



Supporting farmers

A New Zealand perspective of extension

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Who are we?



- Farmer-owned, industry organisation representing New Zealand's sheep and beef farmers.
- We invest farmer levies in programmes that grow the sheep and beef industry and provide sustainable returns now and for future generations.

Our strategy



Vision

Sustainable and profitable farmers, thriving rural communities, valued by New Zealanders

Priorities



Supporting farming excellence



Championing the sector



Increasing market returns

Farming Excellence Strategy at a glance

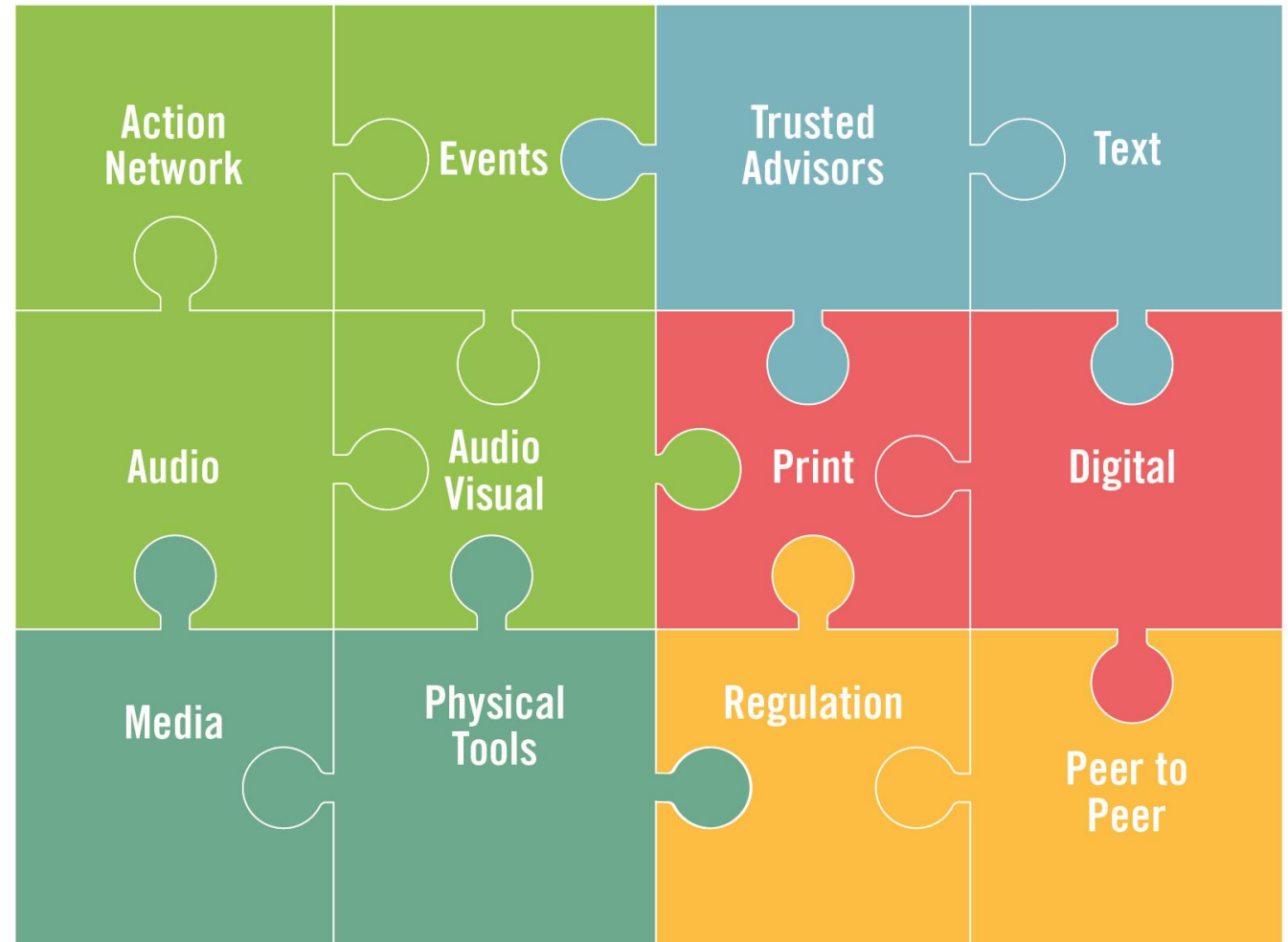
Our strategy for *Supporting Farming Excellence* is a cycle of continuous improvement, driven by farmer needs, alongside a practical vision of the future on-farm.



