cattle handling, amongst others. Improvements to Animal Health and Welfare can lead to positive outcomes across the beef value chain and improve the general public's perception of animal welfare in New Zealand.

We understand that it is important for consumers to know that the animal their beef has come from has been well cared for throughout the animal's whole life. Therefore, it is necessary that the Animal Health and Welfare goals are adopted by the whole value chain, including producers, transporters, processors, and all animal handling service providers.

In setting our goals and targets we are committed to a science-based approach and a curiosity for understanding new research, future technology, and opportunities for improving genetics and disease prevention.

We continue to be challenged by setting worthy and measurable goals that can be verified and supported by credible data. To this end, we have drafted a target to 'support the investigation of a means to measure, track and build data on live cattle animal health and welfare issues', as we see this as a vital means of demonstrating transparency to customers and supporting the improved health outcomes of beef cattle in New Zealand.

One way to drive positive on farm animal health and welfare outcomes are with meaningful Animal Health and Welfare Plans that are updated annually incorporating science-based practices, with the potential to contain verifiable elements to ensure industry action.

We would like to identify sources of useful data that will highlight challenges and opportunities in the New Zealand beef value chain where we can work with producers and industry to improve animal health and welfare. On-farm Animal Health and Welfare plans and on-farm data capture using electronic identification are two examples of how we could capture useful information including mortality, production records, birthing percentage, and animal-based indicators such as BCS (body condition score), worm burden and disease. This data would provide valuable information for farmers and would ensure we make relevant determinations for continual improvement.

The next steps are to expand the membership across the whole beef value chain and to strengthen collaboration between the beef and dairy industries, including transportation, processors and veterinarians and animal welfare experts, who are primarily involved with the health and welfare of livestock. Ensuring a broad range of representative voices are part of the discussion will result in a well-supported and robust strategy for improving animal health and welfare in the New Zealand beef industry for a progressive and sustainable beef future.

ORGANISATIONAL

In addition to aligning with GRSB on Climate, Nature Positive and Animal Health and Welfare, we must also focus on our own organisational development to grow awareness of the NZRSB, increase our connectivity and engagement across the value chain and demonstrate our commitment to the New Zealand beef community.

The three key objectives towards our organisation's Vision and Mission are:

NZRSB is seen as a valuable voice for industry alignment and cooperation.

A clear value the NZRSB provides is that participants from across the beef value chain are involved, therefore creating an organisation that can speak credibly in regards to New Zealand beef production methods, from paddock to plate. Increasing membership to include more members from each step in the value chain will strengthen this message, as will demonstrating that we are achieving the goals that we have set.

Some of the challenges that the industry is facing require cooperation from across the value chain and between companies. The NZRSB aims to bring likeminded partners together to work on these issues, recognising that we are stronger together.

Increase demand for New Zealand beef through awareness of sustainable product.

The second objective acknowledges that growth in demand will demonstrate success for New Zealand's predominantly export beef market. Demand comes from a product that is trusted and valued with the Certification Framework demonstrating a whole of value chain commitment to sustainable beef while encouraging continual improvement. The Certification Framework also allows for the adoption of existing assurance programmes that demonstrate that members are producing beef in a way that achieves the climate, nature positive and Animal Health and Welfare goals.

Promote and support a stronger, resilient and more united Kiwi beef community

In the third objective our focus is the people that make up the New Zealand beef industry. Our farmers, vets, scientists, meat workers, shippers and retailers all contribute to production of beef that is sustainable, ethical and trusted by domestic and international consumers. Recognition of different parts of the beef value chain and the interactions between members of the NZRSB will result in a sector that is united and works together to address challenges and secure new opportunities.

2022/23 ACTION PLAN 2023/24

In 2022 we updated our Action Plan removing actions that were achieved and amending actions to progress on expanding our reach, developing on the Certification Framework and furthering our work to align with the GRSB goals.

ORGANISATIONAL

- Grow membership by 100%.
- By means of regular engagement, remain at the forefront of emergent industry issues and deliver ideas inclusive of all members of the value chain.
- Establish a communications & marketing strategy.
- · Promote and support a stronger, resilient and more united Kiwi beef community.

Although we did not grow our membership by 100% this year, we developed ideas to expand on industry awareness and increase our engagement. We are connecting regularly and engaging across the industry to stay on top of the issues and promote relevant support industries. More work on communications and marketing is planned for this coming year.

CERTIFICATION FRAMEWORK

This year we revisited the recommendations of the Proof of Concept project, considered the actions set in NZRSB's first planning year (2021) and reviewed our work over the last year to reshape the priorities for the 2023/24 year. The 2023/24 Certification Framework Action Plan includes the following five actions.

