PUBLIC DISCLOSURE STATEMENT

QANTAS AIRWAYS LIMITED

SERVICE CERTIFICATION
FY2023–24

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	Qantas Airways Limited
REPORTING PERIOD	1 July 2023 – 30 June 2024 Arrears report
DECLARATION	*To the best of my knowledge, the information provided in this public disclosure statement is true and correct and meets the requirements of the Climate Active Carbon Neutral Standard.*  Alexander Lewis Head of Carbon Markets, Group Sustainability 01/04/2025

Australian Government
Department of Climate Change, Energy, the Environment and Water

1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	243,347 tCO_2-e (Fly Carbon Neutral Program and Carbon Neutral Freight)
CARBON OFFSETS USED	22% ACCU, 54% CER, 20% VCU, 4% VER
RENEWABLE ELECTRICITY	N/A
CARBON ACCOUNT	Prepared by: EnergyLink Services Pty Ltd
TECHNICAL ASSESSMENT	Date: 04/08/2023 Organisation: EnergyLink Services Pty Ltd Next technical assessment due: FY 2026
THIRD PARTY VALIDATION	Date: 20/12/24 Organisation: Energetics Pty Ltd (an ERM company)

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2. CERTIFICATION INFORMATION

Description of service certification

This service certification is for the opt-in service offered by Qantas which is marketed as its Fly Carbon Neutral program. The Qantas Group's service offering is the provision of a service to enable customers to voluntarily compensate for a portion of the estimated emissions of our passenger and freight services.

To assess the volume of emissions attributable to a passenger and freight flying a sector (from one airport to another), the Qantas Group has undertaken a comprehensive well-to-wing Life Cycle Assessment (LCA) to determine the activities undertaken to provide these offerings and the associated emissions.

The objective of the LCA is to assess the emissions footprint of our customers in sufficient detail, to evaluate the emissions attributable to a passenger, or freight, travelling on a Qantas Group aircraft. An average emissions footprint per-passenger-kilometre and per-freight-tonne-kilometre (i.e. functional unit) is applied to codeshare and other non-Qantas Group flights for carbon neutral certification under the Climate Active Carbon Neutral Standard program.

Scope of certification includes only Fly Carbon Neutral program and Carbon Neutral freight program. No other Qantas Group carbon offset programs are included in this opt-in certification. Note that the Carbon Neutral freight service (Freight) and the Qantas Future Planet (Business to Business) program are standalone programs and not marketed under Fly Carbon Neutral (Passenger) program.

The responsible entity for this service certification is Qantas Airways Limited ABN 16 009 661 901.

This Public Disclosure Statement includes information for FY2023-24 reporting period.

Description of business

Founded in the Queensland outback in 1920, Qantas has grown to be Australia's largest domestic and international airline. Qantas has a range of subsidiary businesses that all, in one form or another, support the overall operations of the Group. The Qantas Group's main business is the transportation of customers using two complementary airline brands — Qantas and Jetstar — operating regional, domestic and international services. This also involves a range of operational functions, both in-house and contracted, including pilot and cabin crew operations, aircraft engineering and maintenance, catering and cleaning services, freight processing and other operational airline support services.

Consolidation approach

An operational consolidation approach has been used and includes the entities shown in Figure 1. It should be noted that the organisational diagram represents the reporting structure for the purpose of Climate Active certification and does not reflect the legal corporate structure of Qantas Group.

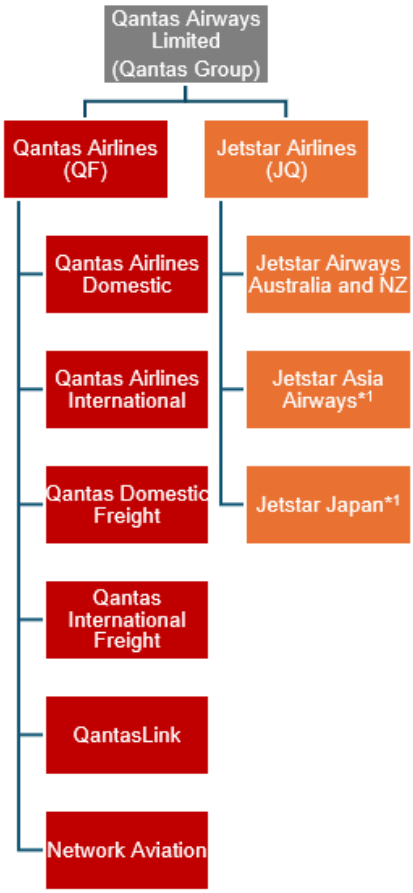

Figure 1: Organisational diagram representing the reporting structure for the purpose of Climate Active

* These organisations' activities have been excluded from the carbon footprint assessment that forms the basis for calculating emissions-per-passenger-kilometre rates that are subsequently used to estimate emissions-per-passenger for each sector (from one airport to another) that the product is offered. These organisations are excluded as they do not form part of the Fly Carbon Neutral (FCN) program. Duty travel has also been excluded as it is compensated for separately by Qantas Airlines and Jetstar Airlines.

[1] Minority ownership.

3. EMISSIONS BOUNDARY

Inside the emissions boundary

All emission sources listed in the emissions boundary are part of the carbon-neutral claim.

Quantified emissions have been assessed as 'attributable processes' of a product or service. These attributable processes are services, materials and energy flows that become the product or service, make the product or service and carry the product or service through its life cycle. These attributable emissions have been quantified in the carbon inventory.

Non-quantified emissions have been assessed as attributable and are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. All material emissions are accounted for through an uplift factor. Further detail is available in Appendix C.

Outside the emissions boundary

Non-attributable emissions have been assessed as not attributable to a product or service. They can be **optionally included** in the emissions boundary and therefore have been compensated with carbon offsets, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim). In addition, as per the Group's domestic and international emissions reporting, the effects of high-altitude radiative forcing are not included within the emissions calculations.

Further detail is available in Appendix D.

Inside emissions boundary

Quantified

1. Kerosene (Stationary & Transport)
2. Diesel (Stationary & Transport) – Domestic
3. Diesel (Stationary & Transport) - International
4. Gasoline (Transport) – Domestic
5. Gasoline (Transport) - International
6. LPG (Stationary & Transport)
7. Natural gas (Stationary & Transport)
8. Electricity (Domestic)
9. Electricity (International)
10. Refrigerants (HFCs)
11. Oils, greases & solvents
12. Embodied energy of aircraft
13. Embodied energy of aircraft parts (maintenance)
14. End-of life of aircraft
15. Ground services equipment
16. Third-party ground services
17. Onboard catering (food and drinks)
18. Onboard cutlery and trays
19. Onboard customer products
20. Onboard magazines
21. Boarding pass and baggage tags
22. In-lounge products: food, drinks and services
23. Water
24. Waste
25. Cleaning services
26. Crew accommodation & travel
27. Operational staff commuting
28. Cloud hosting

Non-quantified

N/A

Optionally included

N/A

Outside emission boundary

Non-attributable

Corporate staff commuting
Corporate office electricity (other than Integrated Operations Centre)
Corporate waste
Corporate goods and services

Service process diagram

Upstream emissions

Embodied emissions (raw materials, manufacturing, transport):

- Aircraft and parts
- Ground servicing equipment
- Onboard products: food, drinks, cutlery, trays, magazines
- In-lounge products: food, drinks and services
- Boarding passes and baggage tags

