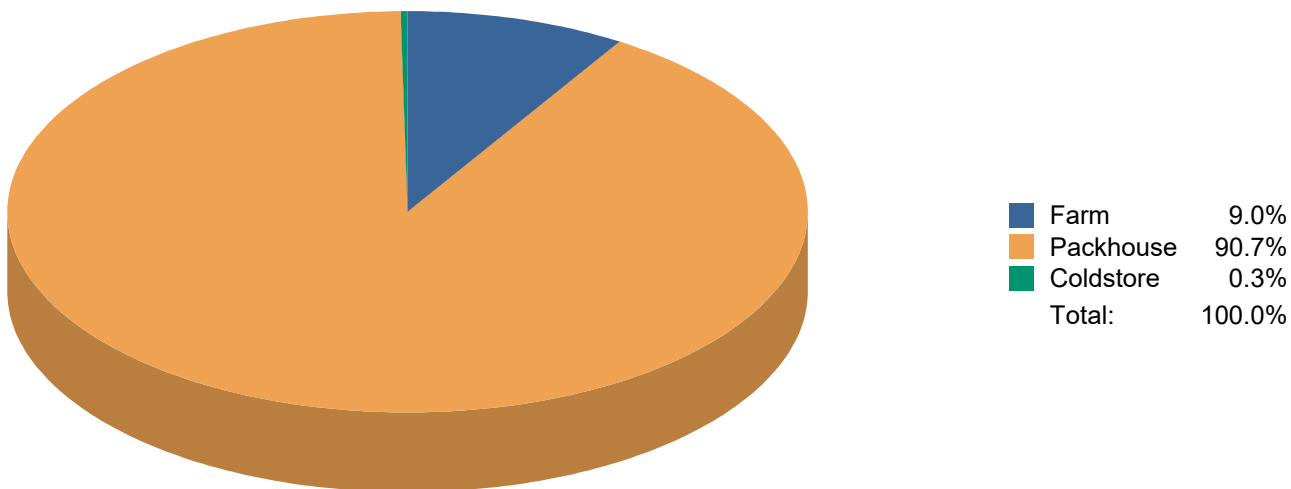


Carbon Calculator Results

Business Name: STEENEBRUG BOERDERY SUIDERLAND PLASE (PTY) L^t
Country Name: South Africa
Creation Date: 10/15/2025 12:00:17AM
Data Collection Period: Nov 2023 to Oct 2024
Report Grade: B1 - This dataset has been checked by CCC and is part of the benchmark.

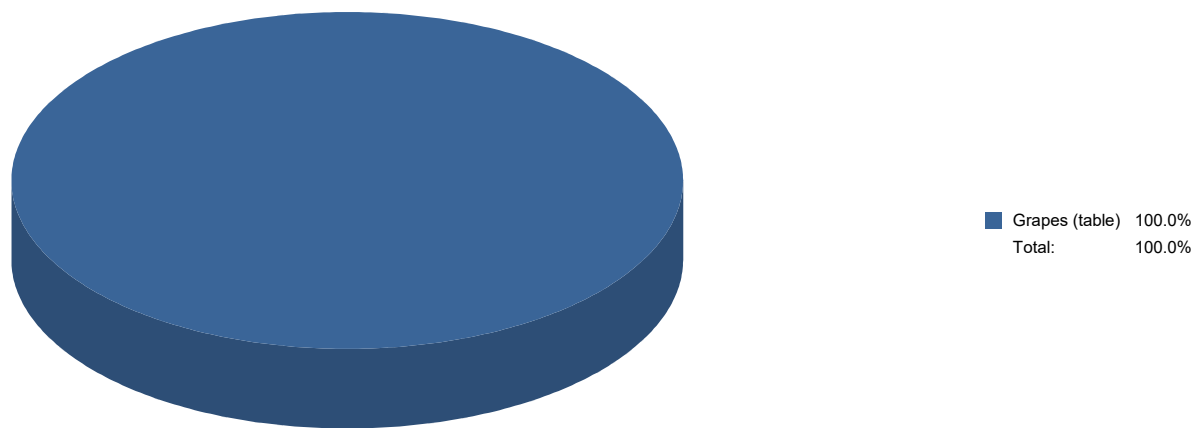
Business Unit - Boundary View



Boundary	Tonne CO ₂ e	%
Farm	442.54	8.99
Packhouse	4,465.67	90.70
Coldstore	15.16	0.31
Total	4,923.37	100.00

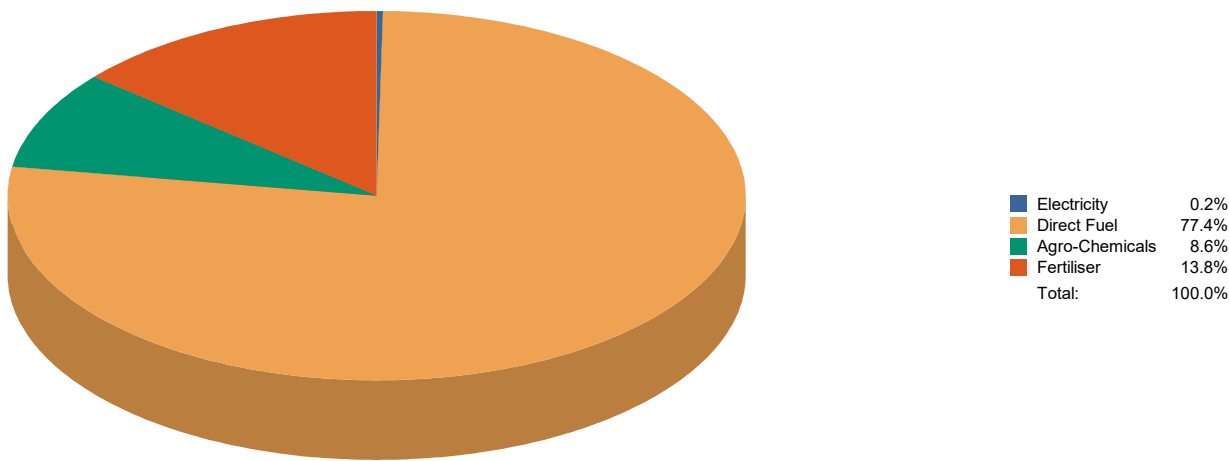
The Carbon Calculator must be completed on an annual basis. This allows users to monitor their carbon footprint trend and analyse improvements.

