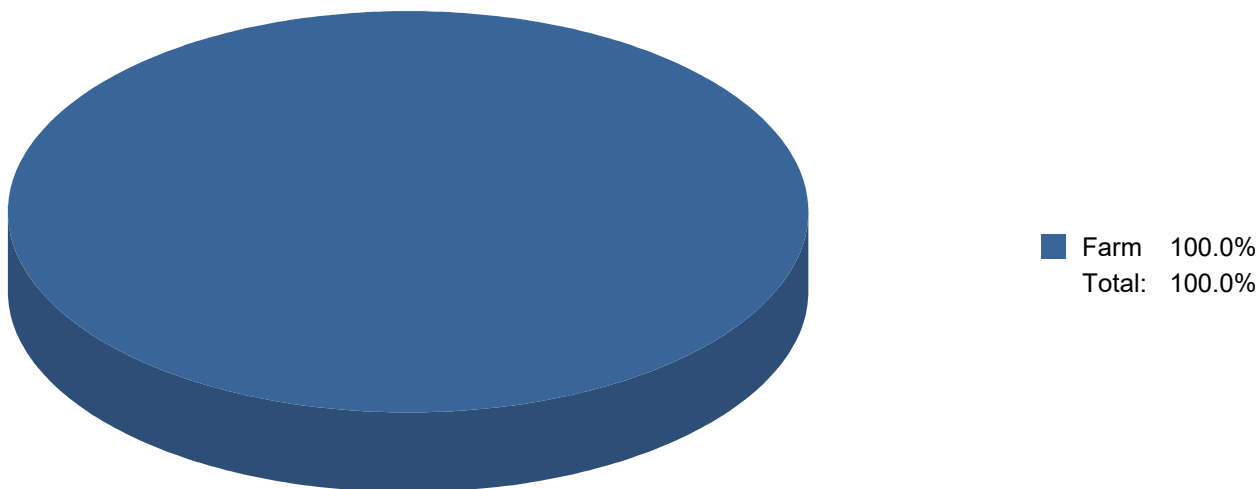


Carbon Calculator Results

Business Name: Niel Loubser Boerdery
Country Name: South Africa
Creation Date: 8/20/2025 9:01:51AM
Data Collection Period: Jul 2024 to Jun 2025
Report Grade: B1 - This dataset has been checked by CCC and is part of the benchmark.

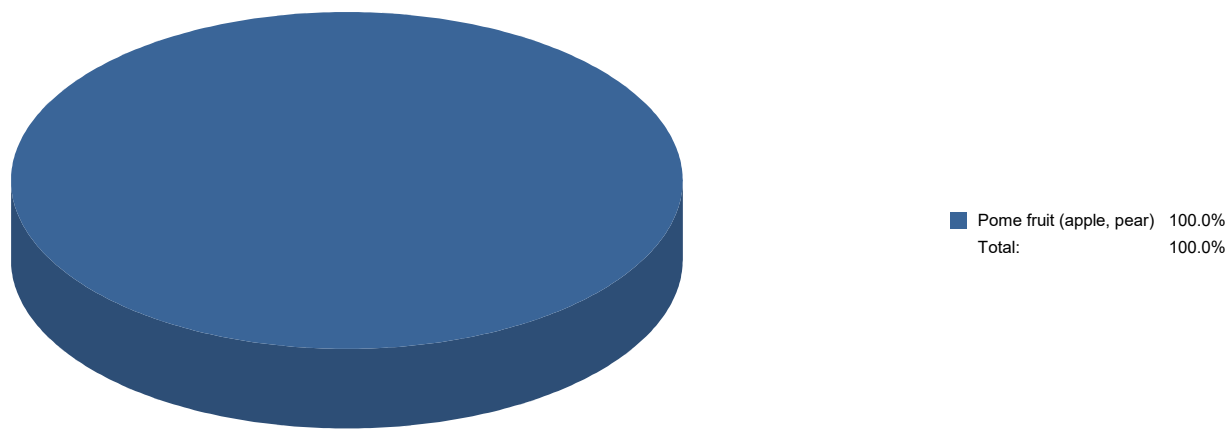
Business Unit - Boundary View



Boundary	Tonne CO ₂ e	%
Farm	311.47	100.00
Total	311.47	100.00

The Carbon Calculator must be completed on an annual basis. This allows users to monitor their carbon footprint trend and analyse improvements.

