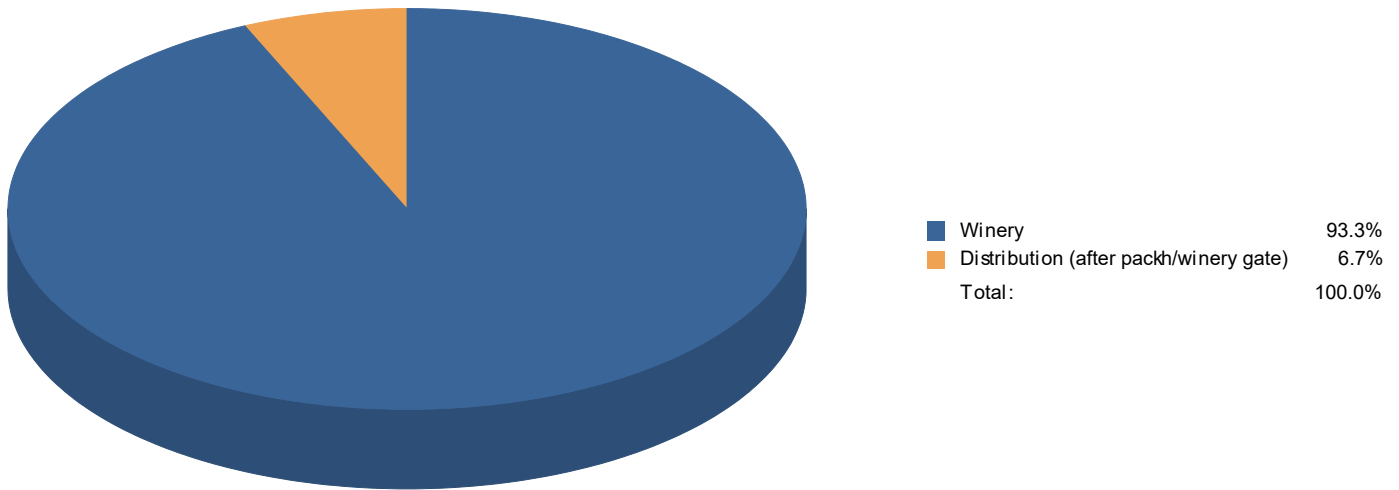




## Carbon Calculator Results

**Business Name:** ORC - Uppington  
**Country Name:** South Africa  
**Creation Date:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024  
**Report Grade:** B1 - This dataset has been checked by CCC and is part of the benchmark.

## Business Unit - Boundary View

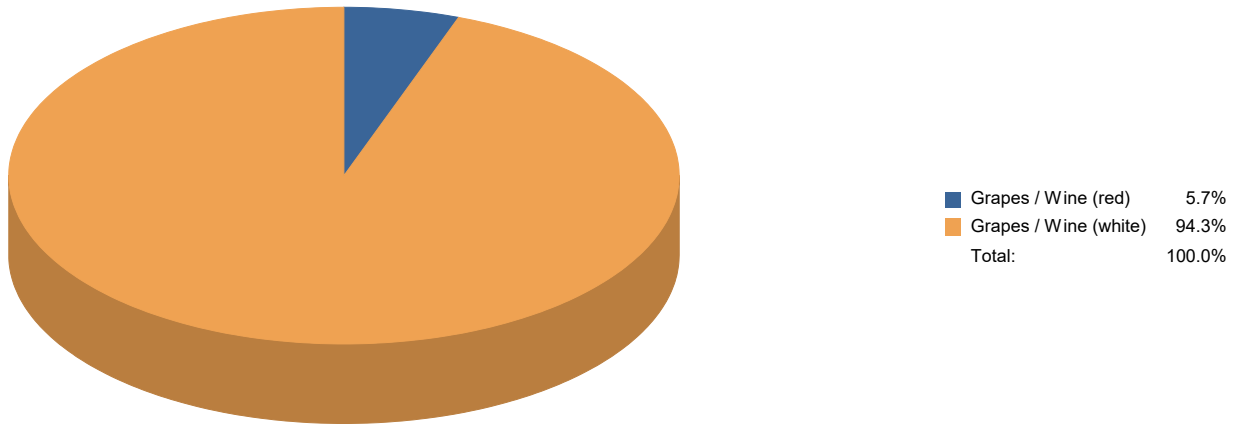


Boundary	Ton CO2e	%
Winery	4,380.52	93.31
Distribution (after packh/winery gate)	314.14	6.69
<b>Total</b>	<b>4,694.66</b>	<b>100.00</b>