Business Unit - Commodity View



Commodity	Tonne CO ₂ e	%
Grapes (table)	4,923.37	100.00
Total	4,923.37	100.00

Farm - Emission Source View



Emission Source	Tonne CO ₂ e	%
Electricity	0.89	0.20
Direct Fuel	342.64	77.43
Agro-Chemicals	37.93	8.57
Fertiliser	61.08	13.80
Total	442.54	100.00

Business Name:

STEENEBRUG BOERDERY SUIDERLAND PLASE (PTY) LTD & Suiderland Plase (Pty) Ltd t/a Steenebrug

Dataset:

10/15/2025 12:00:17AM

Data Collection Period:

Nov 2023 to Oct 2024

Farm Commodity Benchmark

Commodity	Kg CO2e per Kg Fruit	Benchmark
Grapes (table)	0.20	The CCC regional average is 0.44 Kg CO2e per Kg Fruit and consist of 40 data points.

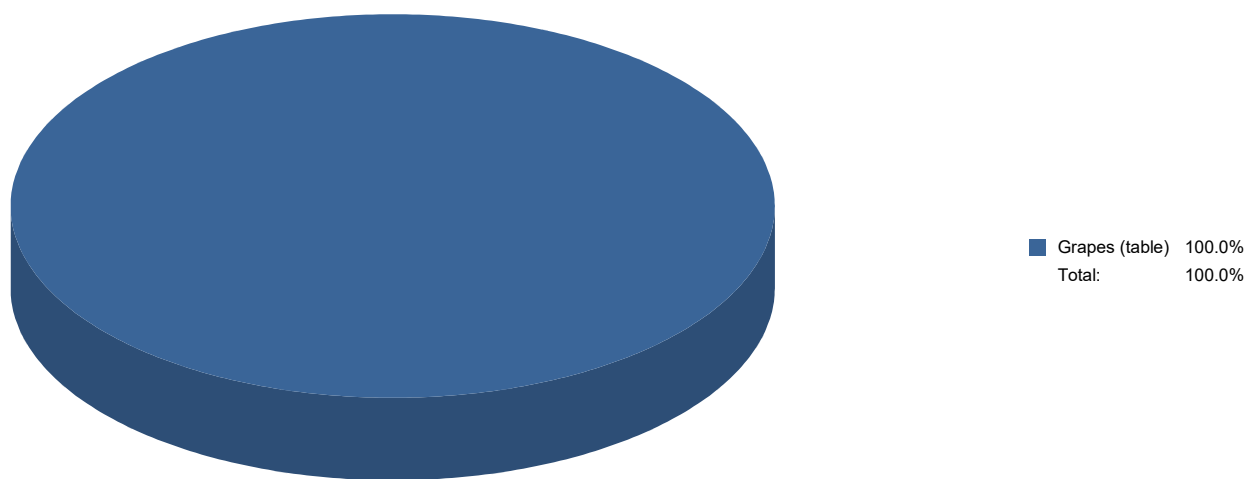
Farm Hectare Breakdown

Commodity	Tonne CO ₂ e per Bearing Ha
Grapes (table)	5.35

Farm Scope Breakdown

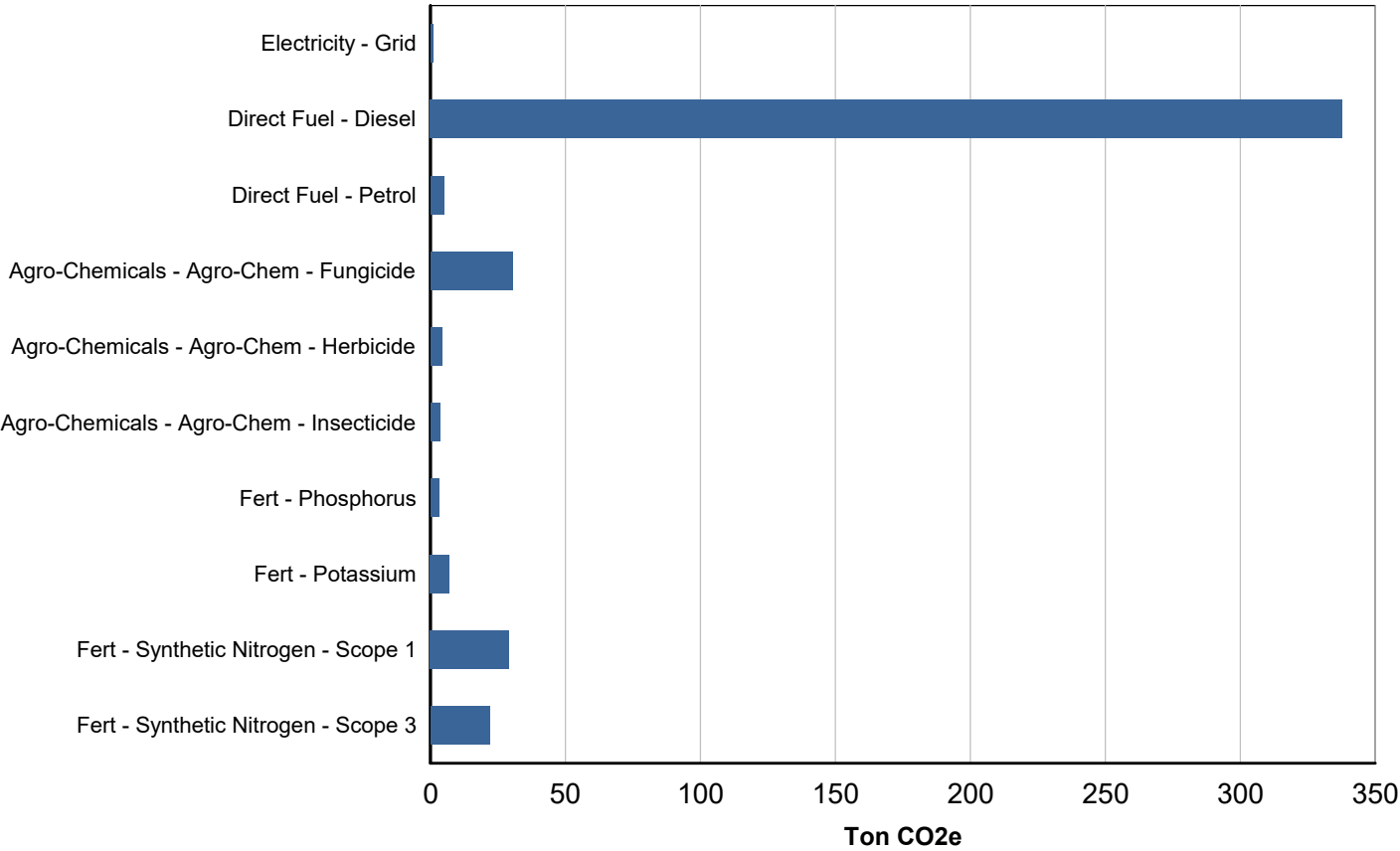
	Tonne CO ₂ e	%
Scope 1	371.73	84.00
Scope 2	0.89	0.20
Scope 3	69.91	15.80
Total	442.54	100.00