Extraction, refining and transport of fuels (scope 3)

- Kerosene, Diesel, Gasoline, LPG, Natural Gas
- Electricity (incl T&D losses)

Service delivery

Aircraft fuels (scope 1)

- Kerosene in aircraft***

Airport*, maintenance hangars, office sites (scope 1,2)**

- Kerosene (non-aircraft), diesel, gasoline***
- LPG, natural gas
- Oil, greases & solvents
- Refrigerants (HFCs)
- Purchased electricity ***

Third party services

- Airport services (incl. baggage handling and shuttle buses)
- Food preparation and catering
- Cloud hosting

Employee commuting and business travel

- Airport and maintenance staff commuting
- Crew travel and accommodation

*Includes Qantas lounges **portion relation to Integrated Operations Centre (IOC)
*** includes both domestic and international consumption

Non-attributable emission sources

- Corporate staff commuting
- Corporate office electricity (other than Integrated Operations Centre)
- Corporate waste
- Corporate goods and services

Excluded emission sources
N/A

Downstream emissions

End-of-life

- Waste, water and wastewater from Qantas airport and maintenance hangar sites
- Food waste from Qantas food and catering services
- Aircraft end-of-life

Third party services

- Cleaning
- Post-flight ground services

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

We recognise that air travel is currently a hard-to-abate sector. That is why we are committed to taking steps – in the air and on the ground – to reduce our impact on the environment. In March 2022, the Qantas Group released its Climate Action Plan which outlined interim targets of 25 per cent net reduction of Scope 1 and 2 emissions from a FY2019 baseline position and a sustainable aviation fuel (SAF) target of 10 per cent in our fuel mix, both by 2030.

There are three key pillars for the Group's strategy to deliver on its targets:

- Sustainable operations – Includes a focus on reducing emissions, which otherwise would have been generated by our operations, by optimising fuel burn through flying and engineering procedures, seeking improvements in airspace design and management, as well as investigating opportunities to enhance aircraft performance and flight planning activities.
- Sustainable aviation fuel – Collaborating with governments, industry and businesses to develop a commercial-scale, competitive SAF industry in Australia. This includes supporting new SAF supply chains through strategic investments via the Qantas Climate Fund, advocating for supportive policies such as SAF mandates to enable domestic production, fostering customer-driven initiatives like the Qantas SAF Coalition, and securing SAF purchase agreements.
- Carbon markets – Identifying and investing in projects outside the aviation industry that remove or avoid carbon emissions through the purchase of carbon offsets that meet our internal standards of quality and integrity, with additional value attributed to projects that support environmental and social co-benefits.

The Qantas Group is covered under both the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and the Safeguard Mechanism. Accordingly, the Group's domestic and international flights are subject to mandatory emissions reduction schemes. These frameworks require the Group to achieve emissions reductions relative to baselines established by the respective schemes. The Group can rely on carbon offsets and direct emissions reductions to meet our obligations under these schemes.

Further information can be found in our 2024 Sustainability Report, with a summary of action to progress against our targets set out below.

Emissions reduction actions

Qantas undertook a range of initiatives and actions during the FY24 reporting period to reduce our emissions. More details can be found in our 2024 Sustainability Report (FY24 SR), and a summary of the actions across our three key pillars is set out below.

Sustainable Aviation Fuel

SAF is a critical lever to meeting our interim and long-term emissions reduction targets as it is a 'drop in' fuel that can be used in existing aircraft and infrastructure. SAFs are non-conventionally derived jet fuel, produced through either biogenic or synthetic pathways. Biogenic SAFs, derived from feedstocks like used cooking oil, energy crops, and agricultural residues, can reduce lifecycle emissions by up to 80 per cent in their unblended form compared to fossil fuels. Synthetic SAFs ("e-fuels"), produced from carbon dioxide, green hydrogen, and renewable electricity, can achieve over 90 per cent lifecycle emission reductions in their unblended form when atmospheric carbon dioxide is used as a feedstock. Currently SAF can be blended with fossil derived jet fuel to a maximum of 50 per cent, with this blending limit expected to increase over the coming decade.

While our current SAF use represents approximately 0.2 per cent of our total fuel consumption, our aim is to progressively move up to approximately three per cent over the next couple of years before acquiring 10 per cent of our total fuel consumption as SAF in 2030. Our ability to reach that target is subject to SAF being available on commercially reasonably terms in the ports to which we fly, primarily the US. The remainder of the 10 per cent by 2030, is planned to be acquired in the back end of the decade to provide sufficient time for the development of domestic and regional SAF projects. To support SAF project development, the Group is directly investing in domestic and international SAF projects through the Qantas Climate Fund and in partnership with Airbus. Given the reliance on new project development to meet our 2030 SAF target, Qantas will also continue to engage with regional incumbent producers and fuel majors on flexible offtakes to bridge to and beyond 2030.

Jet Zero Australia, our first domestic SAF investment, completed a raise in March 2024 of $29 million in committed funds, from existing and new investors including Japanese Industrial Idemitsu. It is a concrete example of Qantas' efforts to form credible consortiums, de-risk projects through early investment and engagement on offtakes, in order to place supported projects in the best position possible to achieve a Final Investment Decision.

We have also made an early investment with ANZ and Renova in a New Zealand-based SAF production opportunity being developed by Chicago-based Seadra Energy Inc. The project has completed engineering design and is moving towards a final investment decision in FY25. The project will re-utilise decommissioned refining assets at Marsden Point and in conjunction with hydrothermal liquefaction technology will convert regional agricultural waste to SAF and renewable diesel.

During FY24, the first plantings also took place for the Wheatbelt Connect project, near Moora in Western Australia. The native seedlings, including mallee (York gum) were planted on an area of marginal pastural land and will support native reforestation and carbon farming to generate ACCUs. The project, between Qantas, ANZ and INPEX aims to integrate within the existing farming system, providing income stability and environmental benefit to farmers through an innovative leasing model. The project is also investigating the potential for native plantation biomass to be converted into renewable fuels including SAF. Recent tests confirmed the ability to produce a stabilised bio-oil and SAF from eucalyptus species. Investigations will progress to understanding the viability of a SAF production at a commercial scale in the region.

Sustainable operations

Improvements in Group operational activities are an important part of the carbon emissions reduction efforts. Throughout FY24, initiatives primarily focused on front-line flying and engineering procedures, such as single-engine taxi-in and promoting ground power unit usage rather than auxiliary power, reduced emissions by more than eight kilotons. A team from across the Group continues to lead the implementation of the FY30 optimising emissions roadmap which includes more than 60 initiatives varying in complexity, delivery timeframes and benefits. In FY25, we will continue to build on frontline cultural transformation supported by effective policy and investment.

During FY24, four Qantas Airlines 737-800s were retrofitted with split-scimitar winglets which improve aerodynamics by reducing drag, in turn improving thrust performance and helping reduce fuel burn. These aircraft deliver approximately 1.75 to two per cent fuel saving per flight — depending on sector length — and reduced emissions by 0.3 kilotons which would have otherwise been generated. Another twenty 738 aircraft are scheduled to be retrofitted by FY26, with 10 of those planned in FY25. The total program of work is expected to reduce emissions by up to eight kilotons which would otherwise been generated, depending on the amount of flying.

During FY24, Jetstar installed FliteDeck Advisor (FDA) in eleven 787 aircraft. FDA is an optimisation application providing pilots with real time, tail-specific, in-flight advisories to improve flight profile, fuel burn and schedule.