- Processor members will provide quarterly reporting on the aggregate number of cattle traced as independently verified sustainable beef through the framework, with first reporting by end of June 2023
- Draft framework project plan by end of September 2023.
- Align & have influence with farm assurance programme providers (e.g., establish MoU with NZFAI) by end of 2023.
- Members engage and use framework by end of December 2023.
- Establish or identify an appropriate industry sponsor for processing standard and investigate
 opportunities in other industry contributors to the beef value chain by end of financial year, to develop a
 measurable framework specific for NZ sustainable beef production that will ensure ongoing relevance of
 standards and verification process and enable them to demonstrate their effectiveness to drive continuous
 improvement.

The Certification Framework is reflected within every set of the NZRSB goals as it encompasses the deliverance of all elements including Climate, Nature Positive, Animal Health and Welfare, industry collaboration and well-being. This project remains in progress with the ambition to allow any member of the beef value chain to contribute to a wholly sustainable beef product available to our end consumers from pasture to plate.

Some Proof of Concept project recommendations that will also be incorporated into our development of the framework include:

- Anchor on one standardised method to track Chain of Custody so that all members of the New Zealand beef community can participate on equal footing.
- Supporting the work on the NZFAP Plus standard, its extension to whole of life verification rather than the last farm of residence and its commercialisation.
- And seek efficient ways using technology to apply an outcome-based approach.
- (ANZCO Foods, Beef + Lamb NZ, Fulton Market Group, Greenlea Premier Meats, McDonald's and Silver Fern Farms Partnership, 2022)

GLOBAL ROUNDTABLE FOR SUSTAINABLE BEEF ALIGNED GOALS

- Publish goals Climate, Nature Positive and Animal Health and Welfare to align with the framework set by Global Roundtable for Sustainable Beef.
- Ensure goals are measurable and grounded under consistent and reliable data representative of the whole beef value chain.

This year we were able to pull together a draft set of goals, objectives and targets based on the strategic planning work carried out over the last two years. Our current emphasis is on consultation to ensure we have all the input of every sector and any member that has ideas to share.

For 2023/2024 we will continue with the action plan set for last year with some adjustments to further the realisation of the Certification Framework.



CERTIFICATION FRAMEWORK PROJECT UPDATE

The NZRSB is committed to a more sustainable beef value chain and to do this we need a framework to ensure that both our members and the wider industry head towards and can align with a more sustainable future.

The processors are crucial to this equation, and they have a responsibility to both support our farming networks and ensure that their own emissions are reducing. To enable this each processor needs to report their carbon emissions footprint to be aligned with the vision of the NZRSB. A publicly announced emissions number alongside a reduction plan audited by a third party is crucial in driving our industry in the right direction.

Transport is slightly trickier as it is made up of multiple aspects, the transport from farm to processor and from processor to customer. Since processors control the transport of live animals there is the ability to reduce emissions per kilogram of cattle transported. Most of the industry have plans in place to enable this and there are platforms that have been created to speed this transition up. Impressively, there are NZ companies that have been so successful in NZ that they are helping international beef producers to be more sustainable in their own countries with the same technology being used in NZ.

Farmers, and most importantly, as we know that the vast majority of emissions for a kilogram of meat occurs on farm, so it is critical to advance this area and have our farmer members either in the process of registering or being registered and certified on the NZFAP Plus framework of continuous improvement. As a NZRSB board we are committed to the advancement of NZFAP Plus standard on farm. Advancing the free membership of NZFAP Plus registered farmers for one year will enable the importance to be elevated across a broader network of actively sustainable farmers. The NZFAP Plus platform on farm underpins the activation that we as a board are striving to achieve – the most sustainable beef value chain in the world.

Customers and retailers are another huge part in ensuring we have a fully integrated value chain that is actively moving towards being more sustainable. The reporting of their own emissions is something that needs to be in a timeline to achieve with a reduction plan in place to decrease this over time.

There are many other essential contributors to the success of our value chain that provide critical inputs and support to the progress of the direct line of product transfer. We hope to bring all contributors to the value chain together to collaborate on a means for inclusion into a whole value chain framework.

As we have stated it takes the whole supply chain and all of its contributors to ensure that we as an industry are doing everything possible to create a more sustainable beef value chain for the future generations of farmers and industry players.

NZ FARM ASSURANCE PROGRAMME PLUS (NZFAP PLUS)

NZFAP Plus is a nationwide higher-level voluntary sustainability farm assurance standard owned and managed by New Zealand Farm Assurance Inc and launched in November 2021.