Farm - Commodity View



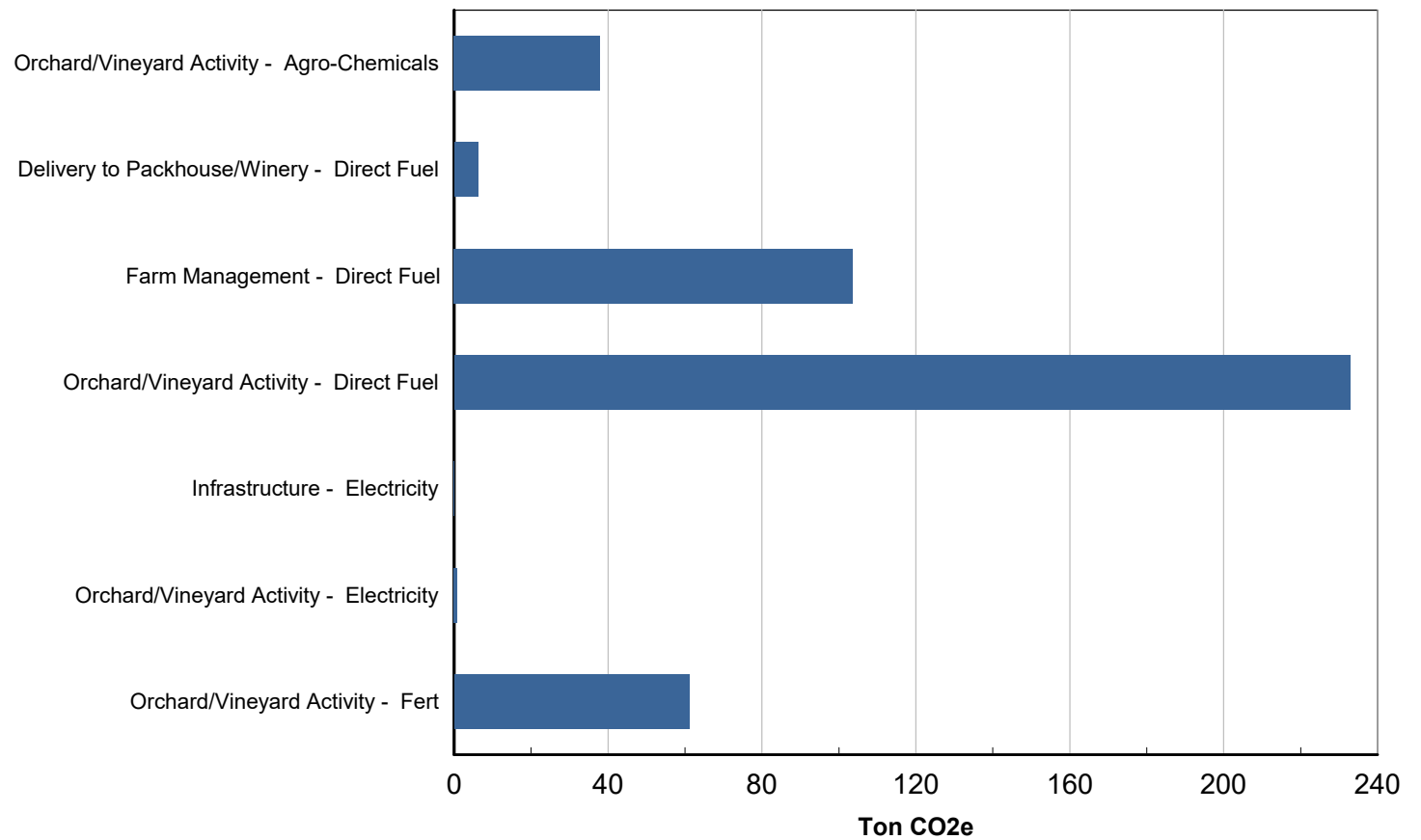
Commodity	Tonne CO ₂ e	%
Grapes (table)	442.54	100.00
Total	442.54	100.00

