



TOITŪ ASSESSMENT REPORT

Toitū carbonreduce certification programme
Verification



Organisation :

Waipapa Taumata Rau | University of Auckland

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Audit team	Pieter Fransen
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Report date	13 July 2026
Report reviewed by	Billy Ziemann, Toitū Envirocare, 24 August 2026

AUDIT OBJECTIVES

The objective of the audit was to determine if the organisation's GHG measurement (emissions data and calculations), GHG emissions management and reductions and marketing meets the criteria for Programme certification.

RESPONSIBILITIES

The responsible party is responsible for the preparation and fair presentation of the GHG statement in accordance with the criteria.

The verifier is responsible for expressing an opinion on the GHG statement based on the verification activities undertaken.

AUDIT CRITERIA AND SCOPE

The audit criteria and scope are detailed in the following table:

Audit criteria	Programme Technical Requirements 3.1, Certification Mark Guide v 3.0, Technical requirements Audit v3.0, ISO 14064-1:2018, ISO 14064-3:2019 Carbon Neutral Government Programme: A guide to measuring and reporting greenhouse gas emissions
Audit date	24/06/2026
Reporting year	1/01/2025 - 31/12/2025
Base year	1/01/2019 - 31/12/2019
Consolidation methodology	Operational control
Materiality threshold	5%
GHG statement (certification claim)	Toitū carbonreduce organisation certified: Waipapa Taumata Rau University of Auckland including Auckland Uniservices Limited, all campuses and operational emissions. Toitū carbonreduce certified means measuring emissions to ISO 14064-1:2018 and Toitū requirements; and managing and reducing against Toitū requirements.
Intended users	This report is intended for use of members of the Sustainable Estate and Operations Governance Group, and the wider community of Waipapa Taumata Rau. Alignment with international and local schemes such as the Science Based Targets Initiative (SBTi) and the New Zealand Carbon Neutral Government Programme (CNGP) are also intended
Registered office address	Princes Street, Auckland, 1010, New Zealand
Locations visited	n/a
Audit Type	Verification only
Activities undertaken remotely	Stage 1 & 2: Planning, execution and reporting remote.

CONCLUSION

The following total emissions have been verified:

Emissions summary by scopes	All verified emissions	Mandatory Programme Boundary	Additional emissions	Units
Category 1	4,781.96	4,781.96	0.00	tCO ₂ e
Category 2	6,129.96	6,129.96	0.00	tCO ₂ e
Category 3	50,967.43	14,753.78	36,213.65	tCO ₂ e
Category 4	1,582.66	770.07	812.59	tCO ₂ e
Total inventory:	63,462.01	26,435.77	37,026.24	tCO₂e
Emissions intensity:	38.94	16.22		tCO ₂ e/\$M

An assessment of materiality was made against the defined threshold. From this analysis it is concluded that the stated emissions are free from material error.

This is the sixth year of reporting under the Toitū carbonreduce programme. An absolute reduction in Category 1 and 2 emissions of 2,821.52 tCO₂e has been achieved against base year. A reduction in emissions intensity (for Category 1, 2 and mandatory Category 3 and 4 emissions) of 15.44 tCO₂e/\$M has been achieved based upon a 5-year rolling average.

SCOPE AND BOUNDARIES

The scope of the emissions inventory includes all activities within the operational boundaries of the University of Auckland including Auckland Uniservices Limited.

A range of activities have been excluded due to being *de minimis*, data quality or availability. These include but are not limited to:

- Products and services (≤ \$99,000)
- Sinks
- Waste - printer recycling
- Waste - Goldies vineyard
- Construction and demolition
- Fertiliser use - Grounds maintenance
- Fertiliser use - Epsom Sports Field
- Fertiliser use - Ngapouri Research Farm

EMISSIONS FACTORS

The emissions factors were checked for all emission sources and were found to align with the following sources:

- Ministry for the Environment. 2026. *MfE Measuring Emissions: A guide for organisations – 2025 Emissions Factor Workbook*. Ministry for the Environment, New Zealand.

VERIFICATION PROCEDURES

Verification evidence-gathering procedures for the stated emission sources are as follows:

Verification Level	Emissions sources
Detailed review: Verification from reported emissions back to actual source data in accordance with the appropriate data sampling protocols (checking supplier or other source data, calculations, scope and boundaries of data, date ranges, emissions factors and key assumptions). The extent to which the verification was conducted varied depending on level of controls noted at the emission source level.	• Air Travel Staff • Air Travel Client and visitor transport • Employee commuting • Imported electricity • Natural Gas distributed commercial
Limited review (Sense checks): Professional judgment that the reported emissions are of the correct order of magnitude; that all emissions factors are correct; that stated <i>de minimis</i> sources are appropriately justified. The extent to which the verification was conducted varied depending on level of controls noted at the emission source level.	• Addition of livestock waste to soils • Air passenger transport (spend-based) • Business travel - Accommodation • Business travel - Accommodation • Disposal of liquid waste - Wastewater • Disposal of solid waste - Landfilled • Disposal of solid waste - Not landfilled • Electricity generated and consumed onsite • Emissions - Industrial processes • Enteric fermentation • Manure Management Sheep • Imported energy • Leakage of refrigerants • Mobile combustion (incl. company owned or leased vehicles) • Purchased fuel and energy related activities • Purchased goods and services • Recycling process • Rental Car • Staff Reimbursements • Stationary combustion • Transmission of energy (T&D losses) • Upstream freight - Paid by the organisation • Water Supply • Working from home

AUDIT SUMMARY

The audit was conducted in accordance with the Programme Verification Guidelines including ISO 14064-3:2019 and the Verification and Sampling Plan.