Business Unit - Commodity View



Commodity	Tonne CO ₂ e	%
Pome fruit (apple, pear)	311.47	100.00
Total	311.47	100.00

Business Name:

Niel Loubser Boerdery

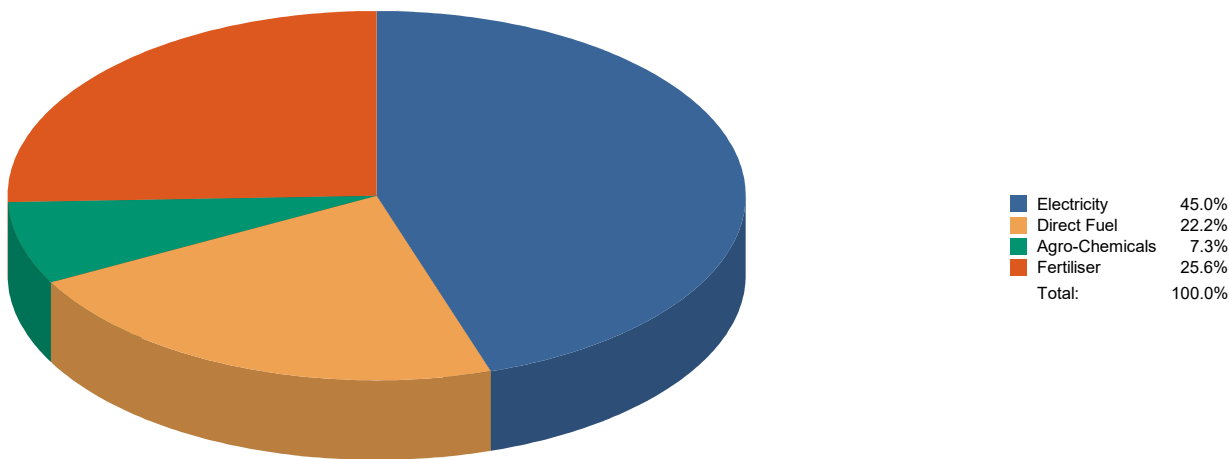
Dataset:

8/20/2025 9:01:51AM

Data Collection Period:

Jul 2024 to Jun 2025

Farm - Emission Source View



Emission Source	Tonne CO ₂ e	%
Electricity	140.06	44.97
Direct Fuel	69.10	22.19
Agro-Chemicals	22.59	7.25
Fertiliser	79.72	25.59
Total	311.47	100.00

Business Name:

Niel Loubser Boerdery

Dataset:

8/20/2025 9:01:51AM

Data Collection Period:

Jul 2024 to Jun 2025

Farm Commodity Benchmark

Commodity	Kg CO2e per Kg Fruit	Benchmark
Pome fruit (apple, pear)	0.08	The CCC regional average is 0.11 Kg CO2e per Kg Fruit and consist of 114 data points.

