PUBLIC DISCLOSURE STATEMENT

VIRGIN AUSTRALIA HOLDINGS

OPT-IN SERVICE CERTIFICATION

FY2020-21

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	Virgin Australia Holdings
REPORTING PERIOD	1 July 2020 – 30 June 2021 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.*  Lisa Burquest Chief People Officer 30 November 2021

Australian Government
Department of Industry, Science, Energy and Resources

Version September 2021. To be used for FY20/21 reporting onwards.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	22,405 tCO2-e
THE OFFSETS BOUGHT	62.55% ACCUs, 37.45% VERs
RENEWABLE ELECTRICITY	0%
TECHNICAL ASSESSMENT	Next technical assessment due: FY2021-22

Contents

2. CARBON NEUTRAL INFORMATION

Description of certification

Our program allows passengers flying with each airline to offset the emissions attributable to their seat when booking their flight. Since introducing the world's first Government certified airline offset program in 2007, over four million of our passengers have chosen to offset their travels, equating to over 570,000 tonnes of carbon emissions neutralised.

The functional unit is kgCO2e per revenue passenger km (RPK). Greenhouse gas emissions are calculated per city pair flown in the previous twelve months (the 2020/21 financial year) within the network, which is then divided by the number of persons 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). The number of persons that travelled on these city pairs during that time includes paying guests and staff on airline business (duty travel). 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.

Organisation description

Virgin Australia Holdings (VAH) is an Australian airline group which operates domestic and international services under the Virgin Australia brand.

At VAH, we seek to drive positive economic, social, cultural and environmental outcomes through our business. We're passionate about sustainability and doing all that we can to ensure healthy communities for many generations to come.

Human-induced climate change is the greatest threat to our planetary wellbeing, which is why we are committed to achieving net zero emissions in our business by 2050. We will also ensure we incorporate climate-related risks and opportunities into our business.

We seek to mitigate our climate change impacts through a combination of fuel efficiency programs, energy reduction programs, and opt-in carbon offsetting through our Fly Carbon Neutral program.

3.EMISSION BOUNDARY

Inside the emissions boundary

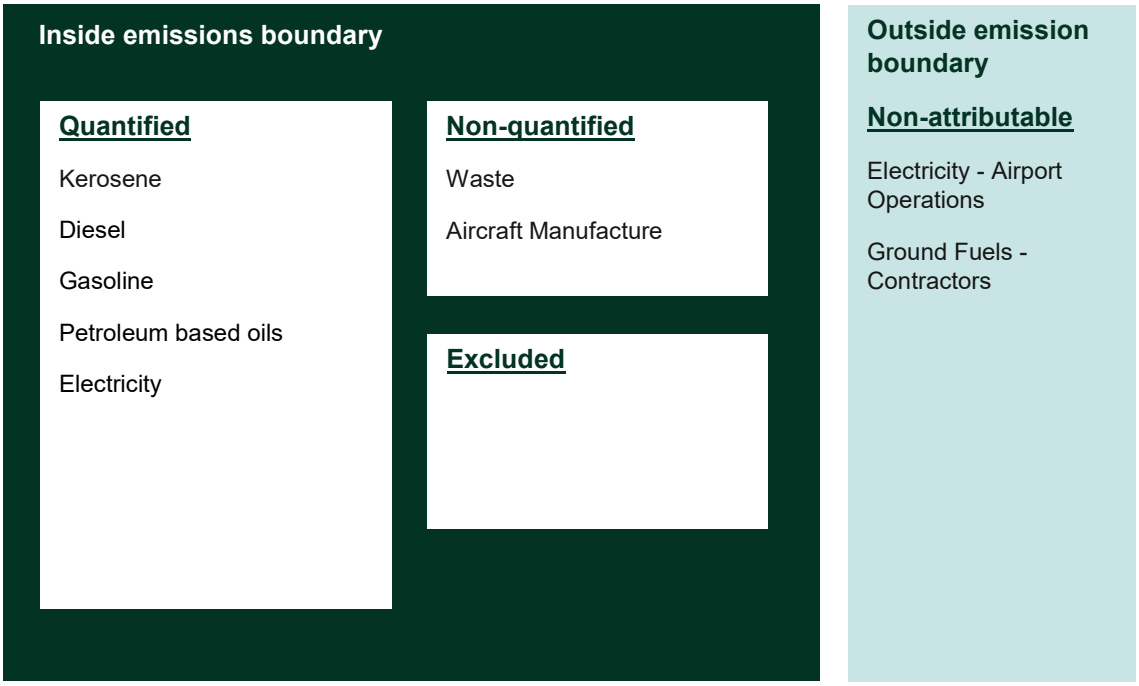
All emission sources listed in the emissions boundary are part of the carbon neutral claim.