In FY24, the Qantas Group received multiple electric vehicles and power units helping support emissions reduction on the ground. A total of 19 vehicles or power units were received and are in operation across the Group, with a further 10 ordered. Through a new bus fleet supplier, there are now six electric, low-floor wheel chair accessible buses servicing our employee shuttle between Qantas' Mascot campus and Sydney domestic and international airports. In FY25, the Group will further invest in electric vehicles and power units, with orders for more than 50 electric vehicles or power units to be placed in FY25. We support renewable energy by purchasing large-scale generation certificates (LGCs) for all of the electricity consumption in Qantas Group buildings throughout Australia.

Carbon markets

As noted above, aviation is a hard-to-abate sector. Even as we pursue solutions for direct emissions reductions through investments in SAF and operational efficiency, high integrity carbon markets will play an ongoing role in helping us to achieve our net climate targets.

With growing compliance requirements for net emissions reductions through regulations such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) and the Australian Safeguard Mechanism, our investment in carbon markets will grow. The Group will continue to purchase carbon offsets to meet its obligations under these schemes as well as our voluntary commitments and customer programs. The Group reports under the National Greenhouse and Energy Reporting (NGER) Scheme as part of its obligations under the Safeguard Mechanism, and this reporting is publicly available on the website of the Clean Energy Regulator.

As a large player in Australia's carbon market and a growing participant in global carbon markets, the Group has a role in helping these markets to facilitate real and transparent emissions reductions and removals. One way the group does this is through leveraging direct investments to help accelerate and encourage market supply of carbon offsets that meet our internal standards of quality and integrity whilst focusing on nature and social co-benefits. The Group aims to do this primarily through investments from the Group's Climate Fund such as our recent $20 million investment into the Silva Capital Origination Fund. The Fund aligns with our commitment to evolve our carbon portfolio to include more nature-based solutions from FY25 onwards. Our investment allows the fund to acquire agricultural land in Australia to develop carbon sequestration projects, that promote sustainable agricultural and land management practices. These projects create biodiversity, economic and conservation benefits as the Fund prioritises planting projects that reforest cleared land while helping to ensure the land can also remain productive for farming.

Regardless of how we source carbon offsets, the key focus of our strategy remains ensuring carbon offsets are sourced from carbon projects that meet our internal standards of quality and integrity, with additional value attributed to projects with environmental and social co-benefits. Moving into FY25, the Group will continue to elevate our carbon market strategy to further strengthen our carbon offsets portfolio.

5. EMISSIONS SUMMARY

Emissions over time

Emissions since the base year				
		Total tCO_2-e	**Emissions intensity of the functional unit (kg CO_2-e/PAX km)**	**Emissions intensity of the functional unit (kg CO_2-e/Freight km)**
Base year:	2012-13	16,263,831	0.134	0.994
Year 1:	2013-14 (PAX)	11,073,707	0.1087	-
Year 1:	2013-14 (Freight)	-	-	-
Year 2:	2014-15 (Pax)	10,985,885	0.104	-
Year 2:	2014-15 (Freight)	1,897,595	-	0.989
Year 3:	2015-16 (Pax)	11,652,495	0.104	-
Year 3:	2015-16 (Freight)	1,760,342	-	0.908
Year 4:	2016-17 (PAX)	11,860,518	0.104	-
Year 4:	2016-17 (Freight)	1,746,526	-	0.935
Year 5:	2017-18 (PAX)	12,045,150	0.100	-
Year 5:	2017-18 (Freight)	1,730,749	-	0.929
Year 6:	2018-19 (PAX and Freight)	13,618,264	0.094	0.902
Year 7:	2019-20 (PAX and Freight)	10,242,941	0.094	0.902
Year 8:	2020-21 (PAX and Freight)	3,495,135	0.094	0.902
Year 9:	2021-22 (PAX and Freight)	3,466,118	0.101	0.761
Year 10:	2022-23 (PAX and Freight)	14,398,142*	0.134*	1.071*
Year 11:	2023-24 (PAX and Freight)	17,191,669*	0.134*	1.153*

*increase in emissions and emissions intensity due to expanded reporting boundary.

Significant changes in emissions

Significant changes in emissions			
Attributable process	**Previous year emissions** (t CO_2-e)	**Current year emissions** (t CO_2-e)	**Reason for change**
Scope 1 emissions from kerosene (Stationary & Transport) for passenger	9,184,757	10,937,272	An increased level of flying activity which returned to pre-pandemic levels. Aviation fuel accounted for more than 99.8 per cent of the Group's Scope 1 emissions

Use of Climate Active carbon neutral products, services, buildings or precincts

Certified brand name	Product/Service/Building/Precinct used
N/A	N/A

Emissions summary - Passenger

Stage / Attributable Process / Source	tCO_2-e
Kerosene (Stationary & Transport)	13,812,893
Diesel (Stationary & Transport) - Domestic	4,131
Diesel (Stationary & Transport) - International	267
Gasoline (Transport) - Domestic	583
Gasoline (Transport) - International	66
LPG (Stationary & Transport)	187
Natural gas (Stationary & Transport)	3,427
Electricity - Domestic	48,014
Electricity - International	695
Refrigerants (HFCs)	1,370
Oils, greases & solvents	3,954
Embodied emissions of aircraft	44,785
Embodied emissions of aircraft parts (maintenance)	890,620
End-of life of aircraft	479
Ground services equipment	21,540
Third-party ground services	69,901
Onboard catering (food and drinks)	236,247
Onboard cutlery and trays	23,142
Onboard customer products	3,845
Onboard magazines	393
Boarding pass and baggage tags	1,549
Water	578
Waste	28,964
Cleaning services	7,502
Crew accommodation & travel	53,222
Operational staff commuting	33,543
Cloud hosting	32,602
Total	**15,324,499**

Emissions Summary – Freight

Stage / Attributable Process / Source	Dedicated freight aircraft (tCO_2e)	Freight carried on passenger aircraft* (tCO_2e)
Kerosene (Stationary & Transport)	636,330	1,096,668
Diesel (Stationary & Transport) - Domestic	16	328
Diesel (Stationary & Transport) - International	21	
Natural gas (Stationary & Transport)	170	272
Electricity - Domestic	5,797	3,812
Electricity - International	55	
Embodied emissions of aircraft	1,481	3,556
Embodied emissions of aircraft parts (maintenance)	18,647	70,710
End-of life of aircraft	126	38
Ground services equipment	1,270	1,710
Third-party ground services	8,713	5,550
Crew accommodation & travel	291	4,208
Operational staff commuting	1,185	2,663
LPG (Stationary & Transport)	15	
Gasoline (Transport) – Domestic	46	
Gasoline (Transport) – International	6	
Refrigerants (HFCs)	109	
Oils, greases and solvents	314	
Onboard catering (food and drinks)	2,302	
Water	33	
Waste	569	
Cleaning services	78	
Cloud hosting	81	
Total	**1,867,170**	

*To account for freight carried on passenger aircraft, the % of emissions relating to freight carried on the passenger reporting boundary has been included as an uplift which equated to 1,190,081 tCO_2e (this includes LPG, gasoline, refrigerants, oils, greases and solvents as these are shared emission sources).

