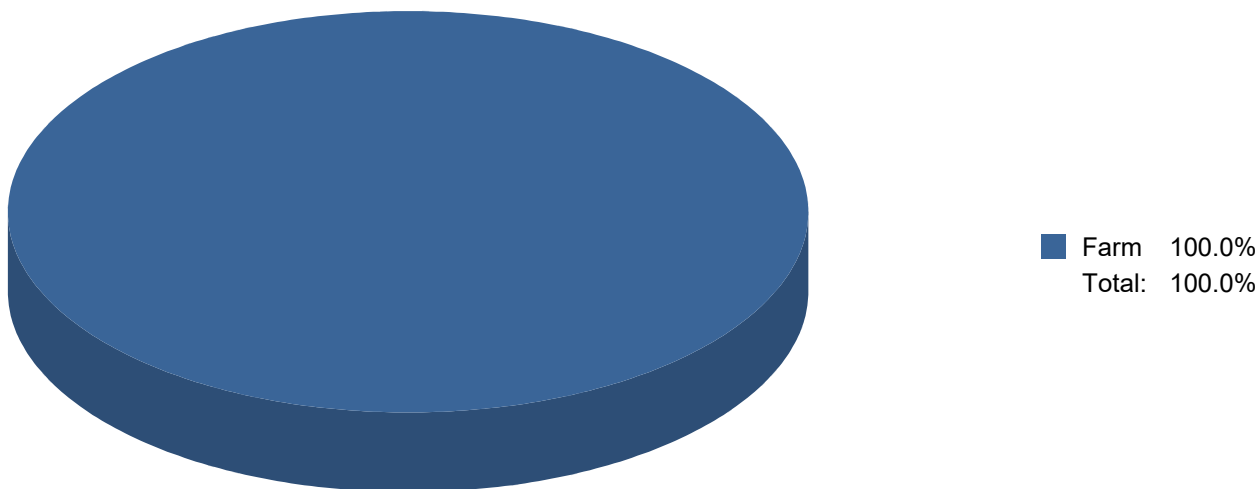


Carbon Calculator Results

Business Name: Graaff Fruit - Rietfontein
Country Name: South Africa
Creation Date: 2025/11/10 11:48:28
Data Collection Period: Jul 2024 to Jun 2025
Report Grade: B1 - This dataset has been checked by CCC and is part of the benchmark.

