

Lowick Manor 30 Sep 2023

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

Carbon balance

Emissions

1,727.84

tonnes CO₂e per year

Offset

-239.20

tonnes CO₂e per year

Carbon

Balance

1,488.64

tonnes CO₂e per year



KPIs

Carbon Balance / hectare:	Carbon Balance / tonne:	Fuel / hectare:
1,488.64	0.3765	260.3738
tonnes CO2e/hectare/year	tonnes CO2e/tonne of product	tonnes CO2e/hectare from fuel
Fertiliser emissions:		
705.7319		
tonnes CO2e per ha from fertilisers		

Breakdown of Emissions and Sequestration

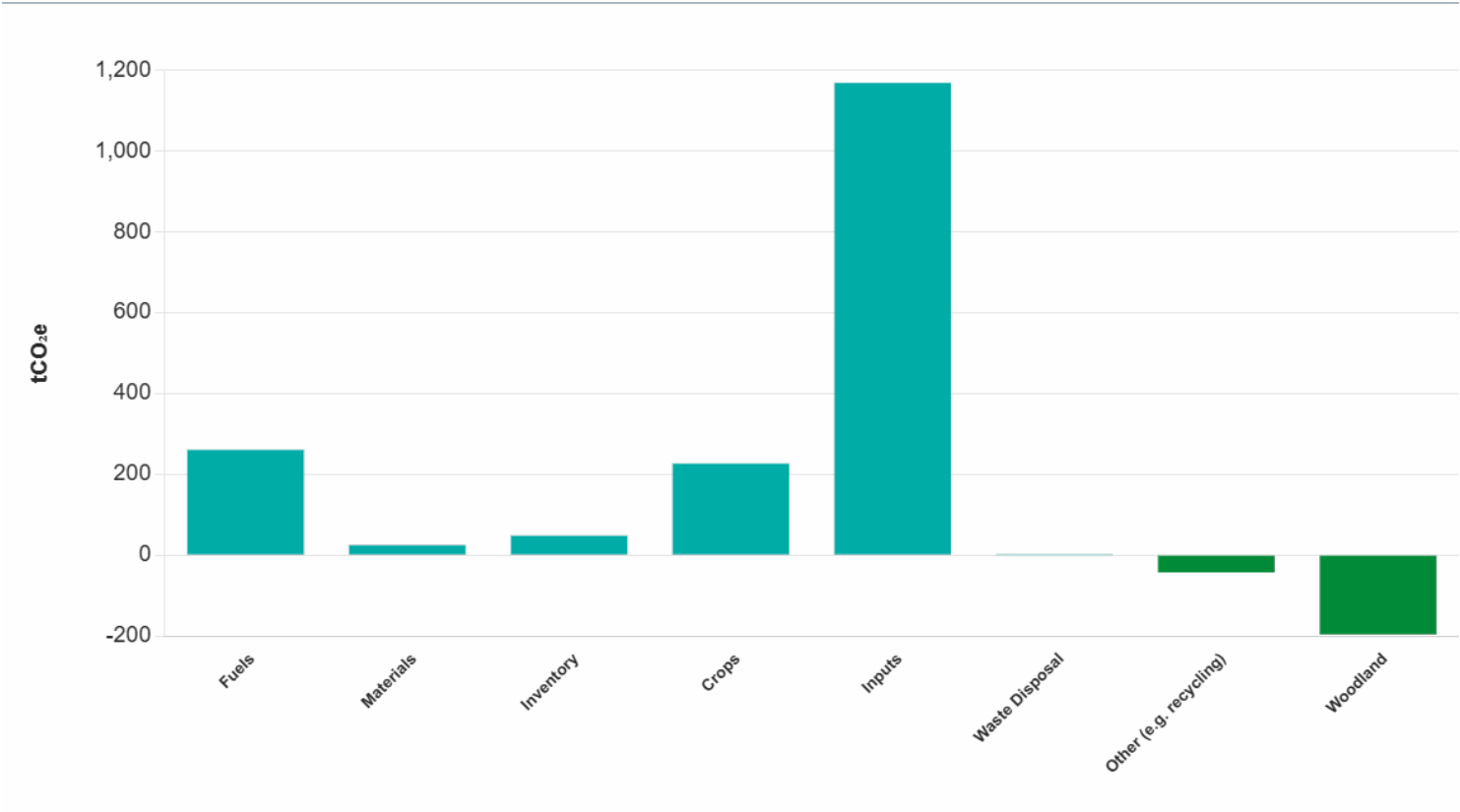


Table of Emissions and Sequestration

Emissions	tonnes CO ₂ e per year	%
Fuels	260.37	15.07%
Materials	24.14	1.40%
Inventory	47.71	2.76%
Crops	226.35	13.10%
Inputs	1,169.01	67.66%
Waste Disposal	0.26	0.01%
Total	1,727.84	100%

Offset	tonnes CO ₂ e per year	%
Other (E.G. Recycling)	-42.94	17.95%
Woodland	-196.26	82.05%
Total	-239.20	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	197.33	6.17	56.88	0.00	260.37	0.00	0.00	260.37
Materials	0.00	0.00	24.14	0.00	24.14	0.00	0.00	24.14
Inventory	0.00	0.00	47.71	0.00	47.71	0.00	0.00	47.71
Crops	214.26	0.00	12.09	0.00	169.57	0.00	56.78	226.35
Inputs	367.57	0.00	801.44	0.00	1,169.01	0.00	0.00	1,169.01
Waste Disposal	0.00	0.00	0.26	0.00	0.26	0.00	0.00	0.26
Total	779.16	6.17	942.51	0.00	1,671.06	0.00	56.78	1,727.84

Yield

Total Production	Units	Yield
Crops: Agricultural Crops	tonnes	3,953.52

Common Land

Area	Subdivision	Emissions (tCO ₂ e)	Active Livestock Units
	0	0.00	0
Total		0.00	0

Farm details

Region UK

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Full Data

Fuels





Baling by area

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
General (by area)	450 Hectares (ha)	9.92	3.81%	  	





Diesel

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Red diesel (gas oil)	67,429 Litres	228.66	87.82%	  	
Road diesel (forecourt diesel)	1,154 Litres	3.66	1.40%	  	