Quantified emissions have been assessed as 'attributable processes' that become the product, make the product and carry the product through its life cycle. These 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.

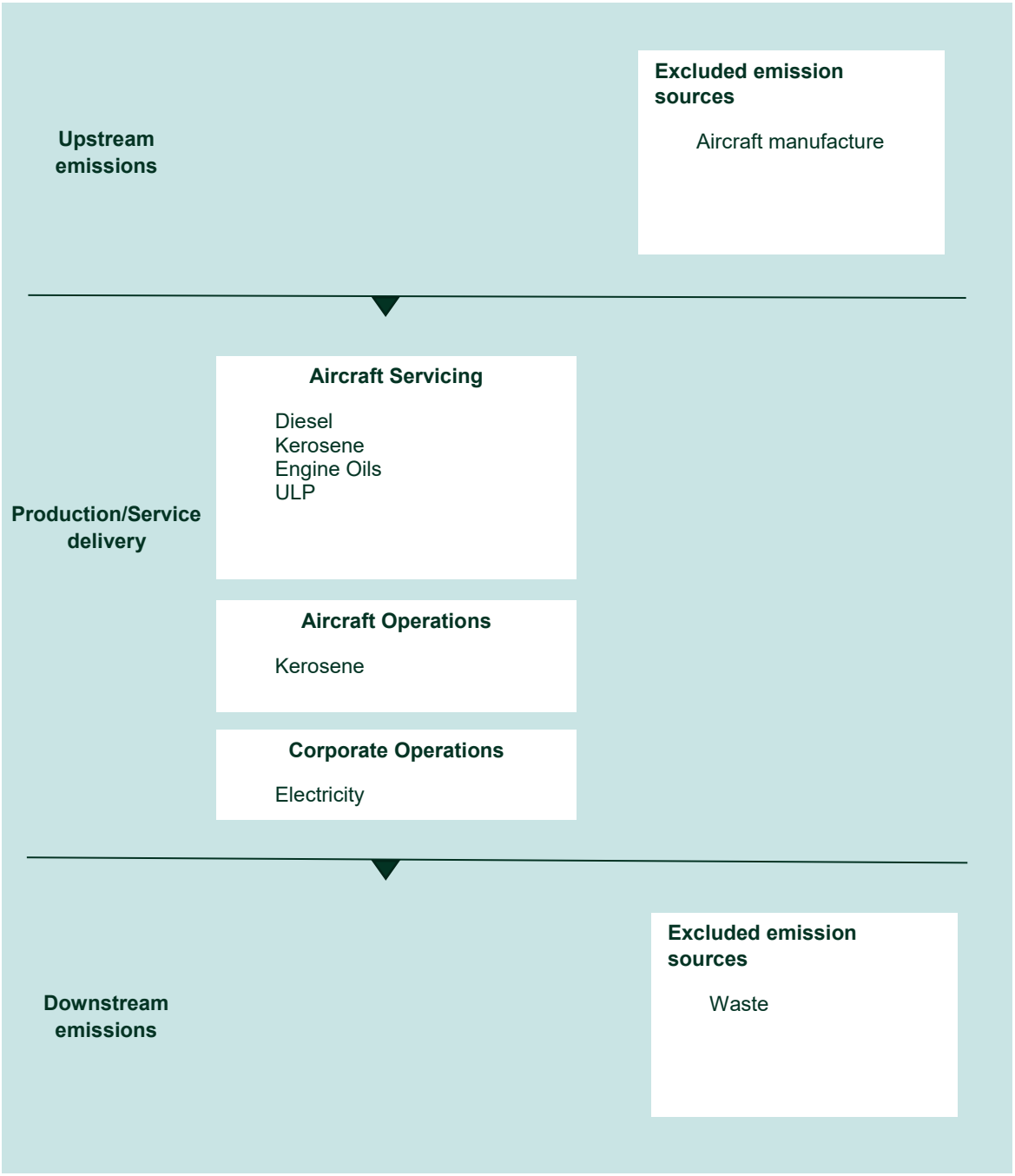
Outside the emissions boundary

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.



