



New Zealand

Key facts: Agriculture in New Zealand



More than half of the country's area is grassland for cattle and sheep farming. Sheep numbers have decreased to 27 million in 2019 due to a shift to dairy cattle farming which is economically more viable (from 70 million in the 1980s).



Approx. 6% of New Zealand's total land area are Māori freehold land; Maori typically manage soil and other resources sustainably but are particularly affected by climate change impacts.



The agricultural sector made up more than 21% of exports in 2021.



The increased use of nitrogen fertiliser leads to nitrogen losses that harm soils, groundwater and freshwater systems.

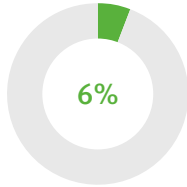


There is hardly any economic regulation of agricultural production and trade.

39%

10 mio ha

used for agriculture
Total area: 26 mio ha



170,000

employed in agriculture
Total labour force 2,8 million

Main agricultural products



Milk and dairy products



Beef, lamb Meat and wool



Horticulture kiwifruit, wine, apples and pears

Key areas with high mitigation potential

Three mitigation options are highlighted here that are important in the national context due to the share of emissions produced from the activity, the magnitude of possible emissions savings, and feasibility of implementation. These 3 measures form part of a broader set of measures that would be needed to address agricultural emissions in the country, especially those that decarbonise on-farm energy use and reduce food loss and waste.



Reducing nitrogen fertilisation on pastures

Apply fertiliser more precisely.



Rewetting of organic soils

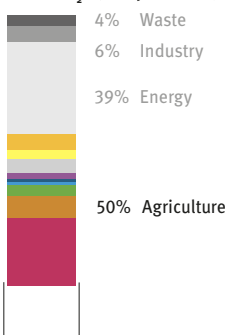
Cease draining 50% of organic soils from crop- and grassland while reducing stocking rates and changing agricultural practices in these areas.



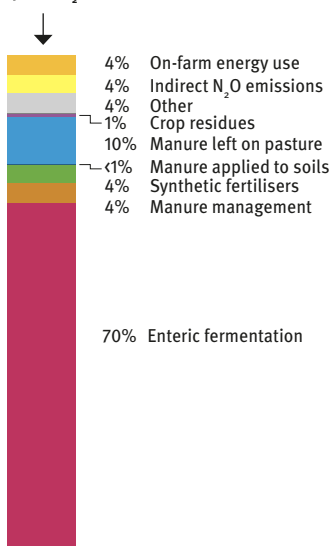
Silvopastoralism

Grow trees on pasture land to enhance carbon sequestration.

Total national emissions 82 MtCO₂e (except LULUCF)



Agricultural emissions 41 MtCO₂e



Key challenges for implementing mitigation measures



Long tradition of livestock farming and its economic importance obstructs changing/reducing livestock farming.



High investment/transaction costs pose barriers to farmers who have little public agricultural support available.



High consumption levels of meat and dairy products which are an important element of national food culture.

Recommendations for enhancing mitigation in the agricultural sector



Enhance the national climate mitigation framework for agriculture.



Set **comprehensive climate policies** in the agricultural and land-use sector.



Increase **public support** for farmers for implementing sustainable agricultural practices.

Ministry for the Environment (2022b). New Zealand's Greenhouse Gas Inventory 1990-2020. Ministry for the Environment. Wellington, 2022. Online available at <https://environment.govt.nz/publications/new-zealands-greenhouse-gas-inventory-1990-2020/>, last accessed on 17 Feb 2023.

Umwelt Bundesamt