monash
graduate
association

Room 157, First Floor, Campus Centre,
21 Chancellors Walk, Monash University,
Clayton Victoria 3800
ABN 86 800 958 958

ACTING
TODAY

FOR
TOMORROW

Carbon Account Report
Climate Active Small Organisation Carbon Neutral Certification

Private and Confidential

Carbon Accountant: Danielle King
Period: Calendar Year 2021
Report Date: 5 July 2022
Version: **v1.0**

GreenMoves
AUSTRALIA

Contents

Abbreviations used in this report

CO_2-e	Carbon Dioxide Equivalent	tCO2e	Tonnes CO2-e
EF	Emission Factor	kWh	Kilowatt hour
FY	Financial Year	l	Liter
GHG	Greenhouse Gas	ML	Mega litre
GJ	Giga Joule	CA	Climate Active
kg	Kilogram	pkm	Passenger kilometer
kL	Kilo litre	t	Tonnes

Acknowledgements

We would like to acknowledge the valuable assistance of Jessica Fimmel for supporting with the data gathering for this carbon account.

For further information:

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Carbon Auditor – Registered Consultant Details	
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Name of Company	Green Moves Aust. Pty Ltd
ABN	52 103 180 132
Period of carbon assessment	Calendar Year 2021
Phone number	03 9024 5515 or mobile 0404 453447
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Company Details	
Name of company	Monash Graduate Association Inc
ABN	86 800 958 958
Address of head office	Room 157, First Floor, Campus Centre, 21 Chancellors Walk, Monash University, Clayton Victoria 3800
Contact person	Jessica Fimmel
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1. Executive Summary

Green Moves has been engaged to calculate Monash Graduate Association Inc organisation carbon emissions (carbon inventory) for the period 1/1/2021 to 31/12/2021 and to assist in achieving Climate Active Carbon Neutral Certification for the organisation for Calendar Year 2021.

The organisation fits into the Climate Active Small Organisation category and the carbon account is in line with Climate Active Carbon Neutral Standard for Organisations. Emissions have been calculated using the Small Organisation fixed emissions boundary and includes a compulsory uplift factor of 5% to cover miscellaneous emissions not accounted for in the fixed boundary.

### Summary Certification Information

Organisation Name	Monash Graduate Association Inc	
Certification Type	Climate Active Small Organisation	
Base Year	Calendar Year 2021	
Reporting Year	CY21 – Arrears strategy	
Actual Emissions this Reporting Year	186 Tonnes CO2-e	
Offsets Purchased this Reporting Year	186 Tonnes CO2-e	
Total Net Emissions	**0**	**Tonnes CO2-e**

Quick Win Opportunities

The most significant and easy to remove emissions are usually electricity, however in this case as MGA do not have control over the energy purchasing. Options include advocating for 100% green power, purchasing Large-scale Generation Certificates (LGC's) or installing onsite renewable energy. Food and professional services (specifically advertising and promotional activities) provide additional areas for focus to reduce future emissions.

Emissions by Scope

Approximately 67.4% of the organisation's emissions are from Scope 3 (indirect emissions) which is primarily food and professional services. Electricity is the single and most significant contributor to Scope 2 emissions and forms 32.6% of the carbon inventory. Scope 1 emissions is primarily refrigerants and fuel for direct business transport (direct business travel and hire car fuel), as there was no traveling during the period due to COVID, and no refrigerant emissions, scope 1 emissions are nil at this time.
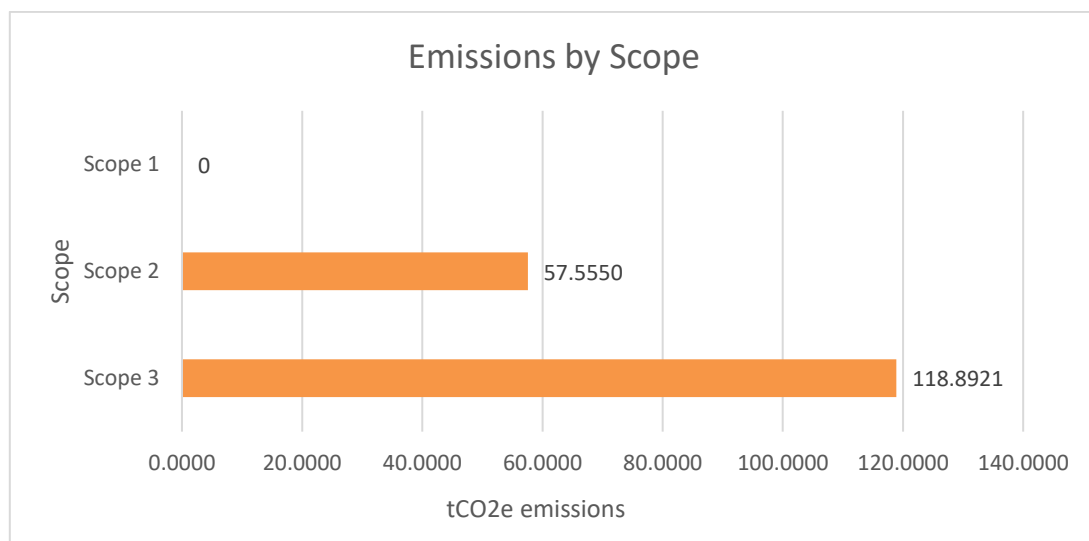
Emissions by Source