Farm - Emission Source Breakdown



Emission Source	Tonne CO ₂ e	%
Electricity - Grid	0.89	0.20
Direct Fuel - Diesel	337.78	76.33
Direct Fuel - Petrol	4.86	1.10
Agro-Chemicals - Agro-Chem - Fungicide	30.34	6.86
Agro-Chemicals - Agro-Chem - Herbicide	4.22	0.95
Agro-Chemicals - Agro-Chem - Insecticide	3.37	0.76
Fert - Phosphorus	3.18	0.72
Fert - Potassium	6.99	1.58
Fert - Synthetic Nitrogen - Scope 1	29.09	6.57
Fert - Synthetic Nitrogen - Scope 3	21.82	4.93
Total	442.54	100.00

Farm - Activity Breakdown



Activity Breakdown	Tonne CO ₂ e	%
Orchard/Vineyard Activity - Agro-Chemicals	37.93	8.57
Delivery to Packhouse/Winery - Direct Fuel	6.25	1.41
Farm Management - Direct Fuel	103.61	23.41
Orchard/Vineyard Activity - Direct Fuel	232.78	52.60
Infrastructure - Electricity	0.05	0.01
Orchard/Vineyard Activity - Electricity	0.84	0.19
Orchard/Vineyard Activity - Fert	61.08	13.80
Total	442.54	100.00

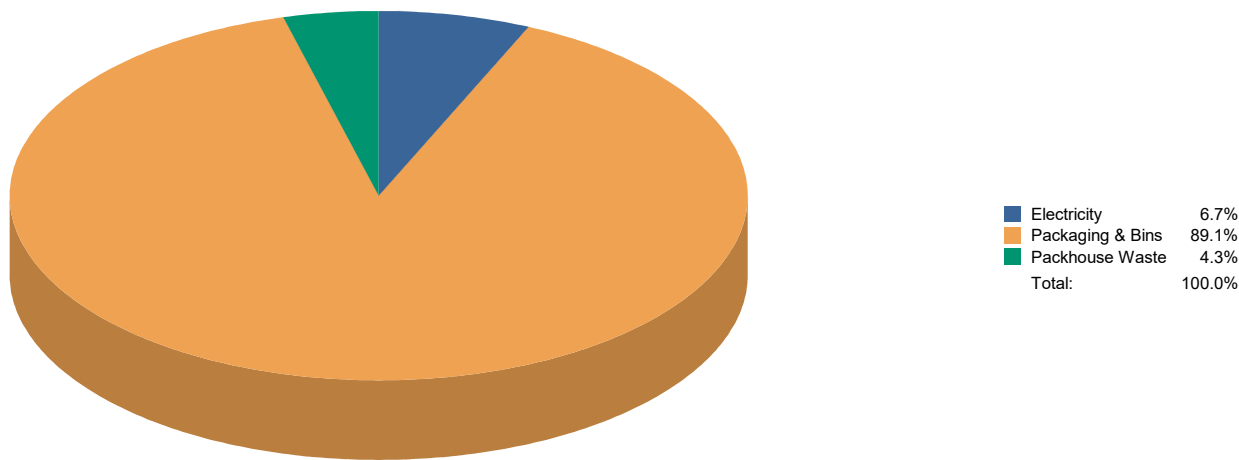
Detailed Carbon Emissions Breakdown

Detailed Activities	Tonne CO ₂ e	%
Electricity - Grid - Orchard/Vineyard Activity - BO	0.84	0.19
Electricity - Grid - Infrastructure	0.05	0.01
Direct Fuel - Diesel - Orchard/Vineyard Activity - BO	232.16	52.46
Direct Fuel - Diesel - Delivery to Packhouse/Winery	6.25	1.41
Direct Fuel - Diesel - Farm Management	99.37	22.45
Direct Fuel - Petrol - Orchard/Vineyard Activity	0.61	0.14
Direct Fuel - Petrol - Farm Management	4.24	0.96
Fert - - Synthetic Nitrogen - Orchard/Vineyard Activity - BO	50.92	11.51
Fert - - Phosphorus - Orchard/Vineyard Activity - BO	3.18	0.72
Fert - - Potassium - Orchard/Vineyard Activity - BO	6.99	1.58
Agro-Chemicals - Agro-Chem - Fungicide - Orchard/Vineyard Activity - BO	30.34	6.86
Agro-Chemicals - Agro-Chem - Insecticide - Orchard/Vineyard Activity - BO	3.37	0.76
Agro-Chemicals - Agro-Chem - Herbicide - Orchard/Vineyard Activity - BO	4.22	0.95
Total	442.54	100.00

Farm Consumption Benchmarks

Commodity	Consumption Measure	Result	Benchmark
Grapes (table)	kL Water per Ton Fruit	11.64	The CCC regional average is 296.30 kL Water per Ton Fruit and consist of 36 data points.
Grapes (table)	kL Water per Bearing Ha	313.30	The CCC regional average is 5920.05 kL Water per Bearing Ha and consist of 36 data points.
Grapes (table)	kWh Orchard / Vineyard Electricity per Ton Fruit	0.37	The CCC regional average is 260.06 kWh Orchard / Vineyard Electricity per Ton Fruit and consist of 36 data points.
Grapes (table)	kWh Orchard / Vineyard Electricity per Bearing Ha	10.02	The CCC regional average is 5751.79 kWh Orchard / Vineyard Electricity per Bearing Ha and consist of 36 data points.
Grapes (table)	Liters Orchard / Vineyard Diesel per Ton Fruit	42.05	The CCC regional average is 28.00 Liters Orchard / Vineyard Diesel per Ton Fruit and consist of 36 data points.
Grapes (table)	Liters Orchard / Vineyard Diesel per Bearing Ha	1,132.02	The CCC regional average is 605.73 Liters Orchard / Vineyard Diesel per Bearing Ha and consist of 36 data points.
Grapes (table)	Kg Pure N per Ton Fruit	1.56	The CCC regional average is 4.05 Kg Pure N per Ton Fruit and consist of 36 data points.
Grapes (table)	Kg Pure N per Bearing Ha	41.88	The CCC regional average is 88.45 Kg Pure N per Bearing Ha and consist of 36 data points.

