2023 Report

Greenhouse Gas Emissions Inventory

Auckland Airport

Introduction

This document is the annual greenhouse gas (GHG) emissions inventory for Auckland International Airport Limited (Auckland Airport) for the period 1 July 2022 to 30 June 2023.

Auckland Airport is committed to carbon accounting and reporting in line with global best practice. Therefore, this inventory has been prepared in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) (the GHG Protocol).

Deloitte Limited has been appointed as the third-party independent assurance provider for the 2023 Greenhouse Gas Emissions Inventory Report.

A reasonable level of assurance has been given over the scope 1 and 2 emissions included in this report and a limited level of assurance over the scope 3 emissions.

Auckland Airport's decarbonisation pathway

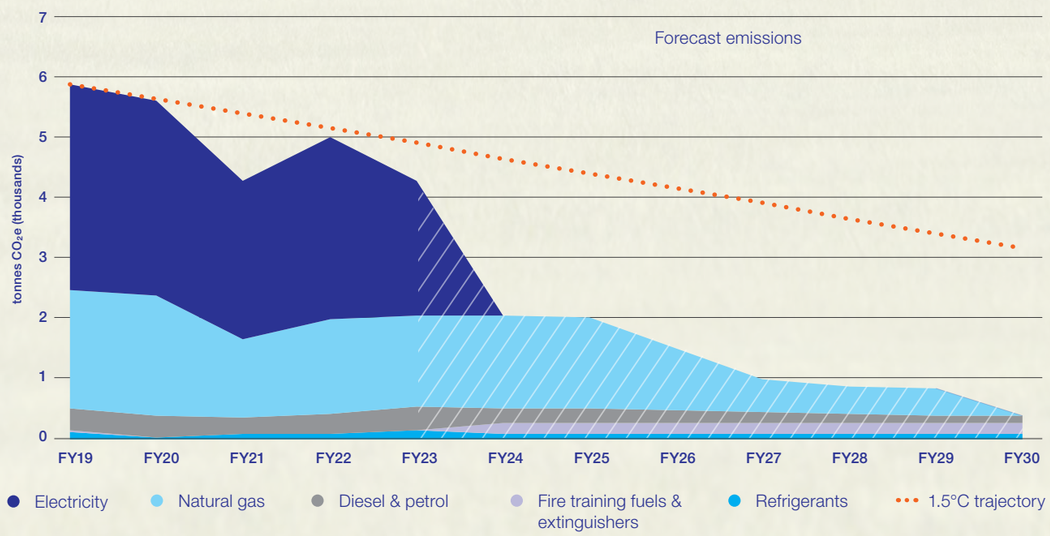
In 2020, Auckland Airport committed to reaching net zero scope 1 & 2 emissions by 2030. A decarbonisation pathway has been set to see these emissions reduce by 90% from 2019 levels by 2030, aligning with a 1.5°C warming trajectory. In the 2023 financial year we continued to progress along this decarbonisation pathway, continuing to phase out assets which result in emissions, and improving efficiency across the business.

In the 2023 financial year Auckland Airport's operations produced **4,291 tCO_2e** of scope 1 and 2 emissions, equating to a **27%** reduction from the 2019 baseline year. This shows that we are well on the way to achieving a **90%** reduction from 2019 levels by 2030.

Refer to page 12 for an explanation of key terms used in this report.

Auckland Airport's scope 1 and 2 decarbonisation pathway

The decarbonisation pathway aligns with a 1.5°C trajectory and FY23 performance shows a 27% reduction from the baseline year.



In FY23 the verification process highlighted that electricity line losses were being double counted as scope 1 and 3 and it was recommended that they be defined as a scope 3 emission source. The decarbonisation pathway has been updated in FY23 to reflect this.

