

PUBLIC DISCLOSURE STATEMENT

VIRGIN AUSTRALIA HOLDINGS

SERVICE CERTIFICATION (OPT-IN) FY2023–24

Australian Government

Climate Active Public Disclosure Statement







| NAME OF CERTIFIED ENTITY | Virgin Australia Holdings |
|--------------------------|---|
| REPORTING PERIOD | Financial year 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. |
| | Fiona Walmsley General Manager, Sustainability |
| | 13 December 2024 |



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Version 9.

1.CERTIFICATION SUMMARY

| TOTAL EMISSIONS OFFSET | 26,090 tCO ₂ -e |
|------------------------|---|
| CARBON OFFSETS USED | 37.64% ACCUs, 62.36% CERs |
| RENEWABLE ELECTRICITY | N/A |
| CARBON ACCOUNT | Prepared by: Virgin Australia Holdings |
| TECHNICAL ASSESSMENT | 30/01/2023 for FY2021-22 report Completed by Earthed Consulting Next technical assessment due: FY2024-25 report |

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2. CERTIFICATION INFORMATION

Description of certification

The Virgin Australia Fly Carbon Neutral program allows passengers to offset the carbon emissions attributable to their flight with Virgin Australia.

Service description

The Fly Carbon Neutral program is an opt-in service, covering the cradle-to-grave emissions of travel.

The functional unit is kgCO₂-e per revenue passenger-km (RPK).

Greenhouse gas emissions are calculated per city pair flown in the previous twelve months within the network, which is then divided by the number of passengers that travelled on these city pairs during that time, adjusted to account for freight (freight emissions are not covered as the service only applies to passenger transportation). Adopting the previous twelve months of data enables emissions to be calculated at the time of passenger purchase and normalises any variations in operational parameters occurring.

Virgin Australia Holdings defines a carbon price which is applied to the emissions per passenger for each route. It then procures carbon credits after the period has ended to achieve the actual cost of carbon per tonne collected from passengers.

Figure 1, below illustrates the general Fly Carbon Neutral Program operated by Virgin Australia Holdings. Noting that prior to the point of a passenger making a flight, the emissions per seat for each city pair are known (based on the previous year), and the cost per tonne CO2-e is defined.



Figure 1: Illustration of the general Fly Carbon Neutral Program steps.

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 at 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 offset, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim). Further detail is available at Appendix D.

Inside emissions boundary

Quantified

Kerosene

Diesel

Gasoline

Petroleum based oils

Electricity

Waste

Hotel accommodation

Crew transport

Catering

Cleaning

Embodied emissions of aircraft

ICT services and equipment

Machinery and vehicles

Office equipment and supplies

Products

Non-quantified

Water / Wastewater

Refrigerants

Optionally included

Ground fuels – third party ground handling agents using non-VA equipment

Outside emission boundary

Non-attributable

Purchased Goods & Services (determined not relevant, see Appendix D)

Service process diagram

Embodied Energy Non-Attributable (excluded) emissions sources Upstream Embodied energy of aircraft emissions Purchased goods and services (determined not relevant, see Appendix D) Non-quantified emissions **Aircraft Servicing** Kerosene Water / wastewater Diesel Refrigerants Petroleum based oils Gasoline Attributable (excluded) emissions sources **Aircraft Operations** 3rd party ground fuel **Production/Service** delivery Kerosene **Facilitation Corporate Operations** Electricity Crew Transport Electricity Hotel accommodation Office equipment and supplies Catering Cleaning Waste ICT services and equipment Machinery and vehicles **Products Downstream** emissions

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Virgin Australia recognises aviation has a significant role to play in reducing global emissions and protecting the environment and our futures. In line with the International Air Transport Association (IATA), in November 2021, we committed to a target of Net Zero Emissions (NZE) by 2050.

In FY23, we announced our near-term carbon intensity reduction objective of a 22% reduction in net GHG emissions intensity by 2030 (Scope 1 and 2) (2019 as the base year). In FY24, we have reduced our net emissions intensity by 6% compared to baseline.