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

**Business Name:** ORC - Upington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

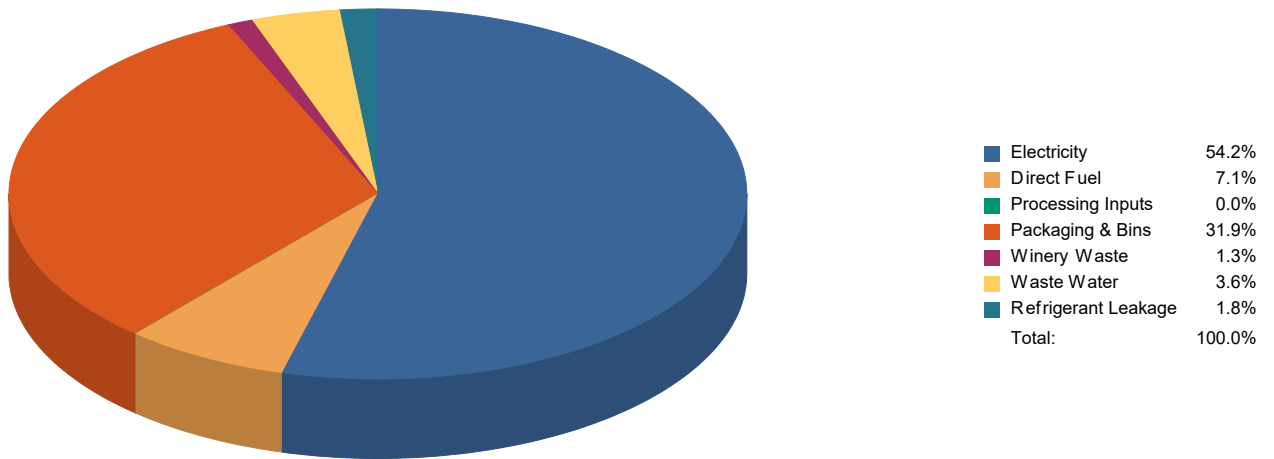
## Business Unit - Commodity View



Commodity	Ton CO2e	%
Grapes / Wine (red)	266.18	5.67
Grapes / Wine (white)	4,428.48	94.33
<b>Total</b>	<b>4,694.66</b>	<b>100.00</b>

**Business Name:** ORC - Upington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

## Winery - Emission Source View



Emission Source	Ton CO2e	%
Electricity	2,373.03	54.17
Direct Fuel	313.17	7.15
Processing Inputs	2.04	0.05
Packaging & Bins	1,397.65	31.91
Winery Waste	56.93	1.30
Waste Water	159.32	3.64
Refrigerant Leakage	78.40	1.79
<b>Total</b>	<b>4,380.52</b>	<b>100.00</b>

**Business Name:** ORC - Upington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

### Winery Commodity Benchmark

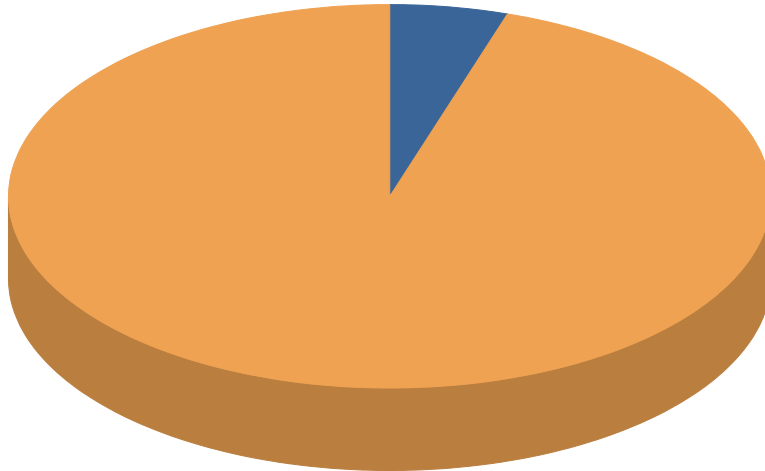
Commodity	Kg CO2e per L Wine	Benchmark
Grapes / Wine (red) - Bottling	0.15	The CCC regional average is 0.24 Kg CO2e per L Wine and consist of 2 data points.
Grapes / Wine (red) - Processing	0.10	The CCC regional average is 0.14 Kg CO2e per L Wine and consist of 2 data points.
Grapes / Wine (white) - Bottling	0.15	The CCC regional average is 0.63 Kg CO2e per L Wine and consist of 2 data points.
Grapes / Wine (white) - Processing	0.10	The CCC regional average is 0.14 Kg CO2e per L Wine and consist of 2 data points.