Our priority is to reduce emissions created by our day-to-day operations as much as we can, with any residual emissions (expected to be around 10% of 2019's scope 1 and 2 emissions) by 2030 neutralised through permanent carbon removals. We are:

Using electricity generated from a mix of on- and off-site renewable generation

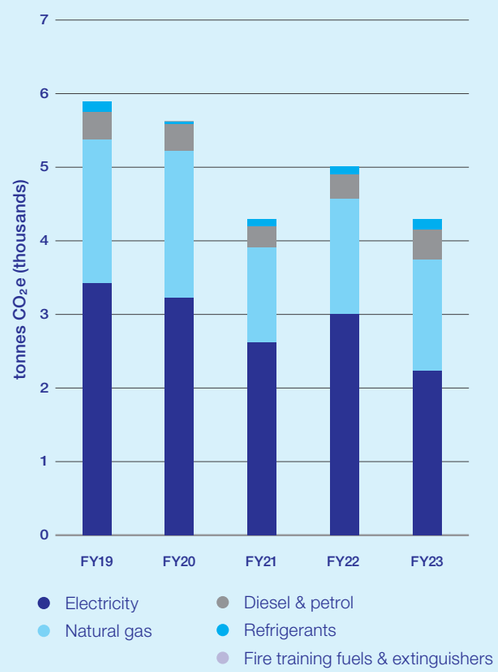
Phasing out the use of natural gas in the terminal through the incremental replacement of natural gas boilers with electric alternatives

Electrifying our vehicle fleet

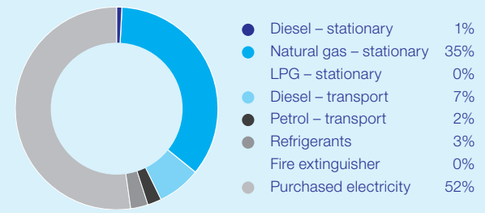
Using refrigerants with the lowest global-warming potential possible

2023 Financial Year Performance

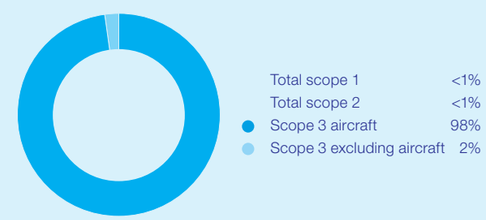
Scope 1 and 2 emissions over time (tCO_2e)



FY23 scope 1 and 2 emissions by source (tCO_2e)



FY23 breakdown of carbon footprint



Reducing our indirect emissions

Scope 1 and 2 emissions make up only a small proportion of Auckland Airport's GHG emissions inventory. In reality, the majority of emissions that occur as a consequence of the operation of New Zealand's largest airport are outside of our operational control.

We are actively partnering with stakeholders across the airport ecosystem to address these emissions and work towards Aotearoa New Zealand's goal to reach net zero by 2050.

Aircraft-related emissions

Aircraft emissions make up over 90% of our GHG emissions inventory. These emissions are tricky to tackle; they require significant technology changes to decarbonise.

We are working closely with our airline partners to understand their plans to introduce alternative aircraft fuels and technologies, and the infrastructure requirements to enable these to be deployed at Auckland Airport.

Sustainable Aviation Fuel (SAF) is widely considered the best option for decarbonisation of long-haul air travel.

The technology is proven, already available across the world and can be delivered to aircraft via Auckland Airport's existing refuelling hydrant system, however cost and security of supply remains a challenge.

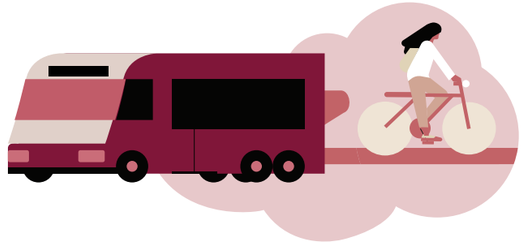
Air New Zealand's flagship shipment of SAF in September 2022 was delivered to Marsden Point and piped through existing fuel pipelines to Auckland Airport and through to aircraft.

We are also active members of Sustainable Aviation Aotearoa, which brings together government and industry to prepare for and accelerate the adoption of lower emissions aircraft.

In the short term, we are focusing on activities to decarbonise the airfield. These include:

- Provision of two banks of common-use electric vehicle (EV) chargers on the airfield to support groundhandlers in their transition to electric ground support equipment (GSE)
- Supplying ground power units (GPUs) and pre-conditioned air at all international gates so aircraft can connect to New Zealand's low-carbon electricity supply instead of burning jet fuel while at the gate. GPUs will also be installed at all gates in our new domestic jet facility, opening 2028/2029
- Work continues with Airways and airlines to reduce aircraft fuel burn by setting fuel-saving flight paths, allocating taxiways to minimise aircraft taxi time and just-in-time pushback allowing aircraft to delay engine use.