Packhouse - Emission Source View



Emission Source	Tonne CO ₂ e	%
Electricity	298.08	6.67
Packaging & Bins	3,977.06	89.06
Packhouse Waste	190.54	4.27
Total	4,465.67	100.00

Business Name:

STEENEBRUG BOERDERY SUIDERLAND PLASE (PTY) LTD & Suiderland Plase (Pty) Ltd t/a Steenebrug

Dataset:

10/15/2025 12:00:17AM

Data Collection Period:

Nov 2023 to Oct 2024

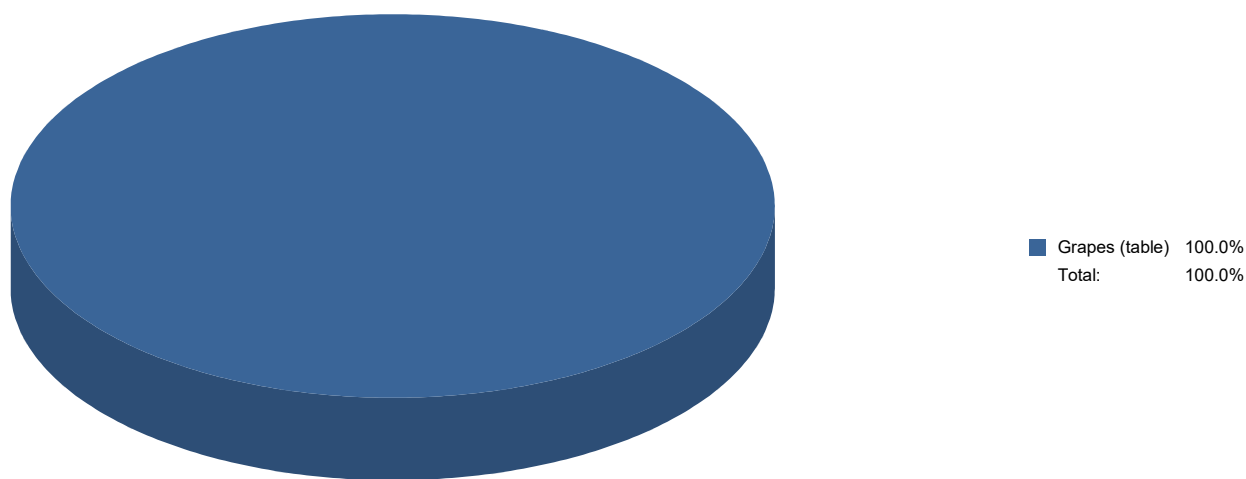
Packhouse Commodity Benchmark

Commodity	Kg CO2e per Kg Fruit	Benchmark
Grapes (table)	0.93	The CCC regional average is 0.20 Kg CO2e per Kg Fruit and consist of 34 data points.

Packhouse Scope Breakdown

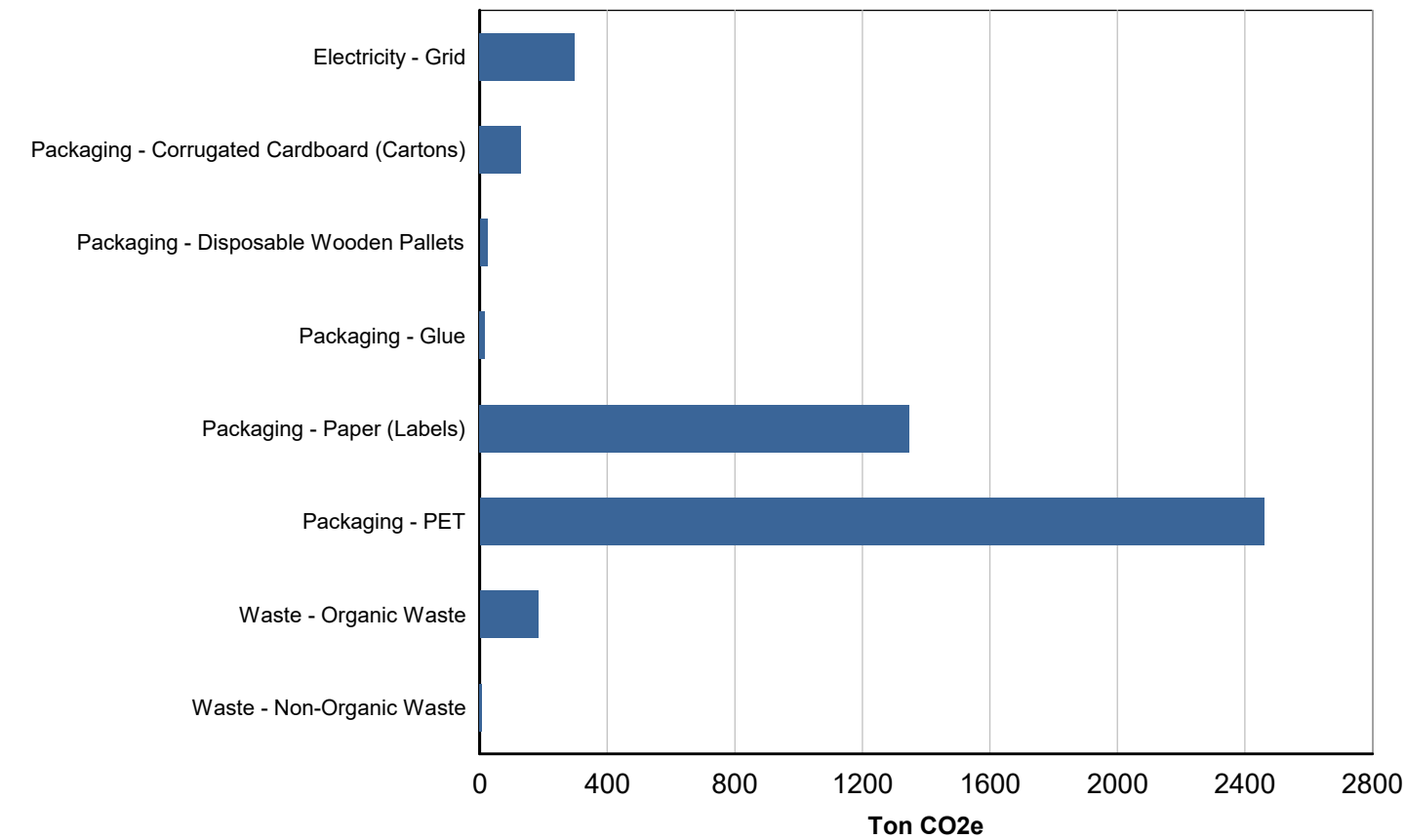
	Tonne CO ₂ e	%
Scope 2	298.08	6.67
Scope 3	4,167.59	93.33
Total	4,465.67	100.00