### Winery Scope Breakdown

	Ton CO2e	%
Scope 1	727.96	16.62
Scope 2	2,248.77	51.34
Scope 3	1,403.79	32.05
<b>Total</b>	<b>4,380.52</b>	<b>100.00</b>

**Business Name:** ORC - Uppington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

## Winery - Commodity View

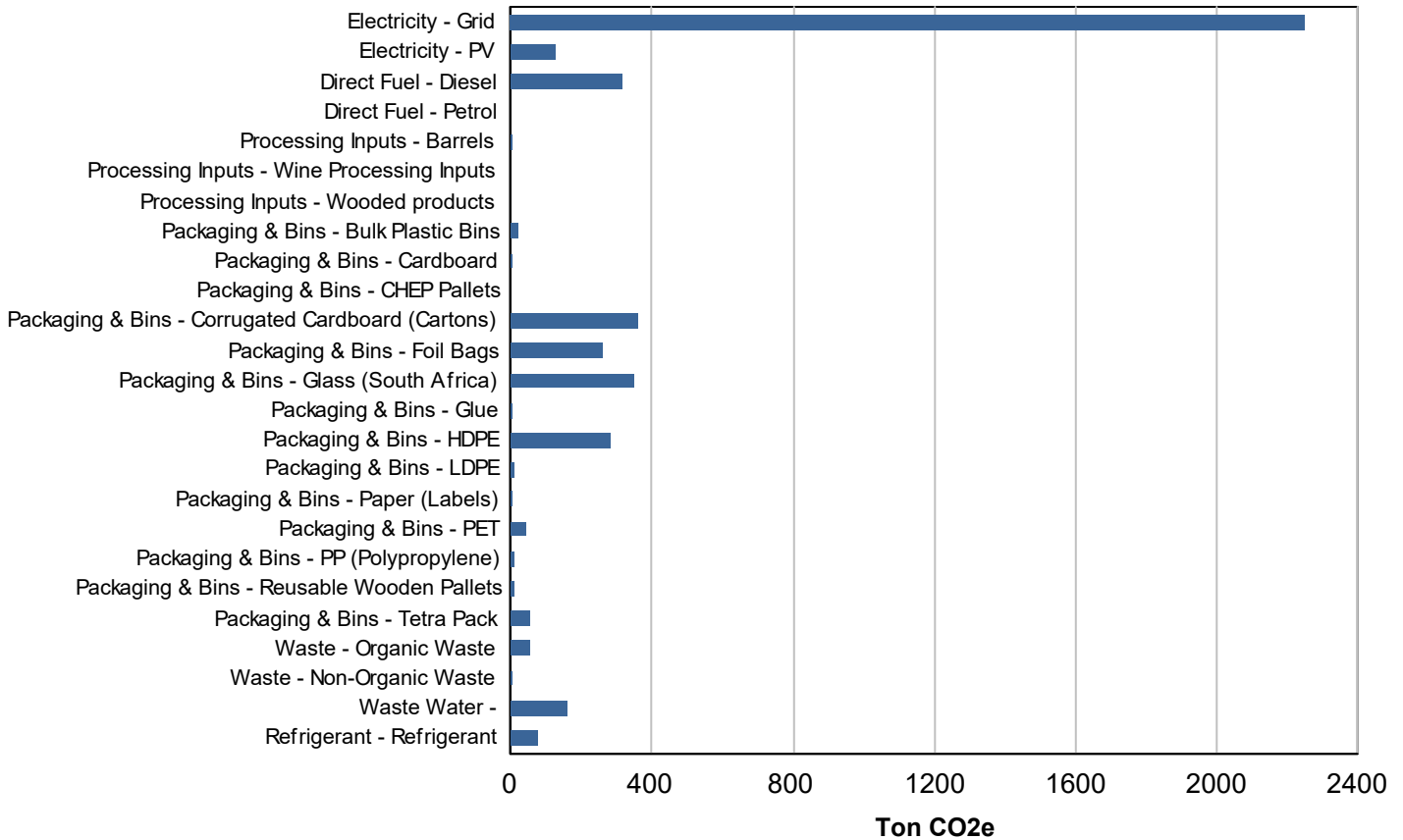


■ Grapes / Wine (red) 5.0%  
■ Grapes / Wine (white) 95.0%  
Total: 100.0%

Commodity	Ton CO2e	%
Grapes / Wine (red)	219.05	5.00
Grapes / Wine (white)	4,161.46	95.00
<b>Total</b>	<b>4,380.52</b>	<b>100.00</b>