In the 2023 financial year, we have extended our GHG inventory to include full flight emissions (climb, cruise and descent) rather than just landing and take-off emissions that were reported in our FY22 GHG inventory.



Surface access

As the gateway to New Zealand, the journey to, from and between the terminals makes a lasting impression on our customers. It is our priority to facilitate a smooth and stress-free journey for passengers from the moment they step foot onto our precinct.

We are in a new chapter of building a better future for our travellers. The opening of our new Transport Hub (October 2024) will provide for a variety of transport options by placing existing and future public transport at the heart of Auckland Airport, provision for active modes and EV charging stations for the anticipated increase in EVs.

Property and construction

Emissions reduction has been integrated into the large-scale infrastructure development programme planned over the next 10 years. We are working with our design and construction partners to reduce carbon embodied in the materials of our developments.

The construction of the remote stands – spanning over 23 rugby fields in size – is using 108,000 tonnes of recycled concrete that previously formed the runway and using a low-carbon concrete to reduce emissions.

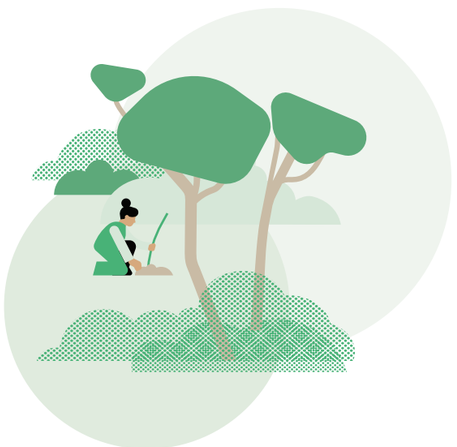
The design of the integrated domestic terminal is reducing embodied carbon through the use of engineered timber in the pier, cement reduction in the concrete specification and timber framing partitions.

Where possible, projects are targeting sustainability certification. The Transport Hub is targeting a Gold Parksmart rating, the first parking building expected to achieve the Parksmart rating in New Zealand, and a 5-Star Green certification for the adjoining office building. The Manawa Bay premium outlet shopping centre is also targeting a 5-star green rating for its design and build with a number of other key sustainability initiatives underway including: optimising resources, reducing carbon emissions, supporting local communities and enhancing the environment.

Mānawa Bay is targeting a 5-Star Green rating for its design and build.

Other indirect emissions sources

Other scope 3 emissions are made up of potable water use and wastewater treatment, waste sent to landfill, staff business travel, and tenant electricity use. During the 2023 financial year, we have introduced organic waste separation for food and beverage operators in the terminals to further reduce waste to landfill. We have also developed a Circularity Plan for the Mānawa Bay premium outlet shopping centre which will guide the operation of the centre and support tenants to reduce their waste streams and keep materials in use at their highest value for as long as possible.



Greenhouse Gas Emissions Inventory

All emissions, except where stated, have been calculated using the latest version of the New Zealand Ministry for the Environment's Measuring Emissions: A Guide for Organisations (2023).

Table 1: Greenhouse gas emissions inventory summary for Auckland Airport

Scope	Category	2022 emissions tCO_2e	2023 emissions (base year[1]) tCO_2e
Direct emissions (Scope 1)	Diesel – stationary	19.57	32.53
	Natural gas – stationary	1,561.91	1,514.02
	LPG – stationary	1.91	0.53
	Diesel – transport	256.51	294.39
	Petrol – transport	59.24	72.57
	Refrigerants	105.07	145.89
	Fire extinguisher	–	0.01
	Total scope 1	**2,004.21**	**2,059.94**
Indirect emissions (Scope 2)	Purchased electricity	3,007.06	2,230.72
	Total scope 2	**3,007.06**	**2,230.72**
Indirect emissions (Scope 3)[2]	Electricity T&D losses	1,121.57[3]	1,123.22
	Natural gas T&D losses	Not measured	55.79
	Tenant electricity use	Not measured	7,455.68
	Business travel	154.47	251.65
	Waste landfilled	149.50	554.52
	Water supply and treatment	82.31	139.08
	Construction materials	9,956.83	25,408.18
	Construction vehicles	Not measured	5,982.41
	Airside vehicles and GSE	Not measured	7,658.56
	Aircraft landing and take-off and engine testing	66,058.81	Not measured[4]
	Aircraft emissions	Not measured	2,530,432.29
	Total scope 3	**77,523.49**	**2,579,061.38**
Total emissions (Scope 1, 2 and 3)		**82,534.76**	**2,583,352.04**