The touch points



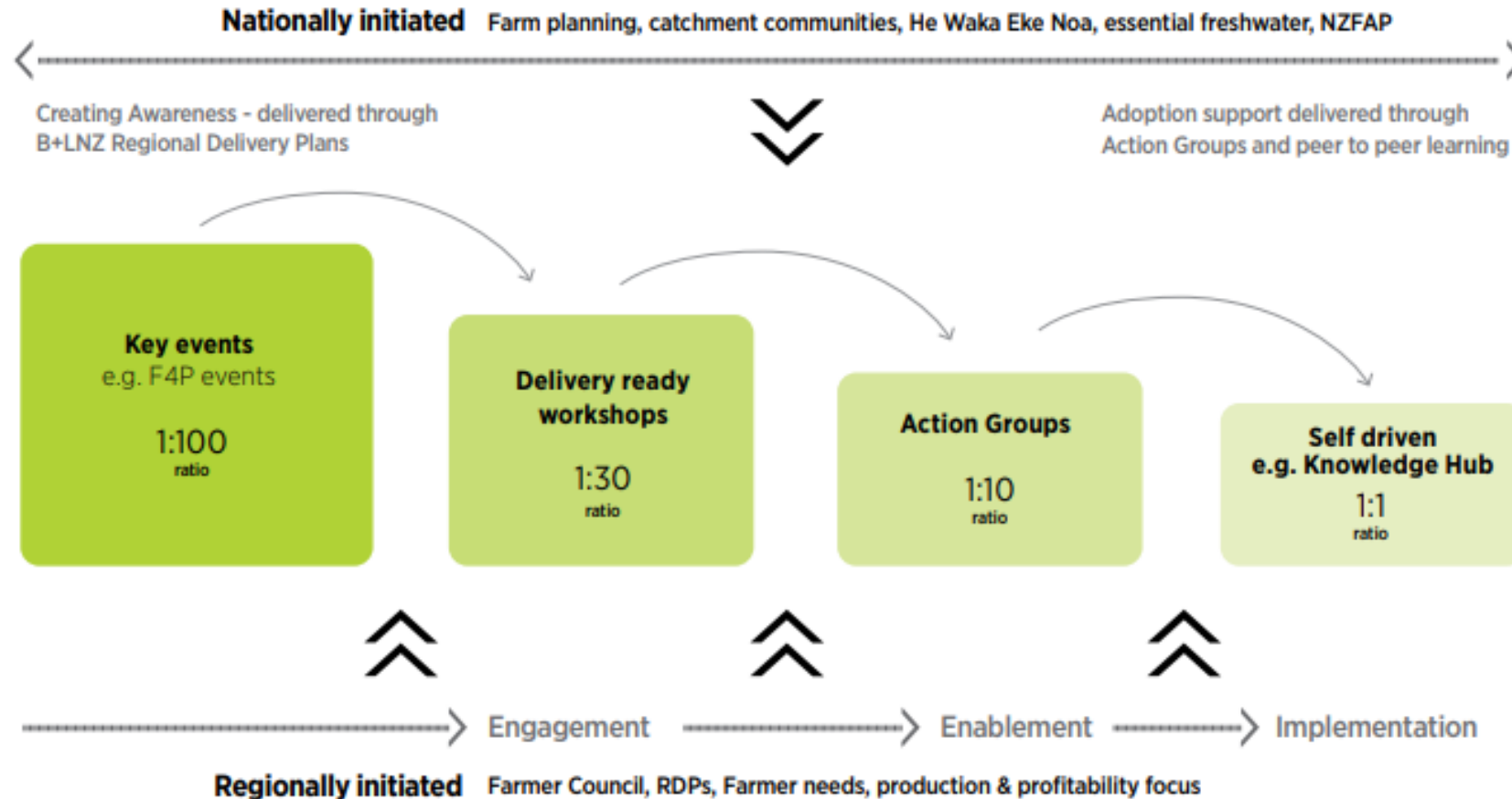
Events are traditional extension method, but we know that everyone learns differently, at different speeds and with differing confidence levels. As the picture explains, traditional events are only one piece of the extension puzzle.



