PUBLIC DISCLOSURE STATEMENT

VIRGIN AUSTRALIA HOLDINGS

OPT-IN SERVICE CERTIFICATION
FY 2019-20

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY: Virgin Australia Holdings

REPORTING PERIOD: 01 July 2019 – 30 June 2020

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.

Signature  Date: 15 January 2021

Name of Signatory: Andrew Sellick

Position of Signatory: GM, Sustainability and Corporate Responsibility

Australian Government
Department of Industry, Science, Energy and Resources

1. 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.
Greenhouse gas emissions are calculated per city pair flown in the previous twelve months (the 2019/20 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 for the offset period and purchases offsets to achieve this price. Offsets are then surrendered by Virgin Australia Holdings after the fact.

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 is an Australian airline group which includes Virgin Australia and Tigerair Australia. Virgin Australia operates a network of domestic and international services from its main hub at Brisbane Airport in Queensland, and Tigerair Australia is a low-cost domestic carrier.

At Virgin Australia Holdings, we genuinely care about driving positive economic, social, cultural and environmental outcomes. We're passionate about embedding sustainability at the core of our business and we firmly believe that we must do all that we can to ensure we have healthy communities for many generations to come.

We address our climate change impacts through a combination of fuel efficiency programs, energy reduction programs, sustainable alternative fuels and opt-in carbon offsetting through our Fly Carbon Neutral program.

Product/service process diagram

Figure 2, below, illustrates the interrelationship between the service (Carbon Offset Program), the function of the service, the relevant function for the Life Cycle Assessment ('LCA'), the functional unit (kg CO_2-e/passenger/city pair), and the reference flow.

Note:
ISO 14044 requires a critical review of the greenhouse gas LCA when the LCA is going to be publicly available and used for the purposes of comparing one service with another. The Virgin Australia Holdings LCA has been prepared as part of the requirements in the application for Climate Active Carbon Neutral certification only. As such, the data and the conclusions presented in the LCA are intended for use by Virgin Australia Holdings and the Department of Industry, Science, Energy and Resources only. They will not be used for comparison with any other similar service. As a result, this LCA does not require a critical review and one has not been undertaken.