Service process diagram

Cradle-to-gate service



Data management plan for non-quantified sources

Virgin Australia is progressing access to third party contractor data to enable waste emissions reporting.

We expect to have access to this data for the FY22 reporting period.

4.EMISSIONS REDUCTIONS

Emissions reduction strategy

Our approach to our emissions management always starts with optimising the amount of fuel we use - the more fuel efficient our operating fleet is, the lower our carbon footprint is. From matching the right aircraft to the right routes to the individual products we put on board, there are many factors at play when it comes to fuel efficiency. Our fuel efficiency program identifies, validates and implements fuel efficiency initiatives across fuel policy optimisation, aircraft weight reduction, operational capability enhancements, technology and innovation, and education and training.

Complementing these initiatives, we use carbon offsets to cover those emissions from passengers who choose to offset the emissions generated through their travel.

Following our sustainable aviation fuel trial at Brisbane Airport in FY19, we continue to explore ways to support the development of commercially viable alternative fuels. We are member of Bioenergy Australia and we are working as an industry to make Sustainable Aviation Fuel (SAF) viable and available for the industry. Virgin Australia fully endorses the resolution passed at the IATA AGM on October 2021 to achieve a collective Net Zero by 2050 Target.

At the moment, we are refreshing our emission reduction strategy, and actively looking into the options available to us to help deliver not only a net zero commitment, but also to develop tangible reductions in the intensity of our emissions this decade. We see the strategy to get to there as multi-faceted solution, including operational efficiency, electrification of ground services, fleet renewal, waste management, SAF, uptake of new technologies and offsetting.

Emissions reduction actions

Fleet renewal

We actively manage the age of our fleet, which allows us to benefit from technological advancements made by manufacturers in improving the fleet efficiency. In FY21 Virgin Australia committed to ordering 25 B737 MAX-10 aircraft for delivering from FY24, with the new aircraft offering improved fuel efficiency.

Fuel Efficiency

Virgin Australia's fuel efficiency working group have introduced over 70 initiatives since launched, with a combined saving of over 13.6 million litres of fuel per annum. As we return to the skies and our workforce returns, our program to optimise fuel uplift has recommenced, with key initiatives underway for delivery in FY22.

Sustainable Aviation Fuels

Sustainable fuels will play a central role in decarbonisation of aviation emissions in the medium term. Virgin Australia actively advocates for and is investigating the feasibility of introducing SAF into its supply chain.

We are an active member of Bioenergy Australia and the international Sustainable Aviation Fuel User Group and participate in international discussions with ICAO on analysing the methodology for assessing the lifecycle carbon reduction of different alternative fuel production processes.

5.EMISSIONS SUMMARY

Emissions over time

Virgin Australia Airlines Emissions since base year			
	Base year: 2010-11	Last year 2019-20	Current year 2020-21
Scope 1	2,976,751	2,642,003	862,152
Scope 2	14,735	4,549	2,095
Scope 3		185,246	49,488
Total tCO2e	2,991,486 tCO_2-e	2,831,798 tCO_2-e	913,735 tCO_2-e

Significant changes in emissions

Emission source name	Previous year (tCO_2-e)	Current year (tCO_2-e)	Detailed reason for change
Fuel: kerosene - aircraft	2,687,043	910,513	COVID-19 Impact on Aviation Travel

Use of Climate Active carbon neutral products and services

Virgin Australia Airlines Fly Carbon Neutral Program

Service emissions summary

Scope	Details	tonnes CO_2-e
1	Aviation Fuel	861,342
1	ULP	14
1	Diesel	754
1	Kerosene	15
1	Engine oil	27
2	Electricity – off-Airport Premises	2,095
3	Aviation Fuel	4,762
3	Aviation fuel – extraction and production	44,409
3	ULP – extraction and production	1
3	Diesel – extraction and production	39
3	Kerosene – extraction	1
3	Engine oil – extraction and production	7
3	Electricity – off-Airport Premises	269
Total inventory emissions		913,735
Number of functional units represented by the inventory emissions		6,514,610,553 RPKs
Emissions intensity per functional unit		0.00009926 t CO2-e/RPK
Number of functional units to be offset		155,997,218
Total emissions to be offset		15,484*

*an additional 6,921t + 5t were surrendered, equalling 22,410t - this then matches the amount offset.

