AgriMagic

SUPPORTING YOUR FARMING FUTURE

Nutrient Constraint Summary

134 Benmore-Kauana Road, Benmore

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GHG Biogenic Losses

eCO2 (carbon dioxide equivalents) tonnes/yr				
	Methane GHG Emissions	N20 GHG Emissions	C02 GHG Emissions	Total GHG Emissions
Base	1304	374	30	1708

Summary of Base Farm System

- 155 ha property (143 ha effective)
- 440 cows peak milked.
- 193,701 kg milk solids produced.
- 65 cows wintered
- 6 breeding bulls November-January
- 125 Heifer calves reared and off farm from December-January.
- Effluent spread on 54 ha
- 5 ha FB for wintering and 5 ha oats for silage.
- Approximately 70 t DM of supplements harvested on farm.
- Approximately 277 t DM of supplements imported on farm.
- Nitrogen fertiliser applied to crops at sowing and February.

Key Drivers of GHG

Methane emissions are driven predominantly by animal Dry Matter Intake - the more dry matter that is eaten (grazed or imported supplement) by ruminants, the more methane will be emitted. A key focus is maximising profitability from every kg DM consumed and finding efficiencies within the farm system to minimise wastage and maintenance feeding.

Nitrous oxide emissions are driven by the nitrogen cycle and the wetness of the soil. If animals urine contains higher concentrations of nitrogen, especially when soils are wetter, the rate of nitrous oxide emissions increase. Applying fertiliser with a urease inhibitor, or ensure applied in optimum conditions to wash fertiliser in also reduces the risk of nitrous oxide emissions.

Carbon dioxide is generated every time fossil fuels are burnt, woody vegetation is cleared and when lime or nitrogen fertiliser are applied.