

EMISSIONS INVENTORY REPORT

Prepared in accordance with ISO 14064-1:2018. This report is to be read in conjunction with the Emissions Inventory spreadsheet.



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Base year period: 01/01/2018 to 31/12/2018

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INTRODUCTION

Auckland University of Technology (AUT) is committed to advancing knowledge and understanding the issues and opportunities around creating a sustainable future for people and the planet and its biological ecosystems. AUT's new strategy, Te Kete, was completed in 2024 and highlights our aspiration to be a net zero carbon university by 2030, along with a focus on regenerative approaches. During 2025 and the first quarter of 2026 we developed our new draft Regenerative Action and Sustainability Plan to reflect Te Kete, in particular our net zero carbon aspiration. As a result, this inventory report is our final year of carbon reporting against targets in AUT's Sustainability Plan that are until 2025, particularly halving CO₂e emissions by 2025.

AUT has reported on its carbon emissions to the Tertiary Education Facilities Management Association of Australasia since 2012. This provides a benchmark against other tertiary Institutes in Australasia. It has reported one of the lowest carbon footprints in this sector.

This report is our seventh GHG Inventory report and is consistent with the International Standards Organisation (ISO) 14064-1:2018 which is based on the Greenhouse Gas Protocol (GHG Protocol¹). This is a Corporate Accounting and Reporting Standard (2004) and ISO 14064-1:2018 Specification with Guidance at the Organisation Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals. Where relevant, the inventory is aligned with sector best practice for emissions measurements and reporting.

For the purposes of this report, AUT refers to the three campuses operations, AUT Foundation and AUT Ventures Ltd. It excludes AUT Millennium, the Mangere Refugee Centre and any organisations partially owned by AUT Ventures.

STATEMENT OF INTENT

ISO14064-1 9.3.2 (a)

This inventory forms part of AUT's commitment to gain ISO14064-1:2018 verification. This report:

- relates specifically to emissions of AUT;
- has been prepared following the requirements in ISO14064-1;
- has been prepared as part of an ongoing commitment to measure and reduce emissions as outlined in our Sustainability Plan; and
- Identifies exposure to carbon risk within our core business and our supply chain, in support of a longer-term goal of transitioning to a business model that is viable within a net zero economy.

Intended users of this report include, but are not limited to:

- Our staff and students
- Prospective students
- Our industry partners and government
- Executive Leadership and AUT Council
- General public
- Ministry for the Environment

¹ Throughout this document 'GHG Protocol' means the GHG Protocol Corporate Accounting and Reporting Standard and 'ISO 14064-1:2018' means the international standard *Specification with Guidance at the Organisational Level Quantification and Reporting of Greenhouse Gas Emissions and Removals*.

DESCRIPTION OF AUT

ISO14064-1 9.3.1 (a) and 9.3.2 (a)

AUT is the second largest university in Aotearoa, New Zealand. Students are provided with unique learning opportunities through engagement with industry, business, and international partners. AUT operates across three main campuses located in Auckland and in 2025 had an enrolment of 20,629 equivalent full-time students (EFTS) and 2,403 full time equivalent (FTE) staff. This information is from the 2025 annual report on AUT's website.

The University has five Faculties:

- Business, Economics and Law
- Culture and Society
- Design and Creative Technologies
- Health and Environmental Sciences
- Te Ara Poutama (Faculty of Māori and Indigenous Development).

For more information on the University see the Annual Reports for the year ended December 2025 at www.aut.ac.nz². For further information on the structure of the organisation see Figure 1 and Table 1.

The University is also a 100% shareholder in AUT Foundation and AUT Ventures Ltd and is a 50% and 15% shareholder in AUT Millennium and the Waterfront Theatre respectively.

Sustainability at AUT

The mission in the University's [Sustainability Plan](#) is to create great graduates for a sustainable world. Collectively we are committed to ensuring that students have opportunities to develop sustainability related knowledge, that students will have opportunities for interdisciplinary collaboration on the world's most intransigent problems, through action orientated research and finally that these activities will be undertaken on campuses that are operating with ever decreasing carbon footprints in response to SDG13, climate action.

The university has set an ambitious goal of halving its CO₂e footprint by 2025 using 2018 as its baseline.

A focus on GHG measurement and gaining ISO14064 certification provides credibility that the organisation is committed to reducing its footprint in line with global targets.

REPORTING PERIOD COVERED

ISO14064-1 9.3.1 (c,l)

This GHG inventory report covers the financial year 1 January 2025 to 31 December 2025. This is our seventh report and 2018 is our baseline year. A calendar year was chosen to align with our financial reporting cycles. The frequency of this report will be annual.

ORGANISATIONAL BOUNDARIES

ISO14064-1 9.3.1 (d)

The organisational boundaries were set with reference to the methodology described in the ISO 14064-1:2018 standard. The standard allows for two distinct approaches to be used to consolidate GHG emissions: the equity share or control (either financial or operational) approaches.

The operational control approach was used to account for emissions. This approach was used to account for emissions over which the University has control and can influence reductions in line with its targets.

² Link to 2024 Annual Report: <https://www.aut.ac.nz/about/auts-leadership/official-aut-publications>.

The criteria AUT used to define organisational boundaries consisted of mapping the organisational chart to show legal structure of all entities residing beneath AUT. Table 1 and Figure 1 describe how each entity is considered and show what has been included in the context of the organisational profile. In Figure 1, the part of the structure in green indicates what has been included and those highlighted in orange show what has been excluded.

ISO 14064-1 requires that different activities and emissions are categorised into ‘facilities’ to provide data in its disaggregated form to provide transparency and flexibility to meet reporting requirements.

A facility is an operation which by its processes and geography can be separately accounted for. ISO14064 defines facility as: **“a single installation, set of installations or production processes (stationery or mobile), which can be defined within a single geographical boundary, organisational unit or production process”³**

While the university operates from three main campuses and it has several subsidiaries which are referred to in this report, they cannot be easily separated into facilities. AUT Foundation and AUT Ventures occupy space within the university campuses and are included in the total emissions. However, the companies owned by AUT Ventures are excluded from the organisational boundary, as the staff do not occupy space in AUT buildings, book travel through AUT, nor does AUT Ventures exercise control over their Boards. The City, South and North campuses which form Auckland University of Technology have not been separated out in this report. The Mangere Refugee Centre and Millennium campus are excluded from the organisational boundary.