The key greenhouse gas (GHG) emitting activities have been identified as Electricity with the highest emissions at 32.6%, followed by Food and catering at 27.8%, and Professional Services at 16.6%. These high emission activities provide the best opportunity for emission reductions and proposed actions are listed in the Emissions Reduction Strategy section.
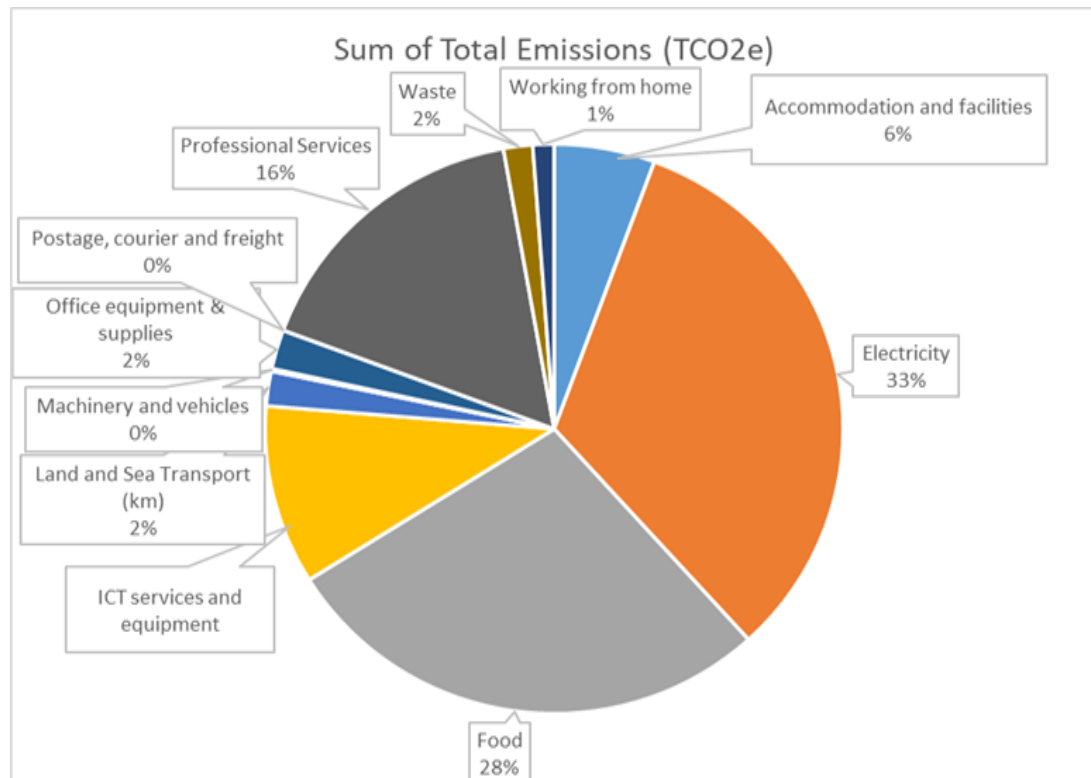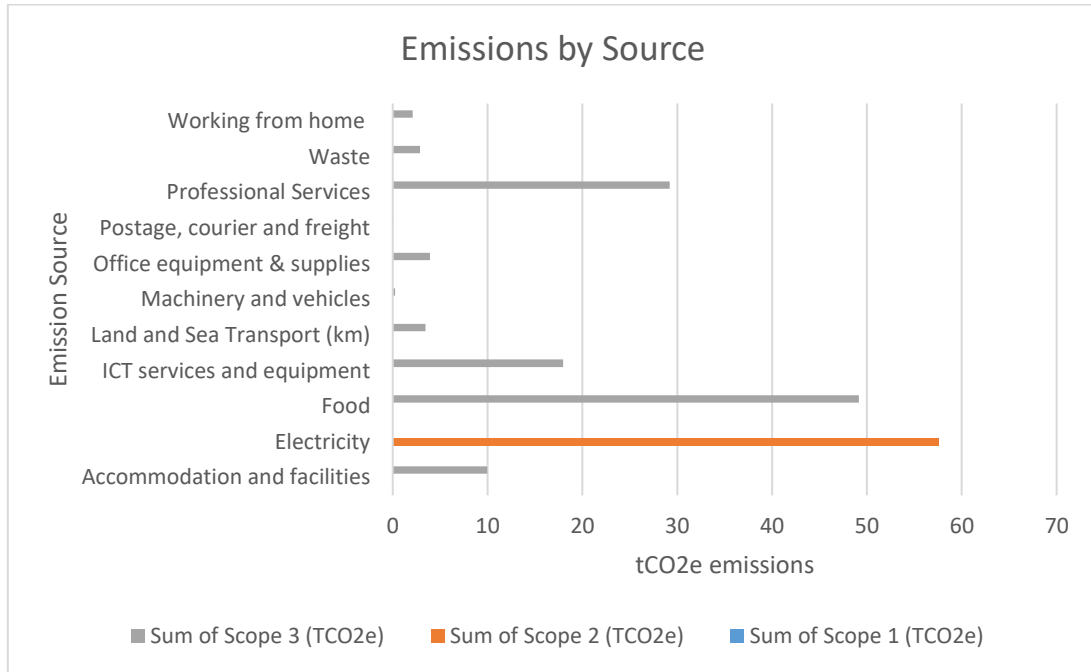
2. About the Organisation

The Monash Graduate Association Inc. (MGA) is an independent incorporated body that is responsible for, and answerable to, the Monash University graduate student community. The MGA is the cross-campus representative body that provides services and support to over 28,000 graduate students across Australia.
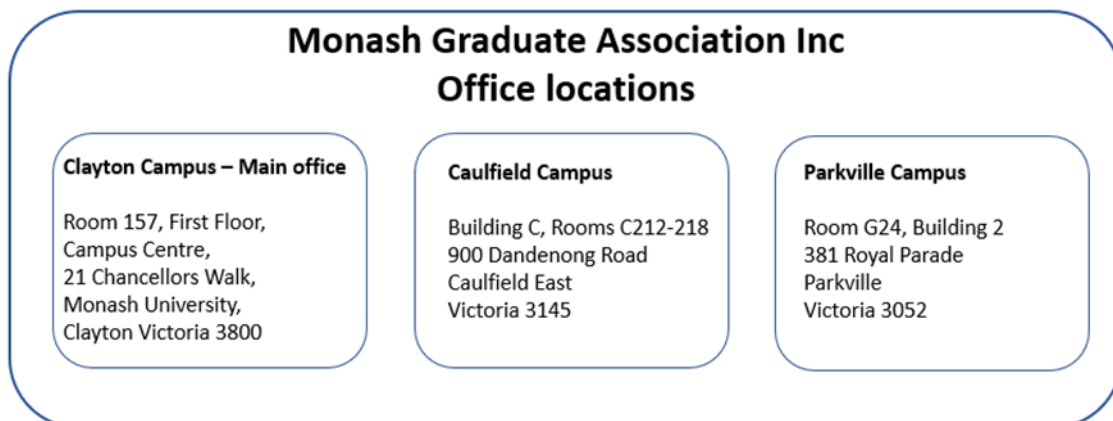
Monash Graduate Association management are keen to minimise the impact of their organisations business activities and have decided to become Certified against the Climate Active Carbon Neutral Standard (for organisations). This is part of their ongoing efforts to reduce emissions, costs and to demonstrate climate action to better protect the environment.