**Business Name:** ORC - Upington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

# Winery - Emission Source Breakdown



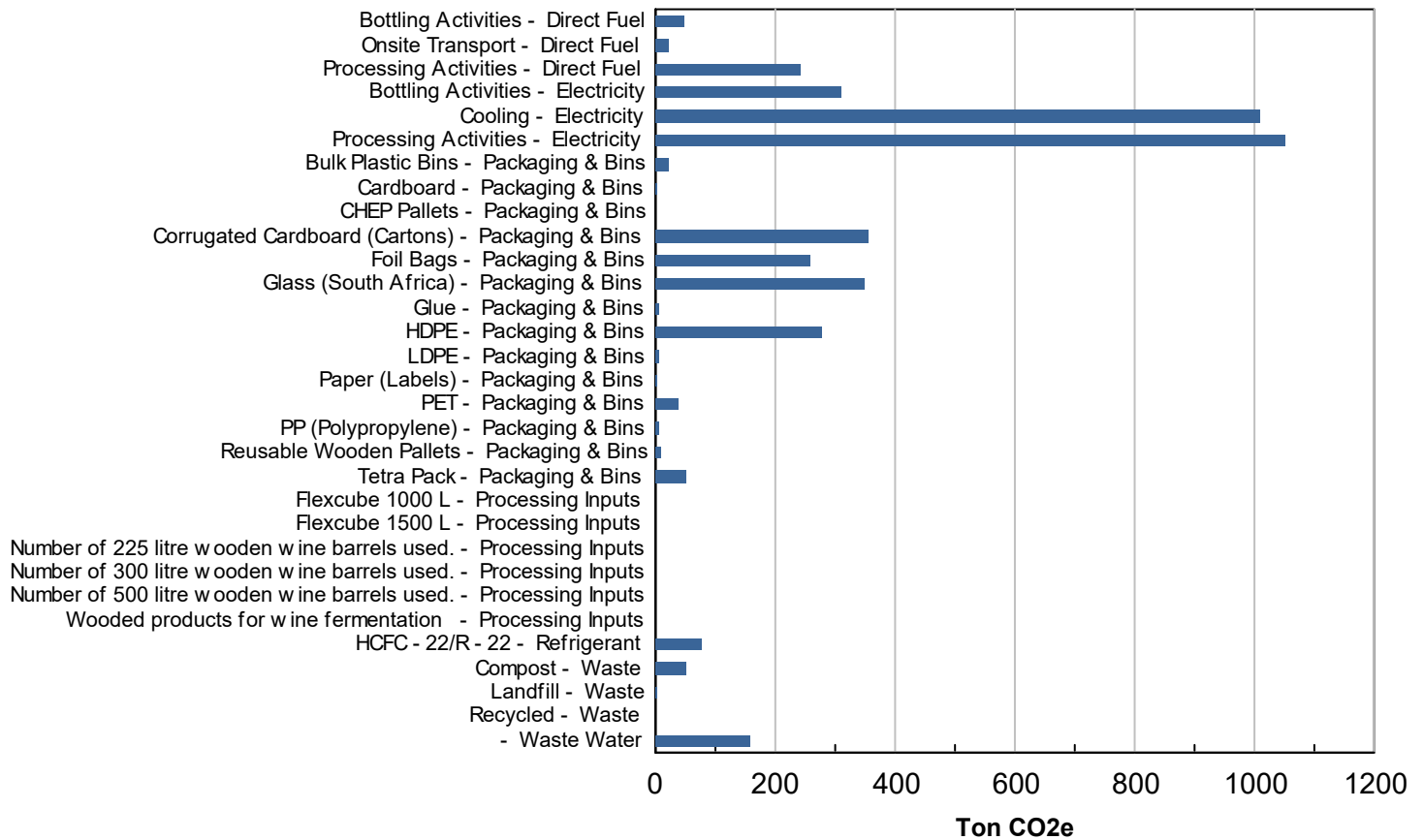
Emission Source	Ton CO2e	%
Electricity - Grid	2,248.77	51.34
Electricity - PV	124.26	2.84
Direct Fuel - Diesel	312.73	7.14
Direct Fuel - Petrol	0.44	0.01
Processing Inputs - Barrels	1.29	0.03
Processing Inputs - Wine Processing Inputs	0.43	0.01
Processing Inputs - Wooded products	0.31	0.01
Packaging & Bins - Bulk Plastic Bins	22.27	0.51
Packaging & Bins - Cardboard	3.16	0.07
Packaging & Bins - CHEP Pallets	0.64	0.01
Packaging & Bins - Corrugated Cardboard (Cartons)	356.03	8.13
Packaging & Bins - Foil Bags	259.66	5.93

**Business Name:** ORC - Upington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

Packaging & Bins - Glass (South Africa)	349.60	7.98
Packaging & Bins - Glue	5.83	0.13
Packaging & Bins - HDPE	279.45	6.38
Packaging & Bins - LDPE	8.46	0.19
Packaging & Bins - Paper (Labels)	3.10	0.07
Packaging & Bins - PET	40.48	0.92
Packaging & Bins - PP (Polypropylene)	7.19	0.16
Packaging & Bins - Reusable Wooden Pallets	10.59	0.24
Packaging & Bins - Tetra Pack	51.17	1.17
Waste - Organic Waste	52.82	1.21
Waste - Non-Organic Waste	4.11	0.09
Waste Water -	159.32	3.64
Refrigerant - Refrigerant	78.40	1.79
<b>Total</b>	<b>4,380.52</b>	<b>100.00</b>

