Agricultural Greenhouse Gas Emissions:

Costs Associated with Farm Level Mitigation

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Abstract

Agricultural greenhouse gas emissions within New Zealand account for 48 percent of all national greenhouse gas emissions. With the introduction of the emissions trading scheme farmers will soon be liable for their emissions, introducing additional physical constraints and financial costs. Farmers that still operate within the sector will have two options to meet emissions targets; to purchase carbon credits from the open market, or mitigate farm level emissions at added costs to the farmer. This study examines the latter case of assessing farm level options for mitigating greenhouse gas emissions, and quantifying the physical and financial costs associated with mitigation strategies. Results show that, based on the assumptions in the study, there are available options for dairy farmers to profitably meet Kyoto protocol emissions targets. Sheep and beef farmers can increase profit, but cannot meet Kyoto protocol emissions targets, through examined scenarios.

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