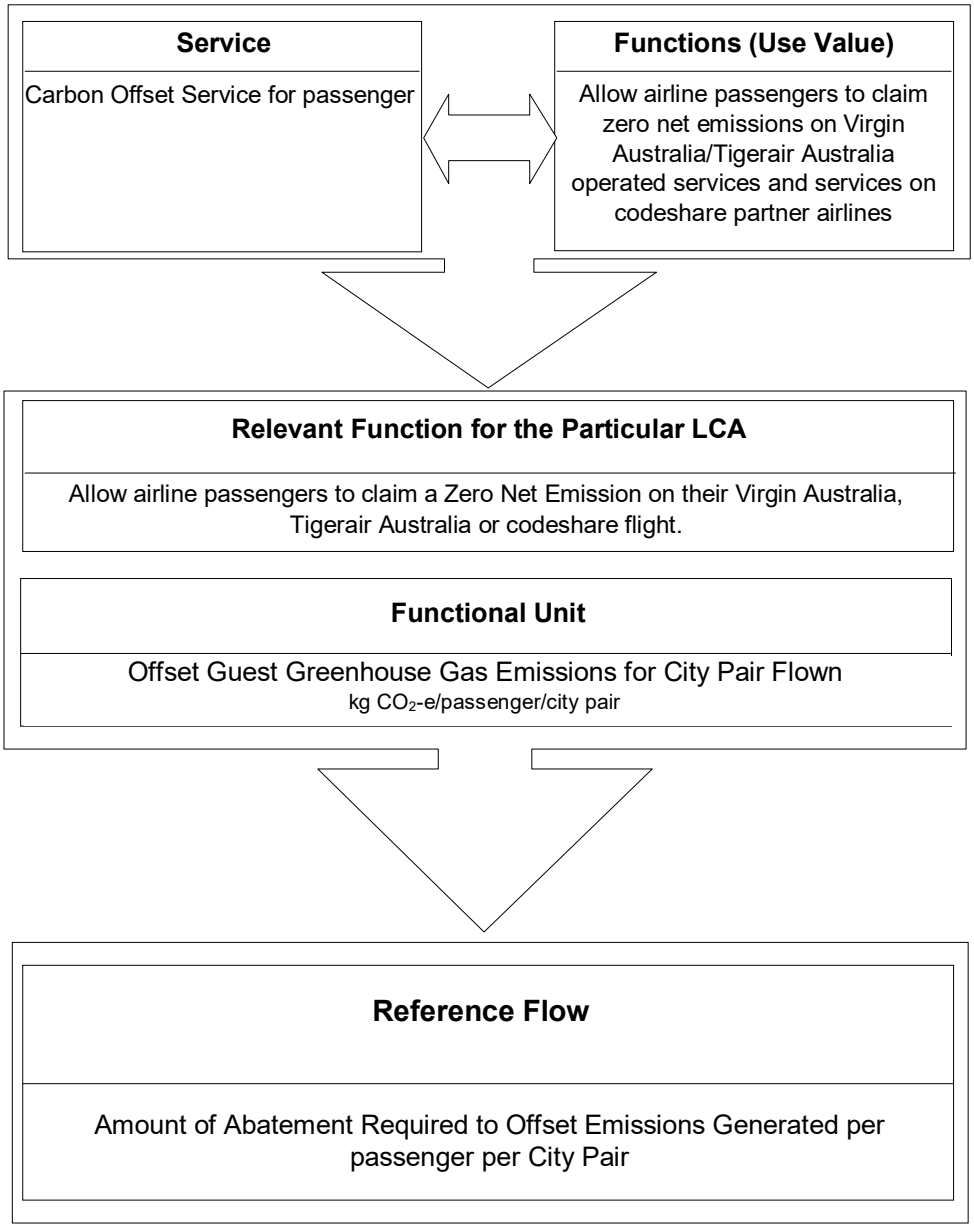
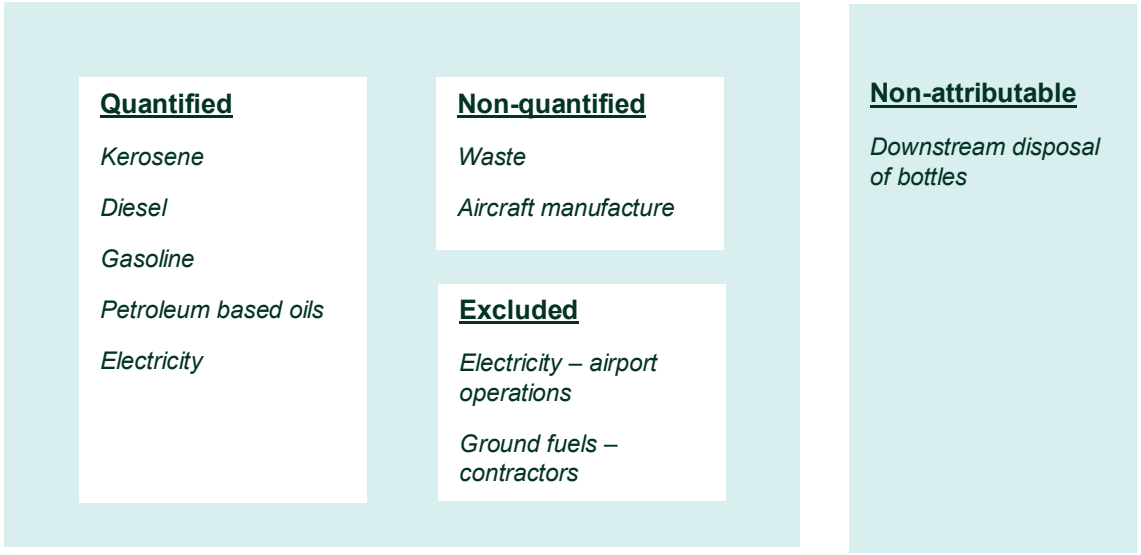


Figure 2 Program Function Overview

2. EMISSION BOUNDARY

Diagram of the certification boundary



Attributable non-quantified sources

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 acquired in the reporting year, there were no applicable scope 3 emissions related to aircraft manufacture.