3. Operational Boundary and Emissions

Monash Graduate Association has been certified Carbon Neutral by Climate Active using the small organisation fixed emission boundary and the inventory has been calculated using the Operational Control boundaries.
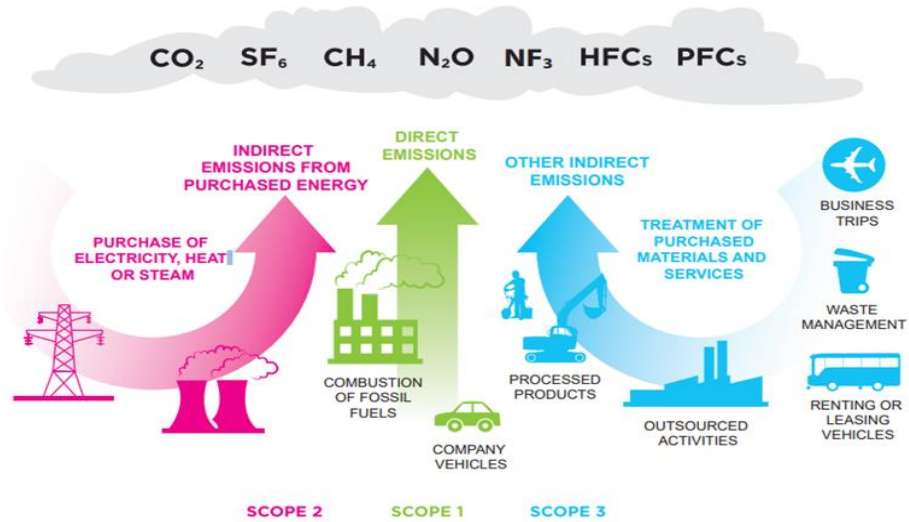
3.1 Operational Boundary

The organisation boundary has been based on operational control as defined by the Climate Active Carbon Neutral Standard. It includes the Australian operations of Monash Graduate Association in Victoria.

Monash Graduate Association Inc
Office locations

Clayton Campus – Main office	Caulfield Campus	Parkville Campus
Room 157, First Floor, Campus Centre, 21 Chancellors Walk, Monash University, Clayton Victoria 3800	Building C, Rooms C212-218 900 Dandenong Road Caulfield East Victoria 3145	Room G24, Building 2 381 Royal Parade Parkville Victoria 3052

3.2   Emissions

Green House Gas (GHG) emissions have been defined in accordance with the GHG Protocol and the Climate Active standard for organisations.

GHG emissions are generally classified into three categories called 'Scope 1, Scope 2 and Scope 3' emissions. The diagram below illustrates the classification method into sources across emission activities.


Scope 1 emissions include all emissions an Organisation is directly responsible for within the organisational boundary. These include fuel used in company owned vehicles or stationary equipment as well as leakage from refrigerants.

Scope 2 emissions are associated with purchased electricity, heat, cooling and steam. These are produced outside the organisation's control but used within the Organisation.

Scope 3 emissions are associated with indirect emissions generated due to the organisations tasks and activities and occur from sources outside the organisations control boundary. The emissions associated with extraction, manufacturing and transportation of fuel, gas and electricity to the organisation are also classified as scope 3 emission.
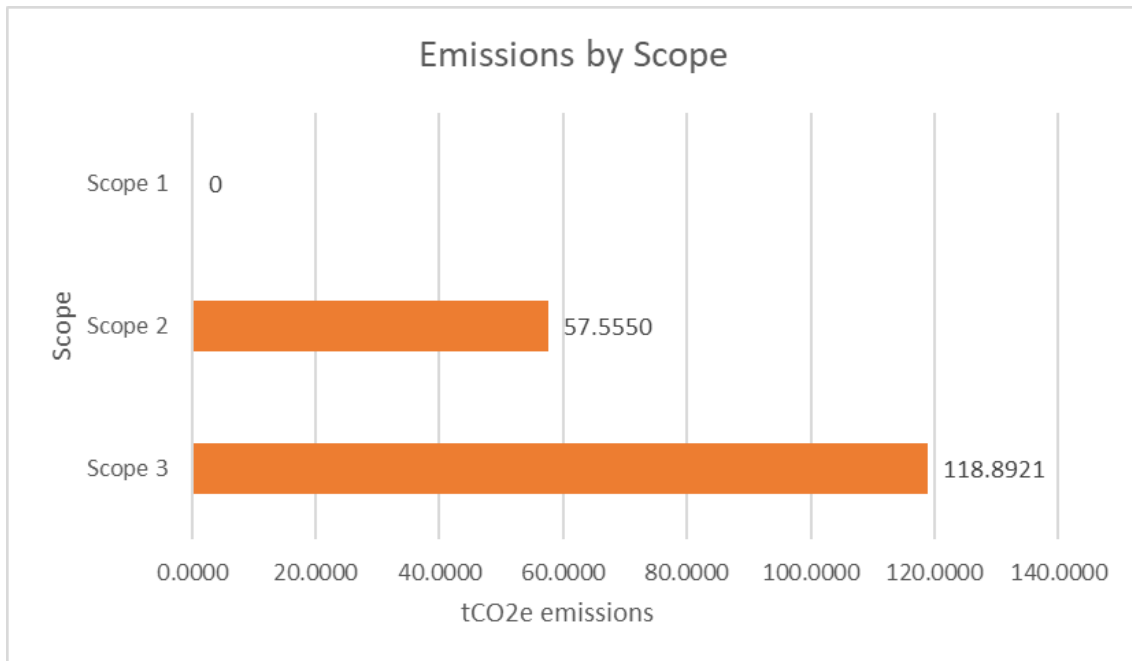
The emission categories for Monash Graduate Association have been based on the Climate Active small organisation fixed emission boundary which includes the following.

### Monash Graduate Association Emission Sources
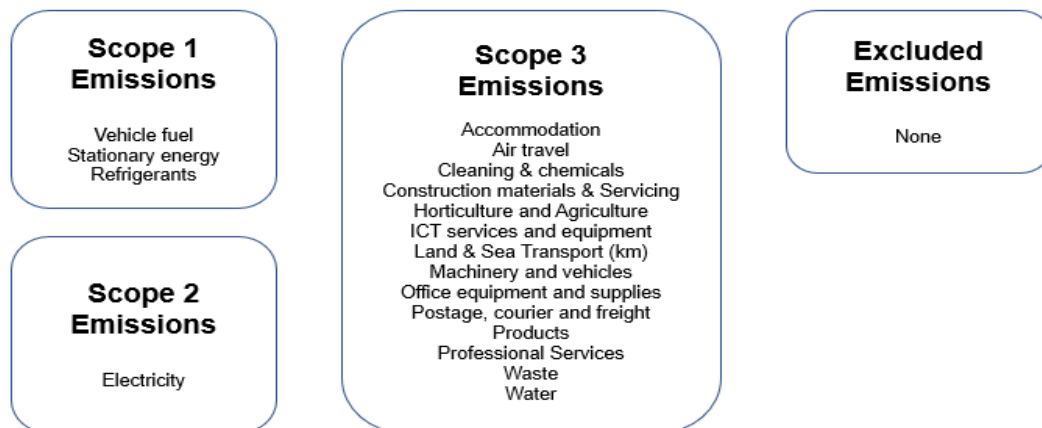
3.3   Emissions by Scope

The following shows Monash Graduate Association greenhouse gas emissions by Scope.