Virgin Australia's net emissions intensity target methodology employs a broader metric (kgCO2-e per revenue-tonne-kilometer (RTK)). This is commonly used by majority of the airlines globally and well recognized by net zero frameworks, such as the SBTi Aviation guidance. This metric encompasses emissions from all scope 1 and scope 2 sources (jet fuel, petrol, diesel, and electricity) and incorporates both passenger and freight transportation. Furthermore, the total emissions are reduced by offsets from the Fly Carbon Neutral program, reflecting a net emissions intensity target. The FY2018-19 baseline emissions intensity is 0.968 kgCO2-e / RTK.

Emissions reduction actions

Fleet renewal program

Fleet replacement is a key strategy for reducing our near term carbon emissions. As of 30 June 2024, the average age of Virgin Australia's mainline fleet is 11.8 years old¹, closely aligning with the global average of 11.6 years². It is projected that our fleet renewal program, combined with various fuel efficiency initiatives, will contribute to achieving about 85% of our 2030 ambition.

In November 2023, VA announced it would increase its fleet of 737 MAX-8s by six, bringing the airline's total number of MAX-8s to 14 and total planned latest generation aircraft to 39. Delivery of these additional six aircraft was expected in the first half of FY25 but is now anticipated in the second half of FY25 due to production delays at Boeing. Up to 25 737 MAX-10s are expected to join the fleet from FY26.Virgin Australia Regional Airlines (VARA), the Group's WA-based regional and charter business, is seeking a replacement for the outgoing Fokker F100 to best service WA charter market routes. At the end of FY24, two aircraft types were being considered. A decision was made in early FY25 to replace the F100 fleet with Embraer E2 jets, with a firm order of eight aircraft with an option for a further eight.

Fleet renewal represents a significant financial investment in future emissions reductions of the fleet. We will continue to invest in new, fuel-efficient aircrafts where commercially and financially feasible for the business.

¹ Excludes our VARA charter aircrafts and wet lease aircrafts.

² Air Passenger Market Analysis

Operational efficiency initiatives

Maximising the efficiency of our fleet both in the air and on the ground is essential to achieving our decarbonisation objectives and goes hand in hand with fleet renewal plans.

We are exploring a variety of opportunities to reduce aircraft fuel consumption, including route optimisation, aircraft weight reduction, single engine taxiing and other initiatives. Collectively, these measures have the potential to save fuel and significantly cut associated emissions each year.

In FY24, we established a Fuel Optimisation Working Group to centralise and coordinate our effort. This group ensures effective cross-department collaboration and information sharing, manages strategic initiatives, and provides visibility into our progress through the Business Transformation program.

Additionally, in FY24, we estimated an annual fuel savings of more than 200,000 litres. This was achieved through the implementation of several initiatives, including flying more direct routes, undertaking more efficient engine washes and removing unnecessary onboard items.

Ground Operations and Facilities

By the end of FY24, 25% of our Ground Service Equipment (GSE) was electric, primarily deployed at our mainline hubs where GSE utilisation rates are highest. In the years ahead, we intend to continue to electrify commercially available and operationally viable equipment, focusing on locations with established charging infrastructure and high equipment utilisation.

Carbon Offsetting

Carbon offsets have been integral to the aviation industry decarbonisation approaches to date. Our 'Fly Carbon Neutral' (FCN) customer offsetting program is a key enabler to the purchase of offsets which contribute to the 2030 target and beyond, in the absence of direct emissions abatement through technological upgrades. Carbon offsets purchased through our voluntary carbon offsetting program will contribute 15% to achieving our reduction in 22% net scope 1 and 2 emissions intensity objective by 2030.

While our primary focus is on reducing emissions within the sector, we recognise the important interim role of purchasing high integrity carbon offsets. This will be a component of our near-term strategy, while jet fuel alternatives and new technologies continue to develop.

Sustainable Aviation Fuel (SAF)

Virgin Australia is an inaugural member of the Australian Jet Zero Council (JZC), which advises the government on a long-term vision to decarbonise the aviation industry and encourage development of a local SAF industry. In FY24, we submitted our response to the Federal Government's Aviation Green Paper, which will shape the Aviation White Paper outlining Low Carbon Liquid Fuels and SAF policy directions through 2050.