**Business Name:** ORC - Upington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

## Winery - Activity Breakdown



Activity Breakdown	Ton CO2e	%
Bottling Activities - Direct Fuel	47.44	1.08
Onsite Transport - Direct Fuel	23.20	0.53
Processing Activities - Direct Fuel	242.53	5.54
Bottling Activities - Electricity	310.23	7.08
Cooling - Electricity	1,009.65	23.05
Processing Activities - Electricity	1,053.14	24.04
Bulk Plastic Bins - Packaging & Bins	22.27	0.51
Cardboard - Packaging & Bins	3.16	0.07
CHEP Pallets - Packaging & Bins	0.64	0.01
Corrugated Cardboard (Cartons) - Packaging & Bins	356.03	8.13
Foil Bags - Packaging & Bins	259.66	5.93
Glass (South Africa) - Packaging & Bins	349.60	7.98
Glue - Packaging & Bins	5.83	0.13
HDPE - Packaging & Bins	279.45	6.38



**Business Name:** ORC - Upington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

LDPE - Packaging & Bins	8.46	0.19
Paper (Labels) - Packaging & Bins	3.10	0.07
PET - Packaging & Bins	40.48	0.92
PP (Polypropylene) - Packaging & Bins	7.19	0.16
Reusable Wooden Pallets - Packaging & Bins	10.59	0.24
Tetra Pack - Packaging & Bins	51.17	1.17
Flexcube 1000 L - Processing Inputs	0.40	0.01
Flexcube 1500 L - Processing Inputs	0.03	0.00
Number of 225 litre wooden wine barrels used. - Processing Inputs	0.05	0.00
Number of 300 litre wooden wine barrels used. - Processing Inputs	1.17	0.03
Number of 500 litre wooden wine barrels used. - Processing Inputs	0.07	0.00
Wooded products for wine fermentation - Processing Inputs	0.31	0.01
HCFC - 22/R - 22 - Refrigerant	78.40	1.79
Compost - Waste	52.82	1.21
Landfill - Waste	2.26	0.05
Recycled - Waste	1.85	0.04
- Waste Water	159.32	3.64
<b>Total</b>	<b>4,380.52</b>	<b>100.00</b>

**Business Name:** ORC - Upington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

# Detailed Carbon Emissions Breakdown

Detailed Activities	Ton CO2e	%
Electricity - Grid - Processing Activities	1,009.65	23.05
Electricity - Grid - Cooling	1,009.65	23.05
Electricity - Grid - Bottling Activities	229.47	5.24
Electricity - PV - Processing Activities	43.49	0.99
Electricity - PV - Bottling Activities	80.77	1.84
Direct Fuel - Diesel - Processing Activities	242.09	5.53
Direct Fuel - Diesel - Bottling Activities	47.44	1.08
Direct Fuel - Diesel - Onsite Transport	23.20	0.53
Direct Fuel - Petrol - Processing Activities	0.44	0.01
Processing Inputs - Barrels - Number of 225 litre wooden wine barrels used.	0.05	0.00
Processing Inputs - Barrels - Number of 300 litre wooden wine barrels used.	1.17	0.03
Processing Inputs - Barrels - Number of 500 litre wooden wine barrels used.	0.07	0.00
Processing Inputs - Wooded products - Wooded products for wine fermentation	0.31	0.01
Processing Inputs - Wine Processing Inputs - Flexcube 1000 L	0.40	0.01
Processing Inputs - Wine Processing Inputs - Flexcube 1500 L	0.03	0.00
Waste - Organic Waste - Compost	52.82	1.21
Waste - Non-Organic Waste - Recycled	1.85	0.04
Waste - Non-Organic Waste - Landfill	2.26	0.05
Waste Water - -	159.32	3.64
Refrigerant - Refrigerant - HCFC - 22/R - 22	78.40	1.79
Packaging & Bins - Glass (South Africa) - Glass (South Africa)	349.60	7.98
Packaging & Bins - Cardboard - Cardboard	3.16	0.07
Packaging & Bins - Corrugated Cardboard (Cartons) - Corrugated Cardboard (Cartons)	356.03	8.13
Packaging & Bins - Paper (Labels) - Paper (Labels)	3.10	0.07
Packaging & Bins - PP (Polypropylene) - PP (Polypropylene)	7.19	0.16
Packaging & Bins - PET - PET	40.48	0.92
Packaging & Bins - LDPE - LDPE	8.46	0.19
Packaging & Bins - HDPE - HDPE	279.45	6.38
Packaging & Bins - Glue - Glue	5.83	0.13
Packaging & Bins - Bulk Plastic Bins - Bulk Plastic Bins	22.27	0.51
Packaging & Bins - Reusable Wooden Pallets - Reusable Wooden Pallets	10.59	0.24
Packaging & Bins - CHEP Pallets - CHEP Pallets	0.64	0.01

**Business Name:** ORC - Uppington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

Packaging & Bins - Foil Bags - Foil Bags	259.66	5.93
Packaging & Bins - Tetra Pack - Tetra Pack	51.17	1.17
<b>Total</b>	<b>4,380.52</b>	<b>100.00</b>