B+LNZ approach to extension



B+LNZ approach to extension delivery



The How



7x Regional
Farmer Councils

9x
Extension Managers

Regional Delivery
Plans (RDPs)

Steering Committees

Farmer Needs

What is the RDP

The basis of




- By Farmer for Farmers created
- Reflects on the past & looks at future
- 12 month activity plan
- Regional priorities and desired outcomes
- Programmes seen as needed for region
- Budgets
- Becomes an extension managers guide and basis of planning

Climate Change as an Extension Case Study



New Zealand Climate Policy Context

Zero Carbon Act



Climate Change Response (Zero Carbon) Amendment Act 2019

Public Act 2019 No 61
Date of assent 13 November 2019
Commencement see section 2

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- 3 targets:
 - Long-lived gases (CO₂ and N₂O) to net zero by 2050
 - Biogenic methane (CH₄) to 10% below 2017 levels by 2030
 - CH₄ to 24-47% below 2017 levels by 2050
- Pricing Agricultural Emissions by 2025
- He Waka Eke Noa and its milestones established

He Waka Eke Noa

- He Waka Eke Noa Primary Sector Climate Action Partnership
- 13 Industry and Government Partners
- 5-year programme
- An alternative to a processor level Emissions Trading Scheme levy on each kg of product so that it
 - Reflects what you are doing on farm
 - Separates the price of methane from the price of carbon
- Measure and manage on-farm greenhouse gas emissions, including developing an appropriate pricing mechanism



He Waka Eke Noa Milestones



Know your numbers:

- 100% of farms holds a documented annual total of on-farm GHG emissions, by **31 December 2022**
- 25% had to be completed by 31 December 2021

Have a plan:

- 100% of farms have a written plan in place to measure and manage their GHG emissions by **1 January 2025**
- 25% had to be completed by 1 January 2022

Farm Level Pricing system to be in place by 2025

How – Build Farmer Awareness



Information for farmers on the Government's agricultural emissions pricing consultation

Today, the Government released its response to the He Waka Eke Noa Primary Sector Climate Action Partnership proposal on the pricing of agricultural emissions.

While Beef + Lamb New Zealand would prefer farmers didn't face a price for their emissions, the Government has been very clear that pricing will begin by 2025 and it already has legislation in place.

New Zealand is the first country in the world to look to put a price on agricultural emissions. While we recognise our role in reducing emissions, we are one of the most carbon efficient producers in the world and **we will not accept a system that disproportionately puts our farmers and communities at risk.**

As part of the proposal released today, **agriculture will not be going into the Emissions Trading Scheme (ETS).** Going into the ETS is something B+LNZ and other primary sector partners have been steadfastly opposed to.

The Government has agreed to many of the He Waka Eke Noa proposals, but it has put forward some changes which we believe will impact sheep and beef farmers and are not acceptable.



6 June 2022

It's time to know your GHG numbers

Farmers from Southland to the Far North and everywhere in between are taking part in workshops to know their greenhouse gas (GHG) numbers and create action plans.

