

Ministry for Primary Industries
Manatū Ahu Matua



NEW ZEALAND

Koronivia Joint Work on Agriculture workshop 2(e)

Improved livestock management systems, including agropastoral production systems and others

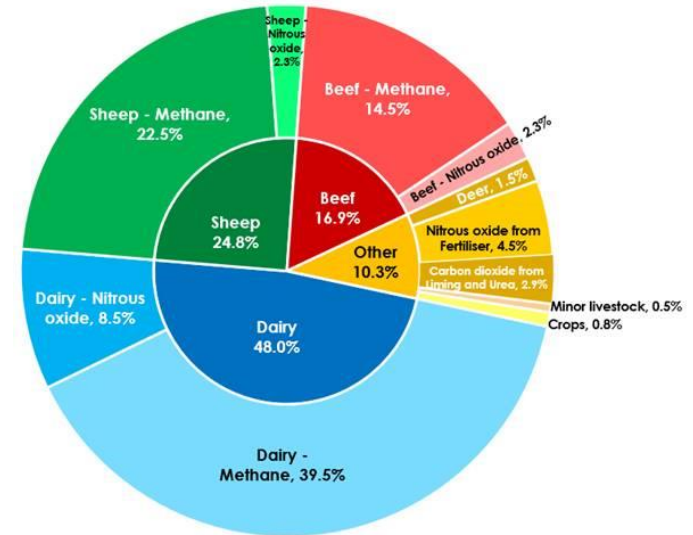
Presentation by New Zealand

UNFCCC November Dialogues, November 2020

New Zealand's National Circumstances

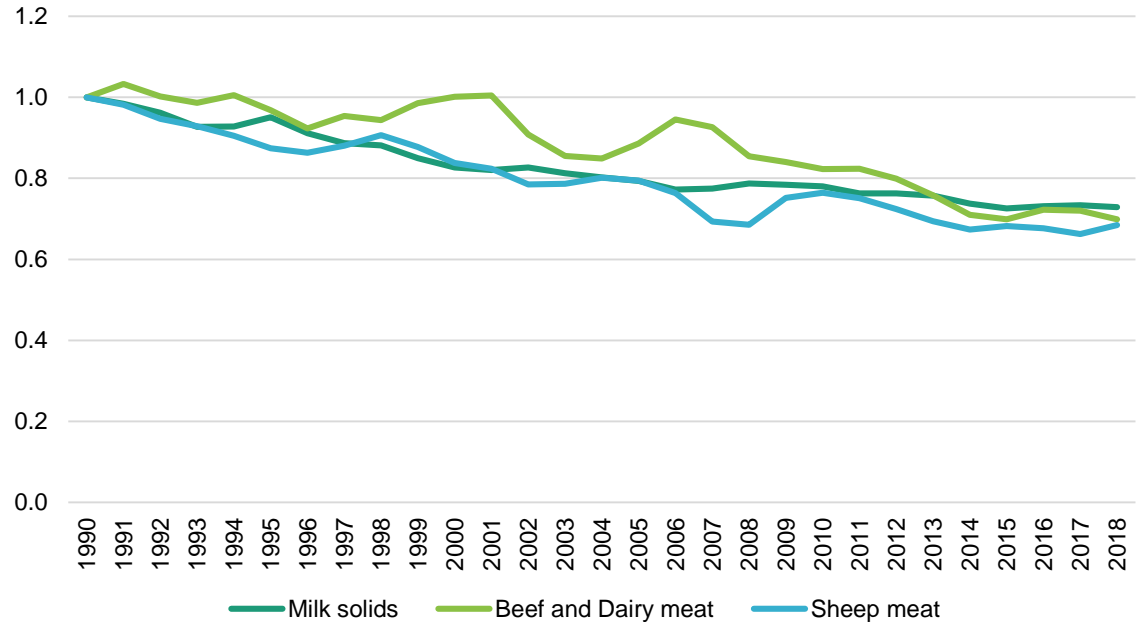
- Temperate climate
- Extensive outdoor pastoral grazing systems
- 60% of value of merchandise exports
- 85% total food production goes to the international market
- Agriculture emissions comprise ~48% of total emissions.
- Approximately 91% of our agriculture emissions are from ruminant livestock

New Zealand Agricultural Emissions Profile in 2018
Percentage of total agricultural emissions