**Business Name:** ORC - Uppington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

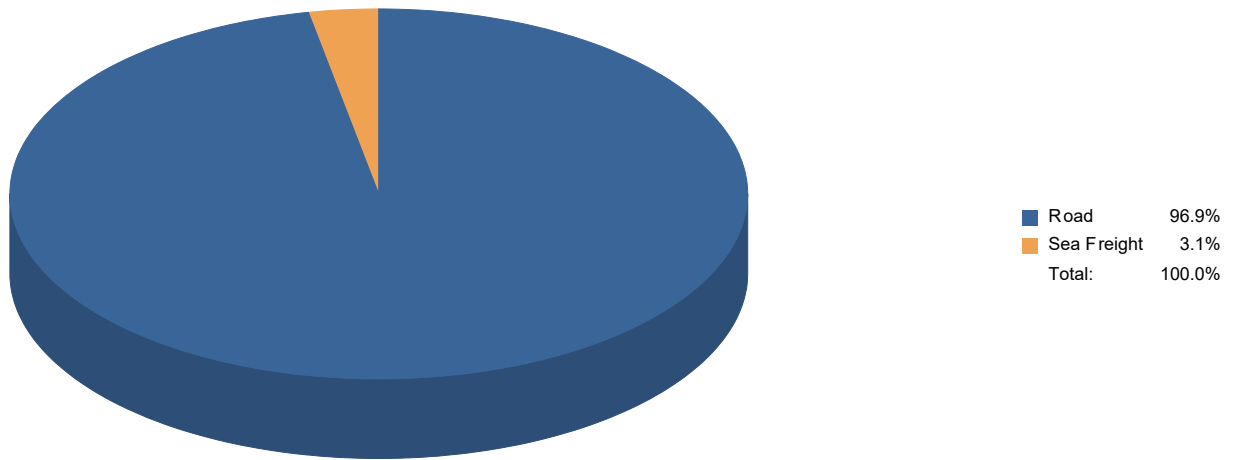
## Winery Consumption Benchmarks

Commodity	Consumption Measure	Result	Benchmark
Grapes / Wine (red)	Litres Water per Ton Grapes Processed	2,102.75	The CCC regional average is 1284.30 Litres Water per Ton Grapes Processed and consist of 1 data points.
Grapes / Wine (red)	Litres Waste Water per Ton Grapes Processed	2,263.29	The CCC regional average is 265.15 Litres Waste Water per Ton Grapes Processed and consist of 1 data points.
Grapes / Wine (red)	Processing kWh per Ton Grapes Processed	35.68	The CCC regional average is 37.15 Processing kWh per Ton Grapes Processed and consist of 1 data points.
Grapes / Wine (red)	Cooling kWh per Ton Grapes Processed	27.35	The CCC regional average is 28.49 Cooling kWh per Ton Grapes Processed and consist of 1 data points.
Grapes / Wine (red)	Kg Glass per Liter Wine	0.04	The CCC regional average is 0.07 Kg Glass per Liter Wine and consist of 1 data points.

Commodity	Consumption Measure	Result	Benchmark
Grapes / Wine (white)	Litres Water per Ton Grapes Processed	2,106.64	The CCC regional average is 1590.30 Litres Water per Ton Grapes Processed and consist of 1 data points.
Grapes / Wine (white)	Litres Waste Water per Ton Grapes Processed	2,263.29	The CCC regional average is 265.15 Litres Waste Water per Ton Grapes Processed and consist of 1 data points.
Grapes / Wine (white)	Processing kWh per Ton Grapes Processed	35.75	The CCC regional average is 38.25 Processing kWh per Ton Grapes Processed and consist of 1 data points.
Grapes / Wine (white)	Cooling kWh per Ton Grapes Processed	27.40	The CCC regional average is 29.34 Cooling kWh per Ton Grapes Processed and consist of 1 data points.
Grapes / Wine (white)	Kg Glass per Liter Wine	0.04	The CCC regional average is 0.08 Kg Glass per Liter Wine and consist of 1 data points.

**Business Name:** ORC - Uppington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

## Distribution (after packh/winery gate) - Emission Source View



Emission Source	Ton CO2e	%
Road	304.52	96.94
Sea Freight	9.62	3.06
<b>Total</b>	<b>314.14</b>	<b>100.00</b>