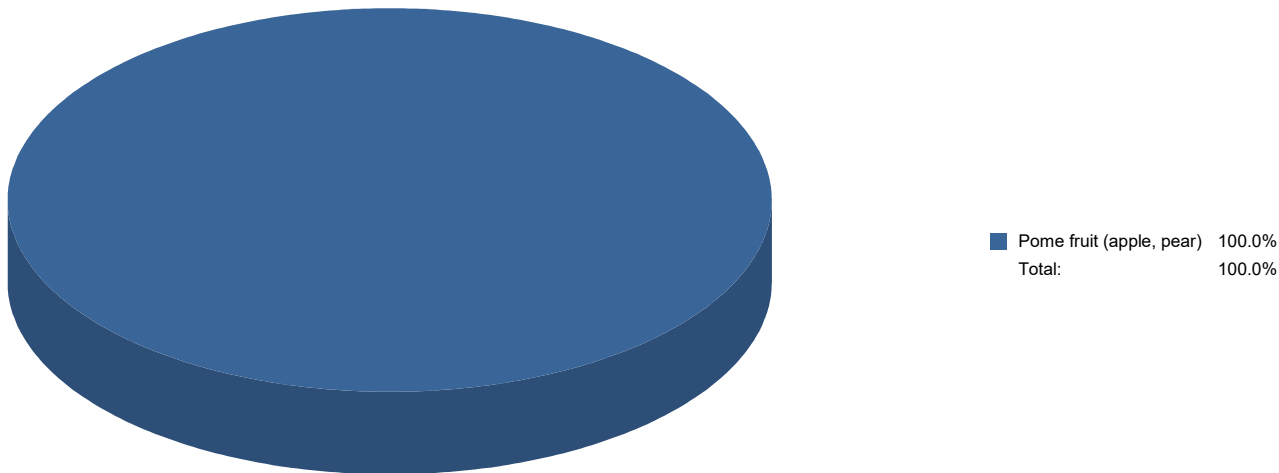
Farm Hectare Breakdown

Commodity	Tonne CO ₂ e per Bearing Ha
Pome fruit (apple, pear)	5.87

Farm Scope Breakdown

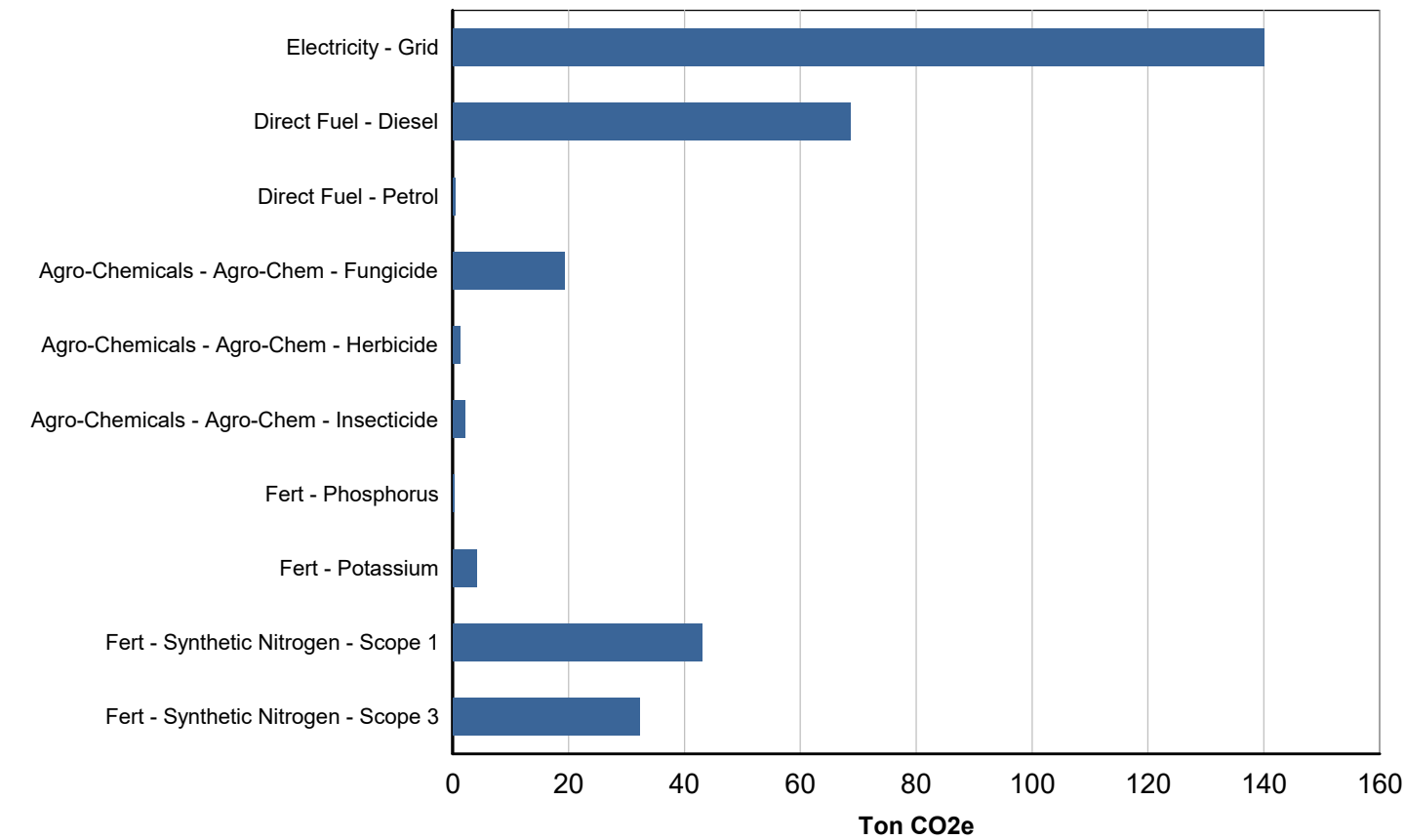
	Tonne CO ₂ e	%
Scope 1	112.20	36.02
Scope 2	140.06	44.97
Scope 3	59.21	19.01
Total	311.47	100.00

Farm - Commodity View



Commodity	Tonne CO ₂ e	%
Pome fruit (apple, pear)	311.47	100.00
Total	311.47	100.00