Emissions intensity per functional unit (kg CO_2-e/PAX km)	Commercial in confidence
Number of functional units to be offset (kg CO_2-e/PAX km)	Commercial in confidence
Emissions intensity per functional unit (kg CO_2-e/Freight km)	Commercial in confidence
Number of functional units to be offset (kg CO_2-e/Freight km)	Commercial in confidence
Total emissions to be offset (tCO_2-e)	243,347*

*Qantas Fly Carbon Neutral Program (Fly Carbon Neutral and Carbon Neutral Freight). Excludes Qantas Duty Travel and dollar-for-dollar matching.

Functional units

Passenger

The functional unit for both domestic and international travel is the transport of a single passenger, over a specified distance, from entry into the airport terminal at origin to exiting the airport terminal at the destination (i.e. 'kg CO_2-e per-passenger-kilometre').

This is an estimate based on the sectors booked at the time the customer purchases carbon offsets through FCN.

Freight

The functional unit is the transport of one tonne of freight expressed in tonnes CO_2-e per tonne-kilometre (i.e. 't CO_2-e per tonne-kilometre') based on freight transported on an aircraft within and outside of Australia. It includes Qantas Freight and belly freight transported on Qantas and Jetstar passenger aircraft. The functional unit only includes the ground support required to load the freight onto the aircraft and excludes transport to and from the airport. Ground support is not included for freight loading/unloading at international ports. Note that the resulting emission factor is to be applied across all freight including belly freight and freight transported on Qantas dedicated air freight services to take into account the inherent variability in the method used to transport freight.

This is an estimate based on the sectors booked at the time the freight customer purchases carbon offsets through Freight FCN.

Standard

The LCA has been prepared in alignment with Climate Active Carbon Neutral Standard guidelines in accordance with international standards ISO 14040:2006 and ISO 14044:2006.

Greenhouse gases considered

Greenhouse gases considered include Carbon Dioxide (CO_2), Nitrous Oxide (N_2O), Methane (CH_4), Sulphur Hexafluoride (SF_6), Hydrofluorocarbons (HCFs) and Perfluorocarbons (PFCs).

Allocation of belly freight

Qantas Freight uses passenger aircraft for freight transport (belly freight). The quantity of fuel used for freight transported in passenger aircraft was determined using traffic statistics for Qantas mainline which provided information on the following by aircraft type:

- **PAX RTK** passenger revenue-tonne-kilometres – which is the revenue load in tonnes of passengers multiplied by the distance flown.
- **RTK** which is the revenue load in tonnes multiplied by the distance flown (that is the total load – freight and passengers flown).

The freight component for each aircraft type was determined using the following formula:

- **%RFTK** = (RTK – PAX RTK)/RTK

This percentage was applied to fuel use by aircraft type to apportion fuel to belly freight.

A similar approach was used for Jetstar services; however, PAX RTK and RTK were not available by aircraft type and a single belly freight percentage was applied across the Jetstar fleet.

The goal of the LCA is to assess an emissions footprint in sufficient detail that supports the global warming potential attributable to a passenger on a Qantas Group and/or an average emissions footprint-per-passenger-kilometre to be applied to codeshare and other non-Qantas Group flights for carbon neutral certification under the Climate Active program.

6. CARBON OFFSETS

Carbon offsets retirement approach

This reporting year, Fly Carbon Neutral program volume requirements for voluntary carbon offsets was communicated to our voluntary carbon offsets supplier. Once our supplier prepared a portfolio and it was approved by Qantas Group, they purchased and retired the offsets on Qantas' behalf.

This certification has taken an in-arrears approach. The total emission to compensate for is 243,347 tonnes of CO2e. The total number of eligible offsets used in this report is 243,347. Of the total eligible offsets used, 70,731 were previously banked and 172,616 were newly purchased and retired. 52,104 are remaining and have been banked for future use.

A summary of the offsets purchased and retired by Qantas Group in FY24 are highlighted below:

- 243,340 carbon offsets were purchased and retired for customers who 'ticked-the-box' to participate in Qantas' Fly Carbon Neutral program which is the Climate Active certified service detailed in this PDS.
- 7 carbon offsets were purchased and retired as part of Qantas's carbon neutral freight service program.
- 58,656 carbon offsets were purchased and retired to compensate for all duty travel. See Appendix A for more details on this program.
- 136,066 carbon offsets were purchased and retired for customers as part of Qantas's Dollar for Dollar matching program. See Appendix A for more details on this program.
- 70,731 from the total 114,760 carbon offsets that were purchased and retired in excess of the volume requirements for Qantas to meet its obligations in FY23, were banked for future use, and have now been used for customers who 'ticked-the-box' to participate in Qantas' Fly Carbon Neutral program which is the Climate Active certified service detailed in this PDS for FY24.
    - These carbon offsets have retirement text that states "*Retired on behalf of Qantas Airways Ltd. to meet its obligations under the Climate Active Neutral Standard for the period Financial Year 2022/23*" but as outlined above, these will be used to meet obligations in this PDS for FY24.

The calculation of neutrality is based on the data related to the passenger and flight details of the booking made at the time the passenger purchases carbon offsets through FCN. Discrepancies may exist between the estimated emissions associated with a passenger's flight at the time of purchasing carbon offsets through FCN, and the emissions estimated at the time of preparing this report. These discrepancies are due to several factors, which are included in the calculation of the emissions related to the emissions boundary set out in this document. As such, the Qantas Group may purchase additional carbon offsets to compensate for any discrepancies in estimated emissions at the time of preparing this report, in order to ensure neutrality.

The purchase of these additional carbon offsets may be in excess of the amount required to ensure neutrality, and this excess may be banked for use in future years to address any discrepancies.

Eligible offsets retirement summary

Offsets retired for Climate Active certification

Type of offset unit	Quantity used for this reporting period	Percentage of total units used
Australian Carbon Offset Units (ACCUs)	52,695	22%
Certified Emissions Reductions (CERs)	132,192	54%
Verified Emissions Reductions (VERs)	9,794	4%
Verified Carbon Units (VCUs)	48,666	20%

Project description	Type of offset unit	Registry	Date retired	Serial number	Vintage	Total quantity retired	Quantity used in previous reporting periods	Quantity banked for future reporting periods	Quantity used for this reporting period	Percentage of total used this reporting period
Central Arnhem Land Fire Abatement (CALFA) Project	ACCU	ANREU	1/09/2023	8,997,754,467-8,997,756,139	2023-24	1,673	0	0	1,673	0.69%
Central Arnhem Land Fire Abatement (CALFA) Project	ACCU	ANREU	1/09/2023	8,997,756,140-8,997,776,143	2023-24	20,004	0	0	20,004	8.22%
South East Arnhem Land Fire Abatement Project (SEALFA) Project	ACCU	ANREU	1/09/2023	8,378,977,200-8,378,979,762	2022-23	2,563	0	0	2,563	1.05%
South East Arnhem Land Fire Abatement Project (SEALFA) Project	ACCU	ANREU	1/09/2023	8,378,979,763-8,378,991,505	2022-23	11,743	0	0	11,743	4.83%
North East Arnhem Land Fire Abatement (NEALFA)	ACCU	ANREU	1/09/2023	8,997,697,097-8,997,732,328	2023-24	35,232	0	5,290	883[1]	0.36%
South East Arnhem Land Fire Abatement Stage 2 (SEALFA2)	ACCU	ANREU	1/09/2023	8,998,006,140-8,998,008,924	2023-24	2,785	0	2,785	0	0%

[1] Remaining units (29,059 units) are not used towards the Climate Active Carbon Neutral Certification in this table and have been used separately as part of Qantas' dollar-for-dollar matching below (see Appendix A of this document for more detail).