6.CARBON OFFSETS

Offsets strategy

Virgin Australia Holdings offset in arrears and prioritises purchase of Australian Carbon Credit Units (ACCUs). 91% of carbon offset by passengers for flights in FY21 were from ACCUs, with a small amount of international credits used to meet the average cost of carbon per tonne realised over the reporting period.

Passenger participation in the Fly Carbon Neutral Program has been impacted heavily by COVID-19. Overall volumes continue to be seen in the major routes between Brisbane, Sydney and Melbourne with 19% of the volume of offsets purchased. As noted in Table 2 above, the total net emissions for Virgin Australia Airlines in FY21 were 913,735 tCO2-e.

In FY21, Virgin Australia Airlines customers offset total emissions of 15,484 tCO2-e. During the period, it was discovered that historic financial treatment of no-show passengers (passengers who were checked in to travel but did not board the aircraft) who had purchased a carbon offset on a Virgin Australia Airlines flight between FY17-FY20 had resulted in 6,921 tCO2-e of carbon offset liabilities being previously unaccounted for. An additional 6,921 tCO2-e has been surrendered this year to address this.

While no flights operated during the period due to Tigerair Australia Airlines having ceased operations in FY20, a final 5 tCO2-e is being surrendered this period due to the financial treatment of bookings made for flights that were planned to operate in FY21.
In total, 22,410 tCO2-e are surrendered, as per Table 4 below.

As we strive to boost awareness with the travelling public around the importance of carbon offsetting, we are hopeful that the number of flights being offset by our guests will remain on a positive trajectory. Moving forward, we remain committed to improving the carbon offsetting opportunities for our guests as well as the transparency around the program. Most importantly, we have been hard at work designing a new customer-facing program which will be a step above existing 'offset' programs, and will build partnerships to balance present and future ambitions.

Offset purchasing strategy: in arrears		
	Virgin Australia Airlines	*Tigerair Australia Airlines*
1. Total offsets previously forward purchased and banked for this report	*0*	*0*
2. Total emissions liability to offset for this report	*22,405*	*5*
3. Net offset balance for this reporting period	*22,405*	*5*
4. Total offsets to be forward purchased to offset the next reporting period	*1,607*	*0*
5. Total offsets required for this report	*22,405*	*5*

Co-benefits

We source our carbon credits from a range of projects to meet the carbon offset price charged over the period. A key example of these benefits is outlined below.

Tasmanian land Conservancy – New Leaf Carbon Project

Virgin Australia Airlines guests offsetting their flights are directly supporting the preservation of Tasmania's native forests while also contributing to the protection of important species and ecosystems.

The Tasmanian Land Conservancy (TLC) is a science-based environmental organisation that protects land for biodiversity, applying business principles to achieving conservation outcomes. The TLC manages over 30,000 hectares of habitat for rare and threatened species, including the iconic Tasmanian devil and the magnificent Tasmanian wedge-tailed eagle. In partnership with the Save the Tasmanian Devil Program, the TLC has identified a special management zone where it will conduct intensive monitoring for Tasmanian devils in the wild.

The Tasmanian Land Conservancy's New Leaf Carbon Project directly reduces carbon dioxide entering the atmosphere by protecting approximately 12,000 hectares of native Tasmanian forest. Contiguous with the Tasmanian Wilderness World Heritage Area, it contains entire watersheds of pristine ecosystems and habitats.

When a forest is intact, the trees fix carbon dioxide from the air into their wood, and retain it for centuries. However, when forests are logged, most wood is processed into short-lived products like paper that end up in landfill, rotting and generating carbon dioxide.

This New Leaf Carbon Project was established under the international Verified Carbon Standard to generate carbon credits using the VM10 methodology. TLC credits are also verified under the Climate, Community and Biodiversity standards and are recognised at the highest 'Gold Level', meaning that benefits flow to the community as well as wildlife, plants and their habitat.