This year, our scope 1 and 2 emissions have decreased as we progress along our decarbonisation pathway. Natural gas use has decreased with the introduction of our first electric heat pump which has reduced the need for gas boilers to operate at full capacity. Electricity emissions have also dropped, however this is largely due to the lower emission factor for New Zealand grid electricity this year from a higher percentage of renewable electricity being generated within the country. It is expected that scope 1 and 2 emissions will continue to reduce over time as natural gas continues to be phased out from the terminal and electric vehicles continue to be purchased.

1. Auckland Airport's base year for the GHG emissions inventory has been refreshed due to the addition of new material scope 3 emissions sources (including aircraft full flight emissions). However, the base year for the scope 1 and 2 emissions reduction target remains 2019 as this was the last year reflective of pre-pandemic travel volumes.
2. Scope 3 emissions sources have been determined in line with the GHG Protocol. Excluded emissions sources are listed in Table 7.
3. FY22 electricity transmission and distribution losses have been restated in FY23 as the methodology for calculation has changed. Line losses for the entire Auckland Airport precinct (including tenants) is now included in scope 3 instead of separating into scope 2 and scope 3.
4. Aircraft landing and take-off emissions have been replaced by aircraft full flight emissions in FY23.

Scope 3 emissions, on the other hand, have increased year-on-year with the acceleration of business activity post COVID-19. Waste and water use have increased due to the tripling of passengers between 2022 and 2023. Business travel and construction activity have also increased as border restrictions have lifted and the business financial performance recovers. This year we have introduced a much broader range of scope 3 emissions (including aircraft full flight emissions and airside vehicles), so total reported scope 3 emissions have increased significantly year-on-year. Surface access emissions (staff, tenant and passenger commuting) are intended to be included in future years once higher quality data is available.

Table 2: Greenhouse gas emissions intensity

Category	2022 value	2023 value
Scope 1 and 2 emissions intensity ($kgCO_2e$ per m^2 terminal area)	25.69	25.75
Scope 1 and 2 emissions intensity ($kgCO_2e$ per passenger)	0.94	0.27

Emissions by gas type

Auckland Airport includes scope 1, 2 and select scope 3 emissions from the six Kyoto Protocol gases in its inventory expressed as carbon dioxide equivalent (CO_2e):

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous oxide (N_2O)
- Hydrofluorocarbons (HFCs)
- Sulphur hexafluoride (SF_6)
- Nitrogen trifluoride (NF_3)
- Perfluorocarbons (PFCs)

Auckland Airport did not emit any SF_6, NF3 or PFCs in the 2023 financial year.

Table 3: GHG emissions by gas type

Scope	tCO_2	tCH_4	tN_2O	tHFCs	Other tCO_2e	Total
Scope 1	1,902.17	4.93	6.95	145.89	–	2,059.94
Scope 2	2,167.63	58.33	4.76	–	–	2,230.72
Scope 3	2,524,408.22	1,426.99	18,770.50	–	34,455.67[5]	2,579,061.38
Total	**2,528,478.02**	**1,490.25**	**18,782.21**	**145.89**	**34,455.67**	**2,583,352.04**

Greenhouse gas holdings

Auckland Airport has holdings of HFCs in storage as well as within chillers, air conditioning units and pre-conditioned air units for aircraft. Auckland Airport has holdings of SF_6 within electrical switchgear.

Table 4: GHG stock liability

Source	Quantity (kg)	Potential liability (tCO_2e)
HFC-32	261.72	177.18
HFC-134A	3,743.81	4,866.95
HCFC-123	1,590.00	125.61
HCFC-22	172.60	303.78
R-410A	985.10	2,056.89
R-454B	49.00	22.88
R-406A	10.24	19.90
SF_6	147.47	3,362.38

Other emissions

During the 2023 financial year, Airport Emergency Services (AES) burnt 11.5 tonnes of wood for fire training. The CO_2 content of the wood was 9.91 tonnes, which represents the carbon sequestered during the growing process. This means that the relevant measure of emissions for the purposes of disclosure is therefore limited to methane (CH_4) and nitrous oxide (N_2O), which totals 0.83 tonnes.