Enercon Wind Farms in Karnataka Bundled Project 30.40 MW	CER	ANREU	22/12/2023	295,383,530-295,398,991	CP2	15,462	0	0	15,462	6.58%
Enercon Wind Farms in Karnataka Bundled Project - 73.60 MW	CER	ANREU	22/12/2023	271,538,534-271,558,450	CP2	19,917	0	0	19,917	8.19%
Energy Efficient Stoves Program - CPA1	VER	Gold Standard	22/12/2023	GS1-1-ET-GS11147-16-2021-24612-4070-5080	2021	1,011	0	0	1,011	0.42%
Katingan Peatland Restoration and Conservation Project	VCU	VERRA	22/12/2023	12730-VCS-VCU-263-VER-ID-14-1477-01012020-31122020-0-427215187-427218724	2020	3,538	0	0	3,538	1.45%
Renewable Energy Wind Power Project in Karnataka	CER	ANREU	30/1/2024	283,978,677-283,982,930	CP2	4,254	0	0	4,254	1.75%
Enercon Wind Farms in Karnataka Bundled Project – 33 MW	CER	ANREU	30/1/2024	271,617,255-271,622,326	CP2	5,072	0	0	5,072	2.08%
Bundled Wind Energy Power Projects (2003 policy) in Rajasthan	CER	ANREU	30/1/2024	271,235,452-271,235,528	CP2	77	0	0	77	0.03%
Bundled Wind Energy Power Projects (2003 policy) in Rajasthan	CER	ANREU	30/1/2024	271,209,096-271,209,458	CP2	363	0	0	363	0.15%

Bundled Wind Energy Power Projects (2003 policy) in Rajasthan	CER	ANREU	30/1/2024	271,208,602-271,209,095	CP2	494	0	0	494	0.20%
Bundled Wind Energy Power Projects (2003 policy) in Rajasthan	CER	ANREU	30/1/2024	271,206,718-271,208,601	CP2	1,884	0	0	1,884	0.77%
Bundled Wind Energy Power Projects (2003 policy) in Rajasthan	CER	ANREU	30/1/2024	271,162,723-271,170,406	CP2	7,684	0	0	7,684	3.16%
Renewable Energy Wind Power Project in Karnataka	CER	ANREU	30/1/2024	265,993,518-266,005,652	CP2	12,135	0	0	12,135	4.99%
Energy Efficient Stoves Program - CPA1	VER	Gold Standard	30/1/2024	GS1-1-ET-GS11147-16-2021-24612-5321-7636	2021	2,316	0	0	2,316	0.95%
Katingan Peatland Restoration and Conservation Project	VCU	VERRA	30/01/2024	12730-VCS-VCU-263-VER-ID-14-1477-01012020-31122020-0-431346143-431348458	2020	2,316	0	0	2,316	0.95%
Energy Efficient Stoves Program - CPA 2	VER	Gold Standard	18/06/2024	GS1-1-ET-GS11148-16-2021-25961-1-5986	2021	5,986	0	0	5,986	2.46%
Wind Power Project in Tamil Nadu by Green Infra Renewable Energy Limited	VCU	VERRA	18/06/2024	16402-VCS-VCU-1507-VER-IN-1-1904-01092023-	2023	9,897	0	0	9,897	4.07%

				30112023-0-761099255-761109151						
Wind Power Project in Tamil Nadu by Green Infra Renewable Energy Limited	VCU	VERRA	18/06/2024	16287-VCS-VCU-1507-VER-IN-1-1904-01022022-31122022-0-753472472-753503875	2022	31,404	0	0	31,404	12.91%
Katingan Peatland Restoration and Conservation Project	VCU	VERRA	22/11/2024	12730-VCS-VCU-263-VER-ID-14-1477-01012020-31122020-0431183837 - 431185347	2020	1,511	0	0	1,511	0.62%
Wind Power Project in Tamil Nadu by SWPPL	CER	ANREU	22/11/2024	319,204,389-319,214,817	CP2	10,429	0	0	10,429	4.29%
Promoting Clean Cooking Solutions for the Disadvantaged Households in Nepal	VER	Gold Standard	31/03/2023	GS1-1-NP-GS6212-16-2018-19690-4093-4573	2018	481	0	0	481[2]	0.20%
Enercon Wind Farms in	CER	ANREU	18/10/2023	295,408,473 -	2020	1,222[3]	353	0	869[2]	0.36%

[2] These offsets (70,731 units in total) have retirement text that states *"Retired on behalf of Qantas Airways Limited to meet its obligations under the Climate Active Neutral Standard for the period Financial Year 2022/23",* however these offsets were purchased in excess of the volume requirements for Qantas to meet its obligations in FY23 and have instead been used in this PDS to meet its obligations under the Climate Active Carbon Neutral Standard for FY24.
[3] Remaining units (353 units) are not used towards the Climate Active Carbon Neutral Certification for FY24 in this table and have been used separately as part of the Climate Active Carbon Neutral Certification in FY23.

Karnataka Bundled Project 30.40 MW				295,409,694						
Bundled wind energy power projects (2003 policy) in Rajasthan	CER	ANREU	22/12/2023	271,209,459 - 271,225,463	2020	16,005	0	0	16,005[2]	6.58%
Bundled wind energy power projects (2003 policy) in Rajasthan	CER	ANREU	22/12/2023	271,225,464 - 271,235,451	2020	9,988	0	0	9,988[2]	4.10%
Bundled wind power project in the state of Gujarat	CER	ANREU	30/01/2024	313,107,798- 313,109,819	2019	2,022	0	0	2,022[2]	0.83%
Bundled wind power project in the state of Gujarat	CER	ANREU	30/01/2024	313,109,820- 313,121,210	2019	11,391	0	0	11,391[2]	4.68%
Bundled wind power project in the state of Gujarat	CER	ANREU	30/01/2024	313,121,211- 313,196,319	2019	75,109[4]	0	44,029[5]	14,146[2]	5.81%
Jawoyn Fire 2	ACCU	ANREU	30/01/2024	9,003,827,754 - 9,003,862,850	2024	35,097[6]	13,791	0	15,829[2]	6.51%
Offset Totals						361,065	14,144	52,104	243,347	100%

[4] Remaining units (16,934 units) are not used towards the Climate Active Carbon Neutral Certification for FY24 in this table and have been separately as part of Qantas' FY23 duty travel retirements.
[5] These offsets (44,029 units) have retirement text that states "*Retired on behalf of Qantas Airways Limited to meet its obligations under the Climate Active Neutral Standard for the period Financial Year 2022/23*", however these offsets were purchased in excess of the volume requirements for Qantas to meet its obligations in FY23 and have been banked for future use.
[6] Remaining units (19,268 units in total) are not used towards the Climate Active Carbon Neutral Certification for FY24 in this table and have been separately used as part of Qantas' FY23 Carbon Active Carbon Neutral Certification (13,791 units) and Qantas' FY23 dollar-for-dollar matching (5,477 units).