The base programme, NZFAP, is comprised of three fundamental components, origin, traceability, food safety and animal welfare. NZFAP Plus includes People, Farm and Natural Resources and Biosecurity, the three components over and above the base assurance programme.

Integrated farm planning is an essential part of the NZFAP Plus standard which has been designed to protect and enhance all resources, create better and more sustainable farming businesses and incorporate socially responsible and ethical practices.

To participate in the NZFAP Plus, farmers must already be certified under NZFAP.



MEMBER SUCCESSES/SPOTLIGHTS

NZRSB PROCESSORS TEAM UP

Market 2X or M2X is an organisation focussed on improving the efficiency and sustainability of primary industries in New Zealand through logistics management. One M2X initiative involving livestock transport sustainability is developing transport management technology that will provide full visibility to the business of all transport activity to eliminate unnecessary journeys and build network efficiency.

M2X transport logistics technology to reduce travel kilometres per animal or livestock carcass equivalent (LCE) has resulted in a number of desirable outcomes as highlighted in Figure 3.

7.73% Less emissions per LCE

11.3% Less kms travelled 11.3% Less kms travelled per LCE

7% Drivers' days saved

7.32% Increase in utilisation

Period 01/01/22 - 03/03/23

- All measures are positive
- The Precision Pricing rollout will be completed in Q3 2023
- Continuing to share the benefit with carriers

Figure 3. Market 2X / M2X reporting for the period 01/01/2022 to 03/03/2023. (Silver Fern Farms, 2023)

B+LNZ INFORMING NZ BEEF

Beef + Lamb NZ, with the support of MPI, is two years into a 7-year programme elevating beef genetics, Informing NZ Beef (INZB).

The programme assesses bulls across different breeds on genetic traits which will allow commercial industry producers to determine which animals are most efficient with respect to breeding outcomes, health



traits, GHG emissions and production. Another outcome will be the development of tools that will assist farmers in bull selection based on the traits most relevant to their specific farming system.

There are four elements to this programme:

- 1. Commercial progeny testing genetics, replacements and carcase data to be able to predict hybrid vigour.
- 2. Determine the most valued/relevant breeding traits to test for and index at a simple mainstream commercial level and at a detailed level targeted to advanced breeders.
- 3. Determine the most valued/relevant productivity traits based on existing performance data and additionally by stakeholder consultation. With the intent to carry out breed evaluations and incorporate international breeding values.
- 4. Develop a universal database where all information can be stored and accessed for the benefit to industry members and the New Zealand beef herd.

(Beef + Lamb New Zealand 2022, 2022)

LIFE CYCLE ASSESSMENT

The Life Cycle Assessment (LCA) study by AgResearch was commissioned by Beef + Lamb New Zealand and the Meat Industry Association of New Zealand (MIA) (Beef + Lamb New Zealand 2023, 2022). This LCA is consistent with the GRSB's guidelines and was one of the first to be completed by a regional roundtable.

The study looked at the entire supply chain, from on farm, through to processing, transport, and consumption. This is a useful study for the NZRSB, whose members cover the entire value chain and provides a solid baseline for understanding the emissions intensity of New Zealand beef production from cradle to grave including waste and emissions from end use packaging, food-waste and effluent.

The researchers, which compared New Zealand's on-farm emissions to a range of countries' footprints across the globe, concluded that when New Zealand beef or sheep meat is exported, the total carbon footprint is lower or very similar to domestically produced red meat in those nations.

This is because New Zealand is so efficient at the farm level, which represents about 90-95% of the total GHG footprint. New Zealand's onfarm footprint was about half the average of the other countries compared in the study. (Beef + Lamb New Zealand 2023, 2022)

The LCA was calculated using the standard GWP100 approach for converting methane to carbon dioxide equivalent to enable valid international comparisons. AgResearch scientists also measured the carbon footprint of New Zealand beef and sheep meat using an emerging approach known as GWP*, which determines a carbon footprint based on a product's actual contribution to the warming of the planet over a period of time rather than total emissions. (Beef + Lamb New Zealand 2023, 2022)

For carbon sequestration by trees, the study utilised two reports on sequestration, one from the Auckland University of Technology and one from the Ministry for the Environment's 2021 report: Net emissions and removals from vegetation and soils on sheep and beef farmland, to calculate the sequestration rates.



GHG CALCULATOR & RATE OF SUCCESS

In order to help farmers understand their emissions, the Red Meat Profit Partnership and Beef + Lamb NZ developed an easy to use calculator for farmers to calculate their emissions and sequestration. Understanding on farm emissions is the first step towards managing them and having 100% of farmers understanding their on-farm emissions by the end of 2022 was a key milestone for

the He Waka Eke Noa Partnership.