Table 5: Biomass emissions

Emissions source	tCO_2	tCH_4	tN_2O	Total tCO_2e
Biomass	9.91	0.74	0.09	0.83

5 Construction materials and business travel accommodation are unable to be split into the six GHGs due to an absence of suitable emissions factors, therefore they have been listed as Other tCO_2e.

Organisational Boundary

The organisational boundary determines the parameters for GHG reporting in Auckland Airport's GHG inventory. The boundaries were set with reference to the methodology described in the GHG Protocol.

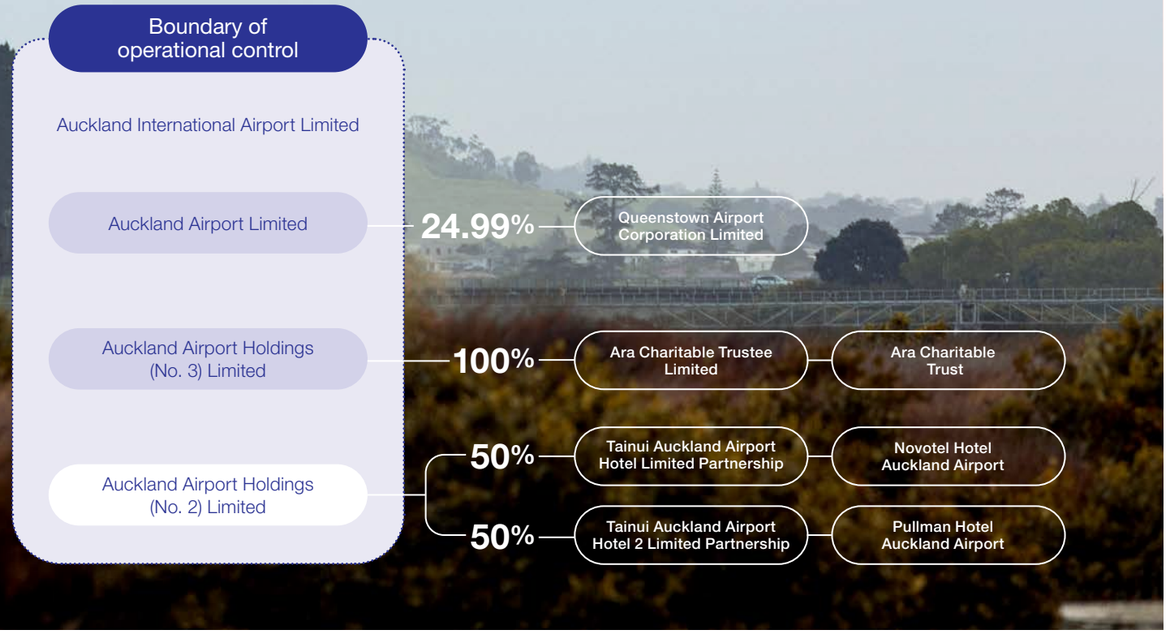
The organisational boundary of our GHG inventory is defined by those emissions over which we have operational control.

This consolidation approach allows us to focus on those emissions sources over which we have control and can therefore implement management actions, consistent with Auckland Airport's sustainability strategy.

Our organisational boundary encompasses the activities and companies listed in Figures 1 and 2, below.

Figure 1: Auckland Airport's business activities

Figure 2: Auckland Airport's organisational boundary



GHG emissions source inclusions

The emissions sources in Table 6 have been included in the GHG emissions inventory.