Co-benefits

Our carbon offsets portfolio reflects the strategic priorities of the Qantas Group, including our commitment to support Indigenous economic development as part of our Reconciliation Action Plan. For FY24, 21% of carbon offsets purchased through the FCN program were sourced from Arnhem Land Fire Abatement Project (ALFA), an Aboriginal owned, not-for profit carbon farming business that develops and operates carbon projects under the savanna burning methodology. The projects provide employment and training opportunities for local rangers while supporting Aboriginal people in returning to, remaining on and managing their country. Communities are supported in the preservation and transfer of knowledge, the maintenance of Aboriginal languages and the wellbeing of Traditional Custodians. Preventing wildfires also reduces the risk of wildlife loss and protects the areas surrounding ancient rock art sites.

These projects may contribute to the following United Nations Sustainable Development Goals (UN SDGs), with further detail on how these projects contribute to the UN SDGs articulated in ALFA's annual reports:

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

1. Large-scale Generation certificates (LGCs)*	N/A

* LGCs in this table only include those surrendered voluntarily (including through PPA arrangements), and does not include those surrendered in relation to the LRET, GreenPower, and jurisdictional renewables.

APPENDIX A: ADDITIONAL INFORMATION

Additional carbon offsets retired by Qantas – Dollar for Dollar Matching

On the 11th of November 2019, Qantas Group announced that they will be matching every dollar spent by customers who 'tick-the-box' to Fly Carbon Neutral through the Qantas and Jetstar channels. The volume of offsets purchased as part of this commitment is based on the dollar value of contributions spent by customers who 'ticked-the-box' and opted into the Fly Carbon Neutral program at the time of booking.

This was done following the same strategic priorities of our voluntary customer offsets portfolio and was communicated to our voluntary carbon offsets suppliers who purchased and retired on Qantas' behalf. 136,066 tonnes of additional carbon offsets were purchased and retired through matching every dollar spent by customers who 'ticked-the-box' and opted into the Fly Carbon Neutral program.

As noted earlier in this document, the calculation of neutrality is based on the data related to the passenger and flight details of the booking made at the time the passenger purchases carbon offsets through FCN. Discrepancies may exist between the estimated emissions associated with a passenger's flight at the time of purchasing carbon offsets through FCN, and the emissions estimated at the time of preparing this report. These discrepancies are due to several factors, which are included in the calculation of the emissions related to the emissions boundary set out in this document. As such, the Qantas Group may purchase further carbon offsets to compensate for any discrepancies in estimated emissions at the time of preparing this report, in order to ensure neutrality. As the commitment is to match the dollar value of customers' contributions and not the cumulative emissions related to the flights taken by those same contributing customers, these further offsets purchased to address the emissions discrepancies are not included as part of the additional offsets purchased through matching every dollar spent by customers who 'ticked-the-box' and opted into the Fly Carbon Neutral program.

On 1 July 2024, the Qantas Group announced that it will stop dollar-matching Fly Carbon Neutral Contributions with the investment being re-allocated to support carbon offset procurement under the airline's regulatory and compliance requirements.

Carbon offsets retired for matching customer dollar contributions										
Project description	**Type of offset units**	**Registry**	**Date retired**	**Serial number (and hyperlink to registry transaction record)**	**Vintage**	**Eligible quantity (tCO2-e)**	**Eligible quantity used for previous reporting periods**	**Eligible quantity banked for future reporting periods**	**Eligible quantity used for this reporting period**	**Percentage of total (%)**
North East Arnhem Land Fire Abatement (NEALFA)	ACCU	ANREU	1/09/2023	SN8,997,697,097-8,997,732,328	2023-24	35,232	0	0	29,059[7]	21.36%
Enercon Wind Farms in Karnataka Bundled Project - 73.60 MW	CER	ANREU	22/12/2023	SN271,509,025-271,538,533	CP2	29,509	0	0	29,509	21.69%
ENERGY EFFICIENT STOVES PROGRAM - CPA1	VER	Gold Standard	22/12/2023	GS1-1-ET-GS11147-16-2021-24612-3227-4069	2021	843	0	0	843	0.62%
Katingan Peatland Restoration and Conservation Project	VCU	VERRA	22/12/2023	12730-VCS-VCU-263-VER-ID-14-1477-01012020-31122020-0-427218725-427221675	2020	2,951	0	0	2,951	2.17%
Enercon Wind Farms in Karnataka Bundled Project 30.40 MW	CER	ANREU	30/1/2024	SN295,414,385-295,417,180	CP2	2,796	0	0	2,796	2.05%
Enercon Wind Farms in Karnataka Bundled Project 30.40 MW	CER	ANREU	30/1/2024	SN295,398,992-295,407,694	CP2	8,703	0	0	8,703	6.40%
Enercon Wind Farms in Karnataka	CER	ANREU	30/1/2024	SN295,366,540-	CP2	13,922	0	0	13,922	10.23%

[7] Remaining units (6,173 units) are not used towards Qantas' dollar-for-dollar matching in this table and have been separately used as part of the Climate Active Carbon Neutral Certification above, with 883 units used for this reporting period in FY24 and 5,290 units banked for future reporting (See Eligible offsets retirement summary for more detail).

Bundled Project 30.40 MW				295,380,461						
Renewable Energy Wind Power Project in Karnataka	CER	ANREU	30/1/2024	SN283,982,931-283,983,989	CP2	1,059	0	0	1,059	0.78%
ENERGY EFFICIENT STOVES PROGRAM - CPA1	VER	Gold Standard	30/01/2024	GS1-1-ET-GS11147-16-2021-24612-7637-9555	2021	1,919	0	0	1,919	1.41%
Katingan Peatland Restoration and Conservation Project	VCU	VERRA	30/01/2024	12730-VCS-VCU-263-VER-ID-14-1477-01012020-31122020-0-431348459-431350186	2020	1,728	0	0	1,728	1.27%
Katingan Peatland Restoration and Conservation Project	VCU	VERRA	30/01/2024	12730-VCS-VCU-263-VER-ID-14-1477-01012020-31122020-0-427221676-427221866	2020	191	0	0	191	0.14%
Energy Efficient Stoves Program - CPA 2	VER	Gold Standard	18/06/2024	GS1-1-ET-GS11148-16-2021-25961-5987-10926	2021	4,940	0	0	4,940	3.63%
Wind Power Project in Tamil Nadu by Green Infra Renewable Energy Limited	VCU	VERRA	18/06/2024	16402-VCS-VCU-1507-VER-IN-1-1904-01092023-30112023-0-761109152-761125258	2023	16,107	0	0	16,107	11.84%
Jamanwada Wind Power Project in Gujarat	VCU	VERRA	18/06/2024	14689-VCS-VCU-208-VER-IN-1-1191-01062021-31122021-0-620760080-620771063	2021	10,984	0	0	10,984	8.07%
Bundled Wind Power Project in Madhya Pradesh, Gujarat and Kerala by D.J. Malpani	VCU	VERRA	18/06/2024	12199-VCS-VCU-997-VER-IN-1-1679-01012021-30062021-0-	2021	6,850	0	0	6,850	5.03%

				395130684-395137533						
Bundled Wind Power Project in Madhya Pradesh, Gujarat and Kerala by D.J. Malpani	VCU	VERRA	18/06/2024	12199-VCS-VCU-997-VER-IN-1-1679-01012021-30062021-0-395125934-395126083	2021	150	0	0	150	0.11%
Katingan Peatland Restoration and Conservation Project	VCU	VERRA	22/11/2024	12730-VCS-VCU-263-VER-ID-14-1477-01012020-31122020-0431183286-431183836	2020	551	0	0	551	0.40%
Wind Power Project in Tamil Nadu by SWPPL	CER	ANREU	22/11/2024	SN319,200,585-319,204,388	CP2	3,804	0	0	3,804	2.80%
								Total offsets retired this report and used in this report	**136,066**	
								Total offsets retired this report and banked for future reports	0	

Type of carbon offset units	Eligible quantity (used for this reporting period)	Percentage of total
Australian Carbon Offset Units (ACCUs)	29,059	21%
Certified Emissions Reductions (CERs)	59,793	44%
Verified Carbon Units (VCUs)	39,512	29%
Verified Emissions Reductions (VERs)	7,702	6%

Additional carbon offsets retired by Qantas – Duty Travel

Please note, the below offset retirement summary has been separated per Qantas program to distinguish between each respective program. As a result, there may be discrepancies between the offset retirement detailed below and the offset retirement certificate.