Emissions Trends in Livestock

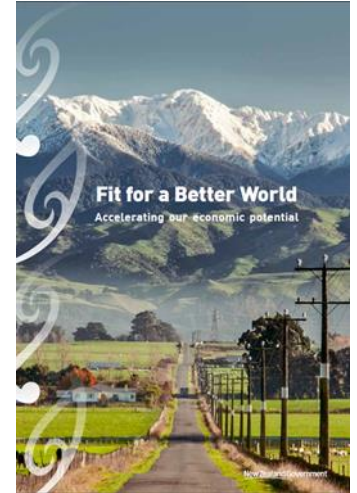
- Emissions intensity for major livestock categories (kg CO₂e per kg product)
- ↑ overall production
- Agriculture emissions have been stable since 2005
- Practices to improve farm efficiency



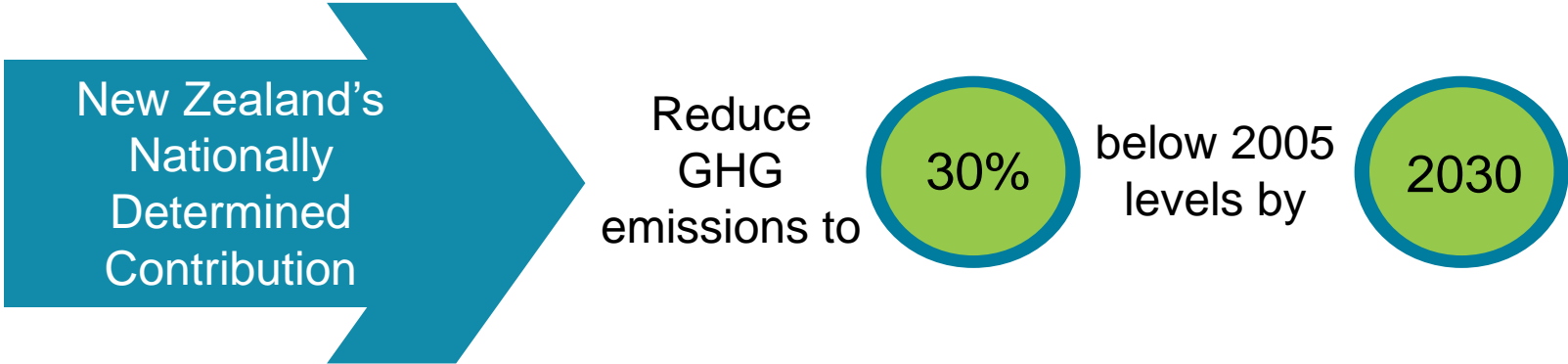
Our Challenge and Approach

OUR GOAL: TO BE THE WORLD'S MOST SUSTAINABLE PROVIDER OF HIGH-VALUE FOOD AND FIBRE

- Livestock, like all natural production relies on access to and the long-term use of, natural resources and these resources are under increasing pressure.
- Sustainable growth is paramount
- COVID-19, medium to long term impacts uncertain – export-led recovery.
- Supporting the economy and our rural communities.

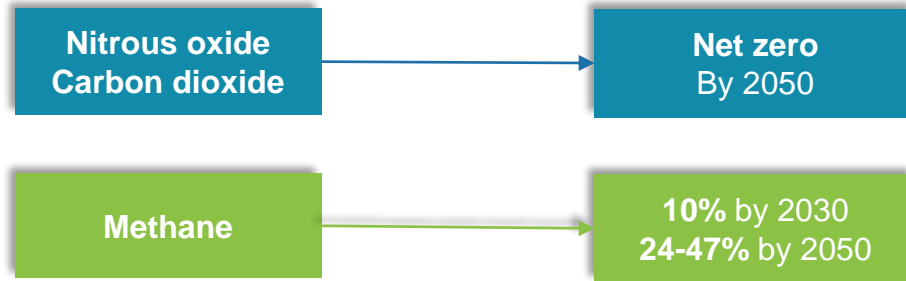


New Zealand's Nationally Determined Contribution



Domestic Climate Change Policy

- Zero Carbon Act (Nov 2019) sets new domestic GHG emissions reduction targets for New Zealand:



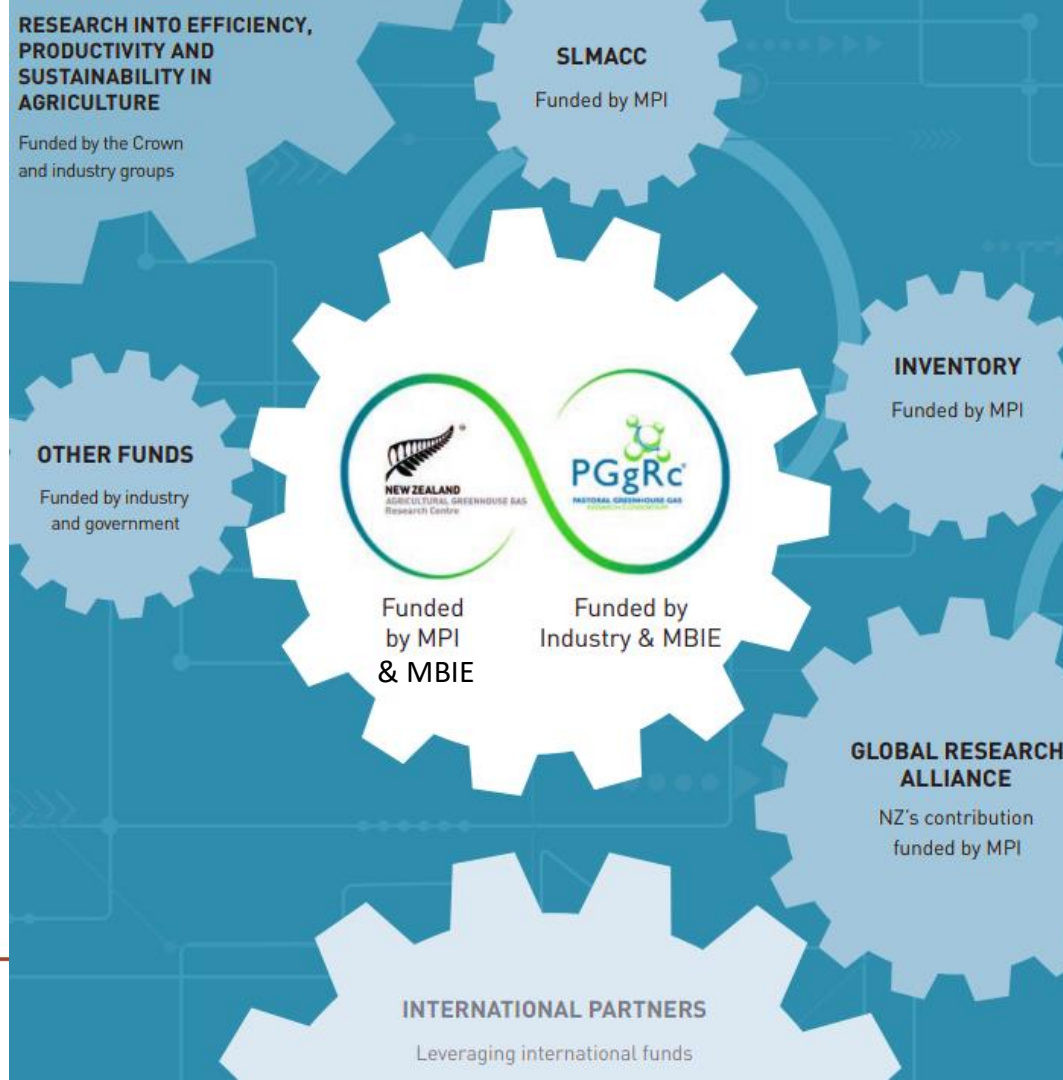
- He Waka Eke Noa – Primary Sector Climate Action Partnership (Oct 2019) is a Joint Action plan to address agricultural emissions, will deliver a scheme for measuring, managing and pricing of GHG emissions by 2025.

Complementary policy measure impacting on the livestock sector

- National Environmental Standards for Freshwater (August 2020) set requirements for land management to protect freshwater and freshwater ecosystems.
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Livestock Mitigation Research

- Farmers and growers need options to respond to climate change
- Evidence-based research to support the reduction of GHG emissions from livestock
- Interventions need to consider overall farm system, value chain and consumers
- Ongoing improvements to our national agricultural GHG inventory to ensure mitigation actions are accurately captured and monitored
- International collaboration through Global Research Alliance on Agricultural Greenhouse Gases



