Neesham Farms Ltd 30 Sep 2023

Prepared using UK as the region in the Farm Carbon Calculator.

Carbon balance

Emissions

550.59

tonnes CO_2e per year

Offset

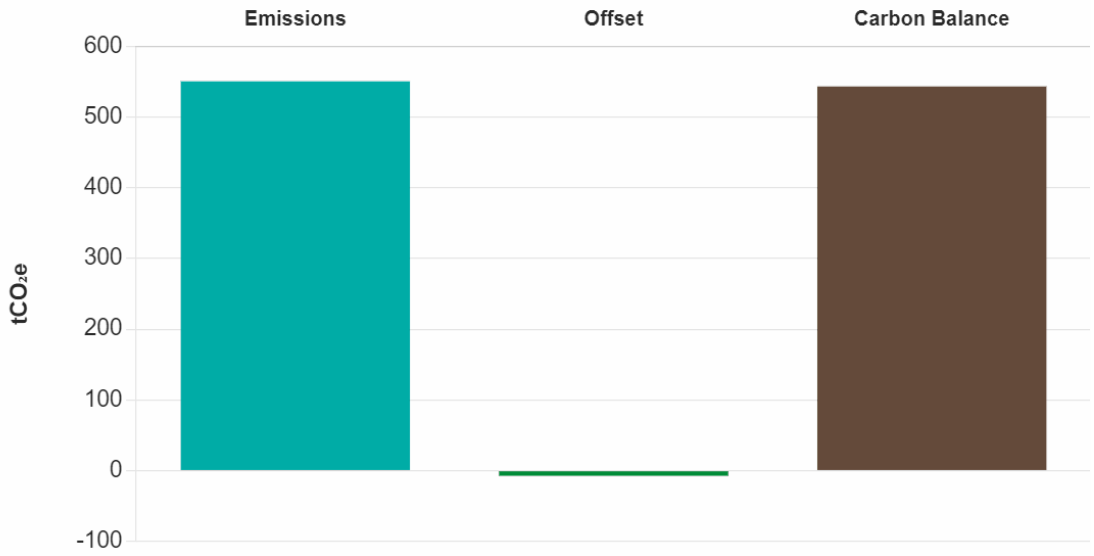
-7.25

tonnes CO_2e per year

Carbon Balance

543.34

tonnes CO_2e per year



KPIs

Carbon Balance / hectare:

2.10

tonnes CO2e/hectare/year

Carbon Balance / tonne:

0.5544

tonnes CO2e/tonne of product

Fuel / hectare:

0.6755

tonnes CO2e/hectare from fuel

Fertiliser emissions:

0.7286

tonnes CO2e per ha from fertilisers

Water:

0.1987

m3 water per tonne of product

Breakdown of Emissions and Sequestration

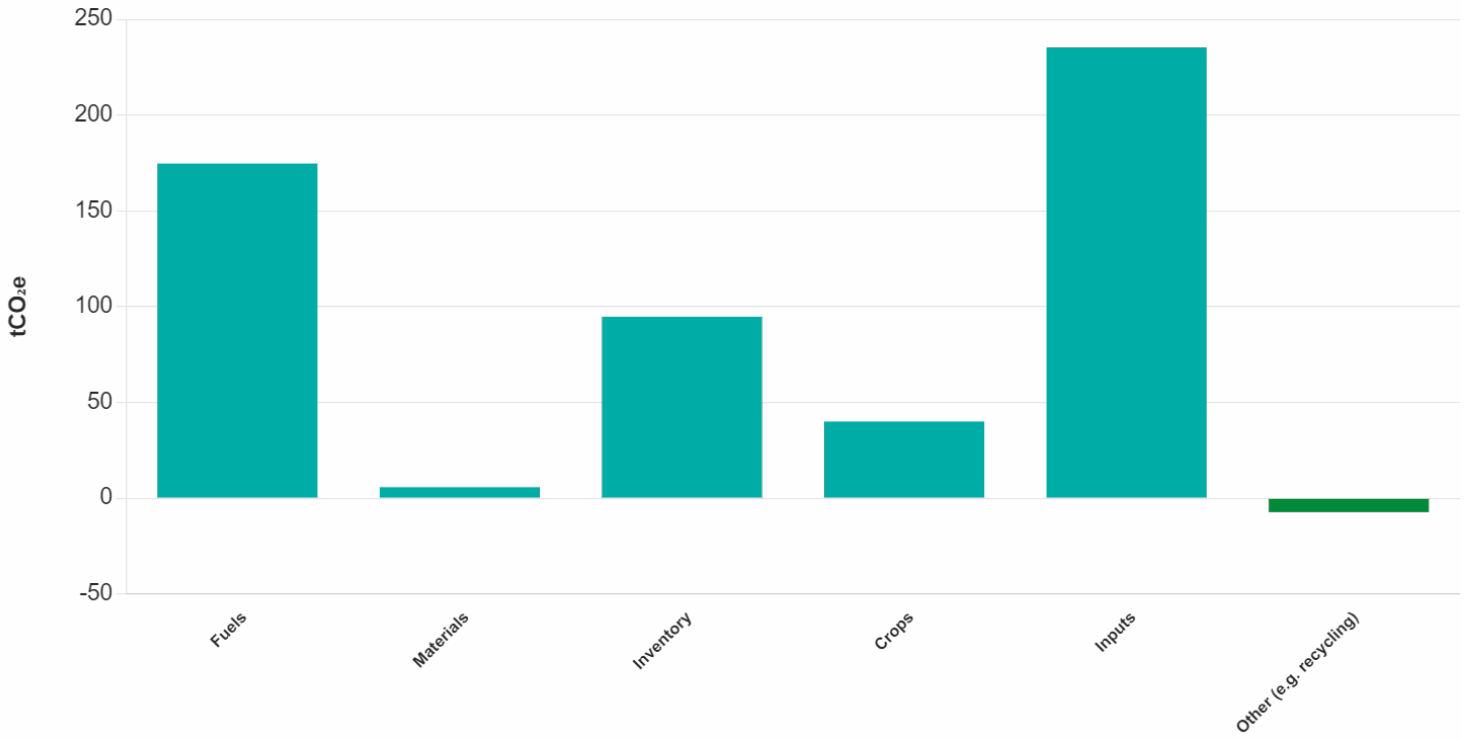


Table of Emissions and Sequestration

Emissions	tonnes CO_2e per year	%
Fuels	174.75	31.74%
Materials	5.74	1.04%
Inventory	94.77	17.21%
Crops	40.01	7.27%
Inputs	235.33	42.74%
Total	**550.59**	**100%**

Offset	tonnes CO_2e per year	%
Other (E.G. Recycling)	-7.25	100.00%
Total	**-7.25**	**100%**

Emissions by Scope & Greenhouse Gas

Emissions	Emissions by Scope				By GHGs			
	Scope 1 tCO_2e	Scope 2 tCO_2e	Scope 3 tCO_2e	Outside of Scope tCO_2e	CO_2 tCO_2e	CH_4 tCO_2e	N_2O tCO_2e	Total tCO_2e
Fuels	134.03	2.29	32.28	6.16	174.75	0.00	0.00	174.75
Materials	0.00	0.00	5.74	0.00	5.74	0.00	0.00	5.74
Inventory	0.00	0.00	94.77	0.00	94.77	0.00	0.00	94.77
Crops	40.01	0.00	0.00	0.00	29.41	0.00	10.60	40.01
Inputs	94.28	0.00	141.05	0.00	202.80	0.00	32.53	235.33
Total	**268.32**	**2.29**	**273.83**	**6.16**	**507.46**	**0.00**	**43.13**	**550.59**

Yield

Total Production	Units	Yield
Crops: Agricultural Crops	tonnes	980.00

Common Land

Area	Subdivision	Emissions (tCO_2e)	Active Livestock Units
	0	0.00	0
Total		**0.00**	**0**

Farm details

Report type

Standard

Region

UK

Report Disclaimer

This Carbon Footprint Report has been generated using the Farm Carbon Calculator, a software tool developed by the Farm Carbon Toolkit. Alongside Farm Carbon Toolkit's General Terms & Conditions, please read this disclaimer carefully before interpreting or relying upon the information presented in this report.

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- **Accuracy and Assumptions:** The carbon footprint calculations and any benchmarks presented in this report are calculated using a variety of standards and protocols, with emissions factors drawn from scientific literature and industry data. While every effort has been made to draw on high-quality and up-to-date information, users should understand that there can be inherent limitations and uncertainties associated with the underlying methodology and data sources.
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Full Data

Fuels

Diesel

Description	Usage	tonnes CO_2e	%	Confidence	Link
Red diesel (gas oil)	47,043 Litres	159.53	91.29%		
Road diesel (forecourt diesel)	682 Litres	2.16	1.24%		

Electricity

Description	Usage	tonnes CO_2e	%	Confidence	Link
Average tariff	11,816 Kilowatt hours (kWh)	3.09	1.77%		