This year marked the first anniversary of Virgin Australia and Boeing's collaborative Memorandum of Understanding (MoU) focused on sustainability initiatives. The MoU recognised the ability of both Virgin Australia and Boeing to leverage their significant Australian operational footprints to amplify and accelerate sustainability-related outcomes. The areas of focus and ambition include SAF, carbon offsetting, First Nations engagement and inclusion, workforce development and inclusion, and Australia-US bilateral clean energy cooperation. In its first year, the MoU has provided a range of opportunities for collaboration on key sustainability challenges and opportunities within the aviation sector. This work is covered in more detail in the MOU Activities Report 2024.

As part of our work assessing the environmental benefits of SAF, this year we purchased SAF through Shell's B&C solution, Avelia. In April 2024, VA joined Shell's Avelia program and procured environmental attributes associated to 10,000 US gallons of neat SAF. VA's total SAF purchase will be delivered in batches over 12 months. The first batch of SAF was produced with used cooking oil, which was delivered into the fuel system at Changi Airport, Singapore, booked into Avelia, and purchased and claimed by VA in Australia.

5.EMISSIONS SUMMARY

Emissions over time

| Emissions since base year | | | | | | |
|---------------------------|---------|---------------------------|--|--|--|--|
| | | Total tCO ₂ -e | Emissions intensity of the functional unit | | | |
| Base year: | 2010-11 | 2,991,486 | | | | |
| Year 1: | 2011-12 | 3,240,251 | | | | |
| Year 2: | 2012-13 | 3,394,284 | | | | |
| Year 3: | 2013-14 | 3,615,695 | | | | |
| Year 4: | 2014-15 | 3,604,530 | | | | |
| Year 5: | 2015-16 | 3,531,322 | | | | |
| Year 6: | 2016-17 | 3,585,091 | | | | |
| Year 7: | 2017-18 | 3,677,847 | | | | |
| Year 8: | 2018-19 | 3,864,771 | | | | |
| Year 9: | 2019-20 | 2,831,798 | 0.1053 | | | |
| Year 10: | 2020-21 | 913,735 | 0.0993 | | | |
| Year 11: | 2021-22 | 1,465,083 | 0.0991 | | | |
| Year 12: | 2022-23 | 3,049,749 | 0.0976 | | | |
| Year 13: | 2023-24 | 3,640,252 | 0.1150 | | | |

Significant changes in emissions

N/A

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

N/A

Emissions summary

| Scope | Details | tonnes CO ₂ -e |
|-------|--|---------------------------|
| 1 | Aircraft Kerosene - Carrier Fuel | 2,479,263 |
| 1 | Petrol/Gasoline | 16 |
| 1 | Diesel oil | 1,485 |
| 1 | Petroleum based oils | 73 |
| 2 | Purchased Electricity (location-based) | 7,703 |
| 3 | Aircraft Kerosene - ACMI Fuel | 140,813 |
| 3 | Aircraft Kerosene - Carrier Fuel [extraction & production] | 635,618 |
| 3 | Aircraft Kerosene - ACMI Fuel [extraction & production] | 36,101 |
| 3 | Petrol/Gasoline [extraction & production] | 4 |
| 3 | Diesel oil [extraction & production] | 366 |
| 3 | Petroleum based oils [extraction & production] | 94 |
| 3 | Purchased Electricity (locaion-based) | 1,140 |
| 3 | Waste | 5,958 |
| 3 | Crew transport | 10,588 |
| 3 | Hotel accommodation | 6,226 |
| 3 | Food & Catering | 25,052 |
| 3 | Cleaning services | 1,036 |
| 3 | Embodied energy of aircrafts | 93,901 |
| 3 | ICT services and equipment | 16,177 |
| 3 | Machinery and vehicles | 14,512 |
| 3 | Printing and stationery | 819 |
| 3 | Aircraft repairing | 161,461 |
| 3 | Products | 1,846 |
| | Total | 3,640,252 |

The emissions summary above represents the full volume of RPK across all Virgin Australia services, as opposed to the emissions attributable to customers opting in to the Fly Carbon Neutral program (the subject of this certification).

