



Botany Farms 30 Sep 2023

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

Carbon balance

Emissions	Offset	Carbon Balance
121.90	-121.93	
tonnes CO ₂ e per year	tonnes CO ₂ e per year	



KPIs

Carbon Balance / hectare:	Carbon Balance / tonne:	Fuel / hectare:
0.00 tonnes CO2e/hectare/year	-0.0001 tonnes CO2e/tonne of product	0.1365 tonnes CO2e/hectare from fuel
Fertiliser emissions:	Water:	Carbon Income:
0.4914 tonnes CO2e per ha from fertilisers	0.0345 m3 water per tonne of product	£0.00 carbon income (£)

Breakdown of Emissions and Sequestration

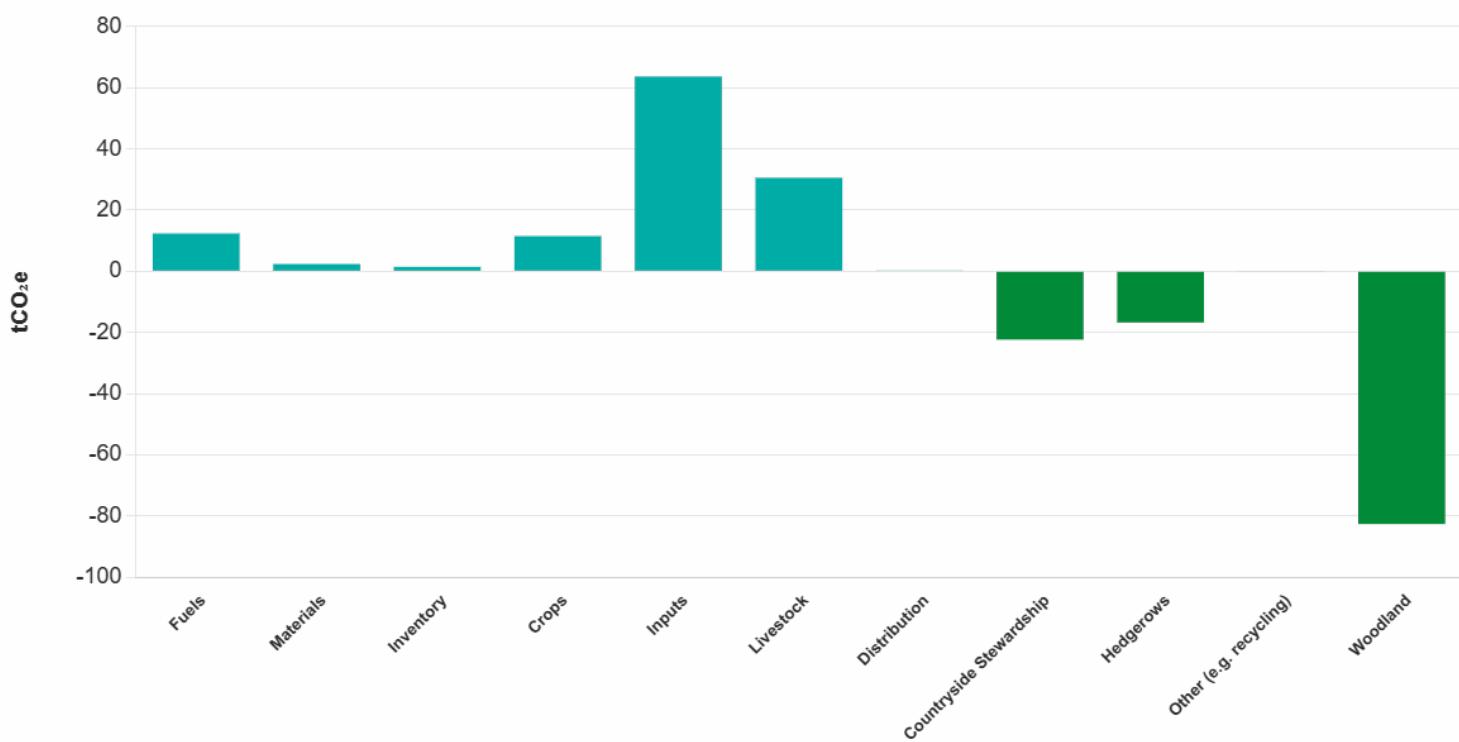


Table of Emissions and Sequestration

Emissions	tonnes CO ₂ e per year	%
Fuels	12.31	10.10%
Materials	2.32	1.90%
Inventory	1.42	1.16%
Crops	11.44	9.38%
Inputs	63.61	52.18%
Livestock	30.51	25.03%
Distribution	0.29	0.24%
Total	121.90	100%