Project description	Type of offset units	Registry	Date retired	Serial number	Vintage	Eligible quantity retired (tCO_2-e)	Eligible quantity used for previous reporting periods	Eligible quantity banked for future reporting periods	Eligible quantity used for this reporting period	Percentage of total (%)
Enercon Wind Farms in Karnataka Bundled Project 30.40 MW	CER	ANREU	22/12/2023	SN295,353,530-295,366,539	CP2	13,010	0	0	13,010	22.18%
Grid Connected Wind Energy Generation at Andhra Pradesh	CER	ANREU	30/1/2024	SN265,631,910-265,638,812	CP2	6,903	0	0	6,903	11.77%
Grid Connected Wind Energy Generation at Andhra Pradesh	CER	ANREU	30/1/2024	SN265,615,588-265,621,909	CP2	6,322	0	0	6,322	10.78%

Grid Connected Wind Energy Generation at Andhra Pradesh	CER	ANREU	30/1/2024	SN265,615,109-265,615,587	CP2	479	0	0	479	0.82%
150 MW Grid Connected Wind Power Based Electricity Generation Project in Gujarat	VCU	VERRA	18/06/2024	14831-VCS-VCU-1491-VER-IN-1-292-01072021-31122021-0629010558 - 629010672	2021	115	0	0	115	0.20%
Jamanwada Wind Power Project in Gujarat	VCU	VERRA	18/06/2024	14689-VCS-VCU-208-VER-IN-1-1191-01062021-31122021-0620745064 - 620760079	2021	15,016	0	0	15,016	25.60%
Jamanwada Wind Power Project in Gujarat	VCU	VERRA	15/08/2024	14689-VCS-VCU-208-VER-IN-1-1191-01062021-31122021-0620771064 - 620780989	2021	9,926	0	0	9,926	16.92%
150 MW Grid Connected Wind Power Based Electricity Generation Project in Gujarat	VCU	VERRA	15/08/2024	14831-VCS-VCU-1491-VER-IN-1-292-01072021-31122021-	2021	3,885	0	0	3,885	6.62%

				0629010673 - 629014557						
150 MW Grid Connected Wind Power Based Electricity Generation Project in Gujarat	VCU	VERRA	15/08/2024	14831-VCS-VCU-1491-VER-IN-1-292-01072021-31122021-0629024558 - 629027557	2021	3,000	0	0	3,000	5.11%
								Total offsets retired this report and used in this report	**58,656**	
								Total offsets retired this report and banked for future reports	**0**	

Type of carbon offset units	Quantity used	Percentage of total
Australian Carbon Offset Units (ACCUs)	0	0%
Certified Emissions Reductions (CERs)	26,714	46%
Verified Carbon Units (VCUs)	31,942	54%
Verified Emissions Reductions (VERs)	0	0%

APPENDIX B: ELECTRICITY SUMMARY

There are two international best-practice methods for calculating electricity emissions – the location-based method and the market-based method. Reporting electricity emissions under both methods is called dual reporting.

Dual reporting of electricity emissions is useful, as it provides different perspectives of the emissions associated with a business's electricity usage.

Location-based method

The location-based method provides a picture of a business's electricity emissions in the context of its location, and the emissions intensity of the electricity grid it relies on. It reflects the average emissions intensity of the electricity grid in the location (State) in which energy consumption occurs. The location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

Market-based method

The market-based method provides a picture of a business's electricity emissions in the context of its renewable energy investments. It reflects the emissions intensity of different electricity products, markets and investments. It uses a residual mix factor (RMF) to allow for unique claims on the zero emissions attribute of renewables without double-counting.

For this certification, electricity emissions have been set by using the location-based approach.

Electricity Calculator – Passenger

Market Based Approach Summary

Market Based Approach	Activity Data (kWh)	Emissions (kg CO_2-e)	Renewable Percentage of total
Behind the meter consumption of electricity generated	0	0	0%
Total non-grid electricity	**0**	**0**	**0%**
LGC purchased and retired (kWh) (including PPAs)	0	0	0%
GreenPower	0	0	0%
Climate Active certified - Precinct/Building (voluntary renewables)	0	0	0%
Climate Active certified - Precinct/Building (LRET)	0	0	0%
Climate Active certified - Precinct/Building jurisdictional renewables (LGCs surrendered)	0	0	0%
Climate Active certified - Electricity products (voluntary renewables)	0	0	0%
Climate Active certified - Electricity products (LRET)	0	0	0%
Climate Active certified - Electricity products jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LGCs surrendered)	1,140,897	0	3%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	288,110	0	1%
Large Scale Renewable Energy Target (applied to grid electricity only)	7,951,845	0	18%
Residual electricity	34,636,003	31,518,763	0%
Total renewable electricity (grid + non grid)	**9,380,852**	**0**	**21%**
Total grid electricity	**44,016,856**	**31,518,763**	**21%**
Total electricity (grid + non grid)	**44,016,856**	**31,518,763**	**21%**
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	**34,636,003**	**31,518,763**	
Scope 2	30,829,849	28,055,163	
Scope 3 (includes T&D emissions from consumption under operational control)	3,806,154	3,463,600	
Residual electricity consumption not under operational control	**0**	**0**	
Scope 3	0	0	

Total renewables (grid and non-grid)	**21.31%**
Mandatory	**18.72%**
Voluntary	**2.59%**
Behind the meter	**0.00%**
Residual scope 2 emissions (t CO_2-e)	**28,055.16**
Residual scope 3 emissions (t CO_2-e)	**3,463.60**
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**28,055.16**
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**3,463.60**
Total emissions liability (t CO_2-e)	**31,518.76**

Figures may not sum due to rounding. Renewable percentage can be above 100%

Location Based Approach Summary

Location Based Approach	Activity Data (kWh) total	Under operational control			Not under operational control	
Percentage of grid electricity consumption under operational control	**100%**	**(kWh)**	**Scope 2 Emissions (kg CO_2-e)**	**Scope 3 Emissions (kg CO_2-e)**	**(kWh)**	**Scope 3 Emissions (kg CO_2-e)**
ACT	1,539,049	1,539,049	1,046,553	76,952	0	0
NSW	6,611,363	6,611,363	4,495,727	330,568	0	0
SA	1,465,499	1,465,499	366,375	117,240	0	0
VIC	19,482,135	19,482,135	15,390,887	1,363,749	0	0
QLD	10,822,981	10,822,981	7,900,776	1,623,447	0	0
NT	923,525	923,525	498,703	64,647	0	0
WA	2,891,493	2,891,493	1,532,491	115,660	0	0
TAS	280,811	280,811	33,697	2,808	0	0
Grid electricity (scope 2 and 3)	**44,016,856**	**44,016,856**	**31,265,209**	**3,695,072**	**0**	**0**
ACT	0	0	0	0		
NSW	0	0	0	0		
SA	0	0	0	0		
VIC	0	0	0	0		
QLD	0	0	0	0		
NT	0	0	0	0		
WA	0	0	0	0		
TAS	0	0	0	0		
Non-grid electricity (behind the meter)	**0**	**0**	**0**	**0**		
Total electricity (grid + non grid)	**44,016,856**					

