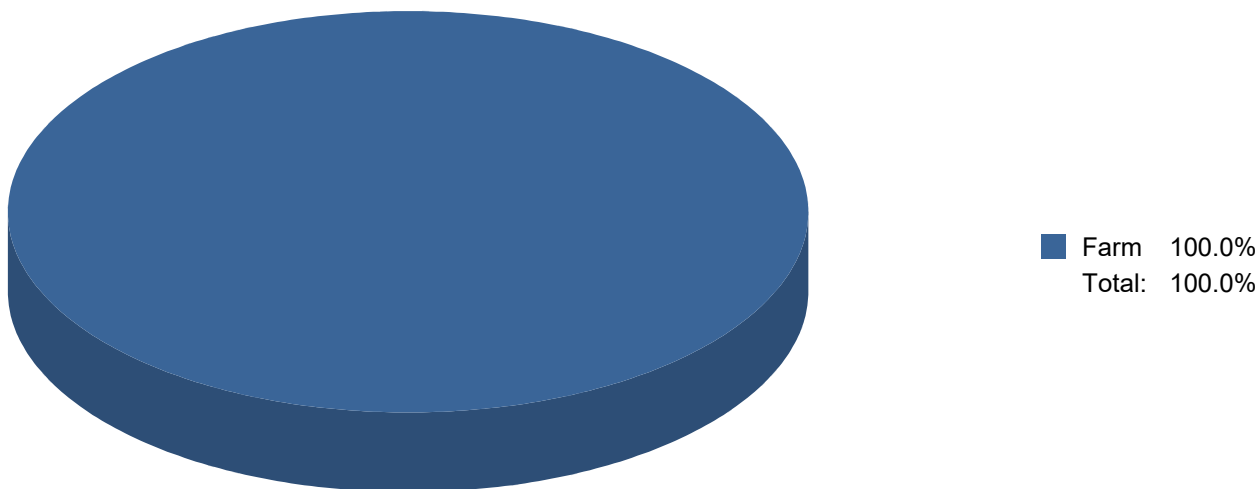


Carbon Calculator Results

Business Name: Witvlei Apple Farms
Country Name: South Africa
Creation Date: 8/20/2025 9:10:32AM
Data Collection Period: Mar 2024 to Feb 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	725.61	100.00
Total	725.61	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 Name:

Witvlei Apple Farms

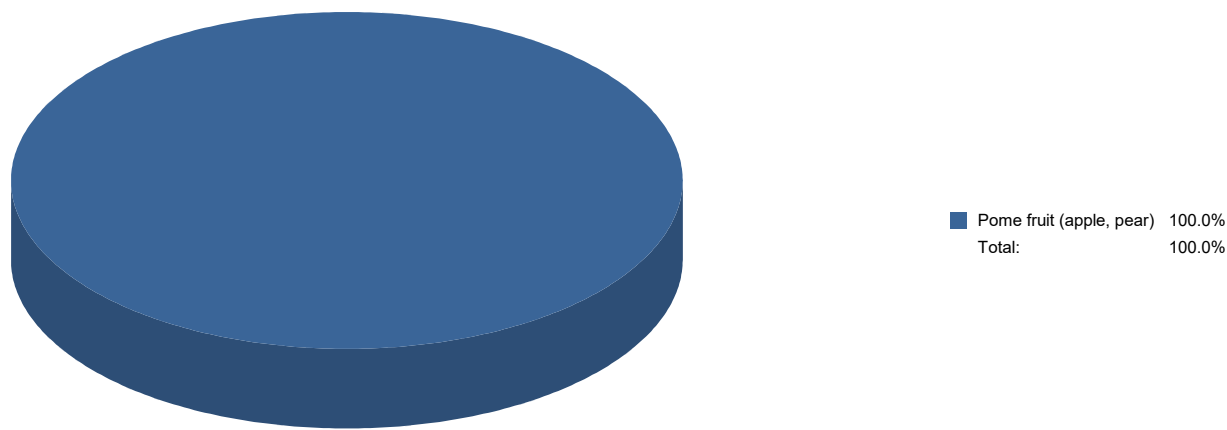
Dataset:

8/20/2025 9:10:32AM

Data Collection Period:

Mar 2024 to Feb 2025

Business Unit - Commodity View



Commodity	Tonne CO ₂ e	%
Pome fruit (apple, pear)	725.61	100.00
Total	725.61	100.00

Business Name:

Witvlei Apple Farms

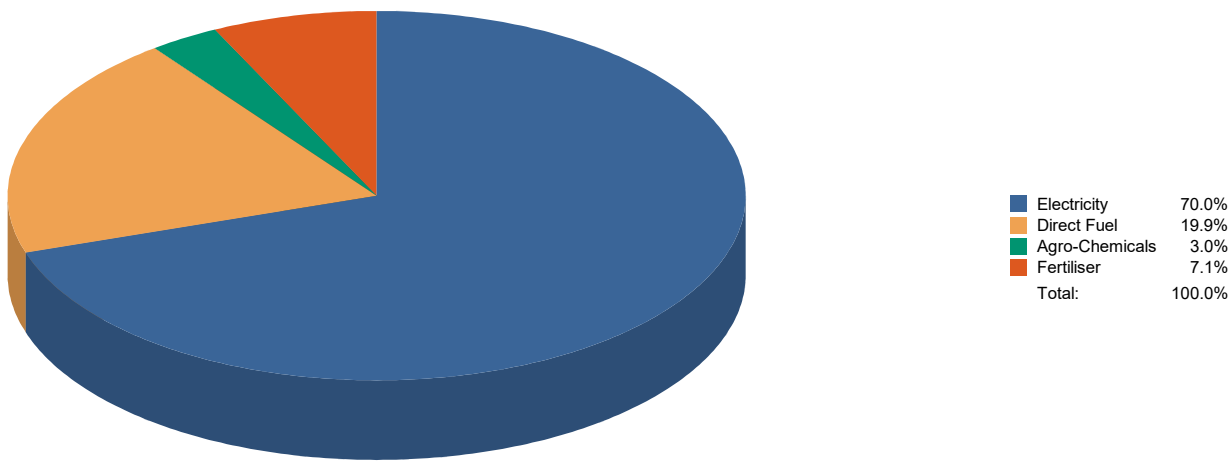
Dataset:

8/20/2025 9:10:32AM

Data Collection Period:

Mar 2024 to Feb 2025

Farm - Emission Source View



Emission Source	Tonne CO ₂ e	%
Electricity	507.66	69.96
Direct Fuel	144.27	19.88
Agro-Chemicals	22.01	3.03
Fertiliser	51.66	7.12
Total	725.61	100.00

Business Name:

Witvlei Apple Farms

Dataset:

8/20/2025 9:10:32AM

Data Collection Period:

Mar 2024 to Feb 2025

Farm Commodity Benchmark

Commodity	Kg CO2e per Kg Fruit	Benchmark
Pome fruit (apple, pear)	0.15	The CCC regional average is 0.11 Kg CO2e per Kg Fruit and consist of 117 data points.

Farm Hectare Breakdown

Commodity	Tonne CO ₂ e per Bearing Ha
Pome fruit (apple, pear)	10.70

Farm Scope Breakdown

	Tonne CO ₂ e	%
Scope 1	166.15	22.90
Scope 2	507.66	69.96
Scope 3	51.79	7.14
Total	725.61	100.00

Business Name:

Witvlei Apple Farms

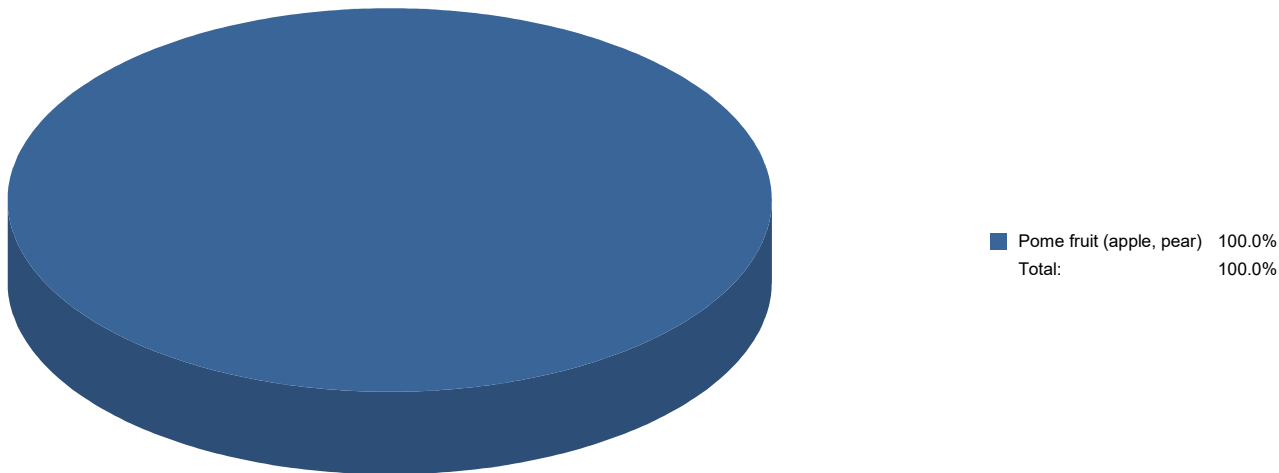
Dataset:

8/20/2025 9:10:32AM

Data Collection Period:

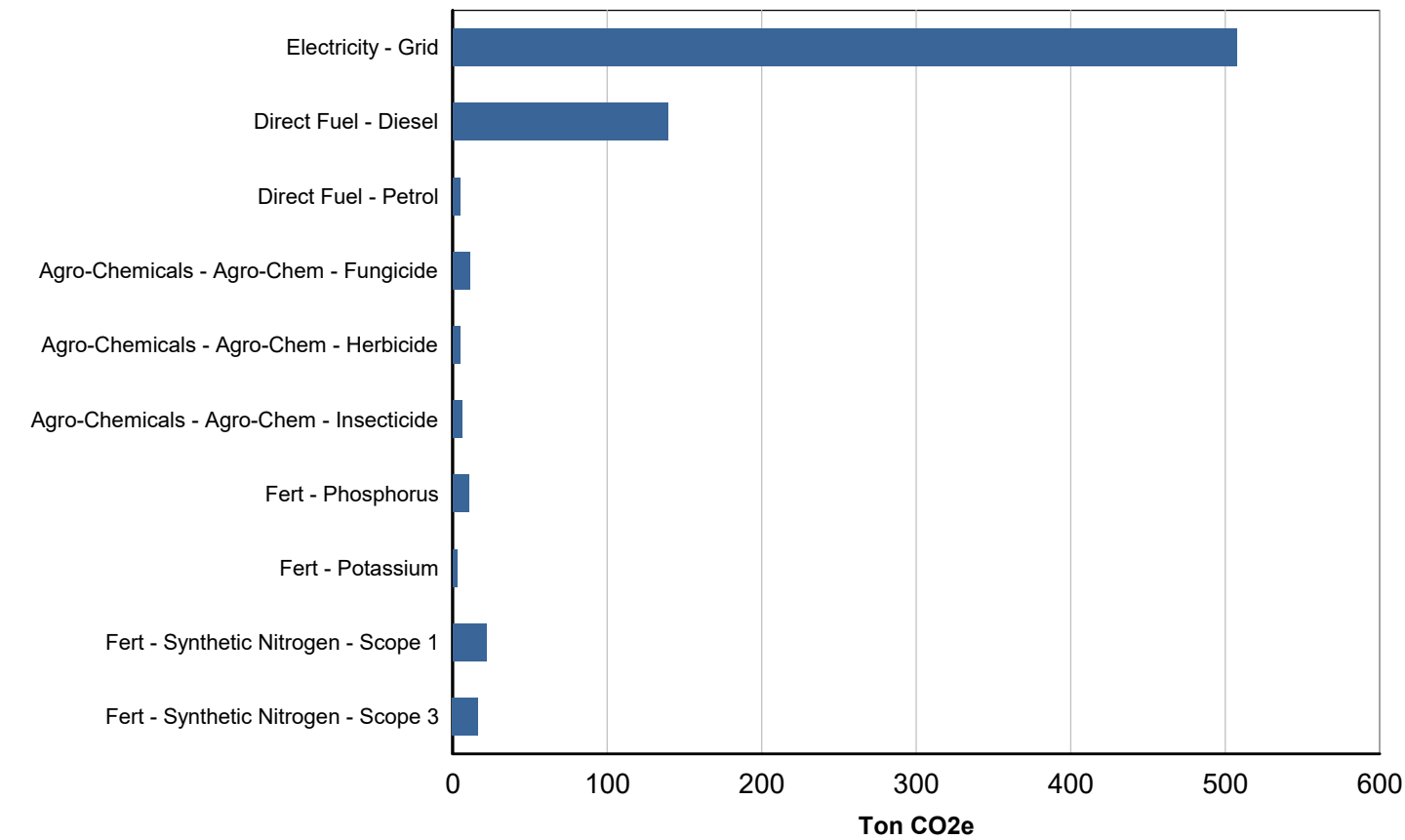
Mar 2024 to Feb 2025

Farm - Commodity View



Commodity	Tonne CO ₂ e	%
Pome fruit (apple, pear)	725.61	100.00
Total	725.61	100.00