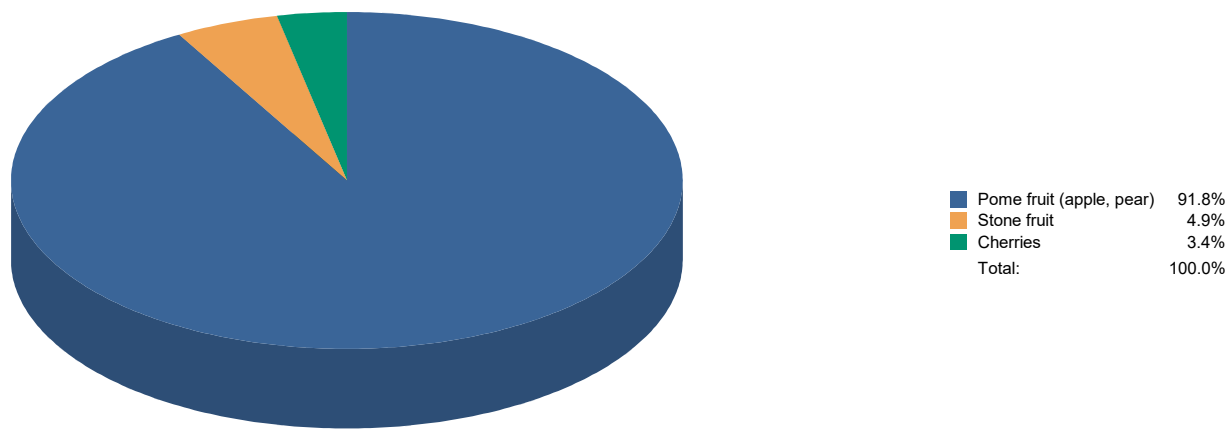
Business Unit - Boundary View



Boundary	Tonne CO ₂ e	%
Farm	4,451.80	100.00
Total	4,451.80	100.00

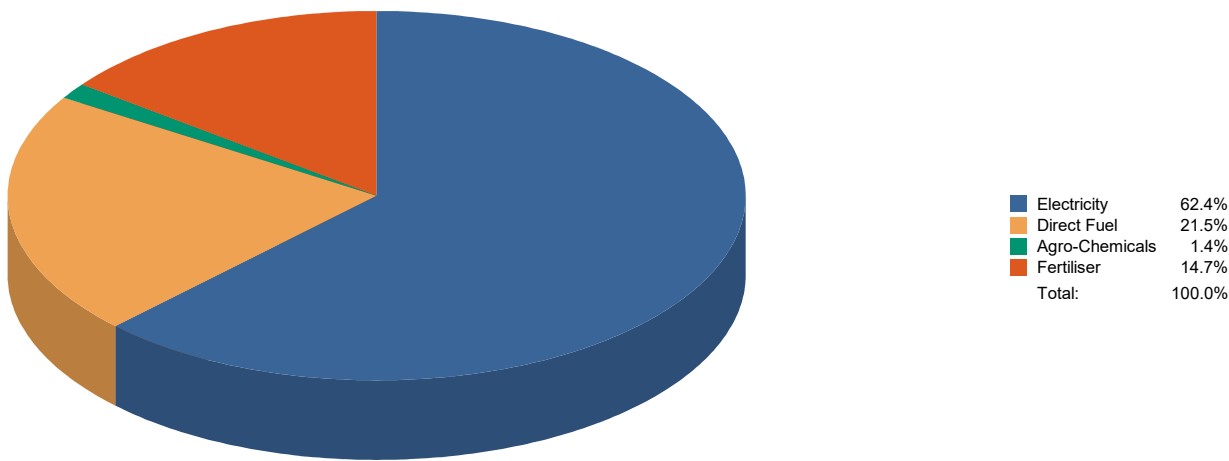
The Carbon Calculator must be completed on an annual basis. This allows users to monitor their carbon footprint trend and analyse improvements.

Business Unit - Commodity View



Commodity	Tonne CO ₂ e	%
Pome fruit (apple, pear)	4,086.06	91.78
Stone fruit	216.55	4.86
Cherries	149.19	3.35
Total	4,451.80	100.00

Farm - Emission Source View



Emission Source	Tonne CO ₂ e	%
Electricity	2,778.74	62.42
Direct Fuel	957.32	21.50
Agro-Chemicals	61.11	1.37
Fertiliser	654.64	14.70
Total	4,451.80	100.00

Business Name:

Graaff Fruit - Rietfontein

Dataset:

2025/11/10 11:48:28

Data Collection Period:

Jul 2024 to Jun 2025

Farm Commodity Benchmark

Commodity	Kg CO2e per Kg Fruit	Benchmark
Pome fruit (apple, pear)	0.27	The CCC regional average is 0.14 Kg CO2e per Kg Fruit and consist of 94 data points.
Stone fruit	0.41	The CCC regional average is 0.24 Kg CO2e per Kg Fruit and consist of 80 data points.
Cherries	1.53	The CCC regional average is 1.59 Kg CO2e per Kg Fruit and consist of 10 data points.

