1 The Dairy Companies Association of New Zealand (DCANZ) appreciates the opportunity to submit views on New Zealand’s Climate Change Target, or its Intended Nationally Determined Contribution (INDC).

Objectives for the contribution

2 DCANZ supports the stated objectives for New Zealand’s contribution, as set out in the consultation document, namely that:

- It is seen as a fair and ambitious contribution, both internationally and domestically;
- Costs and impacts on society are managed appropriately;
- It must guide New Zealand over the long term in the global transition to a low emissions world.

3 Progression along the path to a low emissions world will require policy frameworks that support active participation by all countries, as well as investment in new research and development. A one-size-fits-all model will not achieve this. There needs to be recognition of:

- national circumstance;
- ease of mitigation, and;
- the contribution trade can make to emissions efficiency.

4 New Zealand should contribute to reductions in global emissions. Our unique emissions profile is such that there are no easy abatement targets over the next decade. As the consultation document notes, New Zealand has one of the highest levels of renewable electricity generation in the world. Almost half of our emissions are generated from the agricultural sector. This sets us apart from other industrialised countries.

A fair contribution for New Zealand...

5 DCANZ is assured that the Government has taken the following issues into consideration when drafting its consultation document:

- Dairy’s contribution to the domestic economy is well-established: in 2014, dairy exports comprised around a third of New Zealand’s merchandise goods exports. DCANZ’s 11 members account for 98% of the milk processed in New Zealand and export to over 100 different markets.

- Beyond the export narrative, the sector makes a significant contribution to the domestic economy in terms of employment (over 40,000 employees), skills training, rural services, plus investment in research and development.

- As the consultation document notes, despite being one of the most efficient dairy producers in the world, New Zealand producers will have few emissions reduction options available to them in the next 5-10 years, beyond limiting or reducing production. Such decreases would come at high cost to the New Zealand economy, far beyond the sector itself. Fonterra, a DCANZ member company, has provided initial analysis on this in its submission.

1 DCANZ member companies are Tatua, Westland, Open Country Dairy, Synlait, Fonterra, Miraka, Goodman Fielder, Yashili, Oceania Dairy, Dairy Goat Cooperative and Danone Nutricia.
Any target set by the Government needs to consider the risk of leakage: that is, the potential for less emissions-efficient producers in other countries to meet the shortfall created by a reduction in production in New Zealand. Imposing obligations upon New Zealand producers which extend beyond currently available mitigation potential, and which are in advance of obligations faced by competitors, is likely to result in a further increase in global emissions.

Obligations placed on New Zealand producers which extend beyond mitigation potential will result in a deterioration of New Zealand’s competitive advantage as an exporter of primary production. As an unsubsidised exporter, New Zealand needs to maintain this competitive advantage.

DCANZ members have faced a dairy manufacturing emissions cost under the New Zealand Emissions Trading Scheme (ETS) since 1 July 2010, when obligations on CO2 emissions from the industrial sector came into effect. Since 1 January 2012, dairy processors have also had obligations to report on the biological emissions associated with the milk produced by their farmer suppliers.

The consultation document acknowledges the role to be played by New Zealand in meeting global food security needs. New Zealand has a shared global interest with other countries in ensuring that future food demand is met through emissions efficient production. The FAO estimated in 2014 that that 842 million people in the world remain undernourished, with nearly two thirds of them living in the Asia-Pacific. One in four children under the age of five is stunted due to malnutrition. The FAO projected that the world’s population will increase to 9 billion by 2050 – and that global food production will need to increase by around 60% to meet that demand. It cited more efficient food production as one of the means of addressing food insecurity. New Zealand’s emissions-efficient systems have an on-going role to play in meeting these needs, which are not going to dissipate.

...and what this means for the treatment of agricultural emissions

For these reasons, and pending any mitigation breakthrough, DCANZ would argue that on-farm biological emissions (methane and nitrous oxide) should be treated differently from carbon emissions. Any target should:

- Be aligned with economically-feasible mitigation opportunities;
- Demonstrate New Zealand’s fair share and alignment with food producer competitors’ actions on agricultural emissions;
- Recognise New Zealand’s role in supporting emissions-efficient food production;
- Reflect the critical role that on-going research into agricultural emissions abatement will play.

DCANZ’s preference is for New Zealand to put forward an INDC target which differentiates between CO2 and agricultural emissions (methane and nitrous oxide). We suggest that:

- Part A of New Zealand’s target would specify the contribution New Zealand can make to global carbon dioxide emissions reduction by adopting an absolute target; and

- Part B of the target would set-out the contribution New Zealand can make to global agricultural emissions (methane and nitrous oxide reduction) through adoption of an alternative framework.

We envisage that this alternative framework would, first and foremost, include a strong commitment to continued research and development for new mitigation options.
If New Zealand needs to specify a target for agricultural emissions mitigation, the alternative framework should take an emissions intensity focus, and more specifically:

a) Any New Zealand target for agricultural emissions should be referenced to a reduction in emissions per unit of output (not an absolute emissions reductions);

b) The level of ambition should also be based upon an assessment of economically viable mitigation potential;

c) Any assumptions made about delivery of new tools and techniques to enable further emissions efficiency gains within New Zealand pastoral production systems should be specifically noted as part of conditionality for the target.

If it is necessary for New Zealand to include a target for agricultural emissions mitigation, an intensity focus would allow the Government to reference the investment in emissions-efficient technology already made by New Zealand, and our positive track record to date. Such an approach would provide headroom for increased emissions-efficient production, thereby responding to global food security demands. It would not risk leakage to less emissions-efficient producers, and thus not contribute to higher global emissions from agriculture.