Packhouse - Commodity View



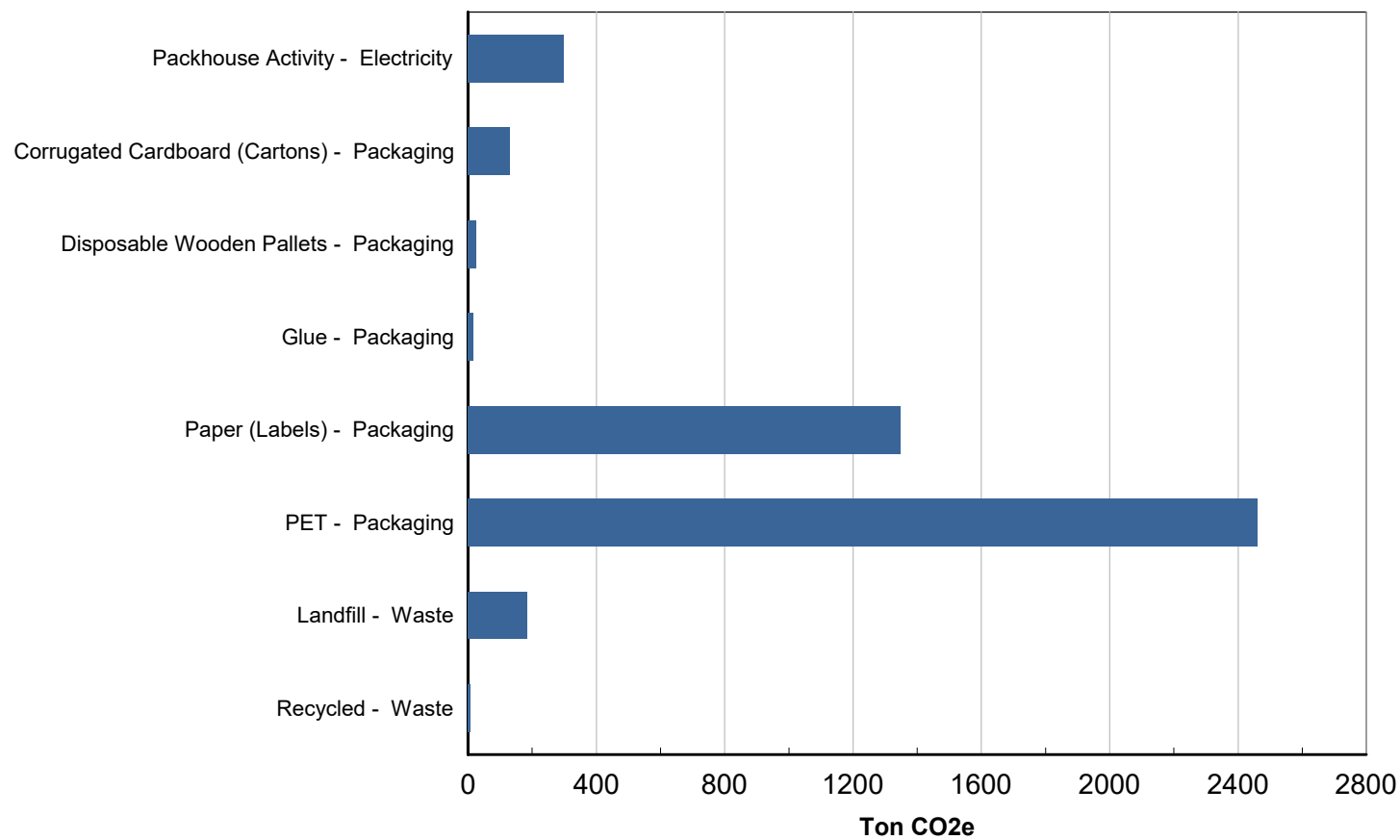
Commodity	Tonne CO ₂ e	%
Grapes (table)	4,465.67	100.00
Total	4,465.67	100.00

Packhouse - Emission Source Breakdown



Emission Source	Tonne CO ₂ e	%
Electricity - Grid	298.08	6.67
Packaging - Corrugated Cardboard (Cartons)	130.20	2.92
Packaging - Disposable Wooden Pallets	24.63	0.55
Packaging - Glue	15.40	0.34
Packaging - Paper (Labels)	1,346.31	30.15
Packaging - PET	2,460.52	55.10
Waste - Organic Waste	183.61	4.11
Waste - Non-Organic Waste	6.92	0.15
Total	4,465.67	100.00