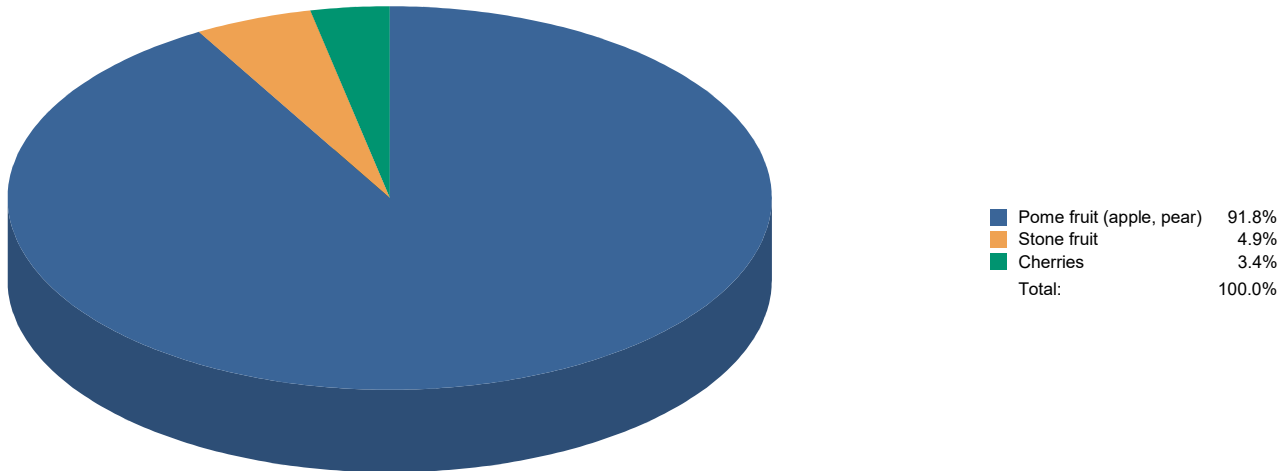
Farm Hectare Breakdown

Commodity	Tonne CO ₂ e per Bearing Ha
Pome fruit (apple, pear)	20.01
Stone fruit	21.62
Cherries	22.56

Farm Scope Breakdown

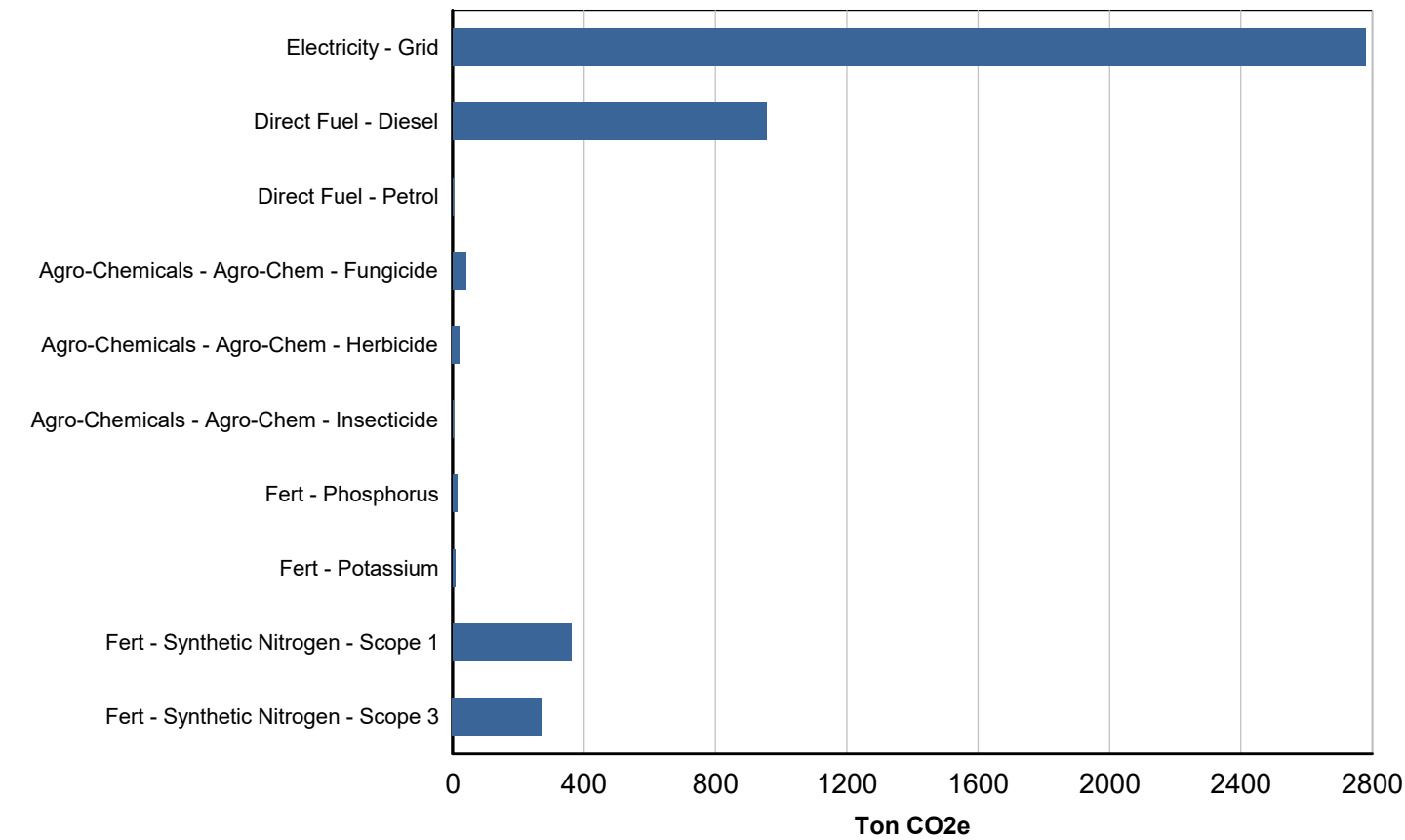
	Tonne CO ₂ e	%
Scope 1	1,318.29	29.61
Scope 2	2,778.74	62.42
Scope 3	354.77	7.97
Total	4,451.80	100.00