Data management plan

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.

Excluded sources (within certification boundary)

Emission Source	Details

Electricity – airport operations	Due to the nature of airport access agreements, no data exists. Not deemed to be material.
Ground fuels – contractors	Due to the nature of agreement with third party contractors, no data exists. Not deemed to be material.

Non attributable sources (outside certification boundary)

Not applicable.

3. EMISSIONS SUMMARY

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.

As our fuel efficiency program continues to deliver innovations, we've turned our focus to integrating climate change measures into business strategy and planning, and improving institutional capacity on climate change mitigation, adaptation and impact reduction.

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

Emissions over time

Table 1

Virgin Australia Airlines Emissions since base year			
	Base year: 2010-11	Last year 2018-19	Current year 2019-20
Scope 1	2,976,751	3,603,786	2,642,003
Scope 2	14,735	4,843	4,549
Scope 3		256,142	185,246
Total tCO2e	2,991,486 tCO_2-e	3,864,771 tCO_2-e	2,831,798 tCO_2-e

Table 2

Tigerair Australia Airlines Emissions since base year			
	Base year: 2016-17	Last year 2018-19	Current year 2019-20
Scope 1	462,516	417,251	286,209
Scope 2	79	91	85

Scope 3	23,214	21,857	14,685
Total tCO2e	485,809 tCO_2-e	439,198 tCO_2-e	300,979 tCO_2-e

Emissions reduction actions

Fleet renewal
We continue to focus managing the age of our fleet, which allows us to benefit from technological advancements made by manufacturers in improving the fleet efficiency.

Fuel Efficiency
Fuel saving initiatives launched in FY20 delivered a reduction in emissions by over 4,100 tCO2-e. To date, the Fuel Efficiency program has delivered 73 initiatives, realising a combined saving of over 13.6 million litres of fuel per annum.

Sustainable Aviation Fuels
In October 2017, Virgin Australia Holdings commenced a project in partnership with the Queensland Government, Brisbane Airport Corporation, US-based biofuel producer Gevo, Inc. and supply chain partners Caltex and DB Schenker to test the logistics of getting these fuels into the fuel infrastructure at Brisbane Airport. Having successfully completed the trial and established supply chain readiness, we continue to actively engage with potential producers, government and industry bodies in order to support the production and use of low carbon sustainable fuels in Queensland and across Australia.

We continue to be an active member of the 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.

Functional units

Table 3

	Number of functional units
a) Number of functional units sold this period	30,408,297,686 RPKs

Emissions summary (inventory)

Table 4: Virgin Australia Airlines

Scope	Details	tonnes CO_2-e
1	Aviation Fuel	2,640,291
1	ULP	32
1	Diesel	1547

1	Kerosene	64
1	Engine oil	68
2	Electricity – off-Airport Premises	4,549
3	Aviation Fuel	46,752
3	Aviation fuel – extraction and production	137,777
3	ULP – extraction and production	2
3	Diesel – extraction and production	79
3	Kerosene – extraction	3
3	Engine oil – extraction and production	18
3	Electricity – off-Airport Premises	615
Total inventory emissions		2,831,798
Number of functional units represented by the inventory emissions		26,900,385,751 RPKs
1. *Emissions per functional unit (based on the number of functional units represented by the inventory)*		0.1053
2. *Emissions per functional unit (2)* number of functional units (a or b from table 2)*		29,582

Table 5: Tigerair Australia Airlines

Scope	Details	tonnes CO_2-e
1	Aviation Fuel	286,203
1	ULP	4
1	Diesel	0
1	Kerosene	0
1	Engine oil	1
2	Electricity	85
3	Aviation fuel – extraction and production	14,685
3	ULP – extraction and production	0.22
3	Diesel – extraction and production	0
3	Kerosene – extraction	0
3	Engine oil – extraction and production	0.35
3	Electricity	0.1