Farm - Emission Source Breakdown



Emission Source	Tonne CO ₂ e	%
Electricity - Grid	507.66	69.96
Direct Fuel - Diesel	139.52	19.23
Direct Fuel - Petrol	4.75	0.65
Agro-Chemicals - Agro-Chem - Fungicide	11.07	1.53
Agro-Chemicals - Agro-Chem - Herbicide	4.78	0.66
Agro-Chemicals - Agro-Chem - Insecticide	6.15	0.85
Fert - Phosphorus	10.36	1.43
Fert - Potassium	3.01	0.42
Fert - Synthetic Nitrogen - Scope 1	21.88	3.02
Fert - Synthetic Nitrogen - Scope 3	16.41	2.26
Total	725.61	100.00

Business Name:

Witvlei Apple Farms

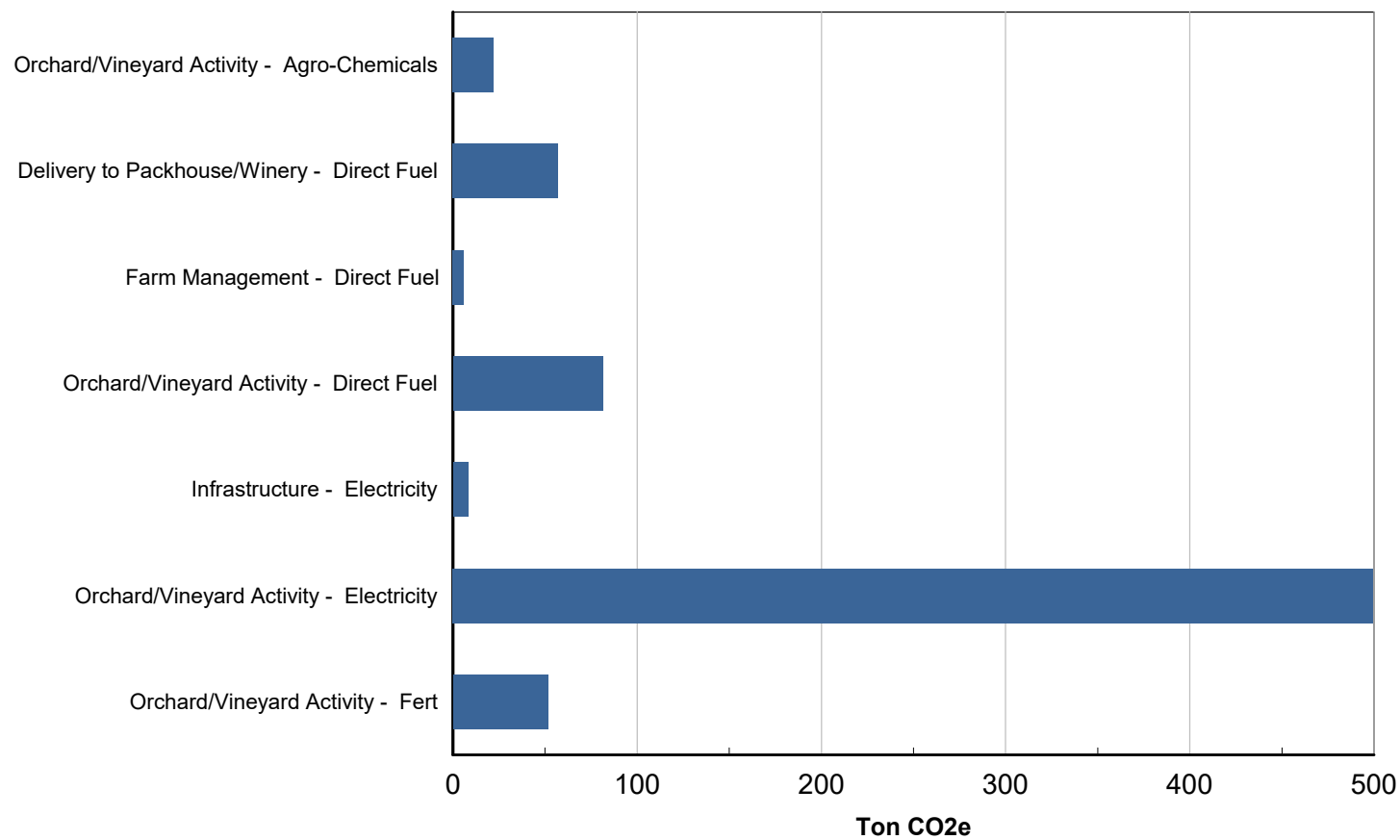
Dataset:

8/20/2025 9:10:32AM

Data Collection Period:

Mar 2024 to Feb 2025

Farm - Activity Breakdown



Activity Breakdown	Tonne CO ₂ e	%
Orchard/Vineyard Activity - Agro-Chemicals	22.01	3.03
Delivery to Packhouse/Winery - Direct Fuel	57.00	7.86
Farm Management - Direct Fuel	5.84	0.80
Orchard/Vineyard Activity - Direct Fuel	81.43	11.22
Infrastructure - Electricity	8.10	1.12
Orchard/Vineyard Activity - Electricity	499.56	68.85
Orchard/Vineyard Activity - Fert	51.66	7.12
Total	725.61	100.00

Business Name:

Witvlei Apple Farms

Dataset:

8/20/2025 9:10:32AM

Data Collection Period:

Mar 2024 to Feb 2025

Detailed Carbon Emissions Breakdown

Detailed Activities	Tonne CO ₂ e	%
Electricity - Grid - Orchard/Vineyard Activity - BO	499.56	68.85
Electricity - Grid - Infrastructure	8.10	1.12
Direct Fuel - Diesel - Orchard/Vineyard Activity - BO	76.68	10.57
Direct Fuel - Diesel - Delivery to Packhouse/Winery	57.00	7.86
Direct Fuel - Diesel - Farm Management	5.84	0.80
Direct Fuel - Petrol - Orchard/Vineyard Activity	4.75	0.65
Fert - - Synthetic Nitrogen - Orchard/Vineyard Activity - BO	38.29	5.28
Fert - - Phosphorus - Orchard/Vineyard Activity - BO	10.36	1.43
Fert - - Potassium - Orchard/Vineyard Activity - BO	3.01	0.42
Agro-Chemicals - Agro-Chem - Fungicide - Orchard/Vineyard Activity - BO	11.07	1.53
Agro-Chemicals - Agro-Chem - Insecticide - Orchard/Vineyard Activity - BO	6.15	0.85
Agro-Chemicals - Agro-Chem - Herbicide - Orchard/Vineyard Activity - BO	4.78	0.66
Total	725.61	100.00

Business Name:

Witvlei Apple Farms

Dataset:

8/20/2025 9:10:32AM

Data Collection Period:

Mar 2024 to Feb 2025

Farm Consumption Benchmarks

Commodity	Consumption Measure	Result	Benchmark
Pome fruit (apple, pear)	kL Water per Ton Fruit	91.70	The CCC regional average is 73.12 kL Water per Ton Fruit and consist of 111 data points.
Pome fruit (apple, pear)	kL Water per Bearing Ha	6,385.07	The CCC regional average is 4577.97 kL Water per Bearing Ha and consist of 111 data points.
Pome fruit (apple, pear)	kL Water per Non-Bearing Ha	6,121.20	The CCC regional average is 3075.98 kL Water per Non-Bearing Ha and consist of 111 data points.
Pome fruit (apple, pear)	kWh Orchard / Vineyard Electricity per Ton Fruit	104.41	The CCC regional average is 46.79 kWh Orchard / Vineyard Electricity per Ton Fruit and consist of 111 data points.
Pome fruit (apple, pear)	kWh Orchard / Vineyard Electricity per Bearing Ha	7,270.38	The CCC regional average is 2650.74 kWh Orchard / Vineyard Electricity per Bearing Ha and consist of 111 data points.
Pome fruit (apple, pear)	Liters Orchard / Vineyard Diesel per Ton Fruit	6.55	The CCC regional average is 7.22 Liters Orchard / Vineyard Diesel per Ton Fruit and consist of 111 data points.
Pome fruit (apple, pear)	Liters Orchard / Vineyard Diesel per Bearing Ha	455.93	The CCC regional average is 426.03 Liters Orchard / Vineyard Diesel per Bearing Ha and consist of 111 data points.
Pome fruit (apple, pear)	Kg Pure N per Ton Fruit	0.55	The CCC regional average is 1.35 Kg Pure N per Ton Fruit and consist of 111 data points.
Pome fruit (apple, pear)	Kg Pure N per Bearing Ha	38.40	The CCC regional average is 81.03 Kg Pure N per Bearing Ha and consist of 111 data points.

Business Name:	Witvlei Apple Farms
Dataset:	8/20/2025 9:10:32AM
Data Collection Period:	Mar 2024 to Feb 2025