The TLC are leading the way in establishing a comprehensive monitoring program that will see hundreds of permanent photo-monitoring sites strategically linked to a network of fauna monitoring stations that track our wildlife over time. Their vision is for the monitoring stations to be capable of sending real time information to scientists to interpret. Hundreds of acoustic sensors will remotely detect and identify birds, bats and frogs from their calls, providing vital information about the species that survive and thrive in these remote landscapes.

Offsets summary

Proof of cancellation of offset units

Offsets cancelled for Climate Active Carbon Neutral Certification										
Project description	**Type of offset units**	**Registry**	**Date retired**	**Serial number (and hyperlink to registry transaction record)**	**Vintage**	**Eligible Quantity (TCO2-e)**	**Quantity used for previous reporting periods**	**Quantity banked for future reporting periods**	**Quantity used for this reporting period claim**	**Percentage of total (%)**
Tasmanian Land Conservancy – New Leaf Carbon Project	ACCU	ANREU	01/01/21	3,781,578,366 - 3,781,585,800	2018-19	7,435	0	0	7,435	33.17%
Tasmanian Land Conservancy – New Leaf Carbon Project	ACCU	ANREU	01/01/21	3,781,599,640 - 3,781,599,675	2018-19	36	0	0	36	0.16%
Tasmanian Land Conservancy – New Leaf Carbon Project	ACCU	ANREU	03/11/21	8,330,188,815 - 8,330,189,517	2021-22	703	0	0	703	3.13%
South East Arnhem Land Fire Abatement	ACCU	ANREU	01/01/21	3,770,376,108 - 3,770,377,994	2017-18	1,887	0	0	1,887	8.42%
South East Arnhem Land Fire Abatement	ACCU	ANREU	01/11/21	3,752,464,008 - 3,752,466,507	2016-17	2,500	0	0	2,500	11.15%
South East Arnhem Land Fire Abatement	ACCU	ANREU	01/11/21	3,752,462,552 - 3,752,464,007	2016-17	1,456	0	0	1,456	6.49%

The Gold Standard Turkey wind project	VER	Gold Standard	01/11/21	GS1-1-TR-GS608-12-2018-21306: 93,748 - 102,140	2018	10,000	0	1,607	8,393	37.45%
								Total offsets retired this report and used in this report	22,410	
								Total offsets retired this report and banked for future reports	1,607	

Type of offset units	Quantity (used for this reporting period claim)	Percentage of Total
Australian Carbon Credit Units (ACCUs)	14,017	63%
Voluntary Emissions Reductions (VERs)	8,393	37%

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

N/A

APPENDIX A: ADDITIONAL INFORMATION

Virgin Australia offsets all of its staff duty travel and selected other staff travel. In FY21, 888 tonnes were offset in total.

APPENDIX B: ELECTRICITY SUMMARY

N/A

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following sources emissions 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	(1) Immaterial	(2) Cost effective (but uplift applied)	(3) Data unavailable (but uplift applied & data plan in place)	(4) Maintenance
Waste generated in operations	Yes	No	No	No
Fuel and energy related activities	Yes	No	No	No

Emission Source	Details
Waste	Emissions from waste are deemed immaterial (<1%). Data has historically been unavailable. Pre-COVID, Virgin Australia was progressing data requests with its supply chain partners.
Embodied energy from Aircraft manufacture	The company notes that as no aircraft were purchased in the reporting year, there were no applicable scope 3 emissions related to aircraft manufacture.

Excluded emission sources

N/A

APPENDIX D: OUTSIDE EMISSIONS 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.

	Relevance Test				
Non-attributable Emission	*The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions*	*The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.*	*Key stakeholders deem the emissions from a particular source are relevant.*	*The responsible entity has the potential to influence the reduction of emissions from a particular source.*	*The emissions are from outsourced activities previously undertaken within the organisation's boundary, or from outsourced activities typically undertaken within the boundary for comparable organisations.*
Fuels contractors	✗	✗	✗	✓	✗
Electricity Airport Premises	✗	✗	✗	✓	✗
Waste from operations	✗	✗	✓	✓	✗
Aircraft Manufacture	✓	✗	✓	✗	✗

Note that in years where aircraft manufacture exists, it will be deemed relevant as the emissions will not be immaterial.

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