Beef + Lamb NZ joined forces with Silver Fern Farms, Alliance, AFFCO, Greenlea Premier Meats, ANZCO and Deer Industry New Zealand to deliver the workshops and reach as many farmers as possible.

By the end of 2022, more than 250 B+LNZ GHG Calculator and Action Plan workshops had been delivered. As a result of this and other activity, more than 8,800 sheep and beef farmers now know their emissions numbers, which represents approximately 96 percent of the commercial sheep and beef farmers in New Zealand. (Beef + Lamb New Zealand, 2022)

These workshops are world-leading – we are not aware of anything on this scale in any other country. With a solid understanding of their farm's emissions farmers now have a solid base to work from as they put in plans to manage emissions.



CREATING A MARKET FOR NON-REPLACEMENT CALVES

Craigmore Sustainable Proteins was originally a trial programme run by Craigmore Farming with the overarching purpose to 'extend the lives of surplus dairy-born calves'. Now in its 4th season, this is being achieved by developing and testing targeted breeding blue-prints that are flexible enough to suit different dairy herds. The aim is to produce high-value dairy-beef calves suitable for the beef industry whilst also maximising the dairy herd genetic gains.

Collaboration with beef breeders and other industry partners has allowed for open sharing of information and data from conception to processing. Analysis has been undertaken of conception rates, gestation length, calving ease, birthweight, growth rate, thriveability, feed-to-growth conversion rate, and processor metrics. (Craigmore Farming, 2023)

There is a growing interest and engagement for strengthening the cross-industry value chain that exists already between dairy and beef. This is reliant on ensuring that dairy farmers are purposeful in producing high value dairy-beef animals that will continue to add value for beef finishers.



FINANCIALS TO 31 MARCH 2023

PROFIT & LOSS 2023

	TOTAL NZ\$	
Sales		·
Membership	\$	47,908
Donations	\$	8,625
Interest Received	\$	115
Total Sales	\$	56,648

Cost of Goods Sold	
Communication	\$ 0
IT	\$ 632
Legal Fees	\$ 1,128
Travel	\$ 11,999
Professional Fees	\$ 0
Marketing	\$ 540
HR	\$ 0
Misc	\$ 22
Management Fees	\$ 51,704
General Meeting	\$ 11,112
Audit Fees	\$ 1,500
Total Expenses	\$ 78,637

\$ -21,988

NET PROFIT

BALANCE SHEET 2023

	TOTAL NZ\$	
Assets		
Bank Account	\$	162,414
Debtors	\$	9,158
GST	\$	6,383
Total Assets	\$	177,955

Equity	
Capital	\$ 0
Retained Earnings	\$ 177,881
Total Equity	\$ 177,881

Liabilities		
Creditors	\$	74
GST	\$	0
Total Liabilities	\$	74
Total Elabilities	Ψ	, ,

TOTAL EQUITY & LIABILITIES	\$	177,955
TOTAL EQUIT & EIABILITIES	Ψ	177,733

2024 FINANCIALS FORECAST

30,134

PROFIT & LOSS 2024

	TOTAL NZ\$	
Sales		
Membership	\$	120,816
Donations	\$	0
Interest Received	\$	168
Total Sales	\$	120,984

Cost of Goods Sold	
Communication	\$ 0
IT	\$ 650
Legal Fees	\$ 1,200
Travel	\$ 6,000
Professional Fees	\$ 0
Marketing	\$ 1,000
HR	\$ 0
Misc	\$ 0
Management Fees	\$ 55,000
General Meeting	\$ 15,000
Audit Fees	\$ 2,000
Projects	\$ 10,000
Total Expenses	\$ 90,850

NET PROFIT

BALANCE SHEET 2024

	TOTAL NZ\$	
Assets		
Bank Account	\$	213,461
Debtors	\$	0
GST	\$	2,750
Total Assets	\$	216,212

Equity	
Capital	\$ 0
Retained Earnings	\$ 216,212
Total Equity	\$ 216,212

Liabilities	
Creditors	\$ 0
GST	\$ 0
Total Liabilities	\$ 0

TOTAL EQUITY & LIABILITIES	\$	216,212
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NZRSB MEMBERSHIP

If you or your organisation are interested in becoming a member of the NZRSB, fill out an online membership application at www.nzsustainablebeef.co.nz/join-us

All applications are reviewed and approved by the NZRSB.

CONTACT US

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