3.4   Emissions by Source

The following details Monash Graduate Association emissions by emission type. Isolating the primary emission sources enables prioritised reduction efforts to those sources and should result in maximising reduction strategies in the short term, while investigating options for longer term actions. There were no Scope 1 emissions in this period.
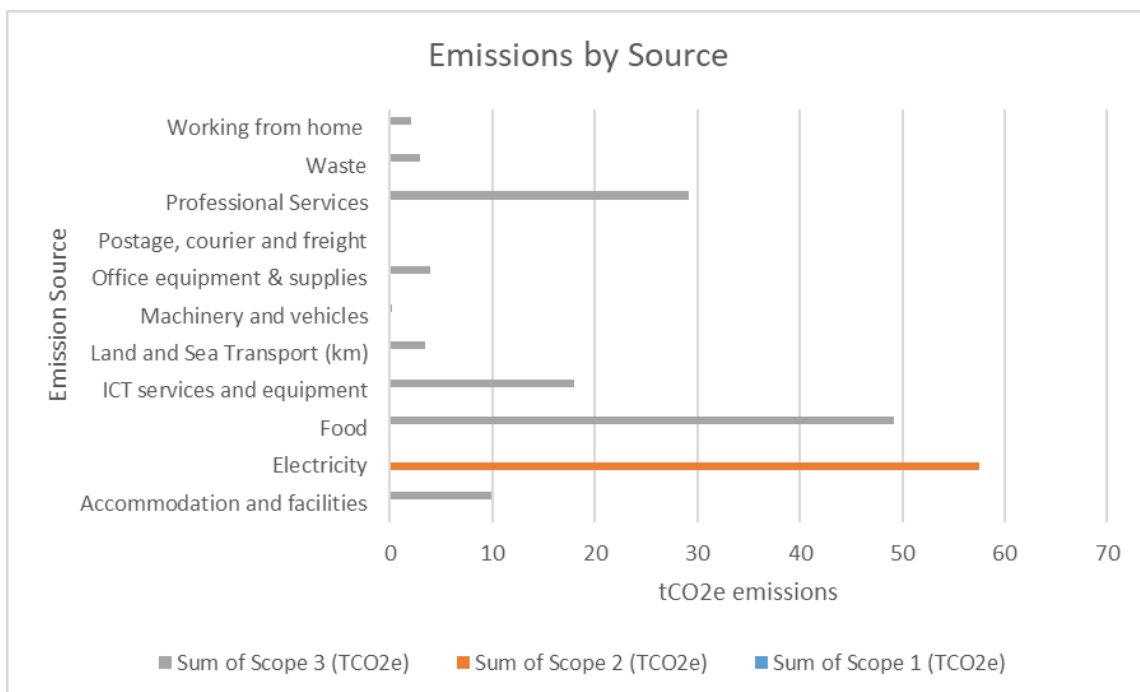
3.5   Emissions non-quantified

Water was non-quantified on the basis of immateriality (less than 1% of emissions). A 5 % uplift was applied to cover residual emissions as required for small organisation emission fixed boundary.

3.6   Emissions excluded

None.

4.   Data Collection and Quality

Monash Graduate Association Inc carbon emissions are reported on where activity data in accordance with the principles of Climate Active and emission factors are available.

All activity data was provided as Excel files, bills and invoices or as information communicated in emails. This data and information have been used to calculate the carbon emissions. The following process was applied:

1. Green Moves provided a Data Collection and Requirements Checklist
2. Monash Graduate Association and Green Moves walked through the Checklist and data sources
3. Monash Graduate Association provided data relating to the company GHG emission sources
4. Green Moves clarified data as needed and sought further information were required to comply with the principles of the Climate Active standard for carbon neutral certification
5. Green Moves completed the carbon inventory in line with Climate Active standards
6. Independent source data validation was completed by an external source
7. A list of reputable carbon offset providers was provided to Monash Graduate Association to select carbon offset projects
8. Monash Graduate Association selected offsets and surrender details were provided to Green Moves
9. Green Moves drafted the Public Disclosure Statement, Monash Graduate Association contributed to relevant sections.
10. Green Moves and Monash Graduate Association reviewed and submitted the carbon inventory and required documents to Climate Active for final review and certification.

5.   Carbon inventory

This inventory forms the baseline for Monash Graduate Association and is based on Calendar year 2021. Monash Graduate Association has emitted an estimated 186 tonnes of CO2e into the atmosphere for this period.

All emissions per the carbon inventory are summarised in the table below. Where an emission has not occurred, it is not included below. Detailed breakdown can be found in Section 5.1.

Emissions Source	Sum of Scope 1 (TCO2e)	Sum of Scope 2 (TCO2e)	Sum of Scope 3 (TCO2e)	Sum of Total Emissions (TCO2e)
Accommodation and facilities	0	0	9.9508	9.9508
Electricity	0	57.5550	0	57.5550
Food	0	0	49.1490	49.1490
ICT services and equipment	0	0	17.9550	17.9550
Land and Sea Transport (km)	0	0	3.4638	3.4638
Machinery and vehicles	0	0	0.2592	0.2592
Office equipment & supplies	0	0	3.9305	3.9305
Postage, courier and freight	0	0	0.0143	0.0143
Professional Services	0	0	29.2035	29.2035
Waste	0	0	2.8800	2.8800
Working from home	0	0	2.0860	2.0860
Total	0	57.5550	118.8921	176.4471
Uplift 5%	0	0	0	8.8220
Grand Totals	0	57.5550	118.8921	185.2691

As offsets can only be purchased in whole units - 186 tonnes of offsets were required to offset carbon emissions and become carbon neutral.

Organisation Name	Monash Graduate Association
Certification Type	Climate Active Small Organisation
Base Year	Calendar Year 2021
Reporting Year	CY 21
Actual Emissions in this Reporting Year	186 Tonnes CO2-e
Offsets Purchased in this Reporting Year	186 Tonnes CO2-e
Total Net Emissions CY2021	**0 Tonnes CO2-e**

5.1 Detailed Emissions Per Category

The following tables detail the emissions in each category and the source data applied.

Accommodation and venue hire
Based on $ value from Profit and Loss

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Accommodation / Venue hire	Venue hire	9950.82	9.9508

Accommodation – None for CY 2021
Based on # nights per person per class of accommodation.