Offset	tonnes CO ₂ e per year	%
Countrywide Stewardship	-22.35	18.33%
Hedgerows	-16.75	13.74%
Other (E.G. Recycling)	-0.17	0.14%
Woodland	-82.65	67.79%
Total	-121.93	100%

Emissions by Scope & Greenhouse Gas

Emissions	Emissions by Scope				By GHGs			Total tCO ₂ e
	Scope 1 tCO ₂ e	Scope 2 tCO ₂ e	Scope 3 tCO ₂ e	Outside of Scope tCO ₂ e	CO ₂ tCO ₂ e	CH ₄ tCO ₂ e	N ₂ O tCO ₂ e	
Fuels	9.89	0.11	2.32	0.00	12.31	0.00	0.00	12.31
Materials	0.00	0.00	2.32	0.00	2.32	0.00	0.00	2.32
Inventory	0.00	0.00	1.42	0.00	1.42	0.00	0.00	1.42
Crops	11.44	0.00	0.00	0.00	8.41	0.00	3.03	11.44
Inputs	22.38	0.00	41.23	0.00	55.42	0.00	8.19	63.61
Livestock	30.51	0.00	0.00	0.00	0.00	28.88	1.63	30.51
Distribution	0.00	0.00	0.29	0.00	0.29	0.00	0.00	0.29
Total	74.22	0.11	47.58	0.00	80.17	28.88	12.86	121.91

Yield

Total Production	Units	Yield
Crops: Agricultural Crops	tonnes	332.22
Common Land		
Area	Subdivision	Emissions (tCO ₂ e)
		0.00
Total		0.00

Farm details

Report type
Standard
Region
UK

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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 ₂ e	%	Confidence	Link
Red diesel (gas oil)	3,420 Litres	11.60	94.20%		
Road diesel	110 Litres	0.35	2.83%		

Electricity

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Average tariff	550 Kilowatt hours (kWh)	0.14	1.17%		

Liquid fuels

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Petrol	80 Litres	0.22	1.80%		

Materials

Aggregate

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Average aggregate by weight	2 Tonnes	0.01	0.64%		

Cement

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
General cement by weight	0 Tonnes	0.04	1.79%		

Complete fencing

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Barbed wire (3 strands)	1,391 Metres	2.06	88.54%		

Roads & tracks

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Recycled Asphalt Plannings	6 Tonnes	0.12	5.04%		

Stone

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
General stone by weight	1 Tonnes	0.08	3.40%		
Limestone by weight	0 Tonnes	0.01	0.50%		

Water & Sewage

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Mains water	11 Metres cubed (m ³)	0.00	0.07%		

Inventory

Farm Machinery - Fore end loaders

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
LuiGong mini digger	21 Horsepower	0.84	59.08%		

Implements (by weight)

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
ATV traileflail mower 120FM	0 Tonnes of metal	0.08	5.38%		

Road vehicles - Cars and Vans

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Honda ATV- TRX500 FA6	7,000 £ spent on new vehicle	0.50	35.54%		

Crops

Agricultural crops

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Barley	129 Tonnes harvested	4.21	36.79%		
Linseed	30 Tonnes harvested	2.71	23.69%		
Wheat	173 Tonnes harvested	4.52	39.52%		

Inputs

Fertiliser

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Custom blend	19 Tonnes	44.33	69.69%		Link

Sprays - Generic

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Fungicide	15 Kg of active ingredient	0.43	0.68%		
Growth Regulator	60 Kg of active ingredient	1.14	1.79%		
Herbicide	663 Kg of active ingredient	17.66	27.76%		
Insecticide	0 Kg of active ingredient	0.00	0.01%		
Molluscicide	4 Kg of active ingredient	0.04	0.06%		

Livestock

Sheep

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Ewes	115 Average head of livestock on farm during last year	24.94	81.73%		Link
Lambs	60 Average head of livestock on farm during last year	5.58	18.27%		Link

Waste - Offsets

Plastics (Recycling)

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
HDPE	0 Tonnes	-0.17	100.00%		Link

Distribution

Contracted

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
HGV (33t +)	21 Delivery distance in miles	0.29	100.00%		Link

Sequestration

AB1 - Nectar Flower Mix

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Baseline: winter wheat	2 Hectares (ha)	-9.77	8.02%		

AB9 - Winter bird food

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Baseline: winter wheat	2 Hectares (ha)	-12.58	10.33%		

Hedgerows

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Hedgerows (large growth with trees)	8,046 Length in metres	-16.28	13.37%		
Hedgerows (managed)	1,714 Length in metres	-0.47	0.39%		

Species and age specific

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Mixed	4 Hectares (ha)	-82.65	67.88%		