Packhouse - Activity Breakdown



Activity Breakdown	Tonne CO ₂ e	%
Packhouse Activity - Electricity	298.08	6.67
Corrugated Cardboard (Cartons) - Packaging	130.20	2.92
Disposable Wooden Pallets - Packaging	24.63	0.55
Glue - Packaging	15.40	0.34
Paper (Labels) - Packaging	1,346.31	30.15
PET - Packaging	2,460.52	55.10
Landfill - Waste	183.61	4.11
Recycled - Waste	6.92	0.15
Total	4,465.67	100.00

Detailed Carbon Emissions Breakdown

Detailed Activities	Tonne CO ₂ e	%
Electricity - Grid - Packhouse Activity	298.08	6.67
Packaging - Corrugated Cardboard (Cartons) - Corrugated Cardboard (Cartons)	130.20	2.92
Packaging - Paper (Labels) - Paper (Labels)	1,346.31	30.15
Packaging - PET - PET	2,460.52	55.10
Packaging - Glue - Glue	15.40	0.34
Packaging - Disposable Wooden Pallets - Disposable Wooden Pallets	24.63	0.55
Waste - Organic Waste - Landfill	183.61	4.11
Waste - Non-Organic Waste - Recycled	6.92	0.15
Total	4,465.67	100.00

Business Name:

STEENEBRUG BOERDERY SUIDERLAND PLASE (PTY) LTD & Suiderland Plase (Pty) Ltd t/a Steenebrug

Dataset:

10/15/2025 12:00:17AM

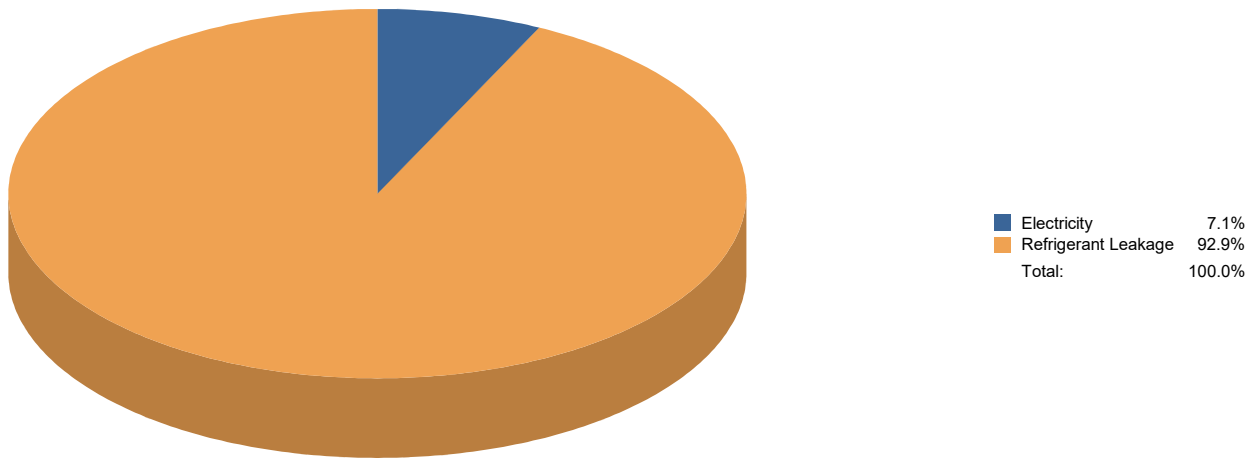
Data Collection Period:

Nov 2023 to Oct 2024

Packhouse Consumption Benchmarks

Grapes (table)	kWh Packhouse Activity Electricity per Ton Fruit	58.02	The CCC regional average is 45.25 kWh Packhouse Activity Electricity per Ton Fruit and consist of 30 data points.
Grapes (table)	Kg Corrugated Cardboard per Ton of Fruit packed	20.16	The CCC regional average is 89.87 Kg Corrugated Cardboard per Ton of Fruit packed and consist of 30 data points.

Coldstore - Emission Source View



Emission Source	Tonne CO ₂ e	%
Electricity	1.08	7.14
Refrigerant Leakage	14.08	92.86
Total	15.16	100.00

Business Name:

STEENEBRUG BOERDERY SUIDERLAND PLASE (PTY) LTD & Suiderland Plase (Pty) Ltd t/a Steenebrug

Dataset:

10/15/2025 12:00:17AM

Data Collection Period:

