

PigGas NZ Report

Greenhouse Gas Emissions Estimation Report

SCENARIO 3 28.11.21 PigGas NZ Version 1.00.01



PigGas NZ estimates emissions of greenhouse gases from pig farms in New Zealand using methodology approved by the Ministry for Primary Industries and in keeping with the methodology used in the New Zealand Greenhouse Gas Inventory Reporting for Swine. All estimated figures are in kgCO₂-e. For more information contact environment@pork.co.nz

SECTION 1: SUMMARY

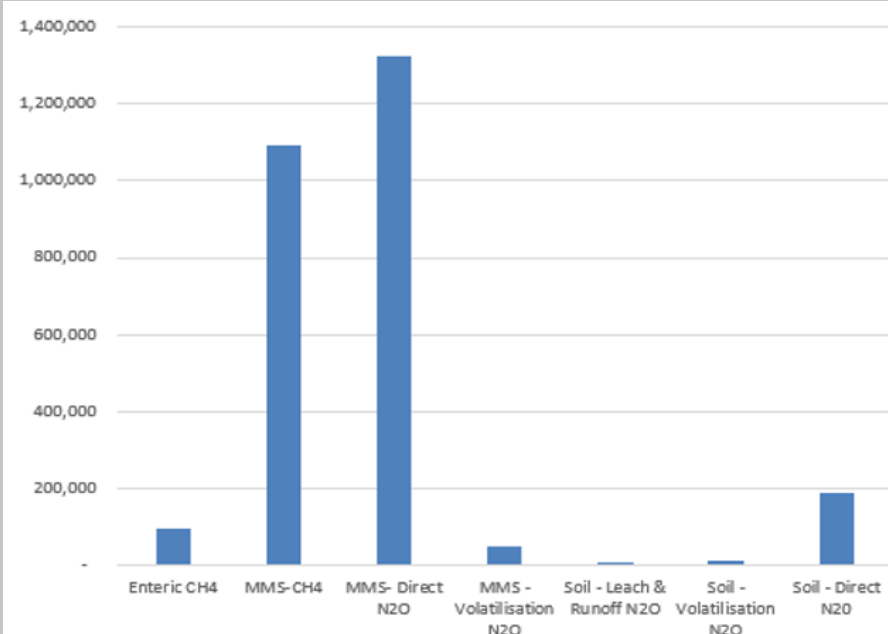
FARM DETAILS

400 sow farrow to finish farm, selling approximately 9,900 finishers per year. Sows outdoors on pasture, with growing and finishing pigs on a deep litter system.

EMISSIONS PROFILE SUMMARY

TOTAL LIVESTOCK EMISSIONS (kgCO ₂ -e):	2,772,310
TOTAL FUEL EMISSIONS (kgCO ₂ -e):	N/A
TOTAL OFFSETS (kgCO ₂ -e):	N/A
TOTAL EMISSIONS (kgCO₂-e):	2,772,310
EMISSIONS INTENSITY (kg CO₂-e / kg HSCW) :	3.95

SECTION 2: LIVESTOCK EMISSIONS BY SOURCE (kgCO₂-e):



KEY:

Enteric CH₄: Emissions from digestive processes within animals.

MMS: Emissions directly attributable to the manure management system

Soil: Emissions from direct deposition of manure, or application of effluent or compost to soil.

SUMMARY OF LIVESTOCK EMISSIONS BY SOURCE.

Source	Emissions (kgCO ₂ -e):
Enteric CH ₄	95,830
MMS – CH ₄	1,094,672
MMS – Direct N ₂ O	1,325,828
MMS – Volatilisation N ₂ O	47,338
Soil – Leaching and runoff N ₂ O	5,877
Soil – Volatilisation N ₂ O	13,265
Soil – Direct N ₂ O	189,499

SECTION 3: PRODUCTION DETAILS

Total Sales **10,088**

Sales Live Wt. kg 942,604

Sales Dress Wt. kg 716,379

Average Dress Wt. kg 71.01

Dress % 76.00%

Purchases

Purchase Live Wt. kg 19,600

Purchase Dressed Wt. kg 14,896

Net Pig Movements

Sales Live Wt. kg 942,604

Sales Dress Wt. kg 716,379

Dress % 76.00%

Feed Consumption (kg) **2,600,733**

FCR L.Wt 2.82

FCR D.Wt 3.71

SECTION 4: EMISSIONS REDUCTIONS SCENARIO MODELLING

The scenarios modelled in this section demonstrate theoretical changes that could be made on farm to reduce emissions. The selection of actual emissions reduction strategies on farm will depend on farm-specific opportunities and costs and are for each farmer to decide as part of their broader farm operation.

Emissions reduction scenarios have not been modelled for example farms. When receiving an individualised PigGas report, the scenario will be detailed in the following way:

Scenario 1: <Description of what is changing>.

This change reduces total emissions from **XX** kg CO₂-e to **XX** kg CO₂-e and emissions intensity from **XX** kg CO₂-e / kg HSCW to **XX** kg CO₂-e / kg HSCW.

SECTION 5: EMISSIONS INTENSITY INDUSTRY COMPARISON

Emissions intensity is the amount of CO₂-e emissions produced per kg of product produced. It is used as a measure of production efficiency. The diagram below shows your emissions intensity compared to the NZ pork industry average of 1.72 CO₂-e / kg HSCW.