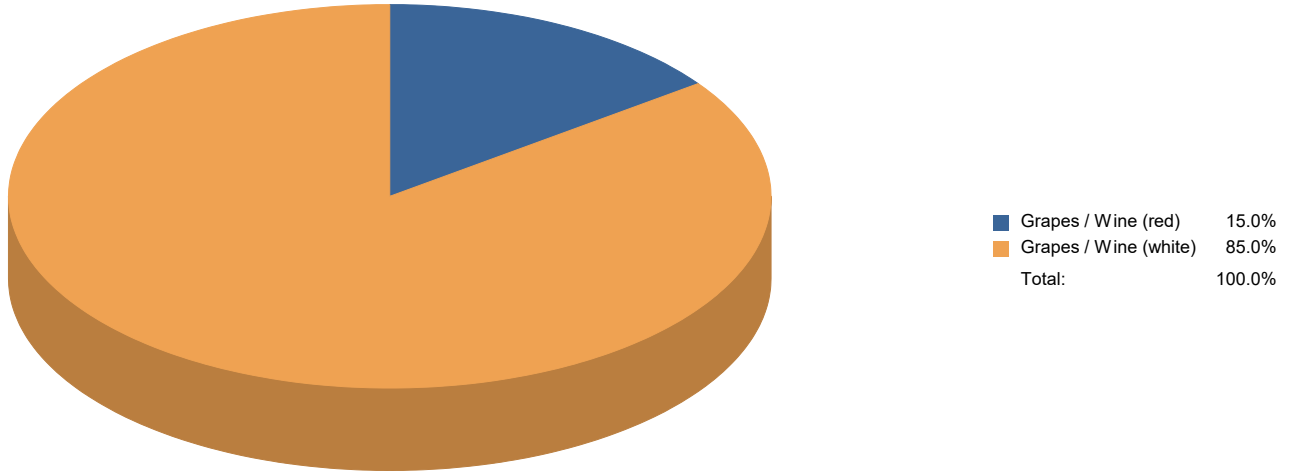
**Business Name:** ORC - Uppington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

**Distribution (after packh/winery gate) Scope Breakdown**

	<b>Ton CO2e</b>	<b>%</b>
Scope 3	314.14	100.00
<b>Total</b>	<b>314.14</b>	<b>100.00</b>

**Business Name:** ORC - Uppington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

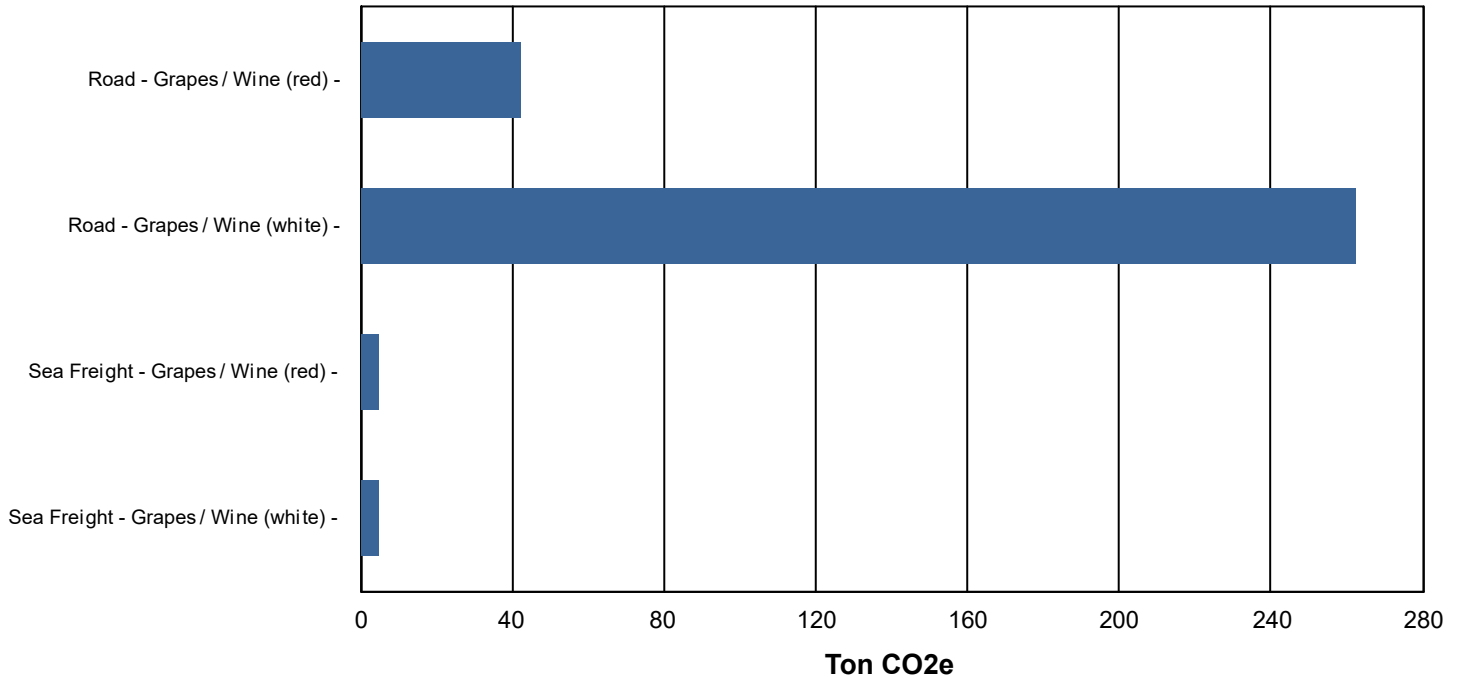
## Distribution (after packh/winery gate) - Commodity View



