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SUPPORTING YOUR FARMING FUTURE

Base GHG Emissions Summary

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GHG Biogenic Losses

The table below outlines the Biogenic GHG losses for the Base farm system.

eCO2 (carbon dioxide equivalents) tonnes/yr				
	Methane GHG Emissions	N20 GHG Emissions	C02 GHG Emissions	Total GHG Emissions
Base	2,556	560	0	3,116

Summary of Base Farm System

- 844 ha property (773 ha effective)
- 4450 MA breeding ewes with a birth rate of 130%
- 1100 replacements kept
- 3900 non-replacement lambs sold prior to winter, 200 retained through winter and sold spring
- Approximately 150 breeding cows
- 30 replacements
- Calves retained and primarily sold before second winter
- Additional 150 steers purchased as calves and retained until following autumn, approximately 50 retained through a second winter.
- 32 ha swedes and 12 ha kale grown for wintering
- Approximately 150 t DM of supplements harvested on farm
- Nitrogen fertiliser applied to crops at sowing

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.

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. Optimising the timing of nitrogen fertiliser application to minimise the risk of volatilisation also reduces the risk of nitrous oxide emissions.

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