Gas fuels

Description	Usage	tonnes CO_2e	%	Confidence	Link
Propane by vol	13 Litres	0.02	0.01%		

Liquid fuels

Description	Usage	tonnes CO_2e	%	Confidence	Link
Lubricant oil	250 Litres	0.87	0.50%		

Petrol

Description	Usage	tonnes CO_2e	%	Confidence	Link
Petrol (forecourt petrol)	749 Litres	2.08	1.19%		

Solid fuels

Description	Usage	tonnes CO_2e	%	Confidence	Link
Wood pellets	3,670 Kilograms (kg)	6.99	4.00%		

Materials

Cement

Description	Usage	tonnes CO_2e	%	Confidence	Link
General cement by weight	0 Tonnes	0.23	4.06%		

Inventory: Building materials

Description	Usage	tonnes CO_2e	%	Confidence	Link
Insulation	4 Kilograms (Kg)	0.01	0.13%		

Steel

Description	Usage	tonnes CO_2e	%	Confidence	Link
Steel plate by weight	0 Tonnes	0.05	0.86%		

Stone

Description	Usage	tonnes CO_2e	%	Confidence	Link
Limestone by weight	39 Tonnes	3.47	60.57%	✓✓✓	

Tyres

Description	Usage	tonnes CO_2e	%	Confidence	Link
Rubber tyres by weight	295 Kilograms (Kg)	0.84	14.66%	✓✓	

Water & Sewage

Description	Usage	tonnes CO_2e	%	Confidence	Link
Mains water	195 Metres cubed (m3)	0.03	0.51%	✓✓	

Wood

Description	Usage	tonnes CO_2e	%	Confidence	Link
Plywood sheet 12mm	9 Metres squared (m2)	0.13	2.26%	✓✓✓	🔗
Plywood sheet 18mm	41 Metres squared (m2)	0.89	15.44%	✓✓✓	🔗
Plywood sheet 25mm	3 Metres squared (m2)	0.09	1.52%	✓✓✓	🔗

Inventory (Depreciated over 10 years)

Farm Machinery - Combine harvesters

Description	Usage	tonnes CO_2e	%	Confidence	Link
Claas lexion 770	549 Horsepower	28.55	30.12%	✓✓✓	

Farm Machinery - Tractors

Description	Usage	tonnes CO_2e	%	Confidence	Link
Agrifac Sprayer	285 Horsepower	12.54	13.23%		
John Deere 6215 r	215 Horsepower	9.46	9.98%		
John Deere 7R330	330 Horsepower	14.52	15.32%		
John Deere 8345 R	345 Horsepower	15.18	16.02%		

Implements (by weight)

Description	Usage	tonnes CO_2e	%	Confidence	Link
7.5 meter straw harrow	2 Tonnes of metal	0.45	0.47%		
compact flail topper	0 Tonnes of metal	0.10	0.10%		
DALE ECO XL Drill	9 Tonnes of metal	2.22	2.34%		

Road vehicles - Cars and Vans

Description	Usage	tonnes CO_2e	%	Confidence	Link
discovery 3	56,583 £ spent on new vehicle	0.00	0.00%		
Land rover defender 90	48,250 £ spent on new vehicle	3.47	3.67%		
range rover sport	115,109 £ spent on new vehicle	8.29	8.75%		

Crops

Agricultural crops

Description	Usage	tonnes CO_2e	%	Confidence	Link
Barley	732 Tonnes harvested	23.82	59.54%		
Field Beans & Dry Peas	138 Tonnes harvested	2.56	6.40%		
Oil Seed Rape	110 Tonnes harvested	13.63	34.06%		

Inputs

Fertiliser

Description	Usage	tonnes CO_2e	%	Confidence	Link
Custom blend	103 Tonnes	188.50	80.10%		

Sprays - Generic

Description	Usage	tonnes CO_2e	%	Confidence	Link
Fungicide	93 Kg of active ingredient	2.70	1.15%		
Herbicide	1,628 Kg of active ingredient	43.35	18.42%		
Insecticide	0 Kg of active ingredient	0.01	0.00%		
Molluscicide	72 Kg of active ingredient	0.77	0.33%		

Waste - Offsets

Description	Usage	tonnes CO_2e	%	Confidence	Link
Scrap metal	0 Tonnes	-6.72	92.73%		

Batteries (Recycling)

Description	Usage	tonnes CO_2e	%	Confidence	Link
Vehicle	0 Tonnes	-0.02	0.30%		

Plastics (Recycling)

Description	Usage	tonnes CO_2e	%	Confidence	Link
HDPE	0 Tonnes	-0.51	6.97%		