Residual scope 2 emissions (t CO_2-e)	**31,265.21**
Residual scope 3 emissions (t CO_2-e)	**3,695.07**
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**31,265.21**
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**3,695.07**
Total emissions liability (t CO_2-e)	**34,960.28**

Electricity Calculator – Freight

Market Based Approach Summary			
Market Based Approach	**Activity Data (kWh)**	**Emissions (kg CO_2-e)**	**Renewable Percentage of total**
Behind the meter consumption of electricity generated	0	0	0%
Total non-grid electricity	**0**	**0**	**0%**
LGC purchased and retired (kWh) (including PPAs)	0	0	0%
GreenPower	0	0	0%
Climate Active certified - Precinct/Building (voluntary renewables)	0	0	0%
Climate Active certified - Precinct/Building (LRET)	0	0	0%
Climate Active certified - Precinct/Building jurisdictional renewables (LGCs surrendered)	0	0	0%
Climate Active certified - Electricity products (voluntary renewables)	0	0	0%
Climate Active certified - Electricity products (LRET)	0	0	0%
Climate Active certified - Electricity products jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	1,376,712	0	19%
Residual electricity	5,977,519	5,439,542	0%
Total renewable electricity (grid + non grid)	**1,376,712**	**0**	**19%**
Total grid electricity	**7,354,231**	**5,439,542**	**19%**
Total electricity (grid + non grid)	**7,354,231**	**5,439,542**	**19%**
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	**5,977,519**	**5,439,542**	
Scope 2	5,320,649	4,841,791	
Scope 3 (includes T&D emissions from consumption under operational control)	656,870	597,752	
Residual electricity consumption not under operational control	**0**	**0**	
Scope 3	0	0	

Total renewables (grid and non-grid)	**18.72%**
Mandatory	**18.72%**
Voluntary	**0.00%**
Behind the meter	**0.00%**
Residual scope 2 emissions (t CO_2-e)	**4,841.79**
Residual scope 3 emissions (t CO_2-e)	**597.75**
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**4,841.79**
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**597.75**
Total emissions liability (t CO_2-e)	**5,439.54**

Figures may not sum due to rounding. Renewable percentage can be above 100%

Location Based Approach Summary

Location Based Approach	Activity Data (kWh) total	Under operational control			Not under operational control	
Percentage of grid electricity consumption under operational control	**100%**	**(kWh)**	**Scope 2 Emissions (kg CO_2-e)**	**Scope 3 Emissions (kg CO_2-e)**	**(kWh)**	**Scope 3 Emissions (kg CO_2-e)**
ACT	0	0	0	0	0	0
NSW	3,175,127	3,175,127	2,159,086	158,756	0	0
SA	0	0	0	0	0	0
VIC	2,292,407	2,292,407	1,811,002	160,469	0	0
QLD	1,521,976	1,521,976	1,111,043	228,296	0	0
NT	0	0	0	0	0	0
WA	274,832	274,832	145,661	10,993	0	0
TAS	89,890	89,890	10,787	899	0	0
Grid electricity (scope 2 and 3)	**7,354,231**	**7,354,231**	**5,237,578**	**559,413**	**0**	**0**
ACT	0	0	0	0		
NSW	0	0	0	0		
SA	0	0	0	0		
VIC	0	0	0	0		
QLD	0	0	0	0		
NT	0	0	0	0		
WA	0	0	0	0		
TAS	0	0	0	0		
Non-grid electricity (behind the meter)	**0**	**0**	**0**	**0**		
Total electricity (grid + non grid)	**7,354,231**					

Residual scope 2 emissions (t CO_2-e)	**5,237.58**
Residual scope 3 emissions (t CO_2-e)	**559.41**
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**5,237.58**
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO_2-e)	**559.41**
Total emissions liability (t CO_2-e)	**5,796.99**

Operations in Climate Active buildings and precincts

Operations in Climate Active buildings and precincts	Electricity consumed in Climate Active certified building/precinct (kWh)	Emissions (kg CO_2-e)
N/A	**0**	**0**

Climate Active carbon neutral electricity is not renewable electricity. These electricity emissions have been offset by another Climate Active member through their building or precinct certification. This electricity consumption is also included in the market based and location based summary tables. Any electricity that has been sourced as renewable electricity by the building/precinct under the market based method is outlined as such in the market based summary table.

Climate Active carbon neutral electricity products

Climate Active carbon neutral product used	Electricity claimed from Climate Active electricity products (kWh)	Emissions (kg CO_2-e)
N/A	**0**	**0**

Climate Active carbon neutral electricity is not renewable electricity. These electricity emissions have been offset by another Climate Active member through their electricity product certification. This electricity consumption is also included in the market based and location based summary tables. Any electricity that has been sourced as renewable electricity by the electricity product under the market based method is outlined as such in the market based summary table.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following emissions sources have been assessed as attributable, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. These emissions are accounted for through an uplift factor. They have been non-quantified due to one of the following reasons:

1. **Immaterial** <1% for individual items and no more than 5% collectively
2. **Cost effective** Quantification is not cost effective relative to the size of the emission but uplift applied.
3. **Data unavailable** Data is unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.
4. **Maintenance** Initial emissions non-quantified but repairs and replacements quantified.

Relevant non-quantified emission sources	Justification reason
N/A	N/A

Excluded emission sources

Attributable emissions sources can be excluded from the carbon inventory, but still considered as part of the emissions boundary if they meet **all three of the below criteria**. An uplift factor may not necessarily be applied.

1. A data gap exists because primary or secondary data cannot be collected **(no actual data).**
2. Extrapolated and proxy data cannot be determined to fill the data gap (**no projected data**).
3. An estimation determines the emissions from the process to be **immaterial**).

Relevant excluded emission sources	Justification reason
N/A	N/A

Data management plan for non-quantified sources

There are no non-quantified sources in the emission boundary that require a data management plan.

APPENDIX D: OUTSIDE EMISSION BOUNDARY

Non-attributable emissions have been assessed as not attributable to a product or service (do not carry, make or become the product/service) and are therefore not part of the carbon neutral claim. To be deemed attributable, an emission must meet two of the five relevance criteria. Emissions which only meet one condition of the relevance test can be assessed as non-attributable and therefore are outside the carbon neutral claim. Non-attributable emissions are detailed below.

1. **Size** The emissions from a particular source are likely to be large relative to other attributable emissions.

2. **Influence** The responsible entity could influence emissions reduction from a particular source.

3. **Risk** The emissions from a particular source contribute to the responsible entity's greenhouse gas risk exposure.

4. **Stakeholders** The emissions from a particular source are deemed relevant by key stakeholders.

5. **Outsourcing** The emissions are from outsourced activities that were previously undertaken by the responsible entity or from outsourced activities that are typically undertaken within the boundary for comparable products or services.