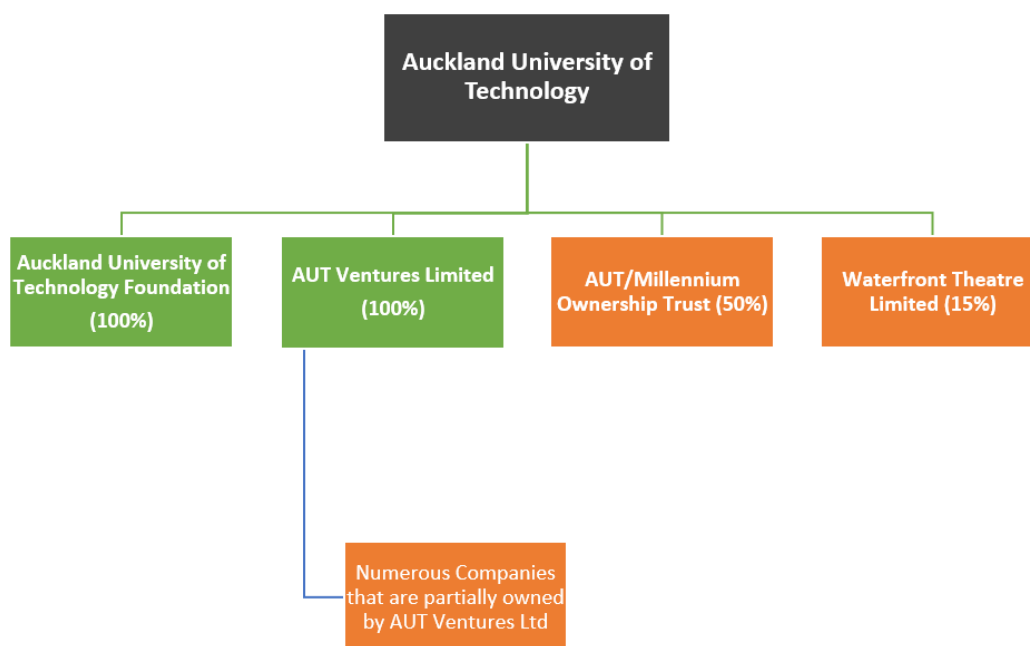


Figure 1: AUT Structure highlighting what is included in the reporting boundaries

Defining the individual facilities

A brief description of each of the facilities (including which legal entities are included within them) follows:

Table 1: Description of AUT Structure and Facilities

Facility	Description
AUT	This includes the three Auckland campuses. The university operates out of 47 buildings and used 16.23 GWh of electricity, 1.76 GWh gas, with 20,629 EFTS students and 2,403 FTE staff. The three campuses are: <ul style="list-style-type: none"> • City campus

³ ISO 14064-1:2018€ section 3.4.1

	<ul style="list-style-type: none"> • North campus • South campus <p>AUT staff also occupy offices at AUT Millennium. Further information about AUT can be found on AUT's website</p>
AUT Millennium	New Zealand's leading health, sport and exercise tertiary education provider managed by the AUT Millennium Ownership Trust.
AUT Ventures	The commercialisation arm of AUT which provides access to the university's IP portfolio, research consultants, commercial research, and investment opportunities.
AUT Foundation	An independent charitable trust established in 1987 set up to manage donations to the university.
ASB Waterfront Theatre	Auckland theatre located in Wynyard Quarter and is the home of the Auckland Theatre Company. AUT is a funder and one of the founding partners.

INVENTORY SUMMARY

ISO14064-1 9.3.1 (f)

A description of AUT emissions is outlined in Tables 2 and 3 and Figures 2 and 3 below.

Table 2: Summary of emissions (tCO₂e) by sources for the period 1/1/2025 to 31/12/2025

	Source	CO ₂ e (tonnes)	% of Total
Category 1	Fuel (L)	38	0.4%
	Refrigerants (kg)	151	1.7%
	Natural Gas (kWh)	345	3.8%
	LPG (kg)	2	0.0%
Category 2	Electricity (kWh)	1641	18.2%
Category 3	Freight (Road)(tonnes)	0	0.0%
	Air Travel (tonnes)	2347	26.1%
	Taxis (\$)	6	0.1%
	Mileage (km)	47	0.5%
	Rental Cars (km)	9	0.1%
	Hotels (stay nights)	205	2.3%
	Staff Commuter Travel (SOV km)	712	7.9%
	Student Commuter Travel (SOV km)	2886	32.1%
	WFH (days)	62	0.7%
	Shuttle Bus (km)	137	1.5%
Category 4	Waste (tonnes)	71	0.8%
	Transmission & Distribution Losses (kWh)	136	1.5%
	Paper Consumption (tonnes)	23	0.3%
	Water & Wastewater (kL)	53	0.6%
	Data Centres (kWh)	123	1.4%
	Grand total	8,994	100%

Table 3: Summary emissions and removals (tCO₂e) by category for the period 1/1/2025 to 31/12/2025

Category	All measured emissions (tCO ₂ e)
Category 1 direct emissions	537
Category 2 indirect emissions (imported energy)	1,641
Category 3 indirect emissions (transportation)	6,411
Category 4 indirect emissions (products used by organisation)	405
Category 5 indirect emissions (use of products from the organisation)	-
Category 6 indirect emissions (other sources)	-
Total direct emissions	537
Total indirect emissions	8,457
Total gross emissions	8,994
Category 1 direct removals	-
Certified renewable energy certificates	-
Total net emissions	8,994