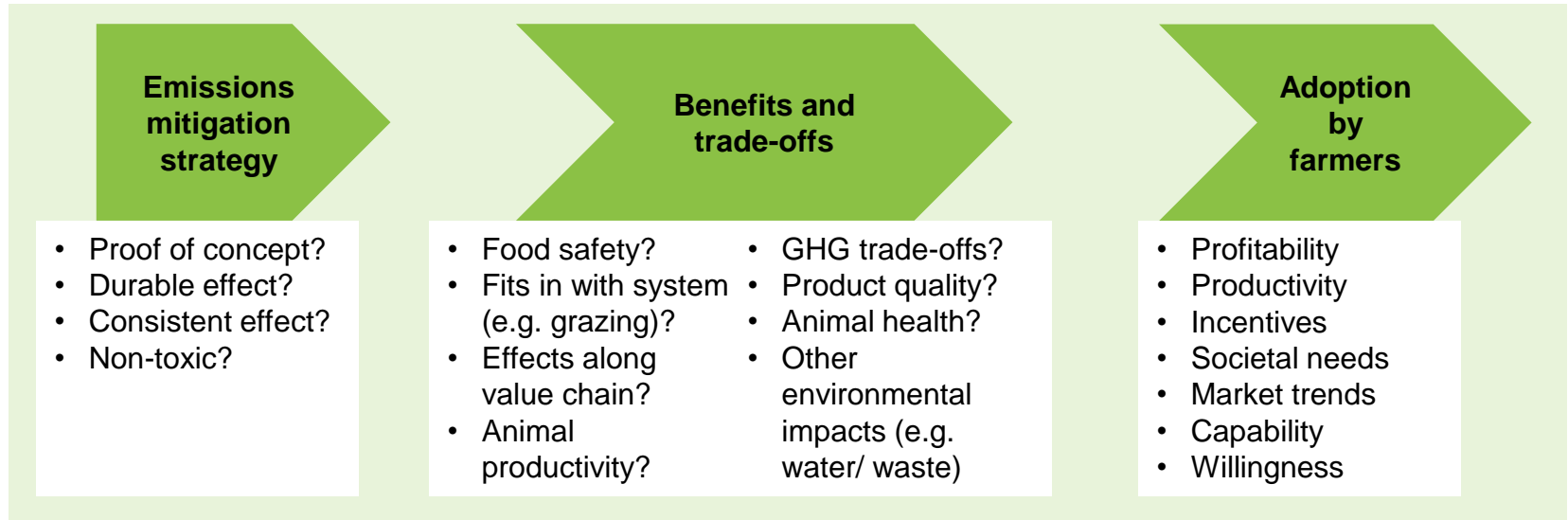
Livestock Mitigation Strategies and Co-benefits

- Mainly centred on improving farm practices

Practice aimed at	Potential co-benefits
Improving efficiency of N use	Reduction of nitrogen leaching into waterways
Manure management to reduce N ₂ O and CH ₄	Reduction of nutrient losses and improvements to air and water quality
Improving feed and nutrition strategies	Improvements to productivity and health status of animals
Improving livestock health	Increase in productive lifetime of animals and increase in disease resistance
Selective breeding for low-methane emitting animals	Greater nutrient and energy efficiency, and better parasite resistance
Sequestration of soil carbon	Improved soil health and water management benefits
Sequestration of carbon through afforestation	Increase adaptive capacity by improving erosion control and increase habitat provision for native species

- Future - methane inhibitors, methane vaccine

Considerations for Implementation



- **Measurement:** On-farm emissions? Can it be captured in GHG inventory?
- Interaction between farmers, government and research programmes focussing on productivity and on greenhouse gas emissions monitoring is critical

International Collaboration

- Increasing global ambition for agricultural emissions reductions
- The Global Research Alliance for Agricultural Greenhouse Gases' Livestock Research Group
- International research community through our research organisations
- Koronivia Joint Work on Agriculture in the UNFCCC
- Food and Agriculture Organisation
- Organisation for Economic Cooperation and Development
- Climate and Clean Air Coalition
- Two way exchanges directly with Parties through dialogues and discussions at bilateral and regional level



United Nations
Climate Change



Opportunities for the UNFCCC



United Nations
Climate Change

- Highlight importance of agriculture and food security in the context of climate change for international community
- Enable information exchange between Parties leading to policy implementation at regional and national level
- Facilitate the improvement of GHG inventories through review process and trainings
- Utilise existing financial mechanisms to support agriculture activities and enable access to finance



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Thank you / kia mihi

Any questions?

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