Table 6: Included emissions sources, data collection methodology and assumptions

Emissions source	Summary of data source	Uncertainty (description)
Scope 1 – Natural gas	Supplier invoices for monthly consumption.	Assumes that meter reading has been done correctly.
Scope 1 – Petrol and diesel	Fuel purchased through company fuel cards. Supplier invoices for bulk diesel purchase.	Assumes that all company fuel cards have been captured.
Scope 1 – Refrigerants	Refrigerant leakage calculated through the 'top-up' method.	Assumes all refrigerant leakage has been identified and topped up.
Scope 1 – LPG	Supplier invoices for LPG purchase.	Assumes all invoices were captured within the finance system.
Scope 1 – Fire extinguisher	Supplier invoices for fire extinguisher purchases.	Assumes all invoices were captured within the finance system.
Scope 2 – Electricity	Supplier invoices for monthly consumption.	Assumes that meter reading has been done correctly. Electricity emission factor based on 2022 New Zealand grid mix.
Scope 3 – Electricity T&D losses	Supplier invoices for monthly consumption.	Assumes that the T&D loss factor provided by the Ministry for the Environment is suitable for the Auckland Airport network.
Scope 3 – Natural gas T&D losses	Supplier invoices for monthly consumption.	Assumes that the T&D loss factor provided by the Ministry for the Environment is suitable for the Auckland Airport network.
Scope 3 – Tenant electricity usage	Monthly meter reading.	Assumes any electricity coming into the Auckland Airport network that is not used by Auckland Airport is used by tenants.
Scope 3 – Business travel	Third-party reporting for annual air travel and accommodation.	Assumes that all corporate travel has been booked through the travel provider.
Scope 3 – Landfilled waste	Monthly supplier invoices.	Assumes that third-party contractors have correct values. Some retail and property tenants' (i.e. other tenants in the Quad 5 office building) waste will also be included in these figures; however, it is assumed these quantities will be minimal compared to the overall waste profile.
Scope 3 – Water supply and treatment	Quarterly invoicing/meter reading.	Assumes that meter reading has been done correctly.
Scope 3 – Construction emissions	Quantities of concrete, asphalt, aggregate and steel used per construction/maintenance project during the reporting period provided by the project's Quantity Surveyor. Emission factors sourced from the New Zealand Green Building Council's Embodied Carbon Calculator (2023)	Assumes that the Quantity Surveyor's results are correct. Estimated quantities used for maintenance projects. Uses the average of a combination of emission factors from multiple companies and locations. Assumes that these general emission factors are suitable for the specific construction materials used at Auckland Airport.
Scope 3 – Construction vehicles	Quarterly reporting by contractors.	In FY23, actual data has only been captured for the second half of the financial year. Assumes that the first half of the financial year had equivalent fuel usage based on capital spend.

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Table 6 (continued): Included emissions sources, data collection methodology and assumptions

Emissions source	Summary of data source	Uncertainty (description)
Scope 3 – Airside vehicles and ground support equipment (GSE)	Surveys of operators of vehicles used on the Auckland Airport airfield.	Assumes that survey responses are representative of all airside vehicle operators on the Auckland Airport airfield.
Scope 3 – Aircraft emissions	Made up of jet fuel dispensed to aircraft, use of aircraft auxiliary power units (APU), and aircraft engine testing. Jet fuel dispensed to aircraft captured through metering information, APU use captured through surveys of airlines, and engine testing captured from the airport control tower. Emissions calculated using methodology and emission factors provided through the Airports Council International ACERT v6.0.	Assumes that jet fuel dispensed is a reasonable proxy for full flight emissions. Assumes that airline survey responses are representative of all airlines.

GHG emissions source exclusions

The following emissions sources have been excluded from the GHG emissions inventory.

Table 7: Excluded emissions sources

Emissions Source	Explanation
Auckland Airport freight	Freight is limited to couriers for small parcels/packages. Data is not available for tracking weights, only dollar spend. Emissions from freight are considered *de minimis* (too minor).
Staff mileage	Emissions associated with local travel by staff for work claimed as mileage are considered *de minimis*.
Surface access	Staff, tenants and passengers commuting to and from the airport is excluded due to an absence of robust data, however we intend to improve the quality of data and include this emission source in future years.
Transport of materials	Emissions associated with the transport of materials to the airport for repairs, maintenance and construction are excluded from the inventory. These emissions are less material than the embodied emissions, which are included in the inventory.
Sanitary waste	The third-party contractor does not report the quantity of waste collected from bathroom sanitary bins and disposed of. The relative emissions are assumed to be *de minimis*.
Fire extinguisher use (over and above use by AES for fire training)	The quantity of CO_2 fire extinguishers used beyond AES fire training during the reporting period is considered *de minimis*.
Construction waste	Construction waste is excluded from the inventory at this time due to an absence of data.
Industrial gases	Gases associated with welding and cutting are considered *de minimis*.