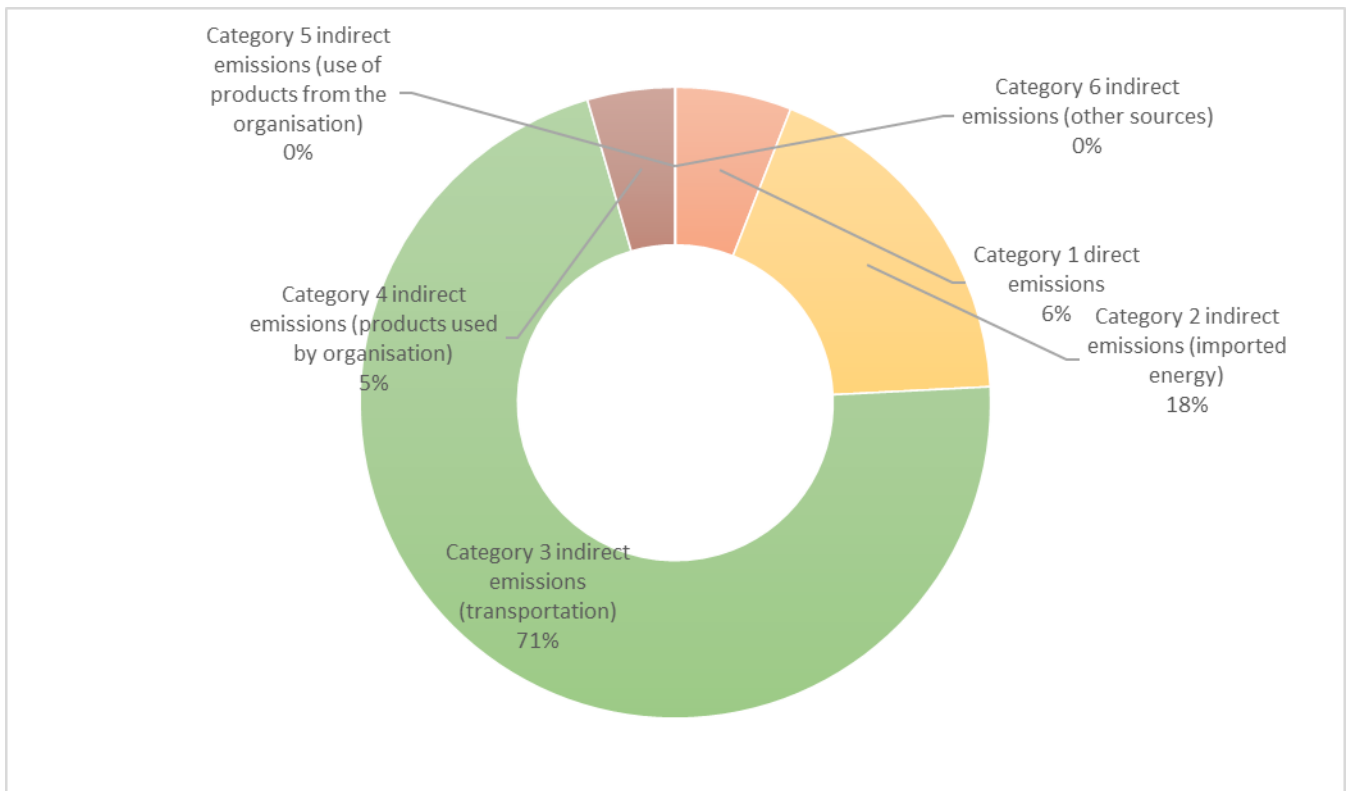


Figure 2: Emissions by Category for all measured emissions for 1/1/2025 – 31/12/2025

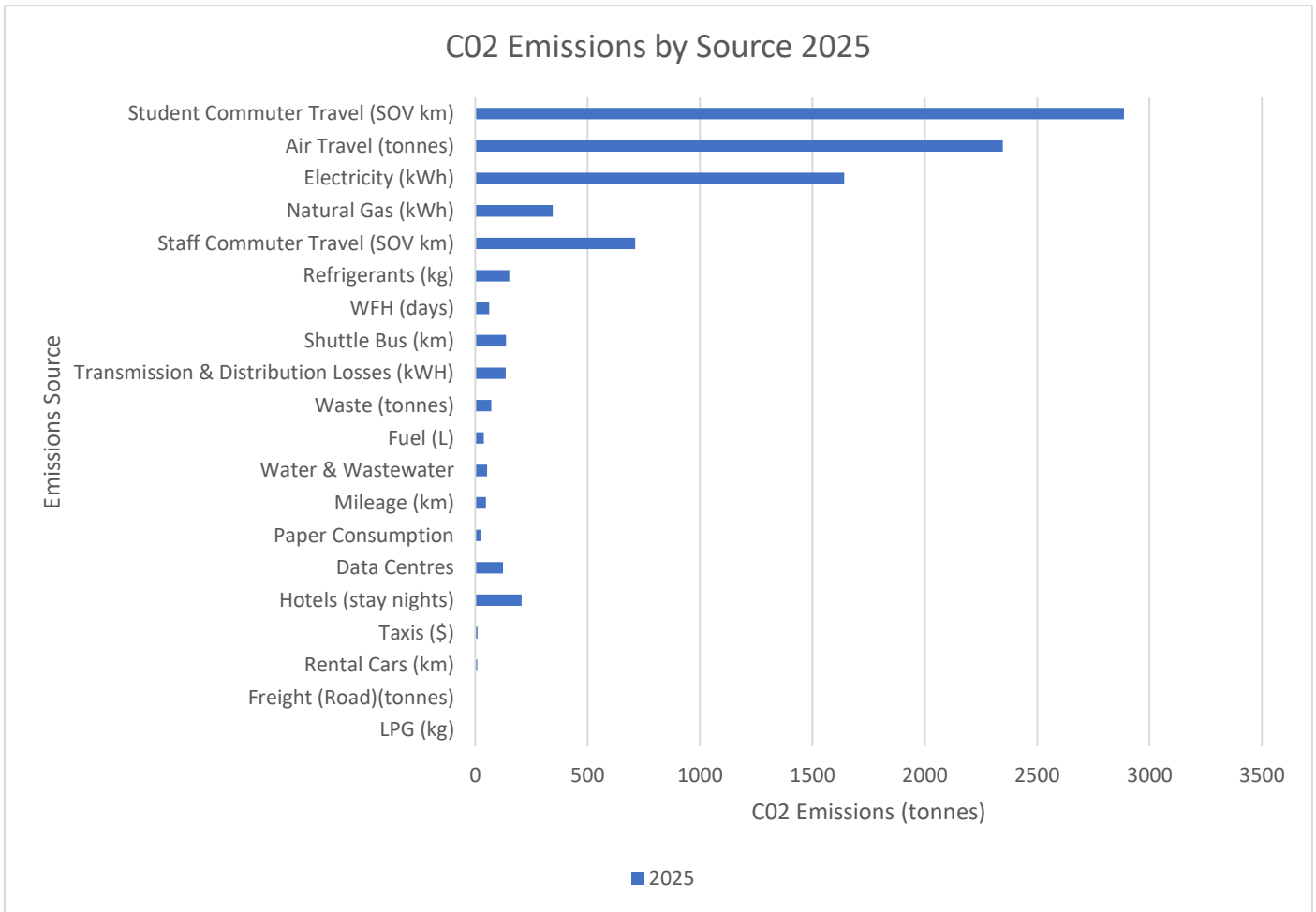


Figure 3: 2025 GHG emissions by source

Category	CO ₂ e	CO ₂	CH ₄	N ₂ O	HFCs	SF
Category 1	537	384	1	1	151	0
Category 2	1641	1594	44	3	0	0
Category 3	6411	2591	9	20	0	0
Category 4	405	133	99	27	0	0

Table 4: Breakdown of GHG emissions by category.