Farm - Commodity View



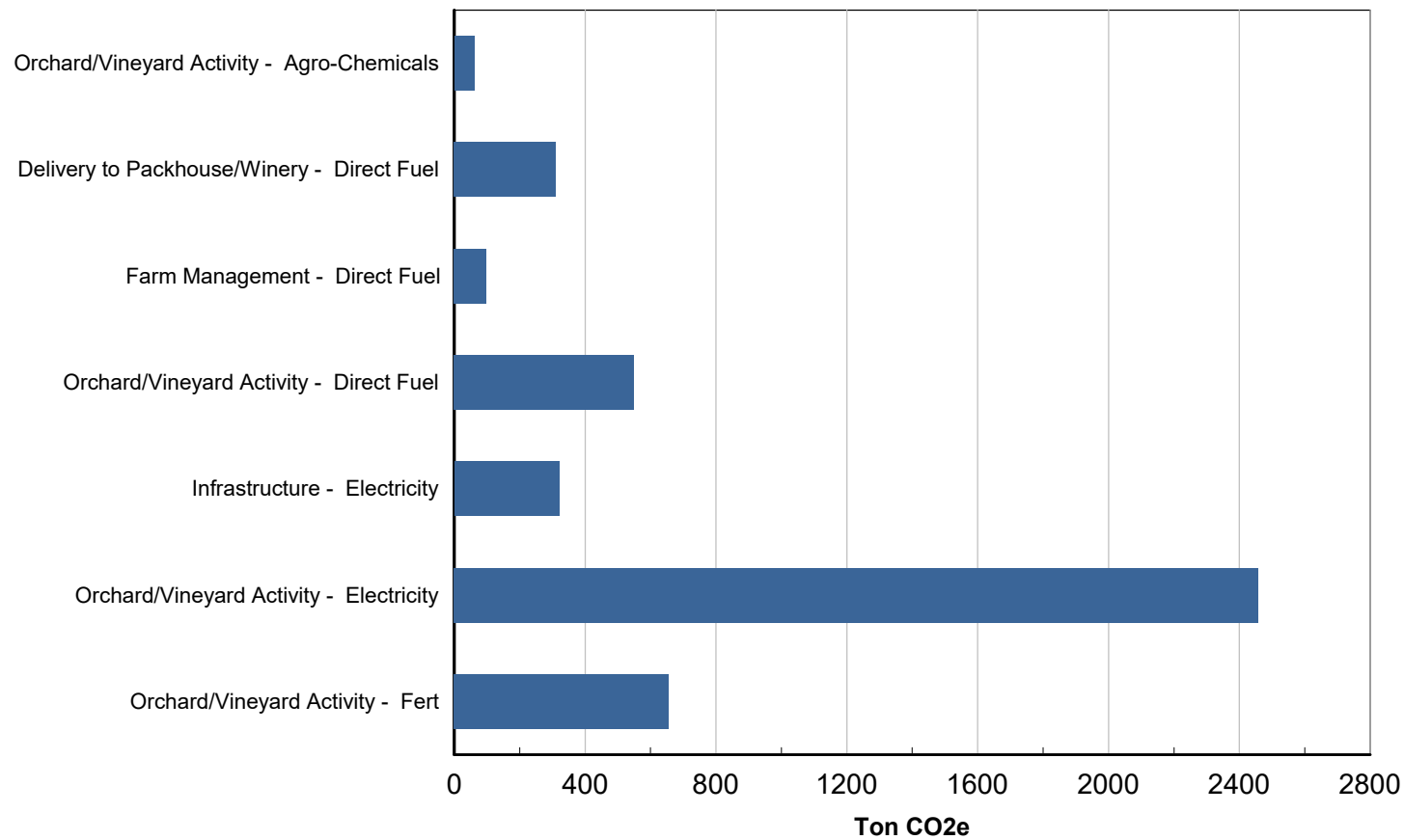
Commodity	Tonne CO ₂ e	%
Pome fruit (apple, pear)	4,086.06	91.78
Stone fruit	216.55	4.86
Cherries	149.19	3.35
Total	4,451.80	100.00