Meat processors are teaming up with B+LNZ to deliver many of these workshops.

Under He Waka Eke Noa, the primary sector's climate change commitment to measure, manage and reduce GHG emissions, farmers will need to know their farm's annual GHG numbers by December 2022.

By January 2025, they will need to have a written plan in place for measuring and managing their emissions.

The B+LNZ workshops are currently being hosted in partnership with Silver Fern Farms and Greenlea Premier Meats.

They explain why farmers should know their GHG numbers and help them calculate on-farm GHG emissions using B+LNZ's GHG Calculator. Farmers will also be shown how to create GHG action plans for their farms.

B+LNZ's Eastern North Island Extension Manager Sarah Crofoot says the workshops will show farmers where their emissions come from and how they can be managed.

Why should I calculate emissions?

New Zealand's agricultural sector has a role to play in contributing to meeting specific greenhouse gas emission reduction targets, as part of international commitments on climate change and in the Climate Change Response (Zero Carbon) Act.

The He Waka Eke Noa partnership, which the red meat sector is part of, puts management and mitigation of greenhouse gas emissions in farmers' hands, instead of a tax at processor level being imposed by the Government.

By the end 2022 we have to show that all farms' know their greenhouse gas emissions numbers, and by the start of 2025 all farms have to have a written plan to measure and manage their emissions.

Can I tell people my numbers?

It's your information so that's up to you. You might want to share your result with your Farm Advisor, or a peer group such as a catchment group, discussion group or action group.

You can download a copy of your inputs and results from the results page of the calculator. When you log in again you can also see all previous completed calculations.

Why doesn't the calculator account for carbon sequestered in grass or soil?

Sequestration in grass or soil is difficult to measure and fluctuates a lot, for example as grass is eaten or soil dries out. The He Waka Eke Noa programme has therefore decided not to include it in sequestration calculations at this stage and so it is not part of the calculator. However, B+LNZ supports further research on sequestration opportunities and these could be incorporated into the calculator in future.

I'm a deer farmer – will this calculator work for me?

Yes, this calculator is designed for the red meat sector, sheep, beef and deer.

I'm a dairy farmer – will this calculator work for me?

This calculator is designed for sheep, beef and deer farms. It can also be used for dairy support/run-off blocks provided none of the area is used for milking. Contact your milk processor, they are helping dairy farmers know their numbers.

What are our commitments through He Waka Eke Noa?

Through He Waka Eke Noa, we've signed up the following targets:

- By the end of 2022 every farm knows their farm's greenhouse gas numbers.
- In 2025:
 - All farms have a written plan to measure and manage their greenhouse gas emissions (usually in their Farm Environment Plans).
 - A nationwide farm-level pricing system has been designed and tested with farmers and growers, and is up and running.

Meeting these milestones is essential to secure a farm-level approach and avoid the Government instead including agriculture in the Emissions Trading Scheme with a tax at processor level. The B+LNZ GHG Calculator is recognised as meeting requirements for calculating greenhouse gas emissions under He Waka Eke Noa.



Scene + Herd: Podcasts from Beef + Lamb New Zealand Climate science, policy and NZ farming



Supporting Technical Resources



USER GUIDE

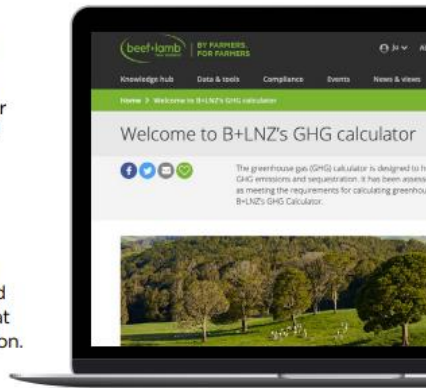
April 2022



GHG CALCULATOR – KNOW YOUR NUMBERS

By the end of 2022, every sheep and beef farmer should 'know their numbers' – that is, have calculated their Greenhouse Gas (GHG) emissions and sequestration.