* Totalling individual GHG numbers may not add to total CO₂e due to rounding and a lack of specific GHG emission factors for some emission sources.

OPERATIONAL BOUNDARIES

ISO14064-1 9.3.1 (e)

GHG emissions sources for AUT were measured using the 12-month period 1 January 2025 – 31 December 2025 which is our financial year.

The following categories are used:

- Direct GHG emissions/removals: GHG emissions that are operationally controlled by the organisation (Category 1)
- Indirect GHG emissions from imported energy: GHG emissions from the generation of purchased electricity, heat or steam consumed by the company (Category 2)
- Indirect emissions from transportation (Category 3)

- Indirect emissions from products used by the organisation (Category 4)
- Products used from organisation (Category 5)
- Other indirect emissions (Category 6)

Sources and sinks were identified through regular discussions with the NZ and Australia Tertiary Education Sector, annual Tertiary Education Facilities Management Association (TEFMA) reporting and a screening tool was used to identify monetary spend and associated carbon emissions.

Key considerations around what sources to include were the magnitude, level of influence, risk/opportunity, sector guidance, outsourcing, stakeholder engagement, ISO14064 requirements and others.

All required category 1 and 2 emissions are included. Category 3 and 4 emissions are included where data is available. Only data that is deemed *de minimis* (less than 1%) or where exclusion has been approved has been excluded.

SUMMARY OF EMISSION SOURCE INCLUSIONS

ISO14064-1 9.3.1 (g & m), 9.3.2 (f)

Table 5 below provides a summary of the emissions sources included in the GHG inventory. It also describes the methodology used and level of uncertainty. A qualitative assessment of uncertainty has been utilised as a quantitative assessment of uncertainty would be cost and resource prohibitive at this stage.

Table 5: Summary of Inclusions

Category	GHG emissions source	Data source	Data collection unit	Methodology and data quality	Uncertainty
Category 1	Natural Gas	Gas consumption in offices, kitchens.	Invoices	Records from billing information. Due to varied timings in actual readings and estimates used in the Natural Gas billing information across reporting years and sites, some estimate readings were applied to the previous reporting year and a pro rata applied to actual readings in this reporting year. At one site the previous year's consumption data was used, as no consumption data was available for this reporting year.	Medium
	LPG	Gas consumed by South Campus Cafe	Invoices	Usage captured through gas purchases.	Low
	Mobile combustion	Fuel used by AUT fleet	Fuel card (Cardlink)	Litres of fuel purchased on fuel card	Low
	Fugitive emissions	Fugitive emissions from AC systems	Maintenance records	Aquaheat & Econair provide data	Medium
Category	GHG emissions source	Data source	Data collection unit	Methodology, and data quality	Uncertainty
Category 2	Electricity	Electricity consumed in offices, lecture theatres, cafes etc	EnergyPro, finance and usage portal for utilities.	Accurate records from the billing system. Electricity data is reported using the location-based methodology.	Low
Category	GHG emissions source	Data source	Data collection unit	Methodology, and data quality	Uncertainty

Category 3 operational	Transportation	Freight (Office consumables)	OfficeMax Carbon Emissions Report (Verified)	OfficeMax pre-verified data.	Low
		Air Travel	Orbit Travel environmental report.	Orbit provides kms travelled, class of travel and departure date. AUT applies emissions factors for all domestic, short haul and long haul travel, including the radiative forcing emission factors.	Low
		Car rentals	Rental provider	Average kms travelled per day applied by Orbit. Plus dollars spent EF applied to rentals on P cards, this use of financial spend based emissions factor for non-orbit related bookings was utilised in FY25 but not in FY24.	Low
		Taxis	Data provided by finances team.	Accurate records from Finance. \$ spent EF applied to P card & taxi chits.	Low
		Mileage	Data provided by the finance team	Accurate records from finance team, Km travelled used.	Low
		Hotels	Orbit Travel environmental report. PCard data provided by the finance team.	Orbit provides Environmental report which uses departure date providing accurate data verified by Toitu. EF for accommodation used to determine the spend based emissions from P cards.	Low
		Staff & Student Commuter Travel (travel alone by private car)	Data based on AUT's annual staff & student travel survey	Data based on AUT travel survey. 8% response rate. Average distance travel assumed to be 24.5km. Emissions calculated for travel alone in a private car assumes petrol car is used, average EF for petrol vehicles applied. People counting technology also used to inform % of students on campus after pandemic. For students, the annual days assumed on campus is 135 (based on an average of the full potential, which is 150 days, 2 semesters at 15 weeks).	High
		Shuttle Bus	Pacific Tourway's emails	Data based on kilometres travelled by diesel & electric buses.	Low
		WFH	Based on different WFH days – used Travel survey data	Uses MfE methodology for working out number of WFH days for total staff. This is based on a 46-week year and applies different WFH days across FTE total. WFH days data from annual staff travel survey.	Medium
Category	GHG emissions source	Data source	Data collection unit	Methodology, and data quality	Uncertainty
Category 4	Purchased goods & services	Waste	Data provided by OCS as main contractor.	Waste, commingled recycling, paper cardboard recycling and compostables is a mix of actual weights and industry best guess estimates.	Low
		Transmission & Distribution Losses	EnergyPro, finance and usage portal for utilities.	Emissions based on electricity & gas use using MfE average emissions factors for NZ.	Low

		Paper Consumption	Officemax consumption figures	Accurate records from Officemax	Low
		Water & Wastewater	EnergyPro, finance and usage portal for utilities.	Accurate records based on invoice system in EnergyPro. 100% of purchased water is considered to become wastewater.	Low
		Data Centres	Data provided by Datacom & Microsoft	Accurate emissions based on Microsoft data centre and Microsoft 365 scope 1,2 & 3. Datacom based on kWh used by racks & % of total.	Low
Category	GHG emissions source	Data source	Data collection unit	Methodology, and data quality	Uncertainty
Category 5	Upstream and Downstream Leased Assets	Electricity, Water and wastewater, Waste and Gas	Various	Electricity consumption from Downstream Leased Assets without revenue meters (i.e. cafes) are included within AUT's Scope 2 emissions. Natural gas consumption from Downstream Leased Assets without revenue meters (i.e. cafes) are included within AUT's Scope 1 emissions. Water, wastewater and waste usage from Downstream leased Assets without revenue meters (i.e. cafes) are included in AUT's scope 3 emissions.	High

GHG EMISSIONS AND EXCLUSIONS

ISO14064-1 9.3.1 (i)

