



Carbon Footprint Report

For **Umcos Newcombe** (Trading as **Tradeware**)

1 July 2023 to 30 June 2024

Final Copy 14th December 2024



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Abbreviations

ABS	Australian Bureau of Statistics
CH ₄	Methane
CO ₂	Carbon dioxide
CO ₂ -e	Carbon dioxide equivalent
DBEIS	Department for Business, Energy & Industrial Strategy (UK)
Defra	Department for Environment, Food & Rural Affairs (UK)
EF	Emission factor
EPiC	Environmental Performance in Construction
GWP	Global warming potential
GHG	Greenhouse gas
GJ	Gigajoule
HFC	Hydrofluorocarbon
HVAC	Heating, Ventilation and Air Conditioning
kg	Kilogram
kL	Kilolitre
kWh	Kilowatt-hour
L	Litre
ML	Mega litre
N ₂ O	Nitrous oxide
NGA	National Greenhouse Accounts
NO _x	Nitrogen oxides
PFC	Perfluorinated compound
p.km	Passenger kilometre
RFI	Radiative forcing index
t	Tonnes
t.km	Tonne kilometre
UK	United Kingdom
WBCSD	World Building Council for Sustainable Development
WRI	World Resources Institute
WTT	Well to tank

Executive Summary

This Organisational Greenhouse Gas Inventory report has been prepared to assist Umcos Newcombe, trading as Tradeware (hereafter named as Tradeware) understand its carbon footprint and set achievable targets to reduce its emissions.

This document describes the calculation boundaries, calculation methodologies, assumptions, measurement results, and key references used to prepare the Financial Year 2023-24 (FY24) greenhouse gas (GHG) inventory.

Scope 1, 2 and 3 GHG emissions in Tradeware's operations and value chain have been included.

Tradeware's total organisational GHG emissions have been estimated at 1,529.50 tonnes of carbon dioxide equivalent (t CO₂-e) for the period 1 July 2023 to 30 June 2024 (FY24).

The main GHG emitting activities were associated with fuel (transport), resource disposal (waste) and purchased goods and services. Figure 1.

An estimated 21.45% of GHG emissions resulted from scope 1 emissions. Fuel being the contributor for these emissions.

Approximately 5.71% of the emissions were related to scope 2 grid-supplied electricity use.

The remaining 72.85% of GHG emissions resulted from scope 3 activities associated predominantly with Tradeware's resource disposal (waste), purchased goods and services and capital goods.

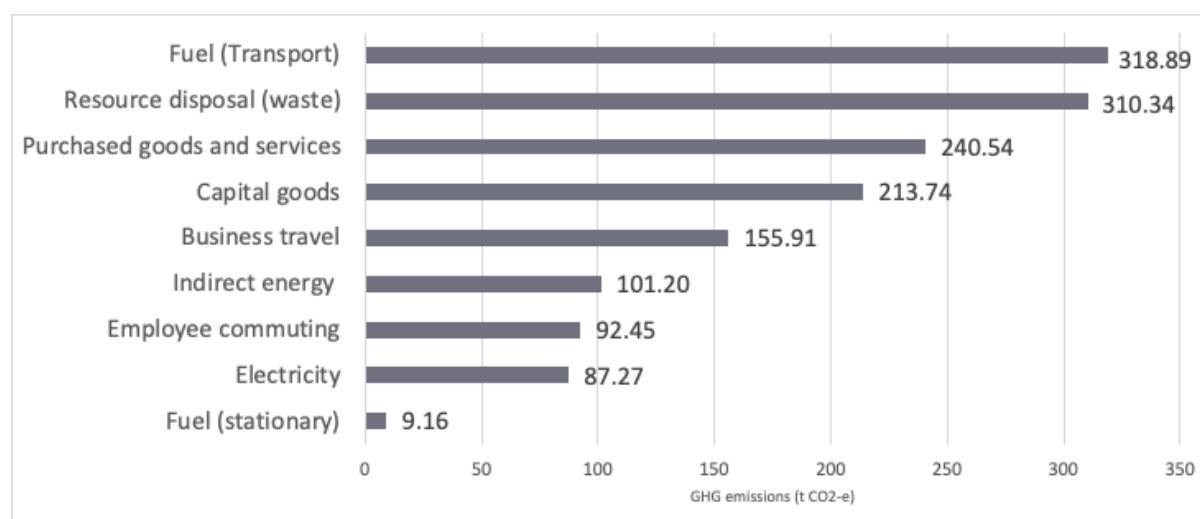


Figure 1. Summary of Tradeware's emissions FY24.

About Carbon Neutral

Carbon Neutral is an Australian owned carbon solutions consultancy and offsets provider. We have 20+ years of experience and we have worked with over a thousand partners and organisations to deliver tangible climate change solutions.

Carbon Neutral assists organisations across Australia to minimise their impact on our environment by measuring, reducing and offsetting greenhouse gas emissions. Carbon Neutral is a market leader, has built a strong reputation within the low carbon economy and was the developer of the first web-based vehicle emissions calculator in Australia.

Carbon Neutral's services include carbon consulting and reduction programs, carbon calculators, retailing of carbon offsets, developing biodiverse reforestation projects, energy and water auditing, and Environmental Management System development and implementation. To date, Carbon Neutral has planted 30+ million trees in rural Australia.

Carbon Neutral is a long-standing, award-winning organisation that works with partners and businesses of all sizes to enrich landscapes, reduce the effects of climate crisis and deliver practical carbon solutions.

We are an independently certified (Climate Active) carbon neutral organisation.



About Tradeware



Tradeware is a company that delivers quality products to the Australian market. We have a nation-wide network of distributions centres for efficient delivery to retailers. We have a field sales team which provides local representation in every state and territory. We

have a marketing team which supports new product launches as well as established products through a range of marketing activations and channels.

We are a pro-active company that recognises the need for business accountability and responsibility to future generations. We aim to measure our current carbon footprint and implement the most efficient targeted changes to become carbon neutral by 2030.

Tradeware is interested in knowing more about the options for offsetting GHG emission. We have been looking at potential solar projects but are open to all recommendations

Organisational Boundary

Tradeware's GHG emissions scope and organisational boundary have been determined in accordance with the GHG Protocol. The boundary follows the operational control model and includes aspects of Tradeware's supply chain that they have influence over. GHG emissions from the organisation have been included and reported on where activity data was captured and recorded.

Tradeware employed 97 staff across six locations in this FY24 carbon report.