Farm - Emission Source Breakdown



Emission Source	Tonne CO ₂ e	%
Electricity - Grid	2,778.74	62.42
Direct Fuel - Diesel	954.71	21.45
Direct Fuel - Petrol	2.61	0.06
Agro-Chemicals - Agro-Chem - Fungicide	39.64	0.89
Agro-Chemicals - Agro-Chem - Herbicide	20.49	0.46
Agro-Chemicals - Agro-Chem - Insecticide	0.97	0.02
Fert - Phosphorus	14.14	0.32
Fert - Potassium	8.79	0.20
Fert - Synthetic Nitrogen - Scope 1	360.97	8.11
Fert - Synthetic Nitrogen - Scope 3	270.73	6.08
Total	4,451.80	100.00

Farm - Activity Breakdown



Activity Breakdown	Tonne CO ₂ e	%
Orchard/Vineyard Activity - Agro-Chemicals	61.11	1.37
Delivery to Packhouse/Winery - Direct Fuel	309.97	6.96
Farm Management - Direct Fuel	98.07	2.20
Orchard/Vineyard Activity - Direct Fuel	549.28	12.34
Infrastructure - Electricity	320.96	7.21
Orchard/Vineyard Activity - Electricity	2,457.78	55.21
Orchard/Vineyard Activity - Fert	654.64	14.70
Total	4,451.80	100.00

Business Name:Graaff Fruit - Rietfontein

Dataset:2025/11/10 11:48:28

Data Collection Period:Jul 2024 to Jun 2025

Detailed Carbon Emissions Breakdown

Detailed Activities	Tonne CO ₂ e	%
Electricity - Grid - Orchard/Vineyard Activity - BO	2,325.06	52.23
Electricity - Grid - Orchard/Vineyard Activity - NBO	132.72	2.98
Electricity - Grid - Infrastructure	320.96	7.21
Direct Fuel - Diesel - Orchard/Vineyard Activity - BO	499.84	11.23
Direct Fuel - Diesel - Orchard/Vineyard Activity - NBO	49.44	1.11
Direct Fuel - Diesel - Delivery to Packhouse/Winery	309.97	6.96
Direct Fuel - Diesel - Farm Management	95.46	2.14
Direct Fuel - Petrol - Farm Management	2.61	0.06
Fert - - Synthetic Nitrogen - Orchard/Vineyard Activity - BO	524.32	11.78
Fert - - Synthetic Nitrogen - Orchard/Vineyard Activity - NBO	107.38	2.41
Fert - - Phosphorus - Orchard/Vineyard Activity - BO	14.14	0.32
Fert - - Potassium - Orchard/Vineyard Activity - BO	8.79	0.20
Agro-Chemicals - Agro-Chem - Fungicide - Orchard/Vineyard Activity - BO	32.90	0.74
Agro-Chemicals - Agro-Chem - Fungicide - Orchard/Vineyard Activity - NBO	6.74	0.15
Agro-Chemicals - Agro-Chem - Insecticide - Orchard/Vineyard Activity - BO	0.80	0.02
Agro-Chemicals - Agro-Chem - Insecticide - Orchard/Vineyard Activity - NBO	0.17	0.00
Agro-Chemicals - Agro-Chem - Herbicide - Orchard/Vineyard Activity - BO	17.01	0.38
Agro-Chemicals - Agro-Chem - Herbicide - Orchard/Vineyard Activity - NBO	3.48	0.08
Total	4,451.80	100.00