As part of the audit, the below criteria/documents were reviewed:

Criteria/documents	Status
Organisational boundaries	Meets scheme requirements.
Application of the accounting principles	Meets scheme requirements.
Emissions Inventory and Management report: part 1	Meets scheme requirements.
Emissions Inventory and Management report part 2	Meets scheme requirements.
Use of the Toitū carbonreduce logo	N/A - not used as this is a base year.
The requirement to maintain a complaints procedure	Meets scheme requirements.
Purchase of renewable energy certificates	N/A.
Success of remote audit process (where relevant)	A remote assessment was undertaken.

	It is confirmed that the use of remote/ICT based approaches has allowed relevant audit activities to be undertaken effectively.
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1 observation was raised during this visit. Full details of the findings are given in the findings log below.

Using our Data Quality Assessment tool for analysing data against completeness and assumed uncertainty an inventory “quality” can be classified as follows:

- High
- Good
- Fair
- Poor

From the analysis conducted your inventory is classified as: Good.

Certification to Toitū carbonreduce programme “certified organisation” is recommended. This is subject to any further client actions.

CONCLUSION

Please refer to the separate Audit Opinion document for further information. The certification claim, along with the assurance level and any qualifications raised summarises the result of the audit process.

Level of Assurance	Reasonable for categories 1, 2 and category 3 Staff Air Travel Limited for remaining categories.
Qualifications	The opinion is unmodified

FINDINGS LOG

Date issued:	24/06/2026
Verifier:	15/07/2026
Team member:	Stephanie Blackwell
Company issued to:	Pieter Fransen

A finding marked NCR must be corrected before audit can be closed out, unless otherwise approved by the Programme
A finding marked mNCR is not required to be corrected for this verification, but may need to be addressed/checked for your next inventory, or it may become a NCR. You may voluntarily correct a mNCR for completeness
A finding marked Obs is an observation or recommendation from the verifier that may be helpful to you
--- corrective actions are expected to be closed out within 15 days of the date raised---

Ref #	Issue	Status	Type	Comments / Agreed Corrective Actions	Date closed	Evidence sighted to close out the issue where corrective action required.
Obs1	Natural gas - there is no formula documented that shows how invoiced remitted data is normalised.	Open	Obs	Consider documentation of the formula(s) used to normalise data where applicable		

NOTES

1. The detailed audit findings and calculations are given in the Verification Plan and Working Papers associated with this audit. These contain proprietary verification methodologies and remain confidential to Toitū Envirocare.
2. The audit is based upon sampling and as such nonconformities may exist that have not yet been identified.
3. We have reviewed the company's GHG emissions inventory for the period. The inventory is based on historical information which is stated in accordance with the requirements of ISO 14064-1:2018 and the scheme Technical Requirements.
4. The scope of the review was limited to personnel interview, analytical review procedures applied to GHG emissions data, and review of the input of data into the emissions inventory. Based on our review the inventory is compliant with the requirements of ISO 14064-1:2018.
5. A **non-conformance (NCR)** indicates that the auditor has found a non-conformance with scheme Technical Requirements (audit criteria) and requires you to take the appropriate corrective action and provide evidence of this correction within two weeks. This may require resubmission of an updated Emissions Inventory and Management report.
6. A **minor non-conformance (mNCR)** which the auditor has found which is not material to the outcome of the inventory, but to which a failure to address in the preparation of future inventories could lead to a major Non-Conformance (NCR).
7. **Observations** made by your auditor are strongly advised but the actions are not required for the organisation to be recommended for certification.
8. Neither Toitū Envirocare nor the auditor has any interest in the organisation, other than in our capacity as assurance providers. We have not carried out any work with this business prior to this review other than conducting the previous verification.
9. This report has been prepared solely for the use of the organisation and Toitū Envirocare as part of an application for Toitū carbonreduce programme certification. It may be relied on solely by the organisation and Toitū Envirocare for that purpose only. Toitū Envirocare does not accept or assume any responsibility to any person other than the organisation in relation to the statements or findings expressed or implied in this report.
10. Any correspondence regarding this audit report should be directed to your Lead Auditor.
11. A copy of this report has been provided to the nominated client contact.
12. A copy of this report may be made available to intended users upon request.
13. **Confidentiality:** All information obtained during this assessment will remain confidential to The University of Auckland, the verifier and Enviro-Mark Solutions Limited (trading as Toitū Envirocare). No information will be released to any other party without your express permission except as required by law or Toitū's accreditation body JASANZ, or if it is in aggregate and/or de-identified form. This report must not be copied except in full without the permission of the Responsible Party and Toitū Envirocare.