Electricity

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Average tariff	31,900 Kilowatt hours (kWh)	8.35	3.21%	  	

Gas fuels


Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Propane by volume	5,420 Litres	9.34	3.59%	  	

Operations

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Solid fertiliser distribution	111 Hectares (ha)	0.45	0.17%	  	




Materials

Concrete




Description	Usage	tonnes CO ₂ e	%	Confidence	Link
General concrete	226 Tonnes	24.14	100.00%	  	

Inventory (depreciated over 10 years)




Farm Machinery - Combine harvesters

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
John Deere Combine S780	470 Horsepower	24.44	51.23%	  	









Farm Machinery - Sprayers

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Challenger Rogator 655	227 Horsepower	0.48	1.00%	  	

Farm Machinery - Tractors

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
JD Tractor 7310R	310 Horsepower	13.64	28.59%	  	

Implements (by weight)

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Allrounder Kockerling Cultivator	3 Tonnes of metal	0.62	1.29%	  	
Amazone Plough	2 Tonnes of metal	0.37	0.77%	  	

Bailey Low loader trailer	3 Tonnes of metal	0.74	1.55%	  	
Bailey Trailers 16T-22346-16	7 Tonnes of metal	1.72	3.61%	  	
cherry grain pusher	1 Tonnes of metal	0.12	0.26%	  	
Cherry Smartbox	1 Tonnes of metal	0.25	0.52%	  	
HE-VA King 12.3m Roller	12 Tonnes of metal	2.95	6.19%	  	
He-va Stealth 4m Cultivator	2 Tonnes of metal	0.49	1.03%	  	
Kuhn Access 40.2	0 Tonnes of metal	0.05	0.10%	  	
Logic Trailed Sprayer	0 Tonnes of metal	0.01	0.03%	  	
Marston Trailer 2	7 Tonnes of metal	0.00	0.00%	  	
Moledrainer Proforge Drainer21	1 Tonnes of metal	0.12	0.26%	  	
Simba Top Titlth	2 Tonnes of metal	0.49	1.03%	  	
Spearhead 250 HD- Flail Mower	1 Tonnes of metal	0.18	0.39%	  	
Sweeper brush	0 Tonnes of metal	0.05	0.10%	  	
Vaderstad Carrier 650	2 Tonnes of metal	0.49	1.03%	  	