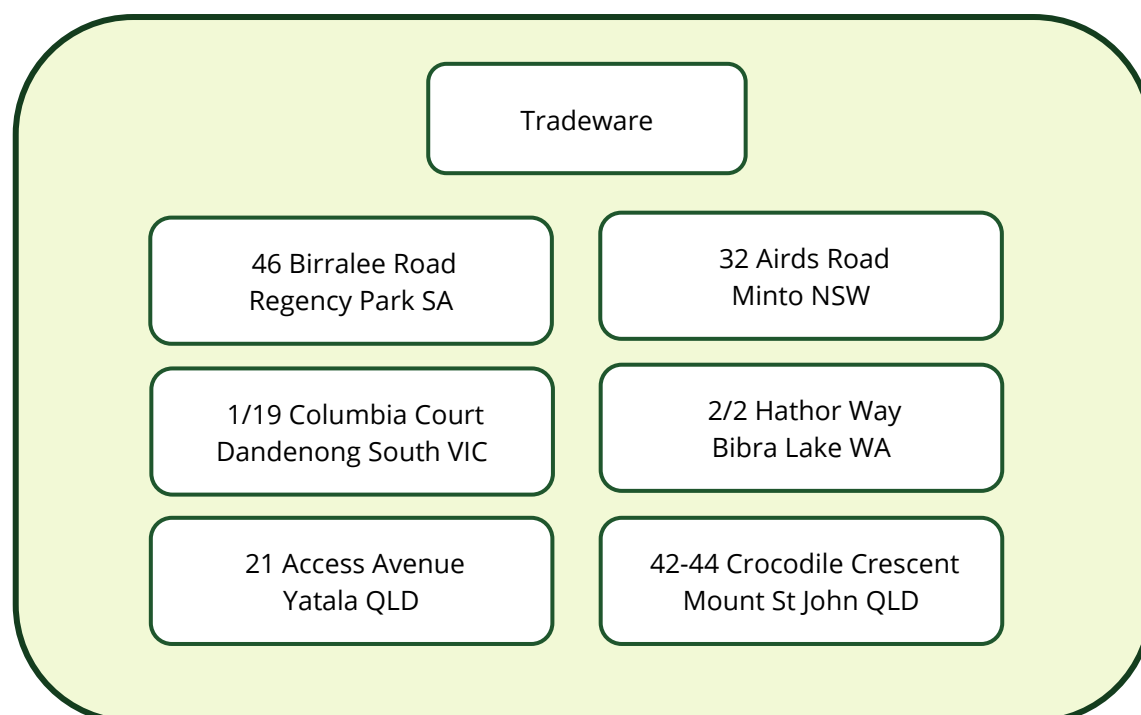


Figure 2. Organisational boundary of Tradeware's FY24 carbon footprint report.

Emissions Scope

The seven key greenhouse gas sources recognised by the United Nations' Intergovernmental Panel on Climate Change have been considered in this assessment, and include:

- + Carbon dioxide (CO₂),
- + Methane (CH₄),
- + Nitrous oxide (N₂O),
- + Hydrofluorocarbons (HFCs),
- + Perfluorocarbons (PFCs),
- + Sulphur hexafluoride (SF₆) and,
- + Nitrogen trifluoride (NF₃)

All these different sources are included and reported on as units of carbon dioxide equivalents (CO₂-e). This provides the ability to compare various greenhouse gasses as a single unit.

Classification Method

The GHG Protocol categorises GHG emissions into three 'scopes' (Figure 3).

Scope 1

Direct GHG emissions from operations owned or controlled by Tradeware (e.g., emissions from fuel consumed by fleet or natural gas).

Scope 2

Indirect emissions from the generation of purchased electricity or steam consumed by Tradeware (e.g., indirect emissions from electricity consumption from the grid for use at Tradeware' facilities).

Scope 3

Other indirect emissions (not included in Scope 2) that occur in the value chain. These emissions arise from activities such as purchasing goods and services and staff commuting.

Activities included in this GHG emissions inventory are shown in Figure 4.

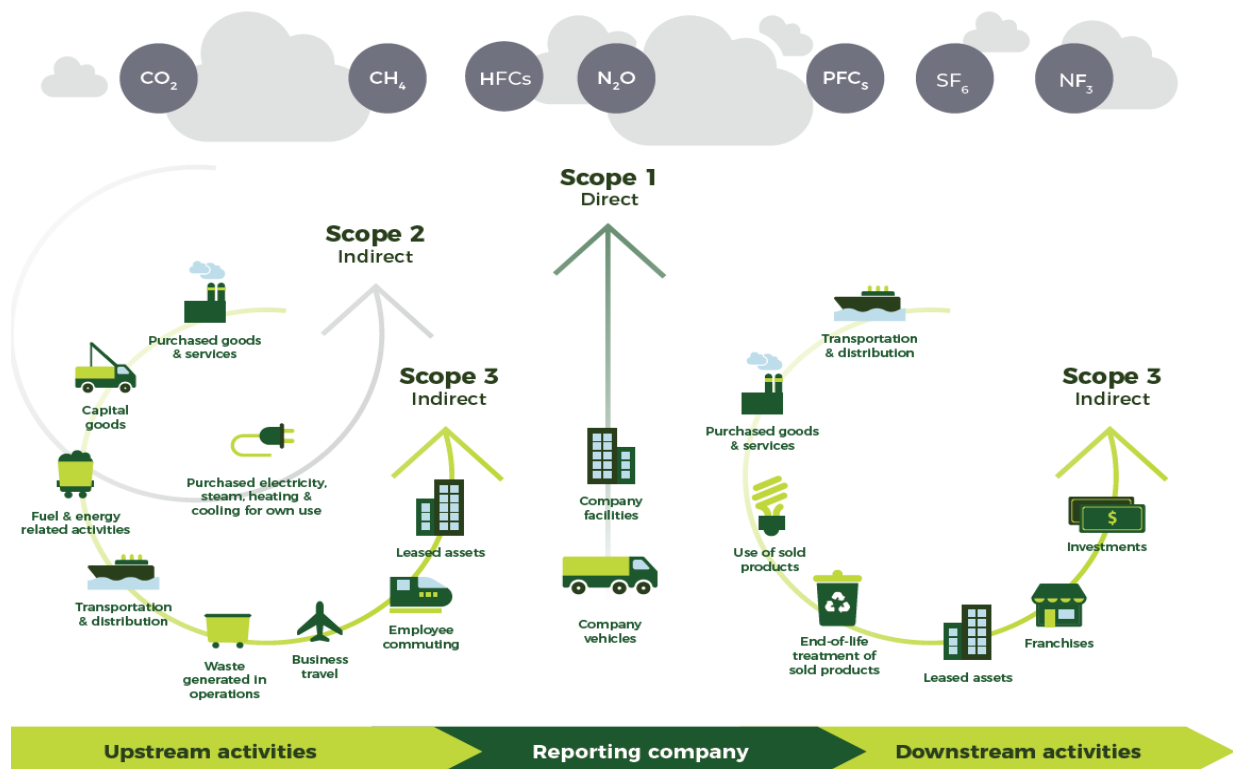


Figure 3. Scope 1-3 by source.