Total inventory emissions	300,979 tCO_2-e
Number of functional units represented by the inventory emissions	3,507,911,935 RPKs
1. *Emissions per functional unit (based on the number of functional units represented by the inventory)*	0.0858
2. *Emissions per functional unit (2)* number of functional units (a or b from table 2)*	4,668

Carbon neutral products

- Virgin Australia Airlines Fly Carbon Neutral Program
- Tigerair Australia Airlines Fly Carbon Neutral Program

4. CARBON OFFSETS

Offsets strategy

Virgin Australia Holdings offset in arrears.

Virgin Australia Airlines

Passenger participation in the Fly Carbon Neutral Program increased in the first half of the year, before dropping during the COVID pandemic. In FY20, the most popular routes offset were for flights operating between:

- Sydney and Ballina
- Hobart and Sydney
- Adelaide and Canberra

Overall volumes continue to be seen in the major routes between Brisbane, Sydney and Melbourne with 27% of the volume of offsets purchased.

As noted in Table 5 above, the total net emissions for Virgin Australia Airlines in FY20 were 2,831,798 tCO_2-e. In FY20, as Table 7 indicates, our customers offset total emissions of 29,582 tCO_2-e. Also listed below in Table 7 are the specific tCO_2-e that were surrendered as required to meet the 29,582 tCO_2-e.

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, our focus remains on reducing our emissions profile and helping to establish a sustainable aviation fuel industry.

Tiger Airways Australia

Overall participation in the Fly Carbon Neutral Program had a successful second year of operations. In FY20, the most popular routes offset were for flights operating between:

- Canberra and Melbourne
- Sydney and Coffs Harbour
- Melbourne and Coffs Harbour

Overall volumes continue to be seen in the major routes between Brisbane, Sydney and Melbourne with 43% of the volume of offsets purchased.

As noted in Table 6 above, the total net emissions for Tiger Airways Australia in FY20 were 300,979 tCO_2-e. In FY20, as Table 8 indicates, our customers offset total emissions of 4,668 tCO_2-e. Also listed below in Table 8 are the specific tCO_2-e that were surrendered as required to meet the 4,668 tCO_2-e.

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	*29,582*	*4,668*
3. Net offset balance for this reporting period	*29,582*	*4,668*
4. Total offsets to be forward purchased to offset the next reporting period	*0*	*0*
5. Total offsets required for this report	*29,582*	*4,668*

Co-benefits

We source our carbon credits from a range of projects to meet the carbon offset price charged over the period. Key projects include:

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.

South East Arnhem Land Fire Abatement (SEALFA)
With the introduction of Tiger Airways Australia's Fly Carbon Neutral service, we also support the South East Arnhem Land Fire Abatement (SEALFA) project in Northern Australia, which uses strategic fire management activities to reduce the fire-generated emissions of greenhouse gas.

The area SEALFA operate in (called SEAL IPA), is managed by the Northern Land Council (NLC) which also manages the Numbulwar Numburindi and Yugul Mangi Rangers. These two Indigenous ranger groups, consisting of Traditional custodians and their families, annually implement a coordinated program of strategic early dry season burning throughout the project area.

In 2016, 15 Indigenous rangers were employed to undertake fire management within the South East Arnhem Land Indigenous Protected Area (IPA). The SEAL IPA encompasses more than 19,000 km2 of Aboriginal freehold land within the Arnhem Land and Urapunga Aboriginal Land Trusts, and is dedicated by its Traditional Aboriginal Owners as an IUCN Category VI Managed Resource Protected Area.

Their fire management plan comprised a combination of aerial prescribed burning (incendiary pellets dropped from helicopters) and finer-scale ground burning to establish a mosaic of cool burns around and within the project area. In 2016, the first year fully operating their fire project, the Numbulwar Numburindi and Yugul Mangi Rangers achieved an outstanding abatement result, reducing their baseline emissions by more than 80%.