| Emissions intensity per functional unit (kgCO ₂ -e/RPK) | 0.1150 |
|--|-------------|
| Number of functional units to be offset (RPK) | 226,891,155 |
| Total emissions (tCO ₂ -e) to be offset | 26,090 |

6.CARBON OFFSETS

Eligible offsets retirement summary

Offsets retired for Climate Active certification

| Type of offset unit Quantity used for this reporting periods | | | | eriod | Percentage of total units used | | | | | | |
|---|---------------------|-----------------|-----------------|---|--------------------------------|------------------------------|---|--|---|--|--|
| Australian Carbon Credit Units (A | ACCUs) | | | 9820 | | | | 37.64% | | | |
| Certified Emissions Reductions | (CERs) | | | 16270 | | | | 6 | 2.36% | | |
| Project name | 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 | |
| Wunambal Gaambera Uunguu Fire Project | ACCU | ANREU | 9/12/2024 | 9,012,466,703 - 9,012,468,339 | 2023-24 | 1637 | 0 | 0 | 1637 | 6.27% | |
| Dambimangari Fire Project | ACCU | ANREU | 9/12/2024 | 8,328,245,797 - 8,328,247,433 | 2020-21 | 1637 | 0 | 0 | 1637 | 6.27% | |
| Wilinggin Fire Project | ACCU | ANREU | 9/12/2024 | 8,332,639,065 - 8,332,640,700 | 2021-22 | 1636 | 0 | 0 | 1636 | 6.27% | |
| Catchment Conservation Alliance - Great Barrier Reef Initiative Site #3 | ACCU | ANREU | 9/12/2024 | 9,004,495,317 - 9,004,497,316 | 2023-24 | 2000 | 0 | 0 | 2000 | 7.67% | |
| Darling River Conservation Initiative - Site #6 | ACCU | ANREU | 9/12/2024 | 9,004,475,085 - 9,004,477,994 | 2023-24 | 2910 | 0 | 0 | 2910 | 11.15% | |
| Darajat Unit III Geothermal Project | CER | ANREU | 12/12/2024 | 20,470,991- 20,478,160 | CP2 | 7170 | 0 | 0 | 7170 | 27.48% | |
| Improved Cook Stove Project 2, Nkhata Bay District, Malawi | CER | CDM registry | 9/12/2024 | MW-5-805751- 2-2-0-9935- MW-5-809850- 2-2-0-9935 | CP2 | 4100 | 0 | 0 | 4100 | 15.71% | |
| Improved Cook Stove Project 2, Nkhata Bay District, Malawi | CER | CDM registry | 9/12/2024 | MW-5-800751- 2-2-0-9935- MW-5-805750- 2-2-0-9935 | CP2 | 5000 | 0 | 0 | 5000 | 19.16% | |

Co-benefits

Project Co-Benefits include

North Kimberly Fire Abatement Project

The majority share of the North Kimberley Fire Abatement Project consists of the Wilinggin, Wunambal Gaambera and Dambimangari Fire Projects. The projects are located on native title land in the Kimberley region of Western Australia. They are owned and managed by the Traditional Owners of the land.

The projects use traditional knowledge and modern scientific practices to conduct early dry season burns which reduce the amount of greenhouse gas emissions released into the atmosphere from unmanaged wildfires in the late dry season.

Traditional Owners are trained and employed as fire specialists and rangers. Funds from the sale of carbon credits are reinvested into ongoing management of Country, protecting vulnerable habitats, cultural sites and community infrastructure from destructive wildfires, and mitigating the impact of weeds and feral animals on threatened species.

The projects enable transfer of traditional knowledge between generations , providing jobs, skills and development opportunities to Traditional Owners by strengthening their connection to country.

Catchment Conservation Alliance -Great Barrier Reef Initiative Site 3

Colodan, situated within the Burnett Mary Catchment area and part of the Great Barrier Reef catchment, is managed by James Henderson, a fourth-generation farmer. The Henderson family, manages the land since 1930, transitioned from traditional practices to implement a Human-Induced Regeneration project. This initiative halted pasture clearing, adopting a rotational grazing approach, resulting in the coexistence of a thriving 2,300ha native forest with their cattle.