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Accommodation and facilities	Domestic hotel 2 Stars		0
Accommodation and facilities	Domestic hotel 3 Stars		0
Accommodation and facilities	Domestic hotel 4 Stars		0
Accommodation and facilities	Domestic hotel 5 Stars		0
Total Emissions			**0**

Cleaning & Chemicals - Source Data – $ value from Profit and Loss - Nil

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Cleaning and Chemicals	Cleaning		0

Electricity - Source Data – Electricity Bills (kWh office and base building)

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Electricity	Market based	57,555.00	57.5550

The 'market based' approach has been used for electricity emissions which takes into consideration the amount of renewable energy on the grid. Emissions calculated using Climate Active Electricity Calculator.

Food and Catering - Source Data – $ value from Profit and Loss

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Food	Food & catering	49,149.00	49.1490

ICT Services and Equipment - Source Data – $ value from Profit and Loss

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
ICT services and equipment	Computer & technical services	17633.43	17.6334
ICT services and equipment	Telecommunications	321.60	0.3216
Total Emissions		**17,955.03**	**17.9550**

Transport (Land and Sea) km - Source Data – Staff Commute Survey data

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Transport (Land and Sea)	Train travel	254.21	0.2542
Transport (Land and Sea)	Bicycle	0	0
Transport (Land and Sea)	Walk	0	0
Transport (Land and Sea)	Bus	71.85	0.0719
Transport (Land and Sea)	Light rail and tram	0	0
Transport (Land and Sea)	Petrol – Large car	1434.84	1.4348
Transport (Land and Sea)	Petrol – Medium car	279.14	0.2791
Transport (Land and Sea)	Petrol – Small car	1422.33	1.4223
Transport (Land and Sea)	Taxi – Melbourne	1.44	0.0014
Total Emissions			**3.4637**

Motor vehicles car hire - Source Data – $ value from Profit and Loss

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Machinery & vehicles	Motor vehicles (hire)	259.16	0.2592

Office Equipment - Source Data – $ value from Profit and Loss

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Office equipment & supplies	Office equipment	1,936.90	1.9369
Office equipment & supplies	Repairs and maintenance	185.65	0.1856
Office equipment & supplies	Printing and stationery	1,683.89	1.6839
Office equipment & supplies	Paper (per ream)	124.08	0.1241
Total Emissions			**3.9305**

Postage, Couriers and Freight - Source Data – $ value from Profit and Loss

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Postage, courier, and freight	Mailing services	14.25	0.0143

Professional Services - Source Data – $ value from Profit and Loss

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Professional Services	Education and training	3,459.03	3.4590
Professional Services	Entertainment	679.32	0.6793
Professional Services	Memberships	2,275.65	2.2756
Professional Services	Accounting services	1,061.36	1.0614
Professional Services	Advertising & promotion	21,671.76	21.6718
Professional Services	Insurance	24.12	0.0241
Professional Services	Legal Services	26.10	0.0261
Professional Services	Parking & tolls	6.20	0.0062
Total Emissions			**29.2035**

Waste - Source Data – Waste assessment

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Waste	General waste (municipal waste)	2,880.00	2.8800
Waste	Recycling	0	0
Total Emissions			**2.8800**

Water - Source Data – Water was excluded due to immateriality.

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Water	Water supply & wastewater	-	-

Working From Home - Source Data – Staff commute survey data and Victorian lockdown records

Emission Category	Emission source	Total Emissions (kg CO2e)	Total Emissions Tonnes CO2e
Working from home	calculator - Result A - VIC	2,086.00	2.0860

6.   Emissions Intensity

An emission intensity is the emission rate of a given pollutant relative to the intensity of a specific activity, or an industrial production process; for example, tonnes CO2 equivalent of carbon dioxide released per kilowatt of energy used (kWh), or the ratio of greenhouse gas emissions produced to size of the site (m2) or number of employees (FTE).

These are generally referred to as Greenhouse Emissions Intensity indicators.

We have calculated some emissions intensity key performance indicators (KPI's) for your office, and they are below.

MGA Emissions / Employee = 186 tCO2e / 17 staff = 10.94 tCO2e per employee

MGA Emissions / m2 office = 186 tCO2e / 525 m2 = 0.35 tCO2e per m2

To provide some context around this emissions intensity, average tertiary education sector greenhouse indicators we have available are around 21 tCO2e / FTE (mostly utilities emissions) and the professional services sector which is 10.8 tCO2e / FTE.

7.   Carbon Offsets

Carbon Offsetting is important because it allows businesses to make a positive contribution to the environment when their emissions can't be removed or avoided.

Carbon offset units (or credits) are used to compensate for emissions a business produces and to bring their carbon footprint down to zero. Offset units are generated by projects that reduce, remove or capture emissions from the atmosphere such as reforestation, renewable energy or energy efficiency. There are numerous different suppliers and projects generating offsets in Australia and around the world.

While carbon offset projects prevent, reduce or remove greenhouse gas emissions from being released into the atmosphere - that's not all they do. Often these projects have other benefits such enhanced biodiversity, habitat protection, creating employment, helping people to live and work on country, improving health and education, and providing access to clean and affordable energy.

Offset Purchases to neutralise emissions

MGA's carbon footprint for calendar year 2021 is 186 Tonnes CO2e. To neutralise these emissions and become carbon natural, 186 tonnes of offsets was required.

186 Tonnes of carbon offsets were purchased to neutralise emissions. The project supported was the Yarra Yarra Biodiversity Corridor, linked to the China Wind Farm and the India Metro Transport projects

186 tonnes of CO2e is equivalent to taking 40 cars off the road for a year.
*Based on 4.6 tonnes CO2e per year per car

Co benefits

- Yarra Yarra Biodiversity project, supporting the China Wind Farm and India Metro Transport projects.

8.   Emission reduction strategy

Having produced the carbon account, the following strategies could be applied to reduce carbon emissions. Actions have been incorporated into a table for easy reference and actioning. It is best practice to always remove or reduce what you can first, then offset what you can't.

Monash Graduate Association commits to reduce emissions across its value chain (scope 1, 2 and 3) by at least 15% by 2025, and 40% by 2030 from our CY2021 base year. MGA aims to achieve this by actioning the following emissions reduction plan.