GREENHOUSE GAS EMISSIONS INVENTORY AND MANAGEMENT REPORT

Toitū carbonreduce programme

Prepared in accordance with ISO 14064-1:2018 and the Technical Requirements of the Programme



Waipapa
Taumata Rau
University
of Auckland

Waipapa Taumata Rau | University of Auckland

Prepared by (lead author): María José Baldoni, Associate Director, Sustainable Estate and Operations, Sustainability Office

Dated: 16 June 2026

Verification status: Reasonable for categories 1, 2 and category 3 Staff Air Travel. Limited for remaining categories

Measurement period: 01 January 2025 to 31 December 2025

Base year period: 01 January 2019 to 31 December 2019

Approved for release by:

A purple ink signature of Simon Neale, written in a cursive style.

Simon Neale, Chief Property Officer

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This work shall not be used for the purpose of obtaining emissions units, allowances, or carbon credits from two or more different sources in relation to the same emissions reductions, or for the purpose of offering for sale carbon credits which have been previously sold.

The consolidation approach chosen for the greenhouse gas inventory should not be used to make decisions related to the application of employment or taxation law.

This report shall not be used to make public greenhouse gas assertions without independent verification and issue of an audit opinion by Toitū Envirocare.

AVAILABILITY

This report is publicly available via web <https://www.auckland.ac.nz/en/about-us/about-the-university/the-university/sustainability-and-environment/sustainable-campus-and-operations/net-zero-carbon/reports.html>

REPORT STRUCTURE

The Inventory Summary contains a high-level summary of this year's results and from year 2 onwards a brief comparison to historical inventories.

Chapter 1, the Emissions Inventory Report, includes the inventory details and forms the measure step of the organisation's application for Programme certification. The inventory is a complete and accurate quantification of the amount of GHG emissions and removals that can be directly attributed to the organisation's operations within the declared boundary and scope for the specified reporting period. The inventory has been prepared in accordance with the requirements of the Programme¹, which is based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) and ISO 14064-1:2018 Specification with Guidance at the Organization Level for

¹ Programme refers to the Toitū carbonreduce, Toitū net carbonzero and the Toitū climate positive programmes.

Quantification and Reporting of Greenhouse Gas Emissions and Removals². Where relevant, the inventory is aligned with industry or sector best practice for emissions measurement and reporting.

Chapter 2, the reduction plan and progress report, forms the manage step part of the organisation's application for Programme certification.

See Appendix 1 and the related Spreadsheet for detailed emissions inventory results, including a breakdown of emissions by source and sink, emissions by greenhouse gas type, and non-biogenic and bio-genic emissions. Appendix 1 also contains detailed context on the inventory boundaries, inclusions and exclusions, calculation methodology, liabilities, and supplementary results.

This overall report provides emissions information that is of interest to most users but must be read in conjunction with the inventory workbook for covering all of the requirements of ISO 14064-1:2018.

² 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 Organizational Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals*.

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EXECUTIVE SUMMARY

This is the annual greenhouse gas (GHG) emissions inventory and management report for Waipapa Taumata Rau | The University of Auckland covering the measurement period 01 January 2025 to 31 December 2025.³

In 2025, the University demonstrated strong progress against its Net Zero Carbon Strategy, with total emissions reduced to 63,462 tCO₂e—an 11% decrease from 2024 and 23.0% below the 2019 baseline. Performance within the target boundary is particularly strong, with emissions reduced by 41.4% against baseline, exceeding the 2025 interim target and positioning the University well toward its 2030 goal. Reductions are primarily driven by sustained decreases in work-related air travel and continued decarbonisation of the estate, characterised by a shift from gas to electricity. These improvements reflect genuine changes in activity and energy use, supported by operational initiatives such as the updated Travel Policy and electrification of infrastructure. The overall emissions profile remains stable, with travel and energy as the dominant sources, while staff commuting and supply chain emissions continue to be areas of focus. The University continues to actively monitor the full emissions profile across both target and non-target sources, ensuring that reductions are pursued not only within the defined target boundary but across all material activities. Recent efforts to better understand staff commuting behaviour, including the introduction of a staff commuting survey, support the identification of opportunities to reduce emissions in this growing area. Results are also influenced by changes in emissions factors—particularly reduced electricity factors and increased waste factors—highlighting the importance of interpreting year-on-year changes carefully. While waste emissions remain below baseline, rising waste volumes present an ongoing challenge. Improvements in emissions intensity across all key indicators confirm that emissions reductions are being achieved alongside organisational growth, indicating improved efficiency and effective delivery of the University's decarbonisation pathway.

Table 1: Inventory summary

Category (ISO 14064-1:2018)	Scopes (ISO 14064-1:2006)	2019	2024	2025
Category 1: Direct emissions (tCO ₂ e)	Scope 1	5,667.38	4,984.91	4,781.96
Category 2: Indirect emissions from imported energy (location-based method*) (tCO ₂ e)	Scope 2	8,066.06	7,570.48	6,129.96
Category 3: Indirect emissions from transportation (tCO ₂ e)	Scope 3	65,935.12	57,139.79	50,967.43
Category 4: Indirect emissions from products used by organisation (tCO ₂ e)		2,799.14	1,567.04	1,582.66
Category 5: Indirect emissions associated with the use of products from the organisation (tCO ₂ e)		0.00	0.00	0.00
Category 6: Indirect emissions from other sources (tCO ₂ e)		0.00	0.00	0.00
Total direct emissions (tCO₂e)		5,667.38	4,984.91	4,781.96
Total indirect emissions* (tCO₂e)		76,800.31	66,277.31	58,680.05
Total gross emissions* (tCO₂e)		82,467.70	71,262.22	63,462.01
Category 1 direct removals (tCO ₂ e)		0.00	0.00	0.00

³ Throughout this document “emissions” means “GHG emissions”. Unless otherwise stated, emissions are reported as tonnes of carbon dioxide equivalent (tCO₂e).

