

Mercian Scottish seed potatoes 2022 31 Dec 2022

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

Carbon balance

Emissions

269.05

tonnes CO₂e per year

Offset

0.00

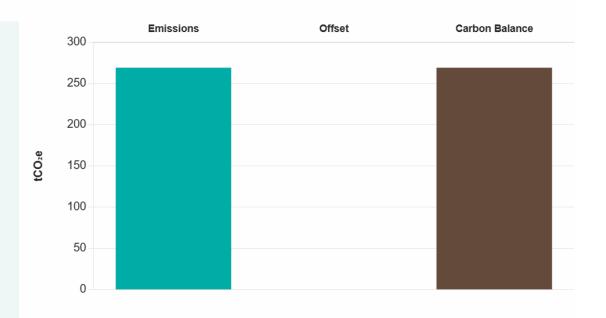
tonnes CO₂e per year

Carbon

Balance

269.05

tonnes CO₂e per year



KPIs

Carbon Balance / hectare: Carbon Balance / tonne: Fuel / hectare:

2.01 0.0764 0.7221

tonnes CO2e/hectare/year tonnes CO2e/tonne of product tonnes CO2e/hectare from fuel

Fertiliser emissions:

0.8281

tonnes CO2e per ha from fertilisers

Breakdown of Emissions and Sequestration

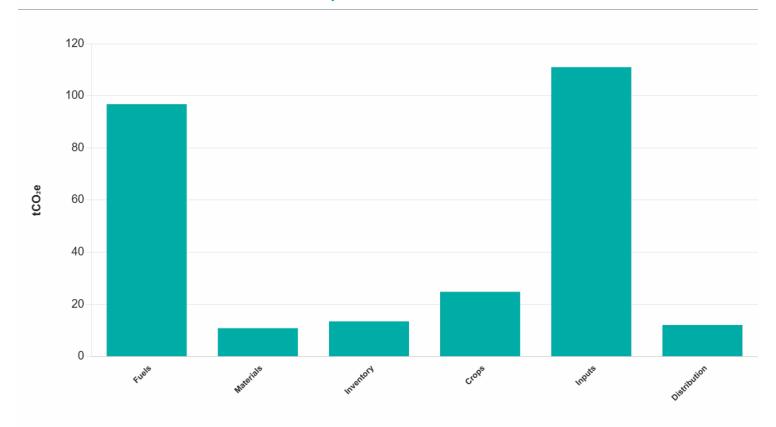


Table of Emissions and Sequestration

Emissions	tonnes CO ₂ e per year	%
Fuels	96.80	35.98%
Materials	10.85	4.03%
Inventory	13.48	5.01%
Crops	24.81	9.22%
Inputs	111.02	41.26%
Distribution	12.10	4.50%
Total	269.05	100%

Offset	tonnes CO ₂ e per year	%
Total	0.00	100%

Emissions by Scope & Greenhouse Gas

	Emissions I	Emissions by Scope			By GHGs			
Emissions	Scope 1 tCO ₂ e	Scope 2 tCO ₂ e	Scope 3 tCO ₂ e	Outside of Scope tCO ₂ e	CO ₂	CH ₄ tCO₂e	N ₂ O tCO ₂ e	Total tCO₂e
Fuels	24.41	0.00	72.39	0.00	96.80	0.00	0.00	96.80
Materials	0.00	0.00	10.85	0.00	10.85	0.00	0.00	10.85
Inventory	0.00	0.00	13.48	0.00	13.48	0.00	0.00	13.48
Crops	24.81	0.00	0.00	0.00	18.23	0.00	6.57	24.81
Inputs	47.91	0.00	63.11	0.00	94.49	0.00	16.53	111.02
Distribution	8.88	0.00	3.22	0.00	12.10	0.00	0.00	12.10
Total	106.00	0.00	163.05	0.00	245.95	0.00	23.10	269.05

Yield

Total Production	Yield (tonnes)
Crops: Vegetables	3,523.25
Total	3,523.25

Common Land

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

Farm details

Region

UK

Report Description

Report prepared by Tilly Kimble-Wilde, Soil and Carbon Advisor at Farm Carbon Toolkit, in June 2023 for Scottish seed potato supplier to Mercian potato farms.

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Full Data

Fuels

Liquid fuels

Description	Usage	tonnes CO ₂ e		Confidence	Link
Petrol	11,291 Litres	31.34	32.37%	000	Ø

Operations

Description	Usage	tonnes CO ₂ e		Confidence	Link
Potato Bed Preparation	134 Hectares (ha)	47.28	48.84%		
Potato Harvesting - Trailed	134 Hectares (ha)	18.18	18.79%	Ø Ø Ø	

Materials

Wood

Description	Usage	tonnes CO ₂ e		Confidence	Link
General Timber	22 Tonnes	10.85	100.00%	000	Ø

Inventory

Farm Machinery - Forklift Truck

Description	Usage	tonnes CO ₂ e		Confidence Lin	nk
Forklift 1 2022	3 Tonnes carrying capacity	0.92	6.80%	⊘ ⊘ ⊙	
Forklift 2 2022	4 Tonnes carrying capacity	1.18	8.77%	❷ ❷ ⊘	

Farm Machinery - Tractors

Description	Usage	tonnes CO ₂ e		Confidence	Link
Tractor 2014	180 Horsepower	7.92	58.75%	000	

Implements (by weight)

Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Bed tiller 2017	1 Tonnes of metal	0.25	1.83%	000	Ø
De-stoner 2014	4 Tonnes of metal	1.03	7.61%	⊘⊘	Ø
Deep ridge 2016	1 Tonnes of metal	0.23	1.73%	000	Ø
Grader 2018	3 Tonnes of metal	0.68	5.02%	000	Ø
Planter	3 Tonnes of metal	0.79	5.84%	000	Ø
Topper 2017	2 Tonnes of metal	0.49	3.65%	⊘⊘	Ø

Crops					
Vegetables					
Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Potatoes	3,523 Tonnes harvested	24.81	100.00%	② ③ ②	8
Inputs					
Fertiliser					
Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Custom blend	111 Tonnes	111.02	100.00%		Ø
Distribution					
Contracted					
Description	Usage	tonnes CO ₂ e	%	Confidence	Link
Lorry (3.5 – 33t)	233 Delivery distance in miles	1.11	9.21%		
Own Vehicle					
Description	Usage	tonnes CO ₂ e		Confidence	Link

10.99

90.79%

54 Delivery

distance in miles

Lorry (3.5 – 33t)