Strategy	Who	Target Date	Done
Sustainability Policies			
Establish environmental sustainability policies for the business and make them publicly available			
Update company policies to formally preference more sustainable and resource efficient products, and where possible certified carbon neutral products and services			
Continue to measure and monitor carbon emissions annually through Climate Active		Annual	
Energy Reduction			
MGA actions will include advocacy to the building management in support of transitioning to an electricity supply that is 100% renewable energy. MGA will actively lobby the University to invest in green energy infrastructure on campus and support the use of SSAF Capital Development funds to implement change.		June 2023	
Investigate feasibility of onsite renewables or purchase of Large-scale Generation Certificates (LGC's)			
Investigate energy reduction opportunities			
Food and Catering			
The MGA will transition to vegetarian-only catering at MGA events, with the aim of reaching 50% vegetarian by the December 2022, 75% by July 2023 and 100% by December 2023.		December 2023	
Professional Services			
Professional Services emissions are primarily advertising. MGA will review advertising with a view to reducing emissions over the next 2 years.		December 2024	
Products			
The MGA will transition to Australian-made merchandise, with the aim of reaching 50% by the December 2022, 75% by July 2023 and 100% by December 2023. This aims to support local merchandise providers who provide more sustainable products with decreased supply chain emissions.		December 2024	

Travel and Commuting			
MGS will aim to reduce travel emissions by installing conference quality AV systems at the two main offices eliminating avoidable business travel by utilizing video conferencing where possible.		June 2024	
The MGA will lobby the Victorian State government to provide public transport concessions to graduate students, in line with concessions provided to graduate students in other states, making the use of public transport more affordable and thereby supporting students to choose a more sustainable transport option.		June 2024	
Reducing employee commute by encouraging low emission modes of transport			
Waste Reduction			
Investigate recycling options at all sites with a view to reducing waste to landfill and increasing recycling			
Implement clear colour coded recycling in the office			
Implement behaviour change programs for staff			
Encourage building management to ensure minimum of co-mingled recycling and landfill waste sorting available			
Investigate further waste reduction opportunities			

Prevent Emissions – Reduce Emissions - Offset the rest

Energy

One of the easiest actions an organisation can take that has significant impact on GHG emissions is purchasing 100% Green Power. There are many providers offering accredited Greenpower products across most States and Territories.

Preventing energy emissions requires investigating and actioning energy efficiency strategies to reduce the amount of energy required onsite. Simple strategies include onsite renewable energy generation (solar PV) if possible, purchasing Large Scale Generation Certificates (LGC), transitioning to LED lighting, installing energy efficient heating/cooling systems and servicing them regularly, and ensuring all appliances onsite are efficient.

An energy audit (to AS/NZ 3598 standards) by a qualified auditor would identify appropriate and tailored efficiency strategies for your sites and provide cost justification and return on investment figures for recommendations made. An alternative quick and simple way to identify energy efficiency strategies is to work through a standard checklist of items and action those that are relevant to your site.

Air Transport

Air travel is highly emissions intensive activity.

There are various strategies available to minimise emissions from air travel. The main options are to simply not travel and use video conferencing instead, or if travel must be done, then always carbon offset the flights (most major airlines have programs) to eliminate the emissions from the flying. Business class travel has higher emissions than economy.

Transport

Reducing emissions in transport can be tackled in several ways.

Company travel and vehicles requires more consideration. Strategies will need to fit in line with business needs but could include:
- Minimise onsite visits as much as possible (ie aim for 80% video call and 20% onsite)
- Route planning to minimise kilometres travelled when on the road
- Upgrade company vehicles to fuel efficient types (ie hybrid or electric) where possible. Smaller vehicles are more efficient (and emit less emissions) than large vehicles.
- Where staff use their own vehicles for business travel, consider offering incentives such as 'salary sacrifice' options for the purchased of efficient electric vehicles.
- Offer onsite electric vehicle charging for staff.

Staff commute is an indirect and external contributor to GHG emissions. Although the organisation will have little control over how staff commute to work, there are strategies that could be put in place to reduce emissions from this source. Some ideas include:
- Where possible ensure offices are located near public transport hubs (ie train stations)
- Introduce discounted travel pass system for staff to encourage public transport use
- Encourage walking or riding bikes to work if employees are nearby and ensure there are staff 'end of trip' facilities available for showering etc before starting work.
- Encourage car sharing or pooling if feasible.
- Consider staff 'salary sacrifice' options for electric or hybrid vehicles, or electric bike purchases.

Accommodation (Travel)

Emissions for accommodation are measured per person per night stay and by the star rating of the hotel. For example, a 2 Star rated hotel has less emissions per night than a 5 Star hotel.

The following strategies may help to reduce emissions from this source:
- Minimise nights away for business purposes where possible.
- Consider a policy to stay at 4 Star rated accommodation or less (eliminating the higher emission 5 Star accommodation).
- Some hotel accommodation is likely to soon be certified carbon neutral, when that occurs preference hotels that are certified as this will remove your need to cover the emissions.

IT and Office Equipment

Set up an equipment policy for the organisation to procure highly energy efficient computers, screens, servers etc.   Much of the IT equipment available in Australia carries the Energy Star Rating (from the USA EPA). As with most star ratings, the more stars the more efficient the item is.

Other strategies include:
- Identify and use carbon neutral service providers
- Turn screen savers off – they do not save energy, they waste it.
- Turning all screens brightness down to 50-60% - reduces energy and hardly noticeable to user.
- Transition to all laptops and remove desktops where possible, laptops are significantly more energy efficient.
- Set computer hibernation modes to come on for screens and staff computers after 15 mins of inactivity, and auto shutdown after 1 hour of inactivity.
- Printers can be energy intensive but often only used for a short time a day. Ensure the ECO (or power saver) settings are on so that the printer 'sleeps' and minimises energy use when not operational.
- Request staff to 'shut down' and power off all screens and computers when leaving the office for the day.

> Did you know that a computer and monitor left on for a year generates the same amount of GHG emissions as a car traveling from Sydney to Perth!

Green Office and Administration

A significant number of resources such as paper, freight and electricity can be reduced by being mindful and efficient with resources. This involves how the office is managed.

Some simple strategies to minimise resource use include:
- Regular servicing and maintenance of heating and cooling systems retains their energy efficiency and contributes to increased lifespan of the appliance. Service all significant machinery on a regular basis.
- Work towards a 'minimal paper' office – use electronic file storage, email etc rather than printing and sending paper.
- Request invoices, quotes, and other accounting and legal information to be electronic as much as possible. This also assists in reducing filing, space requirements and waste.
- Purchase 100% certified carbon neutral paper for printing when its needed (ie Opal)
- Always choose energy and water efficient appliances and products
- Choose local products where possible

- Preference providers that have good environmental credentials (ie carbon neutral, ISO 140001 certified, B Corporation or similar)
- Minimise packaging of products (both purchased and supplied)
- Avoid disposable and single use products (ie coffee cups, paper plates)
- Implement good waste minimisation and recycling practices through all sites.

Waste reduction
Reducing to waste to landfill and increasing recycling rates will contribute to reduced emissions from waste.