Table 6: Category 1 and 2 exclusions

Category	GHG emissions source	Data source	Reason for exclusion	% of total category 1 & 2 inventory
	Stationary combustion			
Category 1	Diesel	Testing of backup generators	Estimates available from maintenance officers & is excluded as considered <i>de minimis</i> .	Less than 1%
	Fertiliser	Fertiliser Usage	Data is de minimis based on previous years	
	Compost (onsite)	Compost bays (North) & Worm farms (City)	Data not available at this stage and considered to be de minimus	
	3.7Kg LPG bottle	LPG used for BBQs at South campus	Data not available	

Table 7: Category 3,4, 5 and 6 exclusions

Category	GHG emissions source	Data source	Reason for exclusion
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Category 3 operational	Transportation	Freight (Other than paper)	Data has not been obtained yet. Work is underway with key suppliers & will be available in the future.
		Air Travel (International students)	Data not available for this report. Will be considered for future reports.
		Air Travel (reimbursed Air Travel)	Data not available and considered to be de minimus.
		Vehicle rentals for students trips not booked through Orbit	Data not available and considered to be de minimus.
		Student trips (students' vehicles)	Data not available and considered to be de minimus.
		Staff & Student Commuter Travel (Public Transport, Carpooling, Motorcycle)	Data not available. Although these sources have been excluded, they are expected to be material to the overall emissions total. These aspects of commuting have been excluded as the focus is on reduction efforts on single occupancy vehicles and if we were to incorporate these aspects a lot of assumptions would need to be made.
		Special gasses	Data considered to be de minimus
Category	GHG emissions source	Data source	Reason for exclusion
Category 4	Capital Expenditure	Capital Goods (machines and buildings)	Data is not available for this report Although these sources have been excluded, they are expected to be material to the overall emissions total.
	Purchased goods & services	Other purchased goods and services	Data not available at this stage. Although these sources have been excluded, they are expected to be material to the overall emissions total.
Category 5	Upstream and Downstream Leased Assets Investments	Electricity for Retail Unit 1-58 Wakefield street	This site has a revenue meter and AUT does not have operational control.
		Subsidiaries of AUT Ventures Ltd	AUT does not have operational control.
		Millennium Ownership Trust	AUT does not have operational control.
		Waterfront Theatre Limited	AUT does not have operational control.

COMPARISON TO PREVIOUS INVENTORIES

Greenhouse gas emissions for the current reporting period are detailed in Figures 4 to 7 and Table 6. There is a decrease of 4,615 tCO₂e compared to 2018, the baseline year. The totals of all categories decreased in comparison to the 2018 baseline. Furthermore, all emissions sources decreased or remained constant (in comparison to 2018) except for refrigerants, LPG, mileage, hotels, rental cars, and data centres.

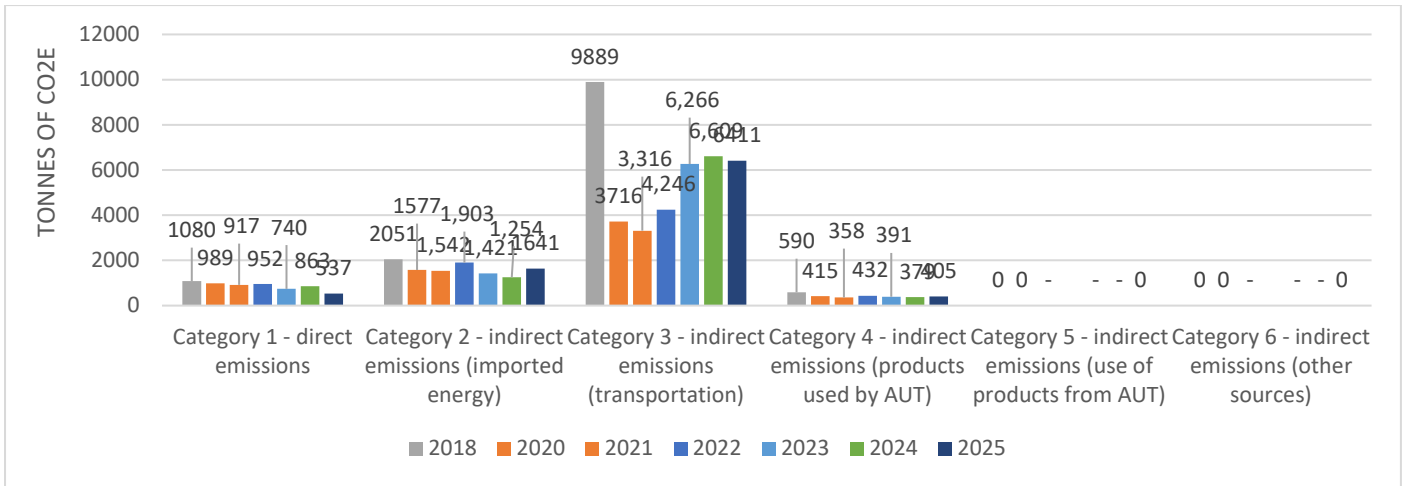


Figure 4: Comparison of gross CO₂e emissions by category in 2018, 2020, 2021, 2022, 2023, 2024 & 2025