Category (ISO 14064-1:2018)	Scopes (ISO 14064-1:2006)	2019	2024	2025
Total net emissions (tCO ₂ e)		82,467.70	71,262.22	63,462.01

*Emissions are reported using a location-based methodology. See section 1.2.1 for details.

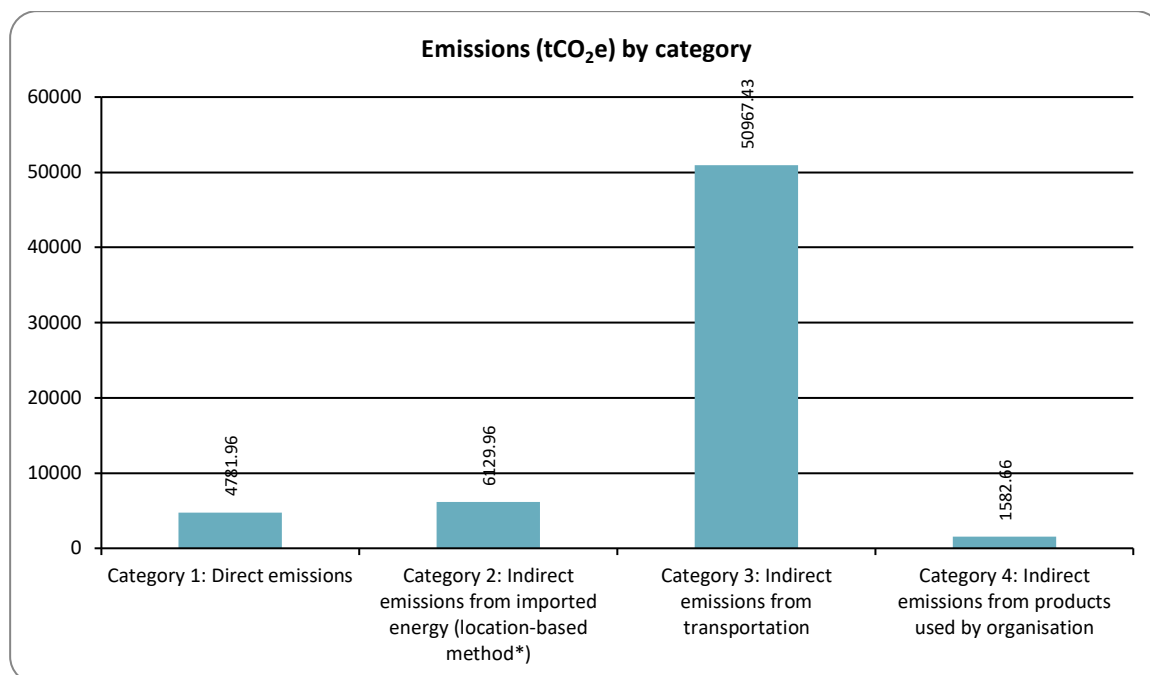


Figure 1: Emissions (tCO₂e) by Category for this measurement period

CHAPTER 1: EMISSIONS INVENTORY REPORT

1.1. INTRODUCTION

This report is the annual greenhouse gas (GHG) emissions inventory and management report for Waipapa Taumata Rau | The University of Auckland.

The overall purpose of this report is to support the implementation of Te Taumata Tukuwaro-kore | Net Zero Carbon Strategy and associated initiatives and plans. The main objective is to identify the Greenhouse Gas emissions profile of the University in a manner that is consistent with best practice and the international standards.

The inventory report and any GHG assertions are expected to be verified by a Programme-approved, third-party verifier. The level of assurance is reported in a separate Audit Opinion provided to the directors of the certification entity.

1.2. EMISSIONS INVENTORY RESULTS

Table 2: Emissions inventory summary for this measurement period

Measurement period: 01 January 2025 to 31 December 2025.