Some suggestions are:
- Identify recycling options across all sites
- Conduct a waste assessment
- Educate your team on proper recycling
- Implement consistent colour coded bins and clear signage throughout the organisation to assist with recycling correctly
- Encourage staff to minimise waste by minimising single use plastics and coffee cups
- Offer 'keep cups' as prizes for sustainability competitions
- Reduce packaging in products where possible
- Involve staff in the actions – create a Green Team to come up with ideas to implement and improve / reduce emissions (as noted below)

Staff and Behaviour Change
Making significant reductions will need the entire organisation to be working towards the same goals. That includes management, staff and even the cleaners to be engaged and actively participating.
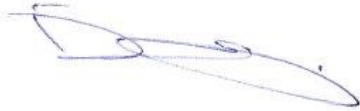
Some suggestions to encourage participation are:
- Educate your team on the reasons for being more sustainable and why sustainability is important both at a personal and business level'
- Involve staff in the actions – create a Green Team to come up with ideas to implement and improve / reduce emissions,
- Have a budget or use savings made from other initiatives to finance more actions,
- Keep it top of mind for employees – include sustainability actions in staff newsletters, run regular engagement events (like lunch and learn sessions), include sustainability in organisation events, publications, website and other suitable avenues.

9.   Declaration

To the best of my knowledge the information provided in the carbon inventory, this report and the Public Disclosure Statement is true and correct.

Danielle King
Director, Sustainability Consultant
Date – 5 July 2022

Appendix A – Source Data

Data used to calculate this carbon inventory was provided as follows.

Data	Source
Accommodation & venue hire	$ spend from Profit and Loss
Cleaning & chemicals	$ spend from Profit and Loss
Electricity	Energy bills – electricity and gas
Food & catering	$ spend from Profit and Loss
ICT Services & Equipment	$ spend from profit and loss
Land & Sea Transport (fuel)	Fuel records and employee reimbursement expenses
Land & Sea Transport (km)	Staff commute survey
Office equipment & supplies	$ spend from Profit and Loss
Post, courier & freight	$ spend from profit and loss
Professional services	$ spend from profit and loss
Refrigerants	None
Waste	Climate Active waste calculator used
Water	Not required
Working from home	Climate Active WFH calculator and staff commute survey.

Appendix B – Emission Factors

Emission factors used for this inventory were obtained from the following sources:
- National Australian Greenhouse Gas Factors – 2021 Report
- Australian Emission Factors EPiC Database
- Climate Active calculators

Appendix C – Glossary

Term	Meaning
Abatement	The act of reducing <u>emissions</u> is known as abatement (often referred to as <u>carbon</u> abatement).
Additional	Additional refers to the process of <u>offsetting</u>. It is a principle that states that offsets must result in <u>emissions</u> reductions that are unlikely to occur in the ordinary course of events.
Base year	A base year is a consecutive 12 month period for which data can be collected. The base year is one full calendar or financial year of <u>emissions</u> data for an entity such as an organisation or a country that is nominated as a starting point to compare emissions in future years and set emissions reduction targets against. For Building certifications the base year can be any consecutive 12 month period.
Carbon	Carbon is a naturally occurring chemical element that forms the foundation for all life on earth. It is found in plants, animals and minerals. Carbon can arrange into various compounds such as <u>carbon dioxide</u> and is therefore used in manufacturing, for example, to make petroleum products and plastics.
Carbon account	A carbon account is an inventory of the <u>greenhouse gases</u> that are emitted because of the existence of a person, organisation, building, precinct, region, country, product, service or event. It details the quantity of <u>emissions</u> that need to be <u>offset</u> for an entity to become <u>carbon neutral</u>. A carbon account includes emissions from the following <u>greenhouse gases</u>: <u>carbon dioxide</u> (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF_6) and nitrogen trifluoride (NF_3). A carbon account is often a reporting requirement for countries and organisations under various reporting schemes. See also <u>greenhouse gas inventory</u>; <u>carbon inventory</u>; <u>carbon footprint</u>.
Carbon budget	The carbon budget is the amount of <u>CO_2</u> measured in gigatons ($GtCo_2$) that the world can still emit while still maintaining a likely chance of limiting warming to 1.5°C or 2°C above preindustrial temperatures.
Carbon credit	A carbon credit is a permit generated by an organisation or a country for storing or avoiding <u>emissions</u>. One carbon credit is equal to one tonne of <u>CO2-e</u>. Carbon credits can be traded with other

	organisations or countries that generate emissions to offset those emissions.
Carbon dioxide (CO2)	Carbon dioxide is formed when a carbon atom joins with two oxygen atoms, hence the chemical formula of carbon dioxide, CO2. Carbon dioxide acts as an important heat-trapping (greenhouse) gas, maintaining an atmosphere on earth that is conducive to life. The release of too much carbon dioxide through human activities such as deforestation and the burning of fossil fuels has caused too much heat to be trapped in earth's atmosphere, causing climate change.
Carbon dioxide equivalents (CO2-e)	Carbon dioxide equivalents (CO2-e) is a way of expressing the different global warming potentials of greenhouse gases compared to carbon dioxide. By using carbon dioxide equivalents, many different greenhouse gases in a carbon account can be expressed with a single number.
Carbon footprint	See carbon account.
Carbon inventory	See carbon account.
Carbon negative	See carbon positive.
Carbon neutral	Carbon neutral is the state of an entity such as an organisation, building, precinct, product, service or event, where the carbon emissions created have been cancelled out by funding an equivalent amount of carbon savings elsewhere in the world.
Carbon neutral organisation	A carbon neutral organisation is where the yearly emissions created during the operation of the organisation are equal to zero. An organisation is a company, corporation, firm, enterprise, authority or institution that has its own functions and administration.
Carbon neutral building	A carbon neutral building is where the yearly operational emissions of the building are measured and offset. Carbon neutral can apply to the building's core services only (base building operations) or to that of the occupants and the core services (whole building operations). Building certification is available through Climate Active, NABERS and the Green Building Council of Australia.
Carbon neutral product or service	A carbon neutral product or service is one in which the emissions that occur as a consequence of a product or service being created, used and disposed of, are measured and offset.
Carbon neutral event	A carbon neutral event is where all emissions that arise as a consequence of an event taking place are measured and offset.