Base-year recalculation policy

This year, Auckland Airport have restated our base year to be the 2023 financial year, due to the addition of aircraft full flight and other scope 3 emissions. We have included the 2022 emissions within the inventory to allow comparison year-on-year.

Base-year data may need to be revised when material changes occur and have an impact on calculated emissions. This includes:

- If additional sources are discovered and represent more than 5% of total scope 1 and 2 emissions;
- If emission factors change substantially and are relevant to prior years (e.g. if the science behind a factor changed); or
- If the operational boundary changes significantly.

Persons responsible

Prepared by: Jessica Lambert
Sustainability Advisor

Reviewed by: Andrea Marshall
Head of Masterplanning and Sustainability

Approved by:

Mary-Liz Tuck
Chief Sustainability and Masterplanning Officer

Key terms used in this report

Scope 1 (direct GHG emissions)
Emissions from sources that are owned or controlled by the company.

Scope 2 (indirect GHG emissions)
Emissions from the generation of purchased electricity consumed by the company and the transmission and distribution losses from electricity lines owned by the company.

Scope 3 (indirect GHG emissions)
Emissions that occur as a consequence of the company's activities but from sources not owned or controlled by the company.

CO_2e
Carbon dioxide equivalent. The six greenhouse gases recorded in this report all have different Global Warming Potentials (GWPs). The emissions are all reported in tonnes of carbon dioxide equivalent to ensure comparability across all gases.

T&D losses
Transmission and distribution losses from the electrical network. As electricity travels through power lines, a proportion of energy is lost as heat due to the resistance in the lines.

GSE
Ground services equipment, used on the airfield to support aircraft operations.

Emission factor
As defined by the Intergovernmental Panel on Climate Change (IPCC), a co-efficient that quantifies the emissions or removals of a gas per unit activity.

Greenhouse gases
Almost every aspect of life produces greenhouse gas emissions, from the manufacturing of building materials and the transport of people and goods right through to the decomposition of waste in landfills.

Increased concentrations of greenhouse gases in the atmosphere leads to global warming.

In 1997, the Kyoto Protocol was signed by 84 countries, committing to reducing greenhouse gas emissions based on the scientific consensus that global warming is occurring and that human-made CO_2 emissions are driving it. In 2015, an international treaty on climate change called the Paris Agreement was adopted by 196 countries, with the aim of limiting global warming to well below 2°C, preferably to 1.5°C, compared with pre-industrial levels.

Deloitte.

INDEPENDENT REASONABLE AND LIMITED ASSURANCE REPORT

TO THE BOARD OF DIRECTORS OF AUCKLAND INTERNATIONAL AIRPORT LIMITED

Report on Greenhouse Gas Emissions ('GHG') Inventory Report

We have undertaken a reasonable assurance engagement in relation to Scope 1 and 2 emissions and a limited assurance engagement in relation to Scope 3 emissions within the Greenhouse Gas Inventory Report (the 'Inventory Report') of Auckland International Airport Limited (the 'Company') and its subsidiaries ('Auckland International Airport Limited' or the 'Group') for the year ended 30 June 2023, comprising the Emissions Inventory and the explanatory notes set out on pages 1 to 12.

The Inventory Report provides information about the greenhouse gas emissions of Auckland International Airport Limited for the year ended 30 June 2023 and is based on historical information. This information is stated in accordance with the requirements of the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) ('the GHG Protocol').

Board of Directors' Responsibility

The Board of Directors are responsible for the preparation of the Inventory Report, in accordance with the GHG Protocol. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of an Inventory Report that is free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on Scope 1 and 2 emissions and a limited assurance conclusion on Scope 3 emissions in the Inventory Report based on the evidence we have obtained. We conducted our reasonable and limited assurance engagements in accordance with International Standard on Assurance Engagements (New Zealand) 3410: Assurance Engagements on Greenhouse Gas Statements ('ISAE (NZ) 3410'), issued by the New Zealand Auditing and Assurance Standards Board. That standard requires that we plan and perform the engagement so as to obtain reasonable assurance that Scope 1 and 2 emissions within the Inventory Report, and limited assurance that Scope 3 emissions within the Inventory Report are free from material misstatement, respectively.