Category	Toitū carbon mandatory boundary (tCO ₂ e)	Additional emissions (tCO ₂ e)	Total emissions (tCO ₂ e)
Category 1: Direct emissions	4,781.96 Agricultural Soils Sheep, CO ₂ , Diesel stationary combustion, Diesel, Dry ice, Electricity - Generated onsite, Enteric Fermentation Sheep, HFC-32, LPG, Manure Management Sheep, Natural Gas distributed commercial, Petrol premium, Petrol, R-404A, R-410A	0.00	4,781.96
Category 2: Indirect emissions from imported energy (location-based method*)	6,129.96 Electricity Toitū carbonzero certified factor Ecotricity, Electricity Toitū carbonzero certified factor Prime Energy	0.00	6,129.96
Category 3: Indirect emissions from transportation	14,753.78	36,213.65	50,967.43

Category	Toitū carbon mandatory boundary (tCO ₂ e)	Additional emissions (tCO ₂ e)	Total emissions (tCO ₂ e)
	Air passenger transport (spend-based), Air travel domestic (average), Air travel long haul (average), Air travel long haul (business), Air travel long haul (econ), Air travel long haul (econ+), Air travel long haul (first), Air travel short haul (average), Air travel short haul (econ), Air travel short haul b/f class, Aircraft - Aérospatiale/Alenia ATR 72, Aircraft - Airbus A320, Aircraft - Cessna Light Aircraft, Aircraft - De Havilland Canada DHC-8-300, Aircraft - Saab SF-340, Freight Air travel Domestic (average), Freight Air travel long haul (average), Freight Air travel short haul (average), Freight Road all trucks (average), Freight Road van (average), Petrol, Rental Car average (diesel), Rental Car average (hybrid), Rental Car average (petrol), Rental Car EV - average, Taxi (regular)	Accommodation - Australia, Accommodation - Austria, Accommodation - Brazil, Accommodation - Canada, Accommodation - Chile, Accommodation - China, Accommodation - Colombia, Accommodation - Fiji, Accommodation - France, Accommodation - French Polynesia, Accommodation - Germany, Accommodation - India, Accommodation - Indonesia, Accommodation - Italy, Accommodation - Japan, Accommodation - Mexico, Accommodation - Netherlands, Accommodation - New Zealand, Accommodation - Philippines, Accommodation - Portugal, Accommodation - Qatar, Accommodation - Singapore, Accommodation - South Korea, Accommodation - Spain, Accommodation - Switzerland, Accommodation - Taiwan, Accommodation - Thailand, Accommodation - United Arab Emirates, Accommodation - United Kingdom, Accommodation - United States, Accommodation (spend-based), Air travel long haul (average), Air travel short haul (average), Bus travel (average), Car Average (diesel), Car Average (hybrid), Car Average (petrol), Car Average (PHEV petrol), Car EV - average, Electric bike, Electric scooter (Commuting), Ferry travel (foot passengers), Motorcycle, Rail metropolitan (diesel), Rail metropolitan (electric), Taxi (regular), Working from home	
Category 4: Indirect emissions from products used by organisation	770.07 Decontamination of medical waste - Autoclaving, Electricity distributed T&D losses, Electricity Toitū carbonzero certified factor Ecotricity (T & D losses), Electricity Toitū carbonzero certified factor Prime Energy (T & D losses), Incineration of hazardous waste, Natural Gas distributed T&D losses, Waste landfilled - Hampton Downs, Waste landfilled LFGR Mixed waste	812.59	1,582.66

Category	Toitū carbon mandatory boundary (tCO ₂ e)	Additional emissions (tCO ₂ e)	Total emissions (tCO ₂ e)
		Composting, Electricity, Paper use - default, Recycling - Aluminium cans, Recycling - Batteries (non-automotive), Recycling - Card, Recycling - Fluorescent tubes & other light bulbs, Recycling - Mixed glass, Recycling - Mixed plastics, Recycling - Paper, Recycling - Steel cans, Waste disposal recycling of Aluminium, Waste disposal recycling of Batteries, Waste disposal recycling of Electrical and Electronic Equipment, Waste disposal recycling of Glass, Waste disposal recycling of Paper, Waste disposal recycling of Plastic, Waste disposal recycling of Steel cans, Wastewater for treatment plants (average), Water supply	
Category 5: Indirect emissions associated with the use of products from the organisation	0.00	0.00	0.00
Category 6: Indirect emissions from other sources	0.00	0.00	0.00
Total direct emissions	4,781.96	0.00	4,781.96
Total indirect emissions*	21,653.81	37,026.24	58,680.05
Total gross emissions*	26,435.77	37,026.24	63,462.01
Category 1 direct removals	0.00	0.00	0.00
Total net emissions	26,435.77	37,026.24	63,462.01
Built environment (gross tCO ₂ e / m ²)		0.034	0.081
Equivalent Full Time Student (gross tCO ₂ e / per FTE per annum)		0.67	1.62
FTE & EFTS - Full-time employees and Equivalent full-time students combined (gross tCO ₂ e / per FTE per annum)		0.58	1.40
Full Time Employee (gross tCO ₂ e / per FTE per annum)		4.23	10.15

Category	Toitū carbon mandatory boundary (tCO ₂ e)	Additional emissions (tCO ₂ e)	Total emissions (tCO ₂ e)
Operating revenue (gross tCO ₂ e / \$Millions)		16.22	38.94

*Emissions are reported using a location-based methodology. See section 1.2.1 for details.