Carbon Offset	See offset.
Carbon Positive	Whereas carbon neutral cancels out the damage caused by an entity creating emissions, carbon positive achieves additional benefits by removing additional greenhouse gases from the atmosphere. Organisations, buildings, precincts, products, services and events can all be carbon positive.
Climate Active	Climate Active is an Australian Government backed program to drive voluntary climate action. Climate Active provide certification to organisations, buildings, precincts, products, services and events that are carbon neutral. It was formerly called the National Carbon Offset Standard (NCOS).
Emissions	Emissions are greenhouse gases discharged into the atmosphere, leading to climate change. See also greenhouse gas.
Emissions boundary	The emissions boundary in a carbon account defines, according to a set of criteria, which emissions will and will not be attributed to the entity seeking carbon neutral status. The emissions included in the carbon account are said to be within the emissions boundary.
Emission factor	An emissions factor is a coefficient that allows the average emissions from a given source (e.g. waste, electricity, fuel) to be calculated. The Australian Government publishes the emissions factors (the particular coefficient used in calculating average emissions) for each emissions source in a document called the National Greenhouse Accounts Factors.
Greenhouse gas	A greenhouse gas is a gas that traps heat in the earth's atmosphere. These gases allow sunlight to pass through the atmosphere but prevent the heat from the sunlight from radiating back into space to varying degrees according to each gas' global warming potential. The main greenhouse gases are water vapour, carbon dioxide, methane, ozone, nitrous oxide and chlorofluorocarbons.
Greenhouse Gas Inventory	See carbon account.
GHG Protocol	The Greenhouse Gas Protocol (GHG Protocol) is the most widely used international carbon accounting standard for government and business leaders to identify, understand, quantify, and manage emissions. It provides a common standard used for calculating a carbon account.

Global Reporting Index (GRI)	The Global Reporting Initiative (GRI) is an international independent standards organization that helps businesses, governments and other organisations understand and communicate their impacts on issues such as climate change, human rights and corruption.
Global Warming Potential (GWP)	Global warming potential is a measurement used to identify the global warming impacts of different greenhouse gases. It states how much energy the emissions of one tonne of a gas will absorb over 100 years relative to one tonne of carbon dioxide. It allows us to add up the emissions of different greenhouse gases for a carbon account.
Life Cycle Assessment (LCA)	Life cycle assessment (LCA) is a method used to evaluate the environmental impact of a product through its life cycle encompassing extraction and processing of the raw materials, manufacturing, distribution, use, recycling, and final disposal.
Material or Materiality	An emissions source that constitutes one per cent or more of all of the emissions recorded in a carbon account, is considered to be material, meaning that the emissions source is significant enough to be included in the carbon account.
Measurable	Measurable refers to carbon accounting and offsetting. This principle states that methods used to quantify the amount of emissions reductions generated must be supported by clear and convincing evidence.
National Carbon Offset Standard (NCOS)	See Climate Active.
National Greenhouse and Energy Reporting Scheme (NGERS)	The National Greenhouse and Energy Reporting Scheme (NGERS) is the Australian reporting framework used to report information related to emissions and energy. The framework was established under Commonwealth legislation, which makes registration and reporting mandatory for corporations whose emissions, energy production or energy consumption meets certain thresholds.
Net zero emissions	Net zero emissions means that any emissions generated by an entity are mitigated by an activity or project that absorbs an equivalent amount of emissions from the atmosphere.
Offsetting	Offsetting is the activity of reducing emissions in one place to compensate for emissions created elsewhere. For example, an individual might use offsetting to compensate for the emissions caused by personal air travel. The individual purchases offset units and the money funds a project such as a reforestation project, that will sequester an equivalent amount of emissions from the atmosphere as was created by the flights.

Offset Units	Offset units are generated by projects that reduce, remove or capture emissions from the atmosphere such as reforestation, renewable energy or energy efficiency. They can be purchased by entities seeking to become or maintain a state of carbon neutral. A carbon account informs an entity of the number of offset units that need to be purchased to cancel out the emissions generated by the entity. Offsets can be accredited under several schemes defined by Climate Active to ensure genuine emissions reductions through the creation, management and retirement of offset units. The offset unit must be listed and tracked in a publicly transparent registry.
Permanent	Permanent in this context refers to the process of offsetting. This principle states that offsets must represent permanent reductions in emissions. It requires that emissions sequestered will not be released into the atmosphere for a period of 100 years.
Relevance	Relevance refers to decisions as to which Scope 3 emissions need to be included in a carbon account. A Scope 3 emissions source may be relevant for example, if it is a large source; if it is important to key stakeholders; or if an organisation is well placed to reduce those emissions.
Responsible entity	A responsible entity is an organisation or person (with appropriate delegation to sign on behalf of the organisation) who owns the responsibility for seeking carbon neutral certification or making a carbon neutral claim.
Scope	Emissions are classified into three categories to delineate direct and indirect emissions sources for carbon accounting. This helps to ensure two or more organisations don't account for the same emissions in their carbon accounts, thereby avoiding double-counting. **Scope 1** emissions include all direct greenhouse gas emissions from sources that are owned and/or controlled by the organisation. These could be emissions from fuel use, refrigerants and on-site electricity generation. **Scope 2** emissions are indirect emissions from the generation of purchased electricity, heat, cooling and steam (i.e. energy produced outside the organisation's operational control but used by the organisation). **Scope 3** emissions are all indirect emissions that occur as a consequence of the operations of an organisation but are outside the organisation's control. Anything considered 'material' to the business should be included in Scope 3 emissions.

Sequestration	Sequestration is the term for the removal of carbon dioxide from the atmosphere, either through biological processes (e.g. photosynthesis in plants and trees) or geological processes (e.g. storage of carbon dioxide in underground reservoirs).
Sustainable Development Goals (SDGs)	The seventeen Sustainable Development Goals, created by the United Nations, are designed to address global challenges including poverty, inequality, climate change, environmental degradation, peace and justice, by 2030. Governments, the private sector and NGOs can use the SDGs to work together, guide their sustainability efforts and show their commitment to the principles of sustainability.
Transparent	Transparent refers to carbon neutral certification. This principle states that consumers and other interested stakeholders must have access to information about the offset project that generated the abatement, including the applied methodology and project-monitoring arrangements.
True-up	The calculation to determine if additional eligible offset units must be purchased after the measurement of a post-event carbon account.
Uplift factor	An uplift factor is a percentage increase or additional amount of emissions in kg of CO2-e added the to the carbon account where emissions from an activity can't be accurately measured. This ensures emissions aren't underestimated.
Verified Carbon Unit (VCU)	A unit corresponding to one metric tonne of carbon dioxide equivalent emissions reduced or avoided, as certified and issued under the Verified Carbon Standard.
Verified Emissions Reduction (VER)	A unit corresponding to one metric tonne of carbon dioxide equivalent emissions reduced or avoided, as certified and issued under the Gold Standard, a global standard for projects that deliver carbon abatement and other social and environmental benefits.