PigGas NZ Report

Greenhouse Gas Emissions Estimation Report

SCENARIO 4 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 kgCO_2-e. For more information contact environment@pork.co.nz

SECTION 1: SUMMARY

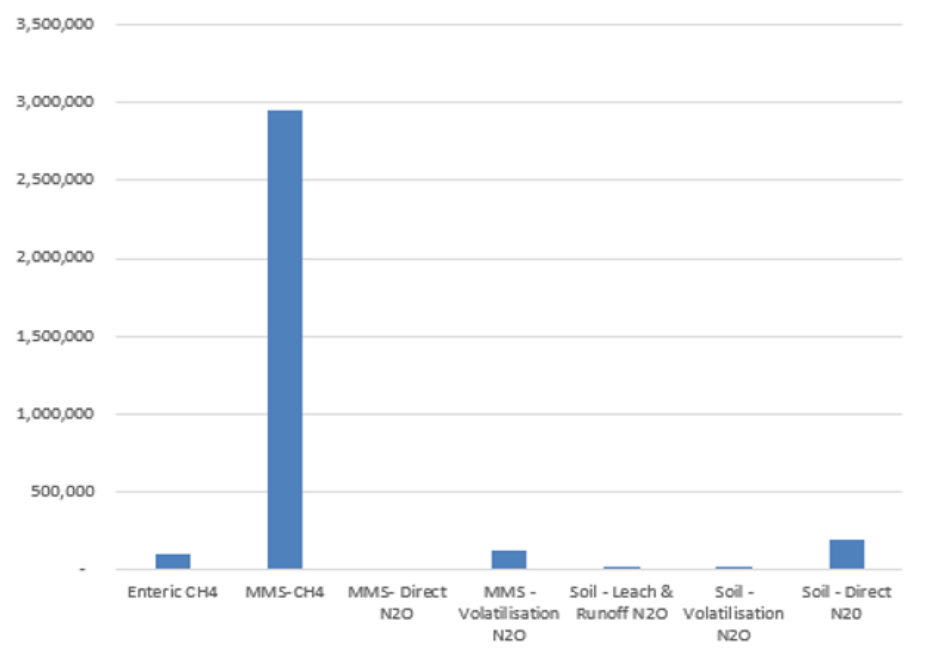
FARM DETAILS

400 sow farrow to finish farm, selling approximately 9,900 finishers per year. Sows and growers/finishers all indoors on a liquid system, which is flushed daily to an anaerobic pond.

EMISSIONS PROFILE SUMMARY

TOTAL LIVESTOCK EMISSIONS (*kgCO_2-e)*:	3,369,148
TOTAL FUEL EMISSIONS (*kgCO_2-e*):	N/A
TOTAL OFFSETS (*kgCO_2-e)*:	N/A
TOTAL EMISSIONS (*kgCO_2-e)*:	**3,369,148**
EMISSIONS INTENSITY *(kg CO_2-e / kg HSCW)* :	**4.80**

SECTION 2: LIVESTOCK EMISSIONS BY SOURCE (*kgCO_2-e*):



KEY:

Enteric CH_4: 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	92,656
MMS – CH_4	2,947,879
MMS – Direct N_20	-
MMS – Volatilisation N_20	123,934
Soil – Leaching and runoff N_20	5,766
Soil – Volatilisation N_2O	13,013
Soil – Direct N_2O	185,900

SECTION 3: PRODUCTION DETAILS

Total Sales	**10,088**	**Net Pig Movements**	
Sales Live Wt. kg	942,604	Sales Live Wt. kg	942,604
Sales Dress Wt. kg	716,379	Sales Dress Wt. kg	716,379
Average Dress Wt. kg	71.01	Dress %	76.00%
Dress %	76.00%		
Purchases		**Feed Consumption (kg)**	**2,600,733**
Purchase Live Wt. kg	19,600	FCR L.Wt	2.82
Purchase Dressed Wt. kg	14,896	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 CO_2-e to **XX** kg CO_2-e and emissions intensity from **XX** kg CO_2-e / kg HSCW to **XX** kg CO_2-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.