Funded by RMPP and B+LNZ, the GHG Calculator is a tool for red meat farmers to measure and report on-farm GHG emissions and sequestration. It's a simple tool that reflects an individual farm's situation. You can benchmark your farm with similar farms.



User Guide #12

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FACTSHEET GHG Calculator Example Farm

July 2022



1) Land Area

Finishing-Breeding Farm in Canterbury
Total: 1174ha Effective: 1100ha

Vegetation:

- 35ha exotic forest at open: Sha harvested this year
- 17ha Indigenous forest – established
- 21ha indigenous shrubland – less than 30 years old



2) Fertiliser, Lime and Dolomite

Type	Total Amount	Kg elemental N	Type
Lime	210 tonnes		
Dolomite	52 tonnes		
Urea	21 tonnes	9660	Urea without urease inhibitor
Cropmaster 20	17 tonnes	3196	Non-urea N fertiliser
Superphosphate 135	202 tonnes		Fertiliser
Cropzeal Boron Boost	9 tonnes	1485	Non-urea N fertiliser
N-Protect	8 tonnes	3672	Urea with urease inhibitor



3) Stock numbers

As per Trading Accounts (page 2)

In addition:

- 500 mixed-age ewes are grazed off-farm all year, in a share-farming arrangement.
- 242 mixed-age dairy cows wintered in 2021. Arrive 9 June, depart 20 July. No deaths.
- 233 mixed-age dairy cows wintered in 2022. Arrive 8 June, depart 15 July. No deaths.
- 121 RI dairy heifers being grazed, on hand at opening, leave 15 May 2022.
- 122 dairy heifer calves arrive to be grazed on 15 December 2021.
- All sheep sold prime.
- All R2 cattle and older cattle sold prime, all R1s sold store.

Factsheet 2024

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FACTSHEET

Biogenic methane from ruminant animals and nitrous oxide from agricultural soils

September 2021

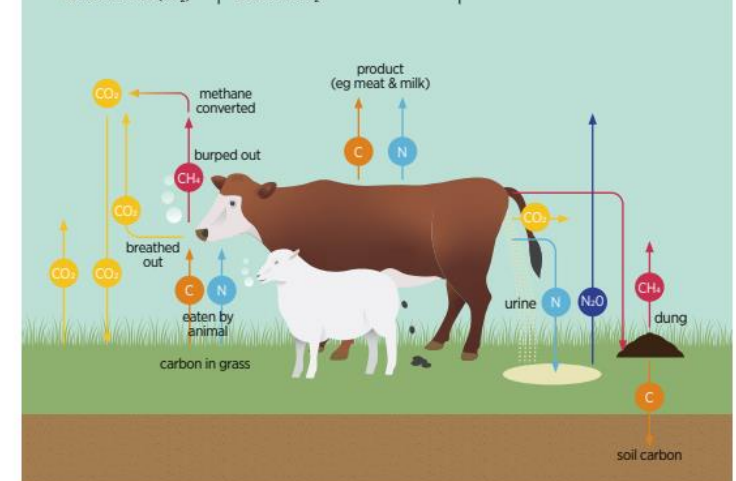
What greenhouse gases are produced by livestock?

Understanding the basics

Livestock are neither a source nor a sink for carbon dioxide (CO₂)

Livestock are a source of methane (CH₄) which eventually decays back into CO₂

Livestock are a source of nitrous oxide (N₂O)