Business Name: Graaff Fruit - Rietfontein

Dataset: 2025/11/10 11:48:28

Data Collection Period: Jul 2024 to Jun 2025

Farm Consumption Benchmarks

Commodity	Consumption Measure	Result	Benchmark
Pome fruit (apple, pear)	kL Water per Ton Fruit	0.38	The CCC regional average is 130.54 kL Water per Ton Fruit and consist of 71 data points.
Pome fruit (apple, pear)	kL Water per Bearing Ha	28.27	The CCC regional average is 6101.92 kL Water per Bearing Ha and consist of 71 data points.
Pome fruit (apple, pear)	kL Water per Non-Bearing Ha	74.07	The CCC regional average is 1939.54 kL Water per Non-Bearing Ha and consist of 71 data points.
Pome fruit (apple, pear)	kWh Orchard / Vineyard Electricity per Ton Fruit	147.81	The CCC regional average is 67.17 kWh Orchard / Vineyard Electricity per Ton Fruit and consist of 71 data points.
Pome fruit (apple, pear)	kWh Orchard / Vineyard Electricity per Bearing Ha	11,140.36	The CCC regional average is 3237.32 kWh Orchard / Vineyard Electricity per Bearing Ha and consist of 71 data points.
Pome fruit (apple, pear)	Liters Orchard / Vineyard Diesel per Ton Fruit	13.54	The CCC regional average is 12.15 Liters Orchard / Vineyard Diesel per Ton Fruit and consist of 71 data points.
Pome fruit (apple, pear)	Liters Orchard / Vineyard Diesel per Bearing Ha	1,020.60	The CCC regional average is 475.62 Liters Orchard / Vineyard Diesel per Bearing Ha and consist of 71 data points.
Pome fruit (apple, pear)	Kg Pure N per Ton Fruit	2.03	The CCC regional average is 2.46 Kg Pure N per Ton Fruit and consist of 71 data points.
Pome fruit (apple, pear)	Kg Pure N per Bearing Ha	152.99	The CCC regional average is 97.13 Kg Pure N per Bearing Ha and consist of 71 data points.

Commodity	Consumption Measure	Result	Benchmark
Stone fruit	kL Water per Ton Fruit	11.46	The CCC regional average is 171.49 kL Water per Ton Fruit and consist of 62 data points.
Stone fruit	kL Water per Bearing Ha	611.11	The CCC regional average is 4885.07 kL Water per Bearing Ha and consist of 62 data points.
Stone fruit	kWh Orchard / Vineyard Electricity per Ton Fruit	202.19	The CCC regional average is 83.80 kWh Orchard / Vineyard Electricity per Ton Fruit and consist of 62 data points.
Stone fruit	kWh Orchard / Vineyard Electricity per Bearing Ha	10,783.33	The CCC regional average is 2520.65 kWh Orchard / Vineyard Electricity per Bearing Ha and consist of 62 data points.
Stone fruit	Kg Pure N per Ton Fruit	8.95	The CCC regional average is 4.23 Kg Pure N per Ton Fruit and consist of 62 data points.
Stone fruit	Kg Pure N per Bearing Ha	477.44	The CCC regional average is 115.05 Kg Pure N per Bearing Ha and consist of 62 data points.

Commodity	Consumption Measure	Result	Benchmark
Cherries	kL Water per Ton Fruit	21.35	The CCC regional average is 1026.58 kL Water per Ton Fruit and consist of 10 data points.
Cherries	kL Water per Bearing Ha	316.67	The CCC regional average is 5805.65 kL Water per Bearing Ha and consist of 10 data points.

Business Name: Graaff Fruit - Rietfontein
Dataset: 2025/11/10 11:48:28
Data Collection Period: Jul 2024 to Jun 2025

Commodity	Consumption Measure	Result	Benchmark
Cherries	kL Water per Non-Bearing Ha	125.00	The CCC regional average is 2294.83 kL Water per Non-Bearing Ha and consist of 10 data points.
Cherries	kWh Orchard / Vineyard Electricity per Ton Fruit	790.61	The CCC regional average is 1150.78 kWh Orchard / Vineyard Electricity per Ton Fruit and consist of 10 data points.
Cherries	kWh Orchard / Vineyard Electricity per Bearing Ha	11,727.33	The CCC regional average is 7354.95 kWh Orchard / Vineyard Electricity per Bearing Ha and consist of 10 data points.
Cherries	Liters Orchard / Vineyard Diesel per Ton Fruit	74.67	The CCC regional average is 109.36 Liters Orchard / Vineyard Diesel per Ton Fruit and consist of 10 data points.
Cherries	Liters Orchard / Vineyard Diesel per Bearing Ha	1,107.67	The CCC regional average is 653.84 Liters Orchard / Vineyard Diesel per Bearing Ha and consist of 10 data points.
Cherries	Kg Pure N per Ton Fruit	24.15	The CCC regional average is 21.35 Kg Pure N per Ton Fruit and consist of 10 data points.
Cherries	Kg Pure N per Bearing Ha	358.17	The CCC regional average is 125.03 Kg Pure N per Bearing Ha and consist of 10 data points.

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