

## APPENDIX 1

### Federated Farmers Policy Position on Climate Change (February 2017)

1. Federated Farmers of New Zealand is supportive of the need to take action to contribute to the global effort to address climate change. Farming is reliant on the climate for the food and fibre that we produce. Public policy should seek action that supports New Zealand's natural advantages in agricultural production.
2. The scientific consensus is that climate change is happening and that humanity, including agriculture, contributes.
3. There should be greater investment in and improved focus of research efforts to reduce current biological agricultural emissions. Emission reduction technologies should be cost-effective, improve farm productivity and ensure continued market acceptance of farm products. Research into such technologies should seek to access all the tools of modern biology, including biotechnology.
4. Efforts to reduce greenhouse gas emissions should understand that not all greenhouse gases are created equal. Carbon dioxide is the dominant greenhouse gas from human activity, and is persistent in the atmosphere. Efforts to reduce emissions should continue to focus on reducing carbon dioxide over methane and nitrous oxide.
5. Reducing biological emissions to zero is impossible without stopping food production. Biological emissions of methane and nitrous oxide are products of agricultural production in New Zealand and elsewhere. The Paris Agreement gives priority to food security and food production, recognizing the dual challenges of controlling global temperatures and feeding a growing population.
6. Farmers, along with the rest of New Zealand, can play their part by eliminating unnecessary fossil fuel consumption. Improved energy efficiency in farm use of electricity and transport fuels, as well as uptake of renewable energy, should also help reduce the costs of farm production.
7. The emissions trading scheme as it is currently structured is not likely to be an effective tool for encouraging behaviour change for biological agricultural emissions. Policy measures should promote efficiency in farm production, not penalize production.
8. Pursuing policy measures to penalise farmers' biological agricultural emissions in advance of similar moves in other countries risks New Zealand's competitiveness as a food exporter.
9. Complementary measures should be considered for biological agricultural emissions, over inclusion in the emissions trading scheme. The farming sector is achieving emissions efficiency improvements every year of 1%. Inclusion in the emissions trading scheme puts at risk those improvements that ensure New Zealand agricultural production is efficient, cost-effective and competitive.
10. The climate is changing, so examining modelled climate changes for New Zealand to understand implications for existing agricultural production will be important to facilitate adaptation to the changes that will come. Farming must remain viable and that requires exploring the implications of the threats and the opportunities arising from a changing climate.

11. There should be greater investment in research to support adaptation in a changing and more volatile climate for agricultural production. Research should explore alternative land-use and production systems to provide farmers with as many options as possible. Research should also explore the potential for broadening the definition of carbon forests to incentivize tree planting for soil erosion, water quality, animal welfare (shelter and shade), and biodiversity.
12. Co-benefits should be realized from better managing the crossover between climate change and other policy issues. Research into understanding the nitrogen cycle could lead to reducing nitrous oxide emissions as well as nitrate leaching which would assist freshwater policy objectives. Soil erosion control plantings on steep hillsides will see emissions sequestered in new forest plantings, reduce sedimentation and phosphate in our waterways, and could also achieve biodiversity objectives. Improved water infrastructure is a strategy that can benefit adaptation to extreme weather events as well as supplementing low flows in waterways. Public policy should seek to ensure there are not unintended consequences from efforts in one issue on other issues.