DAIRY ACTION FOR CLIMATE CHANGE 2017-2018

THE DAIRY ACTION FOR CLIMATE CHANGE IS LED BY DAIRYNZ, IN PARTNERSHIP WITH FONTERRA, WITH THE SUPPORT OF THE MINISTRY FOR PRIMARY INDUSTRIES, AND THE MINISTRY FOR THE ENVIRONMENT.

PURPOSE, VISION AND APPROACH

PURPOSE

To provide a framework for the dairy sector to address biological emissions (methane and nitrous oxide) and contribute to meeting New Zealand's 2030 emissions reduction target of 30 percent below 2005 levels.

VISION

Climate change affects all New Zealanders, including the primary sector. Reducing greenhouse gas emissions is a priority and action is required across New Zealand and internationally.

Underpinning the plan is a common desire by the partners, the Ministry for Primary Industries, and the Ministry for the Environment, to address on-farm dairy greenhouse gas emissions (GHG) in the context of a profitable and sustainable dairy industry.

APPROACH

The partners commit to working together to:

- Provide a link between the research and farms to test possible mitigations and explore the role of incentives in improving practices
- Trial dairy farm reporting and benchmarking for biological emissions as an advisory tool for the dairy industry
- Ensure advice to dairy farmers is consistent and accurate across rural professionals.

The partners of this plan, DairyNZ and Fonterra, the Ministry for Primary Industries, and the Ministry for the Environment, recognise action is required. This plan is our commitment to building the foundation upon which action can be undertaken.

HOW THE PLAN CONTRIBUTES

Climate change is a global problem. Any actions the dairy sector undertakes to address our emissions must be part of the broader agricultural industry, New Zealand economy, and international efforts to prevent the global temperature from rising above two degrees by 2050 on pre-industrial levels. This plan is a concrete example of the dairy sector's commitment to continuous improvement in on-farm environmental performance, and reducing GHG emissions in particular.

BACKGROUND

The New Zealand dairy sector is one of the lowest emissions producers of dairy nutrition in the world due to our efficient year-round pastoral grazing system and healthy cows. Through innovation and continued Kiwi ingenuity, our farmers, scientists, and sector partners can ensure New Zealand dairy continues to stay a world leader, while making meaningful contributions to New Zealand's GHG mitigation targets.

The New Zealand Government has an economy-wide target to reduce absolute GHG emissions by 30 percent below 2005 levels by 2030 under the Paris Agreement.

Approximately 50 percent of New Zealand's annual emissions are biological emissions from agriculture, yet currently there are limited cost-effective options to reduce emissions. Dairy emissions make up approximately half of agriculture's GHG emissions, and around a quarter of New Zealand's total emissions. The two main gases emitted on dairy farms are methane and nitrous oxide.

While on-farm biological emissions do not face a price in the Emissions Trading Scheme, action is required to address on-farm biological emissions over the longer term if New Zealand is to meet the international commitments it has made.

Fonterra Dairy for life

DairyNZ

HOW THE DAIRY ACTION FOR CLIMATE CHANGE PLAN WORKS

This document includes objectives and commitments which will be undertaken between June 2017 to November 2018.

- Objectives outline what the partners expect over the medium to long-term. They set the forward direction of travel in addressing on-farm emissions. Out of scope, are enforceable performance measures as they are seldom within the direct control of any one accountable partner.
- Commitments are the measures (e.g. programmes or other initiatives and associated resourcing commitments) that parties pledge to meet objectives.

OUR COMMITMENTS

BUILDING THE FOUNDATION

OBJECTIVES

- To raise awareness amongst dairy farmers and the wider industry of:
  - the challenge climate change poses
  - the need to address biological emissions over the long-term
  - the research underway, and
  - the actions which can be undertaken now.
- To ensure the rural professional community is ready to support farmers and provide consistent advice on GHG mitigation.
- To build rural professionals' capability through GHG training covering:
  - the national inventory system
  - research into mitigation options
  - off setting opportunities.
- To support and empower dairy farmers who are passionate about climate change to raise awareness and mobilise change.

COMMITMENTS

From June 2017 to November 2018, DairyNZ, with the support of the Ministry for Primary Industries, and the Ministry for the Environment, will:

- Host eight rural professional climate change workshops around the country to build awareness and provide information on the mitigation options available
- Identify 12 climate change dairy farmer champions from across New Zealand to raise awareness and mobilise change
- Host six discussion groups on climate change with DairyNZ's Dairy Environment Leaders
- Train 60 rural professionals on the Massey University GHG course.

STEPS TO A LOWER EMISSIONS DAIRY SECTOR

OBJECTIVES

- To demonstrate the potential biological emissions reduction on dairy farms through farm system changes and to quantify the effect on production and productivity
- To ground-truth the farm system changes with dairy farmers
- To educate dairy farmers, rural professionals, and the wider sector of farm systems changes which may be possible and the implications of these changes.

COMMITMENTS

By February 2018, DairyNZ, with the support of the Ministry for Primary Industries, and the Ministry for the Environment, will:

- Characterise and implement farm system changes which have the potential to reduce biological emissions on dairy farms
- Establish 10 partnership farms across a range of farm systems throughout New Zealand.

ON-FARM RECORDING

OBJECTIVES

- To test the on-farm GHG recording system with farmers to understand what additional information and guidance they may require and to ensure it is fit for purpose if it is rolled out further.
- To educate a selected group of farmers, who can engage with other farmers on biological emissions.

COMMITMENTS

By November 2018, Fonterra will:

- Undertake a GHG on-farm recording pilot involving up to 100 Fonterra suppliers which provides each farmer with a GHG report which includes methane as part of environmental performance reporting they already receive from Fonterra.
- Share general findings from the pilot with plan partners and the Ministry for the Environment and the Ministry for the Primary Industries.

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