Weaving Sabre Tine Drill	2 Tonnes of metal	0.49	1.03%	<div> <div>✓</div> <div>✓</div> <div>✓</div> <div>🔗</div> </div>
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Crops

Agricultural crops

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Field Beans & Dry Peas	336 Tonnes harvested	6.23	2.75%	<div><div>✓</div><div>✓</div><div>✓</div></div>	🔗
Oats	189 Tonnes harvested	5.12	2.26%	<div><div>✓</div><div>✓</div><div>✓</div></div>	🔗
Wheat	3,429 Tonnes harvested	89.61	39.59%	<div><div>✓</div><div>✓</div><div>✓</div></div>	🔗

Lime (including application)

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Ground limestone	201 Tonnes	12.09	5.34%	<div><div>✓</div><div>✓</div><div>✓</div></div>	<div><div>🔗</div></div>

Organic fertility sources

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
AD digestate - Autumn Application	1,708 Tonnes (fresh weight)	45.45	20.08%	<div><div>✓</div><div>✓</div><div>✓</div></div>	🔗
Cattle Manure - FYM - Autumn Application	83 Tonnes (fresh weight)	1.93	0.85%	<div><div>✓</div><div>✓</div><div>✓</div></div>	🔗
Green Waste Compost - Autumn Application	2,274 Tonnes (fresh weight)	65.91	29.12%	<div><div>✓</div><div>✓</div><div>✓</div></div>	🔗

Inputs

Ammonium Phosphate

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
EU origin	13 Tonnes	16.34	1.40%	<div> <div>✓</div> <div>✓</div> <div>○</div> </div>	<div> <div>🔗</div> </div>

Fertiliser

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Custom blend	40 Tonnes	2.33	0.20%	<div> <div>✓</div> <div>✓</div> <div>○</div> </div>	<div> <div>🔗</div> </div>

Specific

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
CF Nitram	45 Tonnes	102.63	8.78%	<div> <div>✓</div> <div>✓</div> <div>○</div> </div>	
Polysulphate	42 Tonnes	2.42	0.21%		<div> <div>🔗</div> </div>

Sprays - Generic

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Fungicide	756 Kg of active ingredient	22.06	1.89%	<div> <div>✓</div> <div>✓</div> <div>○</div> </div>	
Growth Regulator	9,739 Kg of active ingredient	185.46	15.86%	<div> <div>✓</div> <div>✓</div> <div>○</div> </div>	
Herbicide	9,601 Kg of active ingredient	255.71	21.87%	<div> <div>✓</div> <div>✓</div> <div>○</div> </div>	
Insecticide	2 Kg of active ingredient	0.03	0.00%	<div> <div>✓</div> <div>✓</div> <div>○</div> </div>	
Molluscicide	2 Kg of active ingredient	0.02	0.00%	<div> <div>✓</div> <div>✓</div> <div>○</div> </div>	

Urea

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
EU origin	100 Tonnes	339.27	29.02%	<div><div>✓</div><div>✓</div><div>○</div></div>	<div><div>🔗</div></div>

Urea ammonium nitrate

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
EU origin	111 Tonnes	242.74	20.76%	<div><div>✓</div><div>✓</div><div>○</div></div>	<div><div>🔗</div></div>

Waste - Offsets

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Oil	0 Litres	0.00	0.01%	<div><div>✓</div><div>✓</div><div>○</div></div>	<div><div>🔗</div></div>
Scrap metal	0 Tonnes	-35.77	83.30%	<div><div>✓</div><div>✓</div><div>○</div></div>	<div><div>🔗</div></div>

Plastics (Recycling)

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Average	0 Tonnes	-7.17	16.69%	<div><div>✓</div><div>✓</div><div>○</div></div>	<div><div>🔗</div></div>

Sequestration

Average Options

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Mixed woodland	37 Hectares (ha)	-196.26	100.00%	<div><div>✓</div><div>○</div><div>○</div></div>	<div><div>🔗</div></div>