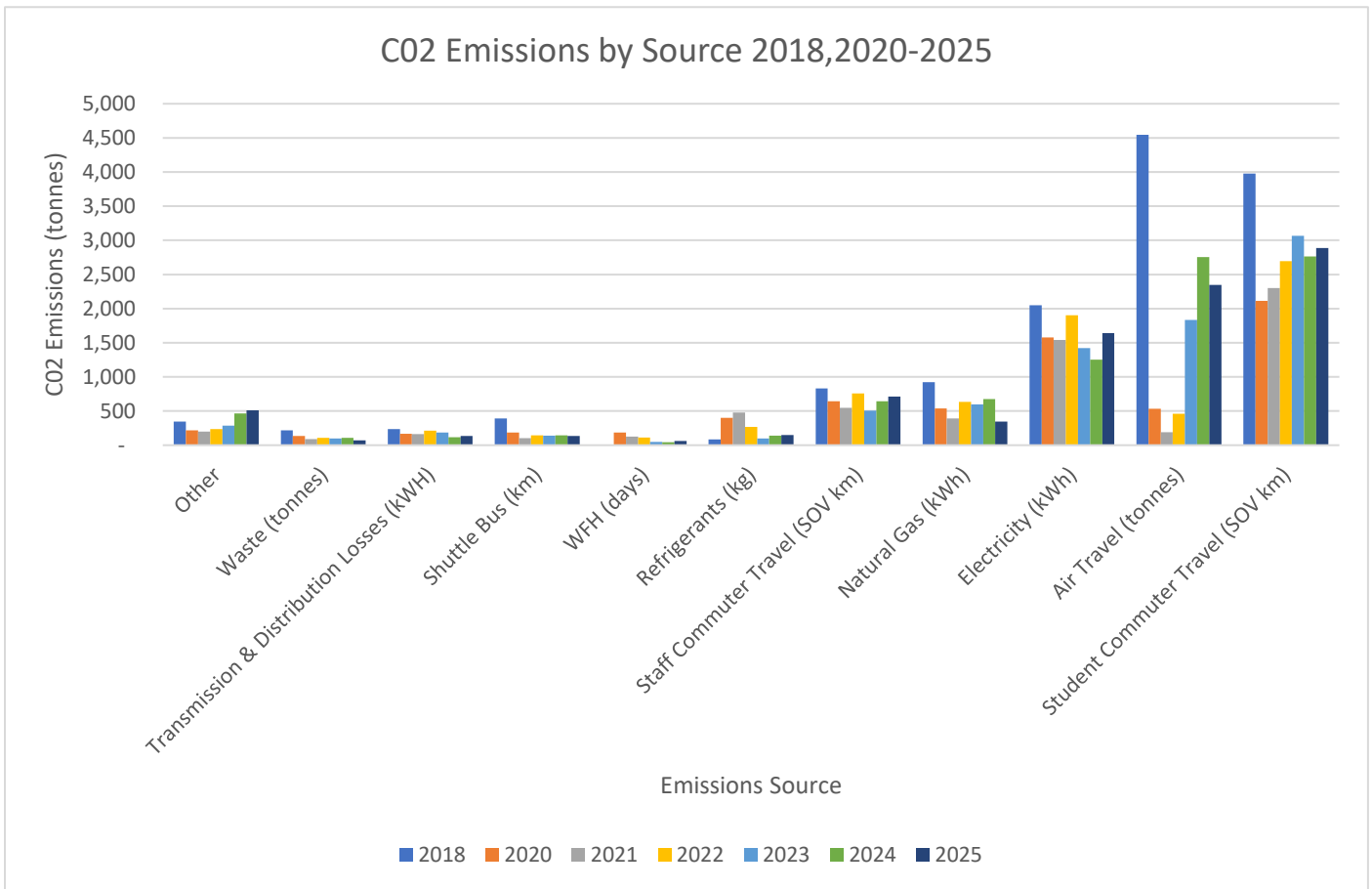


Figure 5: Comparison of gross emissions by source between reporting years

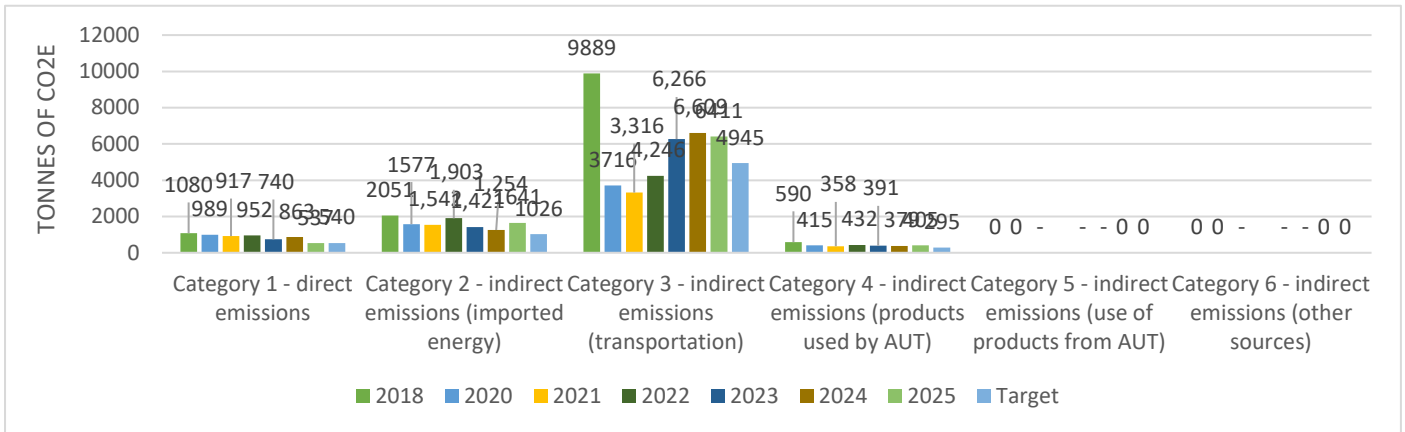


Figure 6: Comparison of emissions by category for 2018 and 2020 - 2025 and a target of half emissions per category

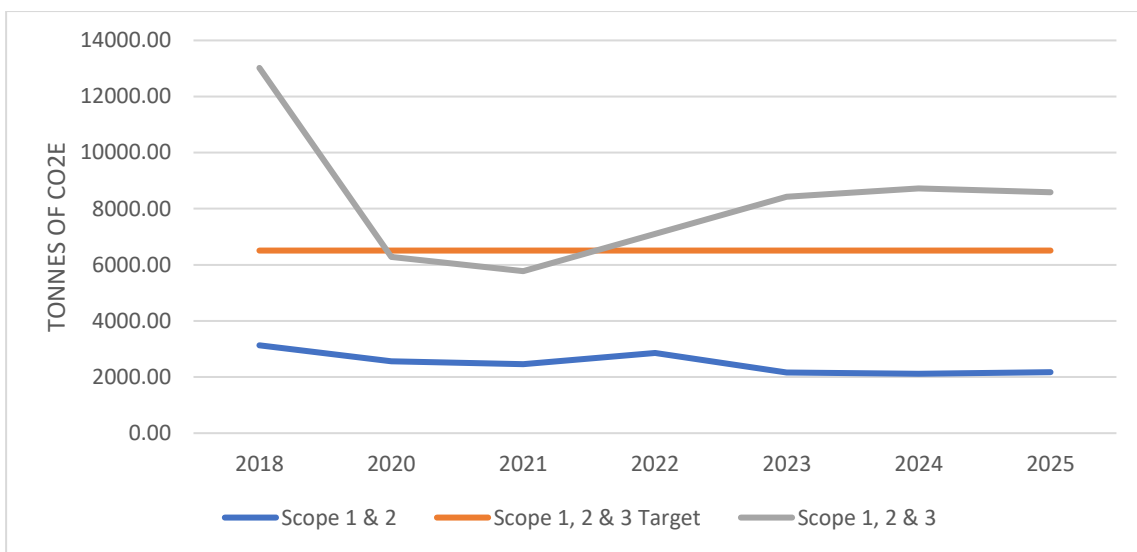


Figure 7: Scope 1, 2 and 3 emissions and Target for 2018, 2020, 2021, 2022, 2023, 2024 & 2025

All category 1 & 2 emissions sources, except refrigerants and LPG, decreased when compared to the 2018 baseline. The carbon associated with refrigerants is an area the industry is developing and AUT is considering adopting refrigerants with a lower global warming potential, whilst balancing other risks, such as flammability of refrigerants.