Farm - Emission Source Breakdown



Emission Source	Tonne CO ₂ e	%
Electricity - Grid	140.06	44.97
Direct Fuel - Diesel	68.68	22.05
Direct Fuel - Petrol	0.42	0.14
Agro-Chemicals - Agro-Chem - Fungicide	19.27	6.19
Agro-Chemicals - Agro-Chem - Herbicide	1.26	0.40
Agro-Chemicals - Agro-Chem - Insecticide	2.06	0.66
Fert - Phosphorus	0.19	0.06
Fert - Potassium	4.11	1.32
Fert - Synthetic Nitrogen - Scope 1	43.09	13.84
Fert - Synthetic Nitrogen - Scope 3	32.32	10.38
Total	311.47	100.00

Business Name:

Niel Loubser Boerdery

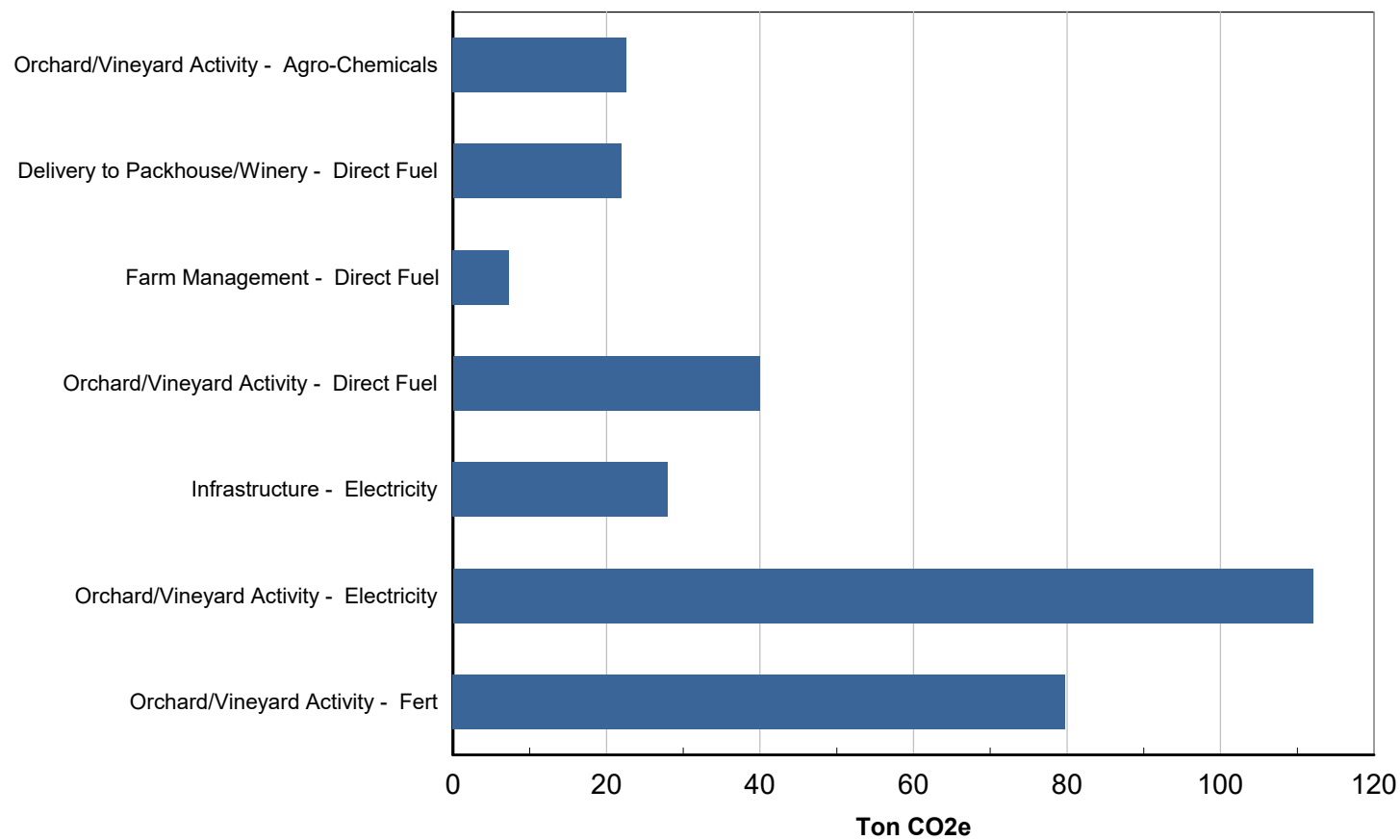
Dataset:

8/20/2025 9:01:51AM

Data Collection Period:

Jul 2024 to Jun 2025

Farm - Activity Breakdown



Activity Breakdown	Tonne CO ₂ e	%
Orchard/Vineyard Activity - Agro-Chemicals	22.59	7.25
Delivery to Packhouse/Winery - Direct Fuel	21.88	7.02
Farm Management - Direct Fuel	7.29	2.34
Orchard/Vineyard Activity - Direct Fuel	39.94	12.82
Infrastructure - Electricity	28.01	8.99
Orchard/Vineyard Activity - Electricity	112.04	35.97
Orchard/Vineyard Activity - Fert	79.72	25.59
Total	311.47	100.00

Business Name: Niel Loubser Boerdery

Dataset: 8/20/2025 9:01:51AM

Data Collection Period: Jul 2024 to Jun 2025

Detailed Carbon Emissions Breakdown

Detailed Activities	Tonne CO ₂ e	%
Electricity - Grid - Orchard/Vineyard Activity - BO	104.20	33.46
Electricity - Grid - Orchard/Vineyard Activity - NBO	7.84	2.52
Electricity - Grid - Infrastructure	28.01	8.99
Direct Fuel - Diesel - Orchard/Vineyard Activity - BO	37.14	11.92
Direct Fuel - Diesel - Orchard/Vineyard Activity - NBO	2.80	0.90
Direct Fuel - Diesel - Delivery to Packhouse/Winery	21.88	7.02
Direct Fuel - Diesel - Farm Management	6.87	2.21
Direct Fuel - Petrol - Farm Management	0.42	0.14
Fert - - Synthetic Nitrogen - Orchard/Vineyard Activity - BO	70.12	22.51
Fert - - Synthetic Nitrogen - Orchard/Vineyard Activity - NBO	5.29	1.70
Fert - - Phosphorus - Orchard/Vineyard Activity - BO	0.18	0.06
Fert - - Phosphorus - Orchard/Vineyard Activity - NBO	0.01	0.00
Fert - - Potassium - Orchard/Vineyard Activity - BO	3.83	1.23
Fert - - Potassium - Orchard/Vineyard Activity - NBO	0.29	0.09
Agro-Chemicals - Agro-Chem - Fungicide - Orchard/Vineyard Activity - BO	17.93	5.76
Agro-Chemicals - Agro-Chem - Fungicide - Orchard/Vineyard Activity - NBO	1.35	0.43
Agro-Chemicals - Agro-Chem - Insecticide - Orchard/Vineyard Activity - BO	1.92	0.62
Agro-Chemicals - Agro-Chem - Insecticide - Orchard/Vineyard Activity - NBO	0.14	0.04
Agro-Chemicals - Agro-Chem - Herbicide - Orchard/Vineyard Activity - BO	1.18	0.38
Agro-Chemicals - Agro-Chem - Herbicide - Orchard/Vineyard Activity - NBO	0.08	0.03
Total	311.47	100.00

Business Name:

Niel Loubser Boerdery

Dataset:

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Farm Consumption Benchmarks

Commodity	Consumption Measure	Result	Benchmark
Pome fruit (apple, pear)	kL Water per Ton Fruit	0.06	The CCC regional average is 72.53 kL Water per Ton Fruit and consist of 108 data points.
Pome fruit (apple, pear)	kL Water per Bearing Ha	5.00	The CCC regional average is 4537.59 kL Water per Bearing Ha and consist of 108 data points.
Pome fruit (apple, pear)	kL Water per Non-Bearing Ha	4.00	The CCC regional average is 3015.04 kL Water per Non-Bearing Ha and consist of 108 data points.
Pome fruit (apple, pear)	kWh Orchard / Vineyard Electricity per Ton Fruit	25.91	The CCC regional average is 46.07 kWh Orchard / Vineyard Electricity per Ton Fruit and consist of 108 data points.
Pome fruit (apple, pear)	kWh Orchard / Vineyard Electricity per Bearing Ha	2,057.28	The CCC regional average is 2593.05 kWh Orchard / Vineyard Electricity per Bearing Ha and consist of 108 data points.
Pome fruit (apple, pear)	Liters Orchard / Vineyard Diesel per Ton Fruit	3.77	The CCC regional average is 7.26 Liters Orchard / Vineyard Diesel per Ton Fruit and consist of 108 data points.
Pome fruit (apple, pear)	Liters Orchard / Vineyard Diesel per Bearing Ha	299.56	The CCC regional average is 427.20 Liters Orchard / Vineyard Diesel per Bearing Ha and consist of 108 data points.
Pome fruit (apple, pear)	Kg Pure N per Ton Fruit	1.20	The CCC regional average is 1.36 Kg Pure N per Ton Fruit and consist of 108 data points.
Pome fruit (apple, pear)	Kg Pure N per Bearing Ha	95.40	The CCC regional average is 81.52 Kg Pure N per Bearing Ha and consist of 108 data points.

Business Name: Niel Loubser Boerdery
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