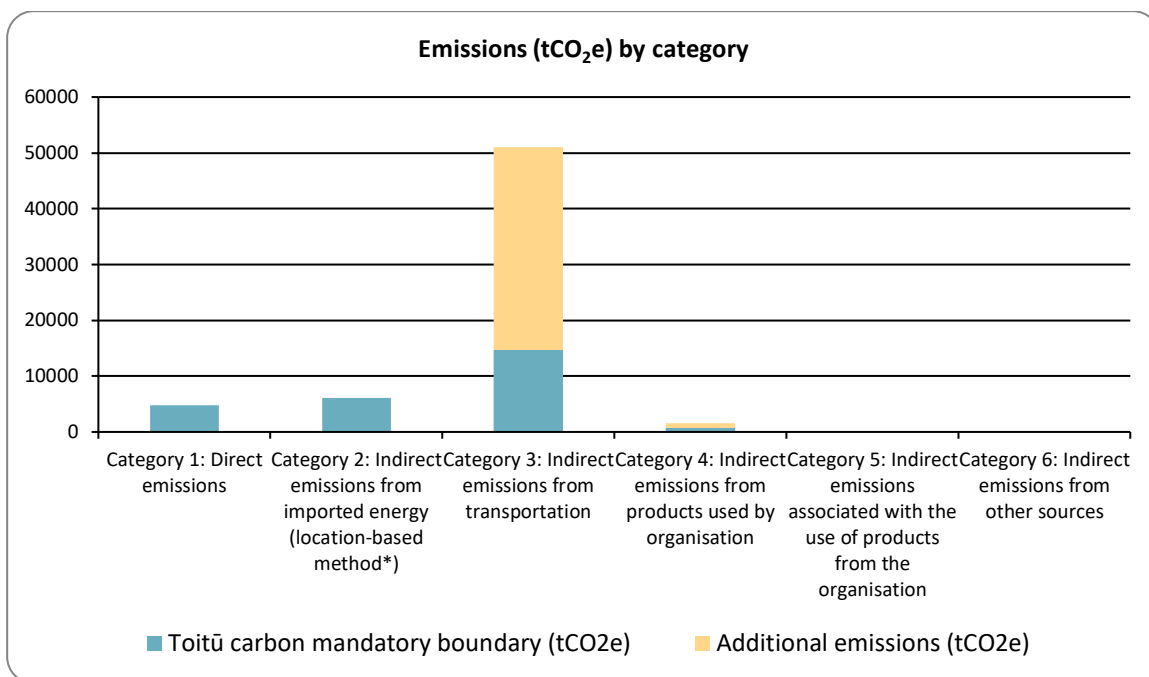


Figure 2: Emissions (tCO₂e) by category

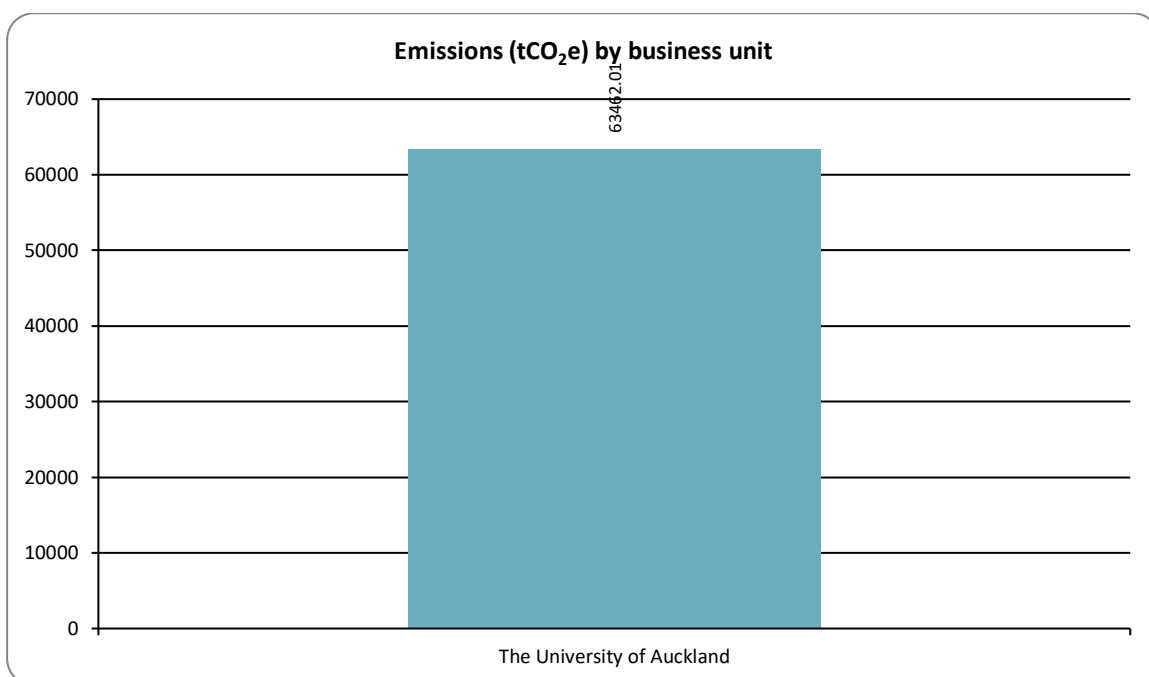


Figure 3: Emissions (tCO₂e) by business unit

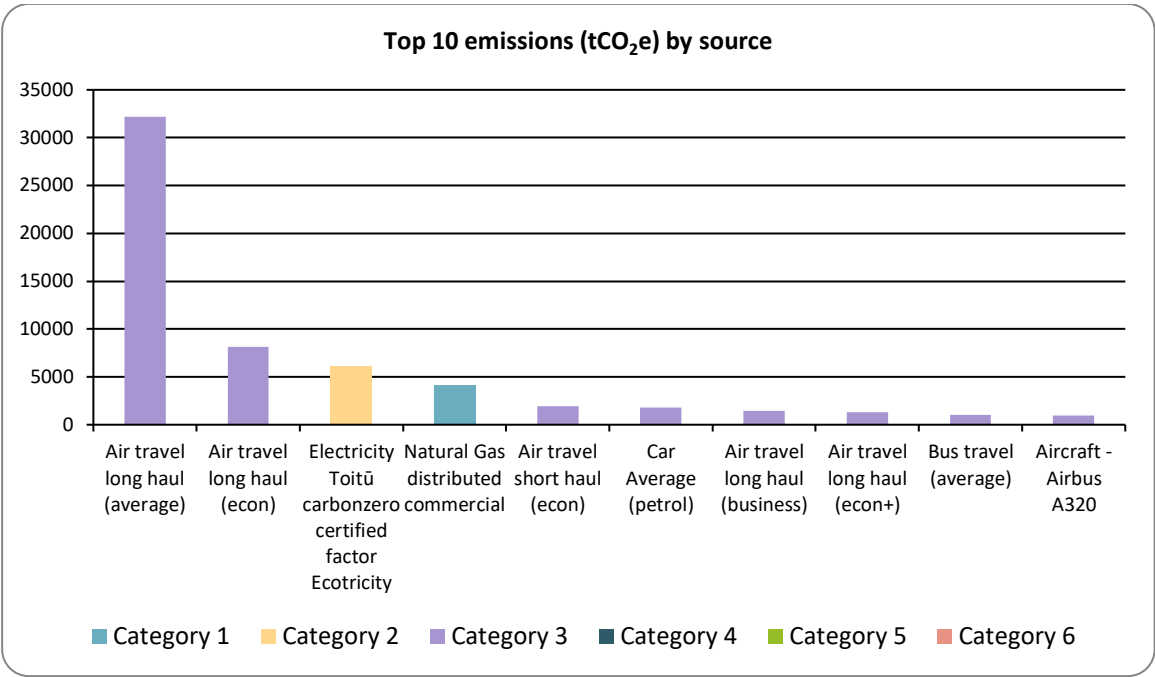


Figure 4: Top 10 emissions (tCO₂e) by source

1.2.1. Dual reporting of indirect emissions from purchased and generated energy

All purchased and generated energy emissions are dual reported using both the location-based method and market-based method. Dual reporting illustrates the role of supplier choice, onsite renewable energy generation and contractual instruments in managing indirect emissions from energy alongside any ongoing energy efficiency and reduction efforts.

The University of Auckland aligns to location-based reporting for tracking energy related emissions and reductions over time.

The University has generated 121,043 kWh of electricity through a solar array installed on the award-winning B201 building, home to the Faculty of Arts and Education.

As part of its continued commitment to clean energy and to support the phasing out of fossil fuel use in electricity generation across Aotearoa, 100% of electricity purchased in 2025 was certified Climate Positive.

Contractual instruments are any type of contract between two parties for the sale and purchase of energy bundled with attributes about the energy generation, or for unbundled attribute claims. This includes Renewable Energy Certificates.

Contractual instruments are applicable for this reporting period.

Waipapa Taumata Rau | The University of Auckland purchased 77,202,416 kWh of Climate Positive certified electricity, representing 100% of our Category 2 purchased energy.

Table 3. Dual reporting of indirect emissions from imported energy

Category	Location-based methodology (tCO ₂ e)	Market-based methodology (tCO ₂ e)
Category 1: Direct emissions	4,781.96	4,781.96

Category	Location-based methodology (tCO ₂ e)	Market-based methodology (tCO ₂ e)
Category 2: Indirect emissions from imported energy	6,129.96	0.00
Category 3: Indirect emissions from transportation	50,967.43	50,967.43
Category 4: Indirect emissions from products used by organisation	1,582.66	1,122.83
Category 5: Indirect emissions associated with the use of products from the organisation	0.00	0.00
Category 6: Indirect emissions from other sources	0.00	0.00
Total direct emissions	4,781.96	4,781.96
Total indirect emissions	58,680.05	52,090.26
Total gross emissions	63,462.01	56,872.22
Category 1 direct removals	0.00	0.00
Total net emissions	63,462.01	56,872.22

1.3. ORGANISATIONAL CONTEXT

1.3.1. Organisation description

The University of Auckland was established in 1883 as a constituent college of the University of New Zealand and became an autonomous university under the University of Auckland Act 1961. It is governed by this Act and the Education and Training Act 2020 and its amendments.

The University's governing body is the Council. Under the Act, its functions include appointing the Vice-Chancellor, undertaking long-term planning, adopting and managing the Investment Plan, and setting institutional policies.

Section 281 of the Act outlines additional Council responsibilities: striving for excellence in education, training, and research; acknowledging the principles of te Tiriti o Waitangi (the Treaty of Waitangi); and promoting participation from the communities it serves, especially under-represented groups.

In 2025, the University had 39,183 Equivalent Full-Time Students (EFTS) and 6,250 Full-Time Equivalent Staff (FTE) and occupied 112 premises, 83 of which are owned by the University. The University also owns or has responsibility for six natural reserves.

The University and Auckland UniServices Limited (AUL) primarily provide teaching and research services.

Commitment to certification

The University's Vision 2030 is to become internationally recognised for its unique contribution to fair, ethical and sustainable societies. This is expressed in 'Taumata Teitei Vision 2030 and Strategic Plan 2025' developed collectively with input from all sectors of the University in 2020 and published in 2021. As part of this vision, Waipapa Taumata Rau made a commitment to Net Zero reflected in 'Te Taumata Tukuwaro kore | Net Zero Carbon Strategy' 2022. The strategy includes a progressive pathway for a Net Zero trajectory. Toitū's CarbonReduce certification provides support and assurance to the University's carbon reduction efforts and progress.

GHG Reporting

One of the key commitments expressed in Taumata Teitei is to achieve Net-Zero Carbon status and to publish meaningful metrics of the University's progress towards sustainability. The contents of this report are important to better understand the emissions profile of the University and to identify effective pathways to net-zero that reflect the commitments and aspirations of Taumata Teitei.

Climate Change Impacts

The Climate Change Scenarios for the Aotearoa NZ Tertiary Education Sector report, developed by the Tertiary Education Sector Climate Futures Group—of which Waipapa Taumata Rau, the University of Auckland (the University) is an active member— has been a valuable resource in shaping the University's approach to risk.

Several climate-related impacts previously identified by the University are also reflected in the report, including:

- Disruption of campus activities and limited access to both built and natural facilities
- Temporary or extended isolation due to compromised infrastructure such as airports and transport hubs, affecting participation by both domestic and international staff and students and visitors.
- Buildings becoming unfit for purpose due to rising temperatures or changing expectations around on-campus presence
- Broader transition risks with financial and operational implications

These insights continue to inform the University's risk management approach. As part of an annual review cycle focused on continuous enhancement, the University progressed refinement of the Enterprise Risk matrix during 2025 with a focus on the following priority areas:

- Health, Safety & Wellbeing
- Reputation and Stakeholder confidence
- Environmental (natural and built environment)
- Information (including data and intellectual property)
- Legal and Regulatory compliance
- Financial sustainability
- Operational disruption

This work is ongoing.

1.3.2. Statement of intent

This inventory forms part of the organisation's commitment to gain Toitū carbonreduce certification. The intended uses of this inventory are:

Intended use and users

This report is intended for use members of the Sustainable Estate and Operations Governance Group, and the wider community of Waipapa Taumata Rau. Understanding the emissions profile and progress towards Net Zero is essential for all University members to foster collective efforts towards carbon reduction across all operations. The report is also intended to support the reporting of the University's Statement of Service Performance as part of the University Annual Report.

Other schemes and requirements

The inventory is expected to align with best practice in GHG measuring and reporting, especially with ISO14064-1:2018. Alignment with international and local schemes such as the Science Based Targets Initiative (SBTi) and the New Zealand Carbon Neutral Government Programme (CNGP) are also intended.

1.3.3. Person responsible

Simon Neale, Chief Property Officer is responsible for overall emission inventory measurement and reduction performance, as well as reporting results to top management. Simon Neale, Chief Property Officer has the authority to represent top management and has financial authority to authorise budget for the Programme, including Management projects and any Mitigation objectives.

State any other people/entities involved

Associate Director Sustainable Estate and Operations, Sustainability Office

Data and Reporting Coordinator, Carbon and Sustainability, Sustainability Office

Carbon and Sustainability Communications and Engagement Manager, Sustainability Office

Asset Information Specialist, Facilities Management, Campus Environment

Associate Director Facilities, Facilities Management, Campus Environment

Campus Operations Manager, Facilities Management, Campus Environment

Campus Service Managers, Facilities Management, Campus Environment

Campus Services Coordinators, Facilities Management, Campus Environment

Chemical Risk Management Adviser, Health and Safety

Commercial Services and Maintenance Manager, Facilities Management, Campus Environment

Compliance Analyst, Finance Control

Data Centre Tech Specialist, Connect, Digital Services

Energy Manager, Facilities Management, Campus Environment

Facilities Manager, Facilities Management, Campus Environment

Finance Business Partner, Finance Business Advisory

Head of Strategic Procurement, Finance

Lead Planning Analyst, Planning and Information Office

Livestock and Facility Manager, Liggins Institute

Manager, Risk Office

Procurement Category Managers, Strategic Procurement

Research Assistant, Faculty of Science

Senior Finance Business Partner, Finance Business Advisory

Space Planning Analyst, Planning and Capital Projects, Campus Environment

Strategic Asset Manager, Facilities Management, Campus Environment

Sustainability Analyst, Planning and Information

Waste Minimisation Specialist, Facilities Management, Campus Environment

The Sustainability Office checks completeness, accuracy, and overall integrity of data, recording any limitations and assumptions in the summary data sheet and supporting documents, including a comprehensive list of definitions for the measures included in this report.

María José Baldoni, Associate Director Sustainable Estate and Operations, Sustainability