Nov 2023 to Oct 2024

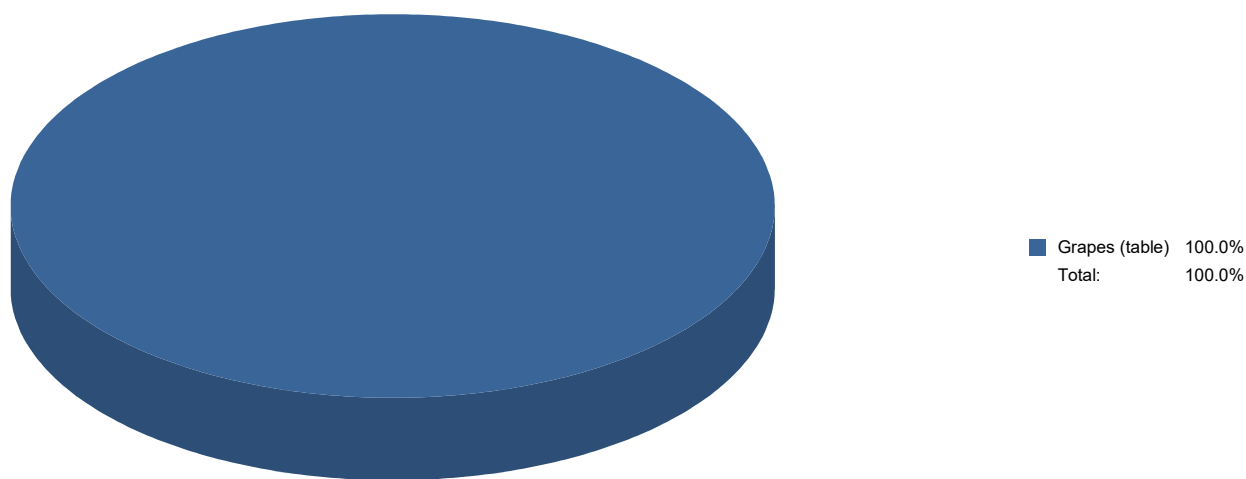
Coldstore Commodity Benchmark

Commodity	Kg CO2e per Kg Fruit	Benchmark
Grapes (table)	0.00	The CCC regional average is 0.12 Kg CO2e per Kg Fruit and consist of 7 data points.

Coldstore Scope Breakdown

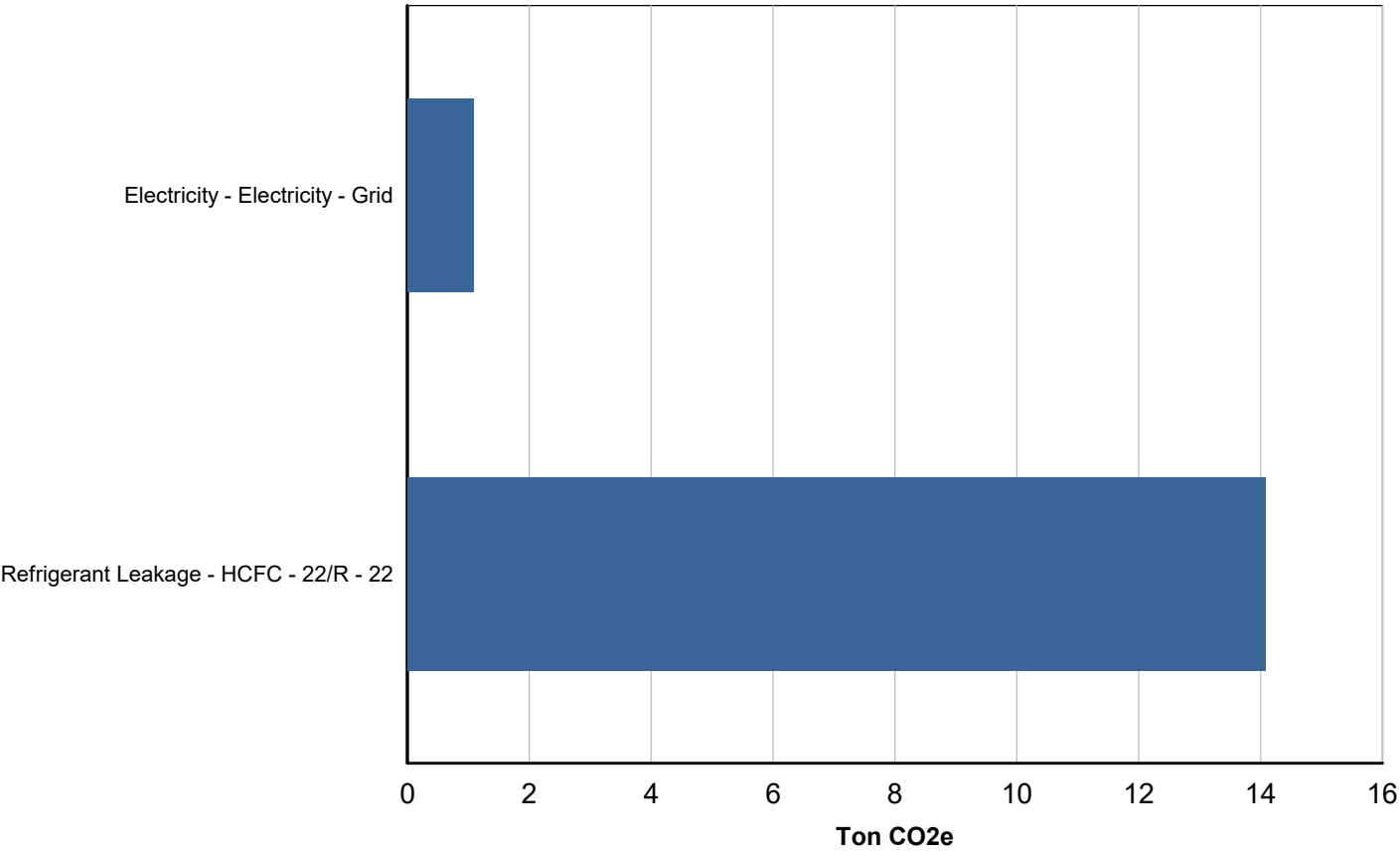
	Tonne CO ₂ e	%
Scope 1	14.08	92.86
Scope 2	1.08	7.14
Total	15.16	100.00

Coldstore - Commodity View



Commodity	Tonne CO ₂ e	%
Grapes (table)	15.16	100.00
Total	15.16	100.00

Coldstore - Emission Source Breakdown



Emission Source	Tonne CO ₂ e	%
Electricity - Electricity - Grid	1.08	7.14
Refrigerant Leakage - HCFC - 22/R - 22	14.08	92.86
Total	15.16	100.00

Business Name: STEENEBRUG BOERDERY SUIDERLAND PLASE (PTY) LTD & Suiderland Plase (Pty) Ltd t/a Steenebrug

Dataset: 10/15/2025 12:00:17AM

Data Collection Period: Nov 2023 to Oct 2024