The project has achieved positive outcomes, including improved water retention, reduced runoff, heightened land productivity, and healthier cattle. Beyond financial benefits, the initiative contributes to ecosystem health, biodiversity promotion and enhanced water quality, benefiting the Great Barrier Reef.

Darling River Conservation Initiative #6 – Emaroo

Located 200km west of Bourke (NSW), Emaroo Station focused on Merino sheep and Hereford cattle grazing. In 2019, the landowners initiated a Human-Induced Regeneration (HIR) project to enhance land management practices, addressing issues like high grazing intensity of the feedstock and limited feral animal control.

Through income generated by the carbon project, the landowners improved property infrastructure and intensified feral goat trapping efforts. They strategically installed additional water points, enabling a rotational grazing system. During the drought, carbon farming became a crucial income source while they were forced to reduce stocking numbers.

After a year of favourable weather, Emaroo witnessed substantial regeneration in grass coverage, tree growth, and a return of birdlife, making the property look better than it has in two decades. The landowners now manage over 28,000ha of regenerating native forest alongside their successful grazing enterprise. This holistic approach has led to carbon sequestration, native habitat regeneration, increased biodiversity, improved infrastructure, financial stability, and improved landscape resilience.

High Impact Cookstoves in Malawi by Ripple Africa

The High Impact Cookstoves in Malawi project is run by the English charity Ripple Africa and benefits approximately 625,000 people in Malawi. So far, Ripple Africa has provided more than 125,000 households with more efficient cookstoves. The simple technology helps save 250,000 bundles of wood per week, helping tackle deforestation. This project is reducing greenhouse gas emissions, preventing deforestation and respiratory diseases in the population, and reducing the time women spend collecting firewood each week.

Project Co-Benefits include

Darajat Unit III Geothermal Project

Darajat Unit III is helping to displace coal and oil in Indonesia's electricity infrastructure and supporting the nation's transition to renewable energy.

Darajat Unit III has helped improve infrastructure in the region, and supports the local community through job creation and investment in schools, helping to address high illiteracy rates in the area.

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

N/A

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**. Though, we have decided to dual report.

| Market-based approach summary | | | |
|---|------------------------|-------------------------------------|-------------------------------------|
| Market-based approach | Activity Data (kWh) | Emissions (kgCO 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 precinct/building (voluntary renewables) | 0 | 0 | 0% |
| Precinct/Building (LRET) | 0 | 0 | 0% |
| Precinct/Building jurisdictional renewables (LGCS surrendered) | 0 | 0 | 0% |
| Electricity products (voluntary renewables) | 0 | 0 | 0% |
| Electricity products (LRET) | 0 | 0 | 0% |
| Electricity products jurisdictional renewables (LGCs surrendered) | 0 | 0 | 0% |
| Jurisdictional renewables (LGCs surrendered) | 299,207 | 0 | 3% |
| Jurisdictional renewables (LRET) (applied to ACT grid electricity) | 75,559 | 0 | 1% |
| Large Scale Renewable Energy Target (applied to grid electricity only) | 2,008,188 | 0 | 18% |
| Residual Electricity | 8,748,172 | 7,960,837 | 0% |
| Total renewable electricity (grid + non grid) | 2,382,954 | 0 | 21% |
| Total grid electricity | 11,131,126 | 7,960,837 | 21% |
| Total electricity (grid + non grid) | 11,131,126 | 7,960,837 | 21% |
| Percentage of residual electricity consumption under operational control | 100% | | |
| Residual electricity consumption under operational control | 8,748,172 | 7,960,837 | |
| Scope 2 | 7,786,834 | 7,086,019 | |
| Scope 3 (includes T&D emissions from consumption under operational control) | 961,338 | 874,817 | |
| Residual electricity consumption not under operational control | 0 | 0 | |
| Scope 3 | 0 | 0 | |