Should an intensity approach be considered, thought would need to be given to farm system competitiveness, as well as other environment considerations, particularly water quality. DCANZ would welcome an on-going dialogue with Government on these issues.

It is important to acknowledge that gains have already been made through on-farm intensity improvements. Investment in improved animal genetics and management, plus better grassland management and feeding practices, have resulted in a decrease in emissions intensity of New Zealand agriculture: this has declined more than 20% since 1990. Without these efficiency gains on farms, emissions would be substantially higher than they currently are.

Any intensity target for New Zealand agriculture should recognise these achievements to date and also the challenges that will exist in maintaining this rate of improvement into the future without breakthrough technology.

Targets should be designed in a way that values investment in mitigation breakthroughs in areas where options are otherwise limited. The dairy industry’s experience is that innovation will be constrained by policies which add costs that can only be mitigated by reducing or eliminating growth. An intensity approach pegged to realistic, economically-viable mitigation potential will avoid such perverse outcomes.

New opportunities in the agricultural sector

The dairy industry has a strong focus on sustainable dairy production in New Zealand. DCANZ is a strategy partner of the Dairy Industry Strategy for Sustainable Dairy Farming 2013-2020. This strategy takes a whole of systems approach to continued improvement in New Zealand farm practice. It supports the adoption of existing best practice – as well as the extension of best practice through research and development into new tools and farming techniques.
The action already underway to implement the strategy will support future intensity improvement at the margin as a co-benefit of:

- Improved nutrient management under the Sustainable Dairying - Water Accord;
- Improved animal efficiency through improvements in genetics, feeding, and animal health management.

The strategy also covers ongoing investment of industry good funding in the Pastoral Greenhouse Gas Research Consortium (PGGRC).

New Zealand is well-placed to make a significant contribution to global emissions reduction through its on-going investment into greenhouse gas mitigation technologies. New Zealand’s scientists are at the cutting edge of research and development in the area of agricultural emissions reduction from extensive livestock farming systems. Indeed, it is in this area that we see real scope for ambition for New Zealand.

Unlike most of the developed world, including Europe and the United States, the majority of New Zealand’s farming systems are not intensive. We share our predominantly extensive livestock farming systems with the developing world, including the likes of Brazil and India, whose emissions profiles are far larger than our own. The kinds of technologies being developed by New Zealand experts, such as methane vaccines and inhibitors, are targeted to be effective on extensive livestock systems. When they are market-ready, their impact will be felt more widely, beyond New Zealand. If adopted by larger developing country emitters, the scope to reduce agricultural greenhouse gas emissions at a global level will be considerable, by today’s standards.

DCANZ therefore sees this research and development as a key priority for addressing the dual global challenges of high quality protein supply to address food security with less associated emissions. We have appreciated our early discussions with the Government on issues to consider in getting these technologies market-ready and look forward to an on-going dialogue. This includes ensuring that the necessary approval processes (such as those around the Agricultural Compounds and Veterinary Medicines Act) are as expeditious as possible. When developed, we hope to work with Government in addressing challenges posed in bringing these technologies to market – and in ensuring that the requisite international standards are in place (eg around CODEX) to support early adoption by emitters, without negative consequences in markets.

The Global Research Alliance (GRA), initiated by New Zealand, now extends to 45 member countries. Its mission is to “focus on research, development and extension of technologies and practices that will help deliver ways to grow more food (and more climate-resilient food systems) without growing greenhouse gas emissions”. It does not, to our understanding, focus on reduction of barriers to bringing technologies to market. DCANZ would be interested to hear the Government’s assessment of how these discussions might best be convened and in what fora. What strategies does the Government have in mind to address this priority issue for New Zealand?

**Tackling future uncertainties**

The consultation document asks how New Zealand should take into account the future uncertainties of technologies and costs when setting its target under an INDC. DCANZ is of the strong view that any commitment made by New Zealand should have conditionality around two key uncertainties flagged by the Minister for Climate Change Issues, Hon Tim Groser:

- The suite of rules to be negotiated by Parties on land-use, land-use change and forestry (LULUCF);
- The availability of economically viable, market acceptable, technologies to mitigate agricultural greenhouse gas emissions.

24 DCANZ would want to see these conditions hard-wired into any commitment. This would be an intended target, contingent on available and widely-accepted mitigation technologies, and LULUCF rules which did not undermine New Zealand interests. As the Minister notes in the consultation document, New Zealand would also require full access to international carbon markets.

**Ensuring a common understanding of challenges and impacts**

25 Like the Government, the dairy sector has been tracking our agricultural emissions profile carefully. We have undertaken modelling of the likely impacts of various policies on the sector. This has informed our engagement with Government to date.

26 It is important that the modelling behind New Zealand’s INDC and domestic policies is as rock-solid as possible. It will be scrutinised closely, both domestically and internationally. This is as it should be, given New Zealand’s unique profile, and the fact that other countries confronting the challenge of mitigating biological emissions may be looking to New Zealand for solutions.

27 Against this context, DCANZ would like to signal our strong wish to work collaboratively with Government on the modelling which supports New Zealand’s INDC and domestic policies. We are willing to share what information we have with Government, to help ensure a common understanding of the potential impacts and challenges generated by policy options. We would expect the Government to reciprocate in what would be a constructive and productive exchange.

**Contact**

28 Any queries regarding this submission can be directed to Kimberley Crewther, Executive Director, DCANZ (kimberly.crewther@dcanz.com; +64 4 471 6902).