Carbon from electricity was 20% lower in 2025 (in comparison to 2018). Emissions from electricity increased in 2025, when compared with 2024 due to a slight increase in the electricity emissions factor, also AUT is switching from natural gas to electricity, as the emissions factor for electricity is lower. This does lead to an increase in emissions from electricity and a continued focus on energy efficiency and developing onsite renewable electricity sources. AUT is continuing to decarbonise our energy infrastructure, the demolition and removal of gas boilers in AR building and vacating WR building began to achieve this goal. Since the decarbonization project began in 2023 11 gas boilers have been removed from across AUT's estate (6 for AR, 1 for AG, 2 for WR, 1 for WM (prior to 2024) and 1 for WH). In 2025 we saw decreases in natural gas consumption in WH building by 81% when compared with 2024 due to all space heating being provided by electric sources with gas only used for cooking. In WF and AA buildings we saw reductions of 46% and 21% respectively when compared to 2024 in part due to staff occupancy changes as a result of refurbishments and AZ opening.

Carbon from air travel is 48% lower than the 2018 baseline year, which is very close to one of our targets – reduce emissions from air travel by 50%. AUT is progressing work around how we maintain low emissions from air travel in the coming years, whilst balancing our strategic international partnerships and global research.

For commuter travel, total student EFTS increased in 2025, and students travelling into the City Campus in single occupancy vehicles dropped a little to 5% in 2025 versus 6% in 2024. These changes led to emissions from student commuter travel, to increase by about 100 tonnes, when compared with 2024.

Table 8: Comparison GHG emissions by category for 2018, 2020, 2021, 2022, 2023, 2024 & 2025

Category	Emissions Sources	Base Year 2018 (tCO2e)	2020 (tCO2e)	2021 (tCO2e)	2022 (tCO2e)	2023 (tCO2e)	2024 (tCO2e)	2025 (tCO2e)
Category 1 direct emissions	Diesel, Petrol, Refrigerants, Natural gas, LPG	1080	989	917	952	789	863	537
Category 2 indirect emissions (imported energy)	Electricity	2051	1577	1542	1903	1421	1254	1641
Category 3 indirect emissions (transportation)	Freight, Air Travel, Taxis, Mileage claims, Hotels, Car rentals, commuter travel, WFH, Shuttle Bus	9889	3716	3316	4246	6282	6609	6411
Category 4 indirect emissions (products used by organisation)	Waste, Transmission & Distribution losses, Paper consumption, Water, Data centres, Fertilizers	590	419	358	432	392	379	405
Category 5 indirect emissions (use of products from the organisation)		0	0	0	0	0	0	0
Category 6 indirect emissions (other sources)		0	0	0	0	0	0	0
Total direct emissions		1080	989	917	952	789	863	537
Total indirect emissions		12,530	5711	5215	6581	8096	8241	8457
Total gross emissions		13,610	6700	6133	7534	8885	9104	8994
Category 1 direct removals		0	0	0	0	0	0	0
Certified renewable energy certificates		0	0	0	0	0	0	0
Total net emissions		13,610	6700	6133	7534	8885	9104	8994

SIGNIFICANT EMISSION SOURCES

In 2025, our most significant emissions sources (in order) were student commuter travel, air travel, electricity and staff commuter travel. There is ongoing work in all these areas to generate reductions, such as sustainable travel activation events on our three main campuses for staff and students.

PERSONS RESPONSIBLE

ISO14064-1 9.3.1 (b)

The GHG Inventory has been prepared by Amelia Adams, Sustainability Officer, and Nina Ives, Sustainability Advisor, and Lucy McKenzie, Head of Sustainability at AUT. The Inventory is the responsibility of the Head of Sustainability. With a significant target to halve CO₂e emissions by 2025, the completion of the Inventory and the baseline provide the necessary information to progress forwards to achieve the target.

The Sustainability team, the Estates operations staff and suppliers have provided background and supporting information. They are:

- ICT – Data Centres
- Hitesh Patel (Energypro) – Energy and Water
- Chris Wood (OCS) – Waste, Recycling and Organic Waste
- Estates – Fleet, Shuttle Bus, Energy
- Orbit – Air Travel, Hotels and Rentals
- Office Max – Paper and Freight
- AUT Finance – Taxis, Mileage, Hotels

INFORMATION MANAGEMENT PROCEDURES

ISO14064-1 9.3.2 (i)

AUT has drafted GHG information management processes that ensure conformance with the principles of ISO14064 and the GHG Protocol: to ensure consistency with the intended use of the GHG inventory: provide routine and consistent checks to ensure completeness and accuracy: identify and address errors and omissions: and manage and

store documentation in a safe and accessible manner. A procedure document has been developed to ensure consistent, accurate and complete data is provided.

The key information management procedures:

- Source data is collected directly from the AUT suppliers or from AUT's financial system;
- The data is stored in the TEAMS folder and reviewed by the Sustainability team;
- Emissions factors and conversion factors are maintained by the Sustainability team;
- The GHG inventory is compiled using activity data and emissions factors;
- The report is reviewed to identify opportunities to reduce emissions and improve the information management process; and
- CO₂e emissions information is provided to AUT Council, AUT's Executive Leadership Team and included on the AUT sustainability webpage.

DATA COLLECTION, QUANTIFICATION AND UNCERTAINTIES

ISO14064-1 9.3.1 (m, n, o & t)

Table 5 provides a summary of the GHG inclusions, and the methodology and uncertainties associated with this information. The data was coordinated by the Sustainability team and sourced from operations staff, the Finance team and suppliers.