| Total renewables (grid and non-grid) | 21.41% |
|---|----------|
| Mandatory | 18.72% |
| Voluntary | 2.69% |
| Behind the meter | 0.00% |
| Residual scope 2 emissions (t CO ₂ -e) | 7,086.02 |
| Residual scope 3 emissions (t CO ₂ -e) | 874.82 |
| Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e) | 7,086.02 |
| Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e) | 874.82 |
| Total emissions liability (t CO ₂ -e) | 7,960.84 |
| 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 contro | | |
| Percentage of grid electricity consumption under operational control | 100% | (kWh) | Scope 2 Emission s (kgCO ₂ - e) | Scope 3 Emission s (kgCO ₂ - e) | (kWh) | Scope 3 Emission s (kgCO ₂ -e) | |
| ACT | 403,625 | 403,625 | 274,465 | 20,181 | 0 | 0 | |
| NSW | 1,326,787 | 1,326,787 | 902,215 | 66,339 | 0 | 0 | |
| SA | 449,231 | 449,231 | 112,308 | 35,938 | 0 | 0 | |
| VIC | 2,424,566 | 2,424,566 | 1,915,407 | 169,720 | 0 | 0 | |
| QLD | 5,353,969 | 5,353,969 | 3,908,397 | 803,095 | 0 | 0 | |
| NT | 7,023 | 7,023 | 3,792 | 492 | 0 | 0 | |
| WA | 1,089,885 | 1,089,885 | 577,639 | 43,595 | 0 | 0 | |
| TAS | 76,040 | 76,040 | 9,125 | 760 | 0 | 0 | |
| Grid electricity (scope 2 and 3) | 11,131,126 | 11,131,126 | 7,703,349 | 1,140,121 | 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) | 11,131,126 | | | | | | |

| Residual scope 2 emissions (t CO ₂ -e) | 7,703.35 |
|---|----------|
| Residual scope 3 emissions (t CO ₂ -e) | 1,140.12 |
| Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e) | 7,703.35 |
| Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO ₂ -e) | 1,140.12 |
| Total emissions liability | 8,843.47 |

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 <u>one</u> 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. <u>Data unavailable</u> 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 |
|--|----------------------|
| Water & wastewater | Immaterial |
| Refrigerants | Immaterial |

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**).

| Emissions Source | No actual data | No projected data | Immaterial |
|---|----------------|-------------------|------------|
| Ground fuels – third party ground handling agents using non-VA equipment. | Yes | Yes | Yes |

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. <u>Size</u> The emissions from a particular source are likely to be large relative to other attributable emissions.
- 2. <u>Influence</u> 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.
- 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.

Non-attributable emissions sources summary

| Emission sources tested for relevance | Size | Influence | Risk | Stakeholders | Outsourcing | Justification |
|---|------|-----------|------|--------------|-------------|---|
| Purchased goods and services (not relevant) | Υ | N | N | N | N | Category 1 covers the upstream emissions associated with goods and services purchased by Virgin Australia Holdings (VAH). Direct expenses data was provided for all business units with rolled-up category descriptions. Data was provided for all "direct expenses" as part of VAH's financial extracts. A review exercise was undertaken for any expenditure items deemed as not relevant to category based on the below criteria: • Where expenditure is captured as part of other GHG Protocol scope 3 categories, e.g. kerosene consumed by ACMI aircrafts, as category 3 • Where the expenditure item does not lend itself to being a purchased good or service, e.g. tax expenses, airport charges. Size: The accumulative emissions from the expenditure items are likely to be above 5% of total Scope 1 and 2 emissions (~2.5M tCO2e). Influence: We do not have the potential to influence the emissions from this source, including by shifting to a different lower-emissions supplier for our service. Risk: There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest. Stakeholders: Key stakeholders (i.e. investors, shareholders, public) are unlikely to consider this a relevant source of emissions for our service. Outsourcing: We have not previously undertaken this activity within our emissions boundary and comparable airlines do not typically undertake this activity within their boundary. The expenditure items deemed as not relevant include: • Professional services: • Airport security and screening • Cost of sales • Trasaury • Marketing • Interest groups & memberships • Metrology services |

| Emission sources tested for relevance | Size | Influence | Risk | Stakeholders | Outsourcing | Justification |
|---------------------------------------|------|-----------|------|--------------|-------------|---|
| | | | | | | Employee related payroll and recruiting Government and GST Employee training Facility rent and maintenance Warehousing service Business machines and equipment repair and services |