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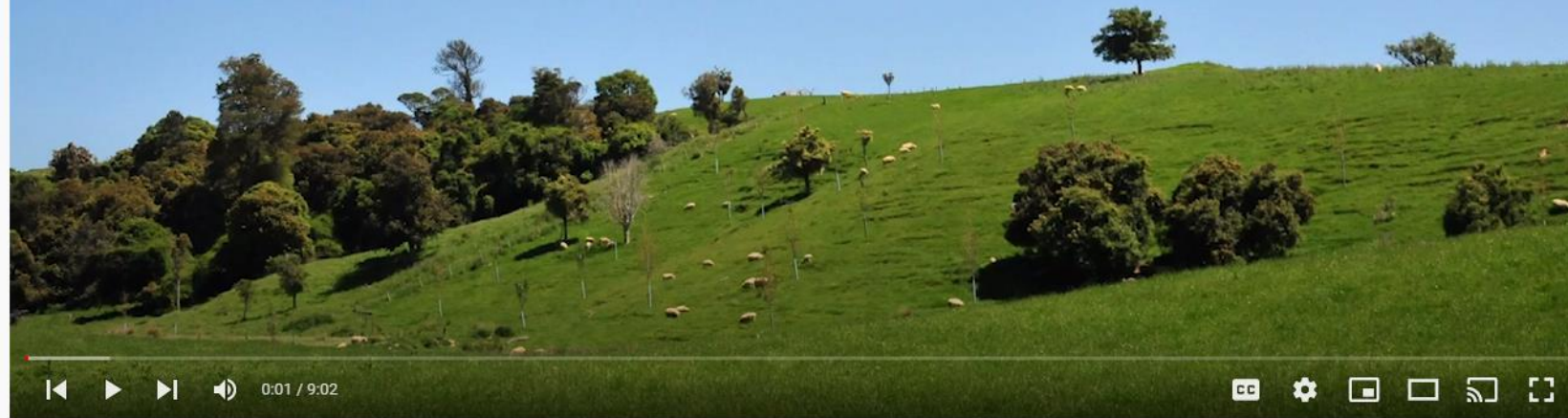
Factsheet 2024

Instructional Videos



Greenhouse Gas Calculator demonstration

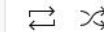
Video 1: Introduction and Farm Setup



GHG Calculator Video 1: Introduction and Farm Setup

GHG Calculator

Beef + Lamb New Zealand - 1 / 9



- ▶ **GHG Calculator Video 1: Introduction and Farm Setup**
Beef + Lamb New Zealand
9:03
- 2 **GHG Calculator Video 2: Fertiliser, Lime and Dolomite**
Beef + Lamb New Zealand
3:48
- 3 **GHG Calculator Video 3: Woody vegetation**
Beef + Lamb New Zealand
3:10
- 4 **GHG Calculator Video 4: Livestock Balances**
Beef + Lamb New Zealand
7:28
- 5 **GHG Calculator Video 5: Grazing Movements**
Beef + Lamb New Zealand
5:10
- 6 **GHG Calculator Video 6: Livestock Movements**
Beef + Lamb New Zealand
6:25
- 7 **GHG Calculator Video 7: Results**
Beef + Lamb New Zealand
6:09
- 8 **Beef + Lamb New Zealand's GHG online Action Plan tutorial**

GHG Calculator and Action Plan Workshop



30 mins	Background – setting scene climate policy, He Waka Eke Noa, emission sources, understanding own ‘why’
15 mins	Demonstration of calculator, steps and information required
45 mins	Participants work through calculator themselves, support with trouble shooting
15-30 mins	Break
10 mins	Interpreting results
50 mins	GHG Farm Plan in sections. Introduce options, time to document

Online delivery



- GHG Action Plan Webinar
- Online workshops
- Drop-in sessions/Clinics
- 0800 number and GHG enquiries inbox



Partnerships



- Catchment Groups
- Meat Companies
 - Silver Fern Farms, ANZCO, Alliance, Greenlea, AFFCO
- Deer Industry New Zealand
- Banks
- Accountants



What we have learnt & what works?



- Partnerships work but take managing
- The calculator is difficult to deliver online in a group setting
- Reinforced value of multiple channels
- Planning for all learning types is essential
- Internal communications plan is key to success
- Well articulated run sheets are essential

Thank-You

QUESTIONS



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