Data and supporting documentation were centrally filed and collated in a Teams folder accessible by key stakeholders. The core data is consolidated on a spreadsheet. The emission factors are taken from the Ministry for the Environment 'Measuring Emissions: A guide for organisations - 2025 Emissions Factors Workbook'⁴ and supporting methodologies are taken from the Ministry for the Environment's guide. 'Measuring Emissions: A Guide for organisations: 2024 detailed guide'⁵. Where this information was not available, emissions factors were taken from the Department of Environment, Food and Rural Affairs⁶ (Defra, United Kingdom) and dollar spend emissions factors have been taken from Thinkstep-anz 'Emissions Factors for New Zealand: Greenhouse Gas Emission Intensities for Commodities and Industries'⁷. Global warming potentials for refrigerants were taken from the aforementioned MfE Guide.

All CO₂e emissions are reported in tonnes and broken into their constituent greenhouse gases where data is available.

There have been no changes in methodologies used for reporting.

LEVEL OF UNCERTAINTY

ISO14064-1 9.3.1 (p, q)

There is an inherent level of uncertainty with most data sources. Verifiable data has been used wherever this is available. A more conservative approach has been taken where there is a higher level of uncertainty.

⁴ Ministry for the Environment. Measuring emissions: A guide for organisations - 2025 Emissions Factor Workbook. Wellington: Ministry for the Environment. [EmissionFactors_Workbook_2025_2.xlsx](#)

⁵ Ministry for the Environment. 2024. Measuring emissions: A guide for organisations: 2024 detailed guide. Wellington: Ministry for the Environment. [Measuring-emissions Detailed-guide 2024 ME1829.pdf](#)

⁶ Department for Business, Energy & Industrial Strategy, UK Government Greenhouse gas reporting conversion factors 2024. <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2024>

⁷ Thinkstep-anz Emissions Factors for New Zealand: Greenhouse Gas Emission Intensities for Commodities and Industries. [Microsoft Word - GHG Emission Factors for New Zealand Industries and Commodities-2025-v3.0.docx](#)

DOUBLE COUNTING

There is no double counting to report in 2025.

BASE YEAR

ISO14064-1 9.3.1 (k)

2018 is our baseline year and was chosen because it aligned with the release of AUT's Sustainability Plan that includes a target to half emissions by 2025. Furthermore, we had a sufficient dataset for 2018 to begin CO₂e emissions reporting. Reporting occurs from 1 January to 31 December and is in line with our financial year.

CHANGES TO HISTORIC BASE YEAR

ISO14064-1 9.3.1 (l)

The Ministry for the Environment released updated emission factors in June 2025 which includes potentially material updates to historic emission factors i.e. electricity (including T&D losses) and air travel which could materially impact historic emission totals. At this stage historic inventories back to the base year period have not been updated or recalculated based on the updated emission factors.

GREENHOUSE REMOVALS AND REDUCTIONS

ISO14064-1 9.3.1 (h) and 9.3.2 (b, c, j & k)

The University has set an absolute target to halve its emissions by 2025 based on the 2018 baseline. A list of current initiatives is listed in Table 9 below.

Table 9: Emissions reduction actions 2025

Initiatives	Detail
Energy efficiency and Decarbonisation	Natural gas boilers in AR and WR buildings were removed due to demolition and vacating the building. This has meant emissions from natural gas reduced by 63% against a 2018 baseline.
Waste reduction	Onsite sorting of the City and South campuses continued in 2025. An audit of onsite sorting showed a calibration issue with the truck, weighing and collecting waste from our City campus. This led to a 5% decrease in actual weights during 2025. The audit also showed potential to generate further reductions through textile and construction materials recycling, which is being progressed.
Engagement with staff and students	During 2025 we delivered the Green Impact programme & sustainability newsletter for staff and students, free bike maintenance workshops for staff and students, and two native planting sessions (planted 700 native trees). Nine teams completed an impressive 455 actions, more than double the previous year's accomplishments. Five teams achieved Platinum status, the programme's highest recognition level.
Transport	Completed a staff and student travel survey to understand how our students and staff are travelling to campus. Worked with Auckland

	Transport and piloted bike focused events at North and South. These events are being developed into sustainable travel events on each campus during March 2026.
Air Travel	Executive agreed to introduce carbon budgets for air travel at AUT. The Deans and DVCs identified how we set the carbon budgets and DCT is to lead a pilot in 2026 around air travel carbon budgets.

Halving our carbon footprint by 2025 is a significant challenge. Initial work is focussed on improved efficiency, upgrades to old technology, integrating circular economy principles to our purchases and better construction using carbon accounting framework.

AUT has no removals to report for this financial period. AUT has not implemented any biogenic CO₂e removals or storage in 2024. Biogenic CO₂ emissions are not measured or reported on in this report.

ASSESSMENT OF PERFORMANCE AGAINST KPIS

ISO14064-1 9.3.2 (h)

This year is the seventh year that the GHG emissions are being reported on. This is being benchmarked against a 2018 baseline and the 2025 target of halving gross emissions.

OFFSETS

ISO14064-1 9.3.3

There are no offsets applied to this inventory. Current thinking is that budget will be used for operational and capital upgrades to reduce emissions.

COMPLIANCE WITH ISO14064-1

ISO14064-1 9.3.1 (r)

The GHG Inventory report has been compiled in accordance with ISO14064-1. A matrix is attached in Appendix 2.

AUDIT OF GHG INVENTORY

ISO14064-1 9.3.1 (s)

An internal review has been conducted by key staff at AUT to get reasonable confidence that the assertions and data are correct. The calculations and inventory have been independently verified by McHugh & Shaw Limited, the assurance level achieved is Reasonable Assurance ISO Cat 1-2 and Limited Assurance ISO Cat 3-6.

APPENDIX 1: AUT STRUCTURE 2025

Company Name	Emissions source	Legal Structure & Partners	Economic Interest held by AUT	Operational control	Comment
Auckland University of Technology	Yes	Parent company	100%	Yes	Includes City, North and South campuses
Auckland University of Technology Foundation			100%	Yes	Included in AUT emissions as operates from City campus.
AUT Ventures Limited			100%	Yes	Included in AUT emissions as operates from City campus
Companies owned by AUT Ventures Ltd			Variable	No	Start Ups. Don't operate from AUT buildings. AUT does not have control over company or facility they operate from.
AUT Millennium			50%	No	Not included as AUT does not have operational control over facility
Waterfront Theatre Limited			15%	No	Not included as AUT does not have operational control over facility

APPENDIX 2: MATRIX TO ISO14064-1:2018 STANDARD

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9.3.1 (b)	Page	14
9.3.1 (c)	Page	4
9.3.1 (d)	Page	4
9.3.1 (e)	Page	8
9.3.1 (f)	Page	6
9.3.1 (g)	Page	9
9.3.1 (h)	Page	16
9.3.1 (i)	Page	10
9.3.1 (j)	Page	
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