Commodity	Ton CO2e	%
Grapes / Wine (red)	47.12	15.00
Grapes / Wine (white)	267.01	85.00
<b>Total</b>	<b>314.14</b>	<b>100.00</b>

**Business Name:** ORC - Uppington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

## Distribution - Route Breakdown by Transport Type

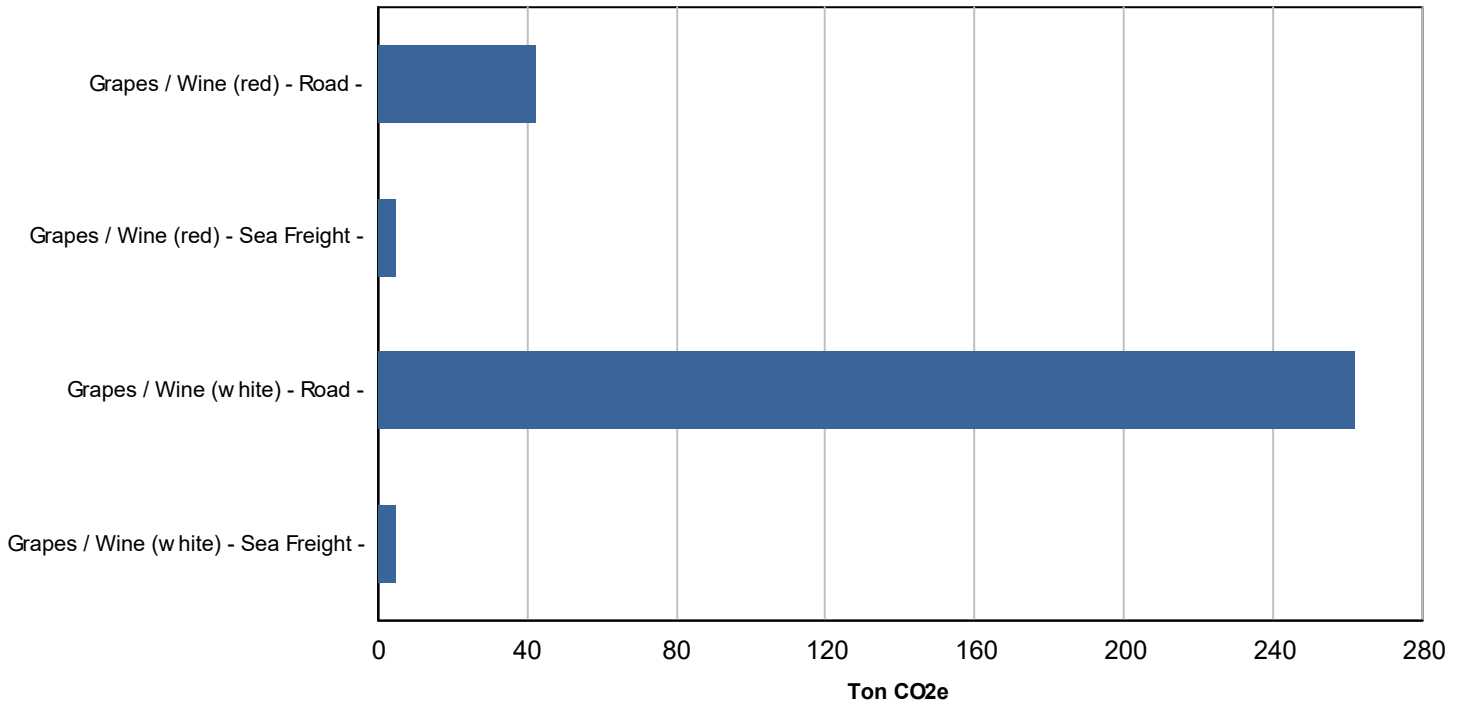


Type	Commodity	Route	Ton CO2e	%
Road	Grapes / Wine (red)		0.07	15.00
Road	Grapes / Wine (white)		53.49	85.00
<b>TOTAL</b>			<b>314.14</b>	<b>100.00</b>



**Business Name:** ORC - Upington  
**Dataset:** 2024/06/25 08:02:40  
**Data Collection Period:** Jun 2023 to May 2024

## Distribution - Route Breakdown by Commodity



Commodity	Type	Route	Ton CO2e	
Grapes / Wine (red)	Road		0.07	22.50
Grapes / Wine (red)	Sea Freight		0.31	3.27
Grapes / Wine (white)	Road		53.49	100.00
Grapes / Wine (white)	Sea Freight		0.09	3.87
<b>Grand Total:</b>			<b>314.14</b>	<b>100.00</b>