Wildfires account for 3-4% of Australia's greenhouse gas emissions, and your contribution will help Indigenous fire managers minimise this by reinstating traditional burning practices.

Offsets summary

Proof of cancellation of offset units – Virgin Australia Airlines

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	14 Jan 2021	3,781,585,801 - 3,781,599,639	2018-19	13,839	0	0	13,839	100%
Berangabah Human-Induced Regeneration Project	ACCU	ANREU	18 Dec 2020	3,797,545,521 – 3,797,545,891	2019-20	371	0	0	371	100%
Berangabah Human-Induced Regeneration Project	ACCU	ANREU	18 Dec 2020	3,799,507,655 – 3,799,510,378	2019-20	2,724	0	0	2,724	100%
Berangabah Human-Induced Regeneration Project	ACCU	ANREU	18 Dec 2020	3,799,843,381 – 3,799,846,083	2019-20	2,703	0	0	2,703	100%
Darling River Conservation	ACCU	ANREU	18 Dec 2020	3,806,933,070 – 3,806,933,847	2020-21	778	0	0	778	100%

Initiative Site #6										
Catchment Conservation Alliance – Great Barrier Reef Initiative Site #3	ACCU	ANREU	18 Dec 2020	3,807,120,851 – 3,807,121,317	2021-21	467	0	0	467	100%
Bangkok Kamphaeng Saen West: Landfill Gas to Electricity Project	CDM-CER	ANREU	18 Dec 2020	7,668,895 – 7,673,128	2013-14	4,234	0	0	4,234	100%
Bangkok Kamphaeng Saen West: Landfill Gas to Electricity Project	CDM-CER	ANREU	18 Dec 2020	11,864,303 – 11,864,308	2013-14	6	0	0	6	100%
Bangkok Kamphaeng Saen West: Landfill Gas to Electricity Project	CDM-CER	ANREU	18 Dec 2020	11,076,369 – 11,077,128	2013-14	760	0	0	760	100%
Bangkok Kamphaeng Saen West: Landfill Gas to Electricity Project	CDM-CER	ANREU	18 Dec 2020	5,812,415 – 5,816,114	2013-14	3,700	0	0	3,700	100%
								Total offsets retired this report and used in this report		29,582

Total offsets retired this report and banked for future reports	0

Proof of cancellation of offset units – Tigerair Australia

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 (%)
South East Arnhem Land Fire Abatement	ACCUs	ANREU	15 Dec 2020	3,770,372,995 - 3,770,375,494	2017-18	2500	0	0	2500	100%
South East Arnhem Land Fire Abatement	ACCUs	ANREU	15 Dec 2020	3,770,375,495 - 3,770,376,107	2017-18	613	0	0	613	100%
South East Arnhem Land Fire Abatement	ACCUs	ANREU	15 Dec 2020	3,770,371,440 - 3,770,372,994	2017-18	1555	0	0	1555	100%
								Total offsets retired this report and used in this report		4668
								Total offsets retired this report and banked for future reports		0

Type of offset units	Quantity (used for this reporting period claim)	Percentage of Total

Australian Carbon Credit Units (ACCUs)	25,550	74.5%
Certified Emissions Reductions (CERs)	8700	25.4%

5. USE OF TRADEMARK

Description where trademark used	Logo type
N/A	N/A

6. ADDITIONAL INFORMATION

Virgin Australia offsets duty travel and selected staff travel.

In FY20, 13,824 tonnes were offset.

APPENDIX 1

Non-attributable emissions for products and services

Table 8: Relevance Test

	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 exist, it will be deemed relevant as the emissions will not be immaterial.

APPENDIX 2

Non-quantified emissions for products/services

Table 9

Non-Quantification Test				
Relevant-non-quantified emission sources	*Immaterial <1% for individual items and no more than 5% collectively*	*Quantification is not cost effective relative to the size of the emission but uplift applied.*	*Data unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.*	*Initial emissions non-quantified but repairs and replacements quantified*
Waste generated in operations	✔	✗	✗	✗
Fuel and energy related activities	✔	✗	✗	✗

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