Reasonable assurance for Scope 1 and 2 emissions

A reasonable assurance engagement undertaken in accordance with ISAE (NZ) 3410 involves performing procedures to obtain evidence about the quantification of emissions and related information in the Inventory Report. The nature, timing and extent of procedures selected depend on the assurance practitioner's judgement, including the assessment of the risks of material misstatement, whether due to fraud or error, in the Inventory Report. In making those risk assessments, we considered internal control relevant to the Group's preparation of the Inventory Report. We also:

- Assessed the suitability in the circumstances of the Auckland International Airport Limited's use of the GHG Protocol as the basis for preparing the Inventory Report;
- Evaluated the appropriateness of quantification methods and reporting policies used, and the reasonableness of estimates made by the Auckland International Airport Limited; and
- Evaluated the overall presentation of the Inventory Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our reasonable assurance opinion in respect of the Scope 1 and 2 emissions.

Limited assurance for Scope 3 emissions

A limited assurance engagement undertaken in accordance with ISAE (NZ) 3410 involves assessing the suitability in the circumstances of the Group's use of the GHG Protocol as the basis for the preparation of the inventory report, assessing the risks of material misstatement of the inventory report whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the inventory report. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgement and included enquiries, observations of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- Reviewed adherence to the principles and requirements outlined in the GHG Protocol, which included a consideration of completeness;
- Obtained an understanding of the process of compiling and validating information received from data owners for inclusion in the Inventory Report;
- Reviewed material quantitative data, including corroborative enquiry and examined selected supporting documentation and calculations; and
- Compared the Inventory Report to the reporting requirements of the GHG Protocol.

Inherent Limitations

Scope 1, 2 and 3 emissions

Non-financial information, such as that included in Auckland International Airport Limited Inventory Report, is subject to more inherent limitations than financial information, given both its nature and the methods used and assumptions applied in determining, calculating and sampling or estimating such information. Specifically, GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

As the procedures performed for this engagement are not performed continuously throughout the relevant period and the procedures performed in respect of the Group's compliance with the GHG Protocol are undertaken on a test basis, our assurance engagement cannot be relied on to detect all instances where the Group may not have complied with the GHG Protocol. Because of these inherent limitations, it is possible that fraud, error or non-compliance may occur and not be detected.

Scope 3 emissions

For the Scope 3 emissions, we note that a limited assurance engagement is not designed to detect all instances of non-compliance with the GHG Protocol, as it generally comprises making enquires, primarily of the responsible party, and applying analytical and other review procedures.

Our Independence and Quality Control

We are independent of the Group in accordance with Professional and Ethical Standard 1 International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board and the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (including International Independence Standards), and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Our firm carries out other assignments for the Group in the area of greenhouse gas inventory assurance reporting, trustee reporting and assurance reporting for regulatory reporting, and non-assurance services in relation to the integrity of the aeronautical pricing model as well as non-assurance services provided to the Corporate Taxpayers Group of which the Company is a member. These services have not impaired our independence as auditor of the Company and Group. In addition to this, partners and employees of our firm deal with the Company and its subsidiaries on normal terms within the ordinary course of trading activities of the business of the Company and its subsidiaries. The firm has no other relationship with, or interest in, the Company or any of its subsidiaries.

The firm applies Professional and Ethical Standard 3 (Amended): Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance Engagements issued by the New Zealand Auditing and Assurance Standards Board, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Use of Report

Our assurance report is made solely to the directors of the Group in accordance with the terms of our engagement. Our work has been undertaken so that we might state to the directors those matters we have been engaged to state in this report and is for no other purpose. We accept or assume no duty, responsibility or liability to any other party in connection with the report or this engagement, including without limitation, liability for negligence in relation to the conclusions expressed in this report.

Reasonable Assurance Opinion for Scope 1 and 2 Emissions

In our opinion, the Scope 1 and 2 emissions of Auckland International Airport Limited within the Inventory Report for the year ended 30 June 2023 have been prepared, in all material respects, in accordance with the requirements of the GHG Protocol.

Limited Assurance Conclusion for Scope 3 Emissions

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Auckland International Airport Limited's Scope 3 emissions within the Inventory Report for the year ended 30 June 2023 are not prepared, in all material respects, in accordance with the requirements of the GHG Protocol.

Deloitte Limited

Chartered Accountants

Auckland, New Zealand

24 August 2023