Emission Boundary

	Quantified	Non-quantified
Scope 1	Natural gas	
	Stationary fuel	
	Transport fuel	
	Refrigerants	
Scope 2	Electricity	
Scope 3	Purchased goods and services	Upstream transportation and distribution
	Capital goods	Upstream leased assets
	Indirect energy	Downstream transportation and distribution
	Resource disposal (waste)	Processing of sold products
	Business travel	Use of sold products
	Employee commuting	End-of-life treatment of sold products
		Downstream leased assets
		Franchises
		Investments

Figure 4. Tradeware's FY24 emission boundary.

Methodology, Data Sources & Assumptions

Except where otherwise stated, scope 1 and 2 emissions have been calculated using the methodology and emission factors presented by the Australian Government's Australian National Greenhouse Accounts (NGA) Factors.

Scope 3 emissions are often more complicated to quantify due to their varied and indirect nature. For scope 3 emissions, a variety of sources have been used, with methodologies following the guidance of the GHG Protocol Corporate Value Chain (Scope 3) Standard.

Calculation methodologies specific to each emission category are referenced in the corresponding category sections in this report.

Sources include the UK government's GHG Conversion Factors for Company Reporting, the University of Melbourne's Environmental Performance in Construction (EPiC) database, Australian Bureau of Statistics and Bureau of Meteorology.

Where the Economic Input-Output methodology was used, Carbon Neutral considered inflation and used the Reserve Bank of Australia's inflation calculator.

All energy and activity data provided by Tradeware is taken to be complete and accurate. Carbon Neutral did not independently verify the completeness or accuracy of this data.

Data Collection & Quality

Business activities outlined under the GHG Protocol Standard are reported against where relevant and where suitable activity data and emission factors are available.

Carbon Neutral endeavours to ensure that reliable and accurate data is used. All assumptions are outlined where appropriate.

The following process was followed:

1. Carbon Neutral provided Tradeware with a list of data required to gather information about potential GHG emission activity sources.
2. Tradeware provided Carbon Neutral with data relating to GHG emitting activities.
3. Carbon Neutral reviewed the supplied activity data.
4. Carbon Neutral sought clarification of activity data where necessary and provided advice and guidance to staff as required to ensure that the most complete, accurate and robust data sources were used where available.
5. Carbon Neutral applied suitable methodologies and emission factors to the supplied activity data to determine the organisational GHG emissions of Tradeware for the reporting period.
6. Carbon Neutral calculated the GHG emissions of Tradeware in accordance with the GHG Protocol Standard and AS ISO 14064.1 – 2006 Greenhouse gases Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals.
7. Carbon Neutral prepared this Organisational Greenhouse Gas Emissions Inventory (Carbon Footprint) Report for Tradeware for the reporting period 1 July 2023 to 30 June 2024 (FY24).

The veracity of the data provided by Tradeware is taken to be complete and accurate and has not been audited or independently verified.

A site visit of the locations was not conducted as part of this assessment.

Carbon Neutral acknowledges the assistance of Brand Specialist Cathy Smallridge for the provision of activity data and information relating to this report.

Total Emissions Summary

The total GHG emissions for Tradeware for this FY24 reporting period have been estimated at **1,529.50 t CO₂-e**.

A breakdown of GHG emissions by scope is presented below in Table 1 and Figure 5.

Table 1. Total GHG emissions FY24.

GHG emissions scope	Emissions (t CO ₂ -e)	Percentage
Scope 1 emissions	328.05 t CO ₂ -e	21.45 %
Scope 2 emissions	87.27 t CO ₂ -e	5.71 %
Scope 3 emissions	1,114.18 t CO ₂ -e	72.85 %
Total emissions FY24	1,529.50 t CO₂-e	100.00 %

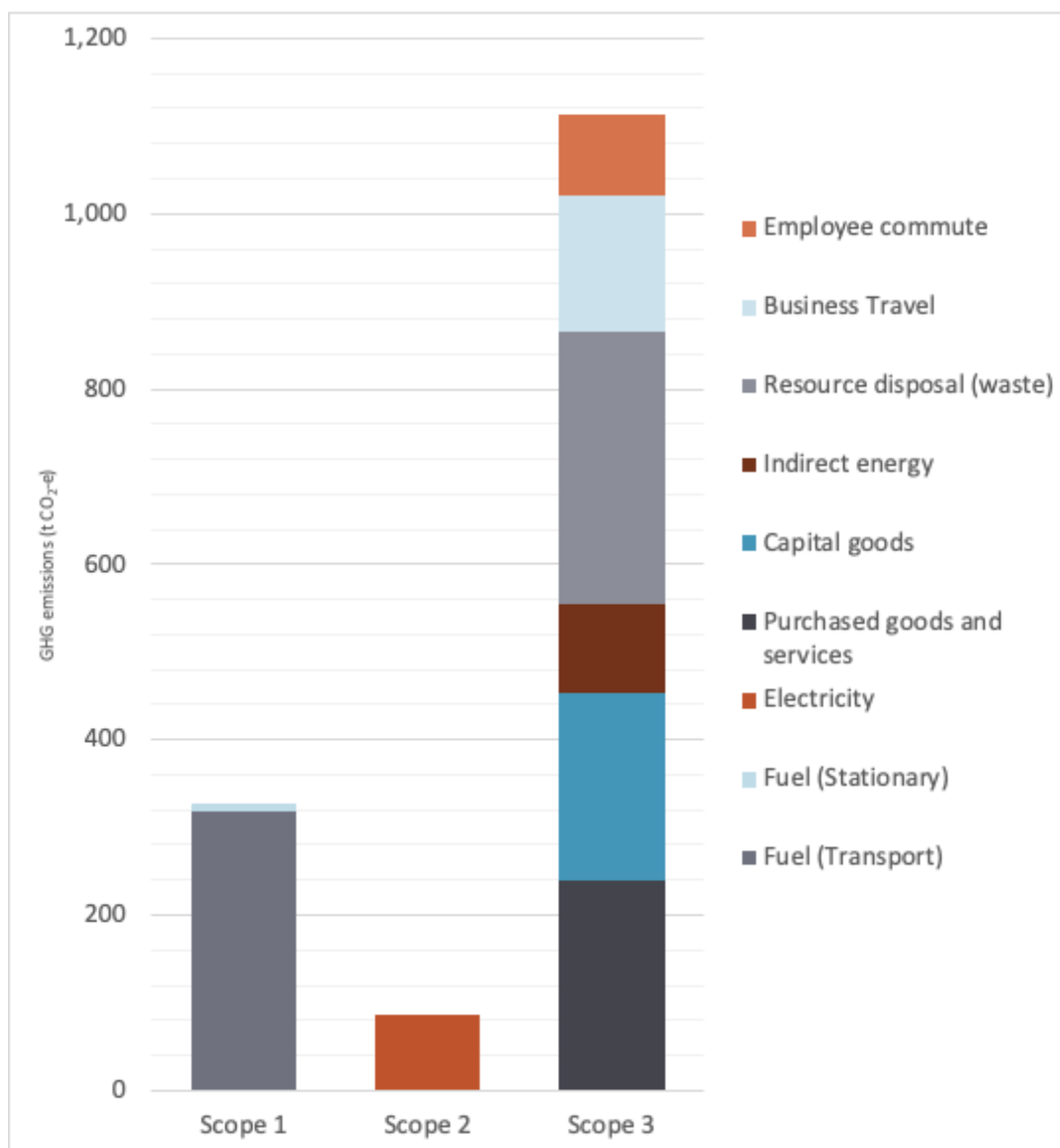


Figure 5. GHG emissions by scope for Tradeware.

Scope 1 Emissions

Scope 1 GHG emissions are released directly from sources that are controlled or operated by Tradeware.

Scope 1 emissions for Tradeware were estimated at **328.05 t CO₂-e**.

Table 2. Scope 1 emissions summary.

Scope 1 emissions		Input data	Emissions (t CO ₂ -e)	Percentage
Natural gas		0 MJ	0.00 t CO ₂ -e	0.00 %
Fuel, LPG, stationary	Regency Park, SA	475 kg	1.45 t CO ₂ -e	0.44 %
	Dandenong South, VIC	795 kg	2.43 t CO ₂ -e	0.74 %
	Minto, NSW	945 kg	2.40 t CO ₂ -e	0.73 %
	Yatala QLD	675 kg	2.88 t CO ₂ -e	0.88 %
Fuel, diesel, transport		19,276.21 litres	52.39 t CO ₂ -e	15.97 %
Fuel, ULP, transport		115,236.14 litres	266.50 t CO ₂ -e	81.24 %
Refrigerants		0 Kg	0.00 t CO ₂ -e	0.00 %
Total Emissions Scope 1			328.05 t CO₂-e	100.00%

Natural gas

Tradeware confirmed that their location was not connected to natural gas during the reporting period. Hence no emissions were attributed to the carbon inventory from this source.

Fuel (Transport)

Tradeware provided a fuel report showing purchases in litres and fuel type for the company vehicles for the reporting period.

The emission factors for fuel combustion are sourced from NGA 2023. Appendix 1.

Fuel (Stationary)

Tradeware provided invoices showing purchases in kilograms and type for the company's stationary equipment for the reporting period.

The conversion of LPG in kilograms to litres has been sourced from www.elgas.com.au. The emission factors for fuel combustion in stationary equipment are sourced from NGA 2023. Appendix 1.

Refrigerant leaks

Tradeware confirmed that the company do not control equipment requiring refrigerant replenishment. Hence no emissions were attributed to the carbon inventory from this source.

Scope 2 Emissions

Scope 2 emissions are indirect GHG emissions associated with electricity use.

The GHG indirect emissions from electricity use for Tradeware were estimated at **87.27 t CO₂-e** for FY24.

Table 3. Scope 2 emissions summary.

GHG emissions – Scope 2	Input data	Emissions (t CO ₂ -e)	Percentage
46 Birralelee Road, Regency Park SA	44,140.03 kWh	11.04 t CO ₂ -e	12.65 %
32 Airds Road, Minto NSW	11,070.43 kWh	7.53 t CO ₂ -e	8.63 %
Warehouse, 1/19 Columbia Court, Dandenong South VIC	21,302.04 kWh	16.83 t CO ₂ -e	19.28 %
19 Columbia Court, Dandenong South VIC	5,771.77 kWh	4.56 t CO ₂ -e	5.23 %
2/2 Hathor Way, Bibra Lake WA	29,334.93 kWh	15.55 t CO ₂ -e	17.82 %
21 Access Avenue, Yatala QLD	34,817.02 kWh	25.42 t CO ₂ -e	29.13 %
42-44 Crocodile Crescent, Mount St John QLD	8,687.27 kWh	6.34 t CO ₂ -e	7.26 %
Total emissions Scope 2	155,123.49 kWh	87.27 t CO₂-e	100.00 %

Electricity

Tradeware provided utility bills from their location, i.e., actual electricity usage.

The emission factors for electricity usage by state are sourced from NGA 2023. Appendix 2.

No heating or cooling was purchased in the reporting period.

No renewable electricity was purchased in the reporting period.

Scope 3 Emissions

The GHG protocol (GHG Protocol, Carbon Trust & WRI, 2013) identifies Scope 3 emissions as upstream and downstream emissions, based on the financial transactions of the reporting company.

- + **Upstream emissions** are indirect GHG emissions related to purchased or acquired goods and services.
- + **Downstream emissions** are indirect GHG emissions related to sold goods and services.
- + As seen in Figure 4 some of these up- and downstream emissions categories have been deemed non-quantifiable by Tradeware for FY24.

The GHG Protocol Scope 3 Standard further divides scope 3 emissions into fifteen distinct categories. Scope 3 emissions inventory calculations are presented according to these categories. Where it enhances relevance and transparency – or where particular emissions sources are deemed critical by Tradeware – Carbon Neutral further disaggregated this data.

The indirect emissions of scope 3 categories, where data was supplied, were estimated at **1,114.18 t CO₂-e** for FY24.

The most significant contribution to scope 3 emissions in Tradeware's value chain came from resource disposal (waste), purchased goods and services and capital goods.

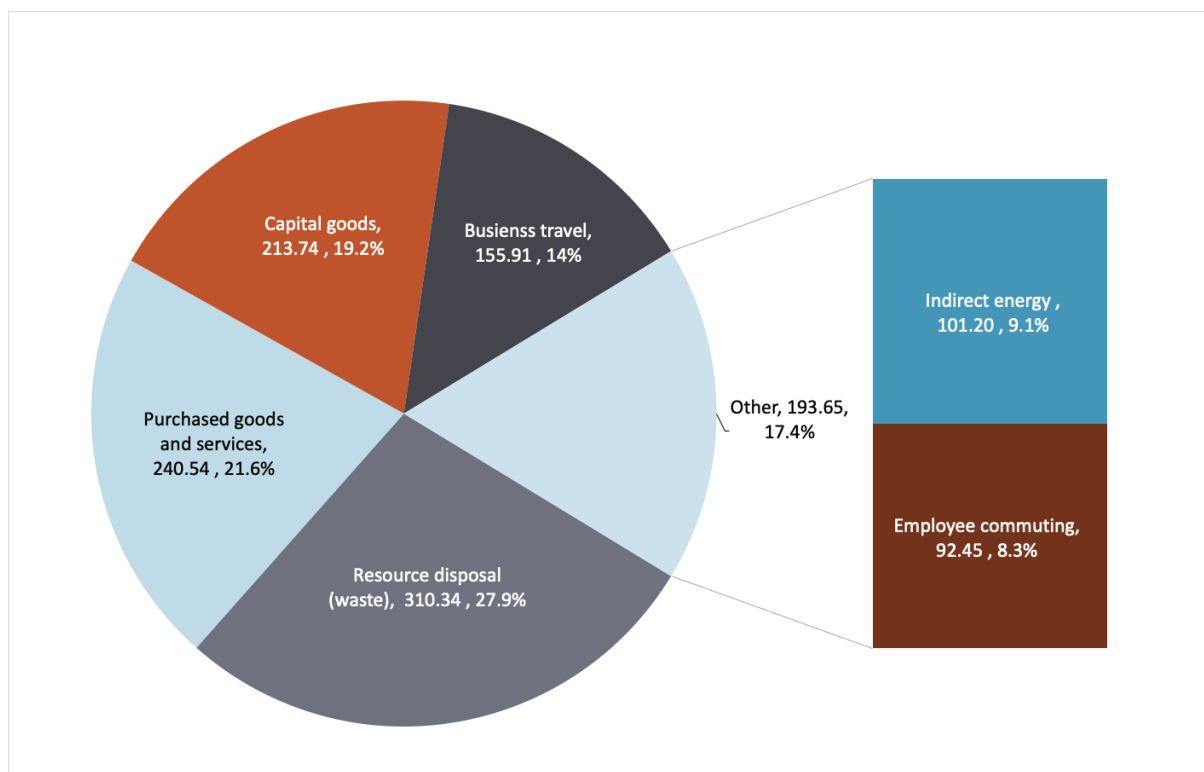


Figure 6. Tradeware scope 3 categories emissions (t CO₂-e).

Scope 3 Emissions Summary

Table 4. Scope 3 emissions.

Scope 3 GHG emissions category		Emissions (t CO ₂ -e)	Percentage
1	Purchased goods and services	240.54 t CO ₂ -e	21.59 %
2	Capital goods	213.74 t CO ₂ -e	19.18 %
3	Indirect energy	101.20 t CO ₂ -e	9.08 %
4	Resource disposal (waste) generated in operations	310.34 t CO ₂ -e	27.85 %
5	Business travel	155.91 t CO ₂ -e	13.99 %
6	Employee commuting	92.45 t CO ₂ -e	8.30 %
Total scope 3 emissions		1,114.18 t CO ₂ -e	100.00 %

Scope 3 Standard Emissions Categories

Category 1: Purchased goods and services

Category description

Upstream (i.e., cradle-to-gate) GHG emissions from the production of products purchased or acquired by Tradeware in FY24. This includes both goods (tangible products) and services (intangible products)

Product / service	Input data	Emissions (t CO ₂ -e)	Percentage
Office paper	South Australia	141 reams	1.48 %
	Victoria	105 reams	
	New South Wales	141 reams	
	Western Australia	105 reams	
	Queensland, SEQ	105 reams	
	Queensland, FNQ	25 reams	
Water supply / sewage	South Australia	664 kL / 598 kL	1.00 %
	Victoria	4 kL / 3 kL	
	Warehouse, Victoria	45 kL / 40 kL	
	Western Australia	951 kL / 124 kL	
Board meetings	\$ 3,600	1.29 t CO ₂ -e	0.54 %
SA groceries	\$ 5,200	1.86 t CO ₂ -e	0.77 %
SA events	\$ 3,600	1.29 t CO ₂ -e	0.54 %
NSW groceries	\$ 2,600	0.93 t CO ₂ -e	0.39 %
Other states groceries	\$ 4,160	1.49 t CO ₂ -e	0.62 %
Christmas nationally	\$ 10,000	3.58 t CO ₂ -e	1.49 %
Gifts and flowers	\$ 4,500	1.61 t CO ₂ -e	0.67 %
Cleaning (excludes rubbish removal)	\$ 41,441.81	7.93 t CO ₂ -e	3.30 %
IT services	\$ 257,080	53.47 t CO ₂ -e	22.23 %
IT freight	\$ 5,612	2.61 t CO ₂ -e	1.09 %
IT software	\$ 224,702	29.91 t CO ₂ -e	12.43 %
Insurance	\$ 175,139	24.77 t CO ₂ -e	10.30 %
Printing and stationery	\$ 7,240	3.01 t CO ₂ -e	1.25 %
Store supplies	\$ 131,124	54.55 t CO ₂ -e	22.68 %
Telephones and internet	\$ 185,421	46.28 t CO ₂ -e	19.24 %
Total category 1		240.54 t CO₂-e	100.00 %

Office paper

Tradeware provided actual number of reams purchased for the locations in South Australia, Victoria and Queensland (FNQ) and assumed New South Wales to be equivalent to South Australia and Western Australia and Queensland (SEQ) to be equivalent to Victoria.

Water

Tradeware provided water bills from four of the six locations. Where sewage volumes were not disclosed through the billing information, Carbon Neutral has set the sewage volume to 90% of water supply based on common practice by water corporations.

Emission factors associated with the use of water and disposal of same to sewage are obtained from the Australian Bureau of Meteorology Department and the most recent National Performance Report 2021/22: Urban Water Utilities Dataset. Appendix 3.

Other products and services

The 'spend-based' method was used to calculate these emissions, with industry-average emission factors applied, based on the economic value of the goods and services.

Spend data was broken down as per Tradeware's internal data recording process. Carbon Neutral has summarised this data on the most likely emission categories.

The corresponding emission factors from the EPiC database (Crawford, 2020) were then applied to calculate overall emissions estimates. Appendix 3.

Category 2: Capital goods

Category description

Upstream (i.e., cradle-to-gate) GHG emissions from the production of capital goods purchased or acquired by Tradeware during the reporting period.

	Input data	Emissions (t CO ₂ -e)	Percentage
Building works	\$ 84,381.31	18.96 t CO ₂ -e	8.87 %
Motor vehicles	\$ 247,950.17	88.71 t CO ₂ -e	41.50 %
Forklifts and pallet related equipment	\$ 131,286.72	46.97 t CO ₂ -e	21.97 %
Furniture	\$ 102,094.92	40.77 t CO ₂ -e	19.08 %
IT and other electronic equipment	\$ 91,843.25	18.34 t CO ₂ -e	8.58 %
Total category 2		213.74 t CO₂-e	100.00 %

Capital goods

The 'spend-based' method was used to calculate these emissions, with industry-average emission factors applied, based on the economic value of the goods and services.

Spend data was broken down as per Tradeware's internal data recording process. Carbon Neutral has summarised this data on the most likely emission categories.

The corresponding emission factors from the EPiC database (Crawford, 2020) were then applied to calculate overall emissions estimates. Appendix 3.

Category 3: Indirect energy

Category description

Indirect GHG emissions from extraction, production, and transportation of fuels consumed in the generation of electricity, steam, heating, and cooling. It also includes indirect emissions from the transmission and/or distribution of those resources.

Input data		Emissions (t CO ₂ -e)	Percentage
Fuel			
Fuel, LPG, stationary	Regency Park, SA	475 kg	1.13 t CO ₂ -e
	Dandenong South, VIC	795 kg	1.89 t CO ₂ -e
	Minto, NSW	945 kg	2.25 t CO ₂ -e
	Yatala QLD	675 kg	1.61 t CO ₂ -e
Fuel, diesel, transport		19,276.21 litres	12.87 t CO ₂ -e
Fuel, petrol, transport		115,236.14 litres	67.79 t CO ₂ -e
Fuel subtotal		87.54 t CO₂-e	86.50 %
Electricity - tenancy			
46 Birralee Road, Regency Park SA		44,140.03 kWh	3.53 t CO ₂ -e
32 Airds Road, Minto NSW		11,070.43 kWh	0.55 t CO ₂ -e
Warehouse, 1/19 Columbia Court, Dandenong South VIC		21,302.04 kWh	1.49 t CO ₂ -e
19 Columbia Court, Dandenong South VIC		5,771.77 kWh	0.40 t CO ₂ -e
2/2 Hathor Way, Bibra Lake WA		29,334.93 kWh	1.17 t CO ₂ -e
21 Access Avenue, Yatala QLD		34,817.02 kWh	5.22 t CO ₂ -e
42-44 Crocodile Crescent, Mount St John QLD		8,687.27 kWh	1.30 t CO ₂ -e
Electricity - tenancy subtotal		13.66 t CO₂-e	13.50 %
Total category 3		101.20 t CO₂-e	100.00 %

Indirect energy

All purchased energy (scope 1 and 2) for Tradeware' locations were included in this category's emission calculation.

This category accounts for the energy required in the manufacturing and transportation of the energy demanded by Tradeware.

The emission factors for indirect energy are sourced from NGA 2023. Appendix 3.

Category 4: Resource disposal (waste) generated in operations

Category description GHG emissions associated with waste treatment in facilities owned or operated by third parties.

Location	Resource type	Input data	Emissions (t CO ₂ -e)	Percentage
46 Birralelee Road, Regency Park SA	Landfill	84 m ³	48.38	15.59 %
	Recycling	45 m ³	0.00	0.00 %
32 Airds Road, Minto NSW	Landfill	117 m ³	67.39	21.71 %
	Paper and cardboard	153 m ³	0.00	0.00 %
	Plastic	11 m ³	0.00	0.00 %
1/19 Columbia Court, Dandenong South VIC	Landfill	81 m ³	46.66	15.04 %
	Recycling	87 m ³	0.00	0.00 %
2/2 Hathor Way, Bibra Lake WA	Landfill	64,800 litres	37.32	12.03 %
	Recycling	81 m ³	0.00	0.00 %
21 Access Avenue, Yatala QLD	Landfill	153 m ³	88.13	28.40 %
	Paper and cardboard	156 m ³	0.00	0.00 %
42-44 Crocodile Crescent, Mount St John QLD	Landfill	39 m ³	22.46	7.24 %
Total category 4			310.34 t CO₂-e	100.00 %

Landfill

This category includes emissions that resulted from the FY24 general waste generated by Tradeware.

The NGA 2023 conversion factors to weight and emissions factors for materials sent to landfill have been applied. Appendix 3.

Recycling

Consistent with the NGER Technical Guidelines, resources sent to recycling is excluded from the total carbon footprint, as these resources has potential to be utilised as input for new products outside the control of Tradeware.

Plant based materials (e.g. paper/cardboard/ food/textiles) release the largest volume of emissions when decomposing at landfill. It is therefore highly encouraged to avoid these materials being sent to landfill all together and as they all hold value in the circular economy, it is additionally important for these to be sent for recycling.

The 309m³ of paper and cardboard sent to recycling has avoided 91.77 t CO₂-e being emitted from landfill.

Category 5: Business travel

Category description

GHG emissions from the transportation of staff for business-related activities in vehicles owned or operated by third parties, such as aircraft, public transport, staff travel in own cars for business purposes, taxi, ride share and car hire.

		Input data	Emissions (t CO ₂ -e)	Percentage
Air Travel	NSW Sales	\$ 2,800	1.86 t CO ₂ -e	60.45 %
	SEQ Sales	\$ 4,400	2.93 t CO ₂ -e	
	FNQ Sales	\$ 1,500	1.00 t CO ₂ -e	
	VIC Sales	\$ 2,000	1.33 t CO ₂ -e	
	WA Sales	\$ 4,050	2.70 t CO ₂ -e	
	SA Sales	\$ 4,200	2.80 t CO ₂ -e	
	NSC Sales	\$ 19,215	12.79 t CO ₂ -e	
	NSC	\$ 60,900	40.54 t CO ₂ -e	
	NSC Supply	\$ 42,500	28.29 t CO ₂ -e	
Accommodation, domestic	NSW Sales	\$ 46,090	5.29 t CO ₂ -e	17.95 %
	SEQ Sales	\$ 25,470	3.67 t CO ₂ -e	
	FNQ Sales	\$ 12,480	1.80 t CO ₂ -e	
	VIC Sales	\$ 28,050	4.02 t CO ₂ -e	
	WA Sales	\$ 13,010	2.94 t CO ₂ -e	
	SA Sales	\$ 11,760	1.86 t CO ₂ -e	
	NSC Sales	\$ 18,505	2.30 t CO ₂ -e	
	NSC	\$ 26,400	3.28 t CO ₂ -e	
	NSC Supply	\$ 22,800	2.83 t CO ₂ -e	
Accommodation, international	NSC	\$ 19,600	2.86 t CO ₂ -e	2.62 %
	NSC Supply	\$ 8,400	1.22 t CO ₂ -e	
Meals while travelling	NSW Sales	\$ 15,600	5.58 t CO ₂ -e	18.99 %
	SEQ Sales	\$ 9,600	3.43 t CO ₂ -e	
	FNQ Sales	\$ 4,680	1.67 t CO ₂ -e	
	VIC Sales	\$ 9,840	3.52 t CO ₂ -e	
	WA Sales	\$ 4,880	1.75 t CO ₂ -e	
	SA Sales	\$ 8,640	3.09 t CO ₂ -e	
	NSC Sales	\$ 5,730	2.05 t CO ₂ -e	
	NSC	\$ 16,710	5.98 t CO ₂ -e	

NSC Supply	\$ 7,080	2.53 t CO ₂ -e	
Total category 5		155.91 t CO₂-e	100.00 %

Air Travel

Tradeware provided data on estimated expenses made on flights by sales group.

The 'spend-based' method was used to calculate emissions associated with flying, with industry-average emission factors applied, and based on the economic value of the flights.

The corresponding emission factor from the EPiC database (Crawford, 2020) was then applied to calculate overall emissions estimates. Appendix 3. Carbon Neutral assumes the output is representative for the reporting period.

Meals while travelling

Tradeware provided data on estimated expenses made on meals while travelling by sales group

The 'spend-based' method was used to calculate these emissions, with industry-average emission factors applied, based on the economic value of the meals had during business travel.

The corresponding emission factor from the EPiC database (Crawford, 2020) was then applied to calculate overall emissions estimates. Appendix 3.

Accommodation

Tradeware provided data on estimated expenses made on business accommodation by sales group as well as assumed cost for one night in accommodation by state.

From this data Carbon Neutral derived the number of nights in accommodation and assumed that all international accommodation took place in China.

The emission factor for accommodation is sourced from CHSB 2023. Appendix 3.

Category 6: Employee commuting and working from home

Category description GHG emissions from the transportation of employees between their homes and the worksite(s) and electricity usage while working from home (WFH).

	Input data	Emissions (t CO ₂ -e)	Percentage
Employee commuting			
Walk	995 km	0.00 t CO ₂ -e	
Car, small, petrol	85,848 km	15.78 t CO ₂ -e	
Car, medium, petrol	125,859 km	28.55 t CO ₂ -e	
Car, medium, diesel	8,412 km	1.76 t CO ₂ -e	
Car, medium, hybrid	1,650 km	0.24 t CO ₂ -e	
Car, large, petrol	63,360 km	21.80 t CO ₂ -e	
Car, large, diesel	75,702 km	19.53 t CO ₂ -e	
Employee commuting - subtotal		87.66 t CO₂-e	94.82 %
Employee working from home			
Staff, WFH	1,989 days	4.79 t CO ₂ -e	
Employee working from home - subtotal		4.79 t CO₂-e	5.18 %
Total category 6		92.45 t CO₂-e	100.00 %

Employee commuting and working from home

Carbon Neutral developed a survey for Tradeware staff to capture emissions associated with employee commute to and from work. Only staff not using a company vehicle responded to the survey which captured 32 valid answers from a total of 48 staff not using a company vehicle to get to work. Hence the responses were extrapolated against 48 staff and assumed representative for the reporting period.

Emission factors for commuting using public transport and vehicle sizes are sourced and assigned based on the DBEIS guidance. Gov, UK 2023. Appendix 3.

The staff survey captured the number of working days from home (WFH) across the reporting year from the 32 responses. These responses were extrapolated against the 48 staff.

From a list of electrical appliances commonly used in an office environment and their associated average energy consumption per day, Carbon Neutral has derived WFH consumes 3.30kWh during an assumed eight-hour workday per FTE. Appendix 3. Emission factors listed in Appendix 2 and 3 are applied for electricity usage while working from home.

Emissions Intensity

Emissions intensity expresses GHG impact per unit of physical activity or unit of economic output. These metrics allow for more meaningful comparison of emissions between years, operations and organisations.

The carbon intensity of an organisation's footprint can be calculated by dividing emissions by a relevant measure of activity to the organisation.

Table 5 displays the FY24 emissions intensity by Tradeware's 86.2 full-time equivalent number of employees, as

provided by Tradeware, plus 4092 hours worked by casual staff, assuming an FTE works 230 days across the year and 8 hours each of those days the casual number of FTE adds to 2.2FTE, ie a total of 88.4FTE during the FY24 reporting period.

Tradeware may also choose to calculate the emissions intensity by for example floor area under operation and or gross revenue or other indicators already used in Tradeware financial reporting.

Table 5. FY24 emissions intensity.

Reporting Period	Intensity	Input data	GHG Emissions (t CO ₂ -e)	GHG Emissions Intensity (t CO ₂ -e/Unit)
FY24	FTE	88.4	1,529.50	17.30
	Gross floor area	Not provided		
	Gross revenue	Not provided		

Actions to-date

The business created a Sustainability Working Group in 2019. Through this group, some preliminary actions have been taken.

The business supported the purchase and installed solar panels by the landlord for the warehouse in NSW and is looking at options for one of the other sites.

The business has also contracted a waste specialist to assess each warehouse site and implement a separation of landfill waste and recyclable materials at each location.

A compost machine has been installed at the NSW site. The business is also part of the APCO initiative and is actively pursuing plastic packaging reduction of its own and its supplied products.

Carbon Neutrality

In order to claim organisational "carbon neutrality", Tradeware should seek opportunities to reduce its avoidable GHG emissions as much as possible and offset the remaining emissions.

It has been estimated that Tradeware's gross organisational carbon footprint for FY24 was **1,529.50 t CO₂-e**.

Tradeware needed to purchase and retire **1,530** tonnes of carbon offsets to cancel all unavoidable GHG emissions. This would result in Tradeware's net GHG emissions equalling zero, against the emission categories and emission sources included in the FY24 carbon report.

Tradeware has achieved organisational carbon neutrality by retiring 1,530 tonnes of carbon offsets, effectively cancelling its GHG emissions for the year. Details of carbon offset retirements are shown in the following table.

Table 6: Carbon offset summary

Details	Serial Numbers	t CO ₂
FY24 Gross Emissions		1,529.50
Offset credits		
VCS VCU Composting of organic waste project, Guangxi, China Vintage 2022	16513-764220326-764221655-VCS-VCU-997-VER-CN-13-2603-01012022-31122022-0.	1,330
ACCU Plantation Preservation – Sunnyside Permanent Planting Project	9,012,178,784 - 9,012,178,983	200
Total Offsets		1,530
FY23 Net Emissions		- 0.50 (ZERO)

Data recommendations for future reporting

Priority	Emission category	Data requirements
1	Natural gas	Capture data, if any, to achieve reasonable assurance by FY27 under upcoming climate-reporting guidelines.
	Fuel (Stationary)	Capture data to achieve reasonable assurance by FY27 under upcoming climate-reporting guidelines. Carbon Neutral accepts the type of input data for the FY24 carbon report.
	Fuel (Transport)	Capture data to achieve reasonable assurance by FY27 under upcoming climate-reporting guidelines. Carbon Neutral accepts the type of input data for the FY24 carbon report.
	Refrigerants	Capture data to achieve reasonable assurance by FY27 under upcoming climate-reporting guidelines. The data is sourced from invoices relating to equipment maintenances.
	Electricity	Capture data to achieve reasonable assurance by FY27 under upcoming climate-reporting guidelines. Carbon Neutral accepts the type of input data for the FY24 carbon report.
	Indirect energy	This scope 3 category is dependent on data capture for scope 1 and scope 2 emission sources. This category will achieve the same assurance as for those.
2	Purchased goods and services	Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines. Carbon Neutral accepts the type of input data for the FY24 carbon report. Tradeware to check if there are additional operational expenditures that was not reported in the FY24 carbon report.
	Capital goods	Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines. Carbon Neutral recommends Tradeware standardise the input data by Tradeware's

		chosen capital goods groupings for future carbon reports.
	Resource disposal (waste)	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines.</p> <p>Carbon Neutral accepts the type of input data for the FY24 carbon report.</p>
	Business Travel	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines.</p> <p>For each flight Carbon Neutral recommends to capture:</p> <ul style="list-style-type: none"> • From and to destinations (names of cities) • Single or return flight • Cabin class • Number of Tradeware people flying <p>For each stay in accommodation Carbon Neutral recommends to capture:</p> <ul style="list-style-type: none"> • Number of nights in business accommodation • Accommodation star rating (if possible) • Country where the accommodation takes place • Number of Tradeware people in accommodation
	Employee commuting	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines.</p> <p>Carbon Neutral recommends to conduct an employee survey every two years.</p>
3	Upstream transportation and distribution	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines.</p> <p>For each delivery Carbon Neutral recommends to capture:</p> <ul style="list-style-type: none"> • Dispatch – postcode if in Australia or (air)port if international • Destination – postcode in Australia or (air)port if international • Kilometres travelled between from and to • Weight in kilograms of product transported between from and to. <p>Please ensure the unit is listed in the</p>

		<p>column name and not on each weight in the cells for that column</p> <ul style="list-style-type: none"> • Transport mode • Carrier
	Downstream transportation and distribution	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines.</p> <p>For each delivery Carbon Neutral recommends to capture:</p> <ul style="list-style-type: none"> • Dispatch – postcode if in Australia or (air)port if international • Destination – postcode if in Australia or (air)port if international • Kilometres travelled between from and to • Weight in kilograms of product transported between from and to. Please ensure the unit is listed in the column name and not on each weight in the cells for that column • Transport mode • Carrier
4	Upstream leased assets	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines.</p> <p>To be discussed.</p>
	Downstream leased assets	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines.</p> <p>To be discussed.</p>
5	Processing of sold products	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines.</p> <p>To be discussed.</p>
	Use of sold products	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines.</p> <p>To be discussed.</p>
	End-of-life treatment of sold products	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines.</p> <p>To be discussed.</p>
	Franchises	<p>Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting</p>

	guidelines. To be discussed.
Investments	Capture data to achieve reasonable assurance by FY30 under upcoming climate-reporting guidelines. To be discussed.

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Appendices

Appendix 1

Scope 1 – Fuel consumption emission factors

Table 6. NGA fuel emission factors.

Fuel type	EC (GJ/kL)	Kg CO ₂ -e/kL
LPG (Stationary equipment)	25.7	60.60
Diesel (Transport)	38.6	70.41
Petrol (Transport)	34.2	67.62

Australian Government, Department of the Environment and Energy, August 2023

Appendix 2

Scope 2 – State-based electricity emission factors

Table 7. NGA State-average emission factors.

State or Territory	EF (kg CO ₂ -e /kWh)
South Australia	0.25
New South Wales	0.68
Victoria	0.79
Western Australia (South West)	0.53
Queensland	0.73

Australian Government, Department of the Environment and Energy, August 2023

Appendix 3

Scope 3 – Category 1 Purchased goods and services emission factors

Table 8. NGA emission factors for electricity use.

State or Territory	EF (kg CO ₂ -e/kg)
Paper Australia	2.29

Climate Active, Paper Australia Pty Ltd, November 2023

Table 9. BoM emission factors for water consumption as a service.

Urban water utility location	Supply EF (kg CO ₂ -e/kl)	Sewage EF (kg CO ₂ -e/kl)
South East Water (VIC)	0.036	0.220
SA Water	0.501	0.532
Water Corporation (WA)	1.736	0.690

BoM, 2022

Table 10. EPiC emission factors for goods (incl. capital goods) and services.

EPiC Sector	EPiC Industry	EPiC EF (Kg CO ₂ -e/A\$)
41	Motor Vehicles and Parts; Other Transport Equipment Manufacturing	0.43
58	Professional, Scientific, Computer and Electronic Equipment Manufacturing	0.24
62	Furniture Manufacturing	0.48
63	Other Manufactured Products	0.50
76	Food and Beverage Services	0.43
80	Air Transport	0.80
81	Postal and Courier Pick-up and Delivery Service	0.56
86	Internet Service Providers, Internet Publishing, Web Search Portals & Data Processing	0.25
87	Telecommunication Services	0.30
91	Auxiliary Finance and Insurance Services	0.17
96	Computer Systems Design and Related Services	0.16
98	Building Cleaning, Pest Control and Other Support Services	0.23
111	Other Repair and Maintenance	0.27

(Crawford, 2020)

Scope 3 – Category 2 Indirect energy use emission factors

Table 11. NGA emission factors for scope 3 fuel consumption.

Fuel	EC (GJ/kL)	Kg CO ₂ -e/GJ
LPG (Stationary equipment)	25.7	20.2
Diesel	38.6	17.3
Petrol	34.2	17.2

Australian Government, Department of the Environment and Energy, August 2023

Table 12. NGA emission factors for electricity use.

State or Territory	EF (kg CO ₂ -/kWh)
South Australia	0.08
New South Wales	0.05
Victoria	0.07
Western Australia (South West)	0.04
Queensland	0.15

Australian Government, Department of the Environment and Energy, August 2023

Scope 3 – Category 4 Resource disposal (waste) emission factors

Table 13. Emission factors for resource disposal.

Resource Type	EF (Kg CO ₂ -e/kg)
Landfill	1.6
Paper / cardboard	3.3

Australian Government, Department of the Environment and Energy, August 2023

Scope 3 – Category 5 Business Travel emission factors

Table 14. CHSB emission factors for accommodation.

Country	EF (kg CO ₂ -e/night)
Australia	34.12
China	58.31

CHSB, 2024

Scope 3 – Category 6 Employee commute and WFH emission factors

Table 15. DBEIS emission factors for commuting.

Mode of transport	EF with RFI (kg CO ₂ -e/p.km / km)
Small car, petrol	0.18385
Medium car, petrol	0.22683
Medium car, diesel	0.2091
Medium car, hybrid	0.14488
Large car, petrol	0.34413
Large car, diesel	0.25799

GOV, UK, 2024

Table 16. Deriving kWh usage for staff working from home.

Activities	Items	Watts	Hours	Usage across year	kWh
Laptop	1	45	7	1.00	0.32
Phone charge	1	5	2	1.00	0.01
Cooling/heating	1	1500	4	0.30	2.70
Lights	3	15	6	1.00	0.27
Total					3.30

The table above, derived by Carbon Neutral, lists the standard type of appliances used in an office environment on a daily basis over an eight-hour working day. It is assumed a laptop is not in use during all hours of a working day. As cooling and heating is not a daily requirement throughout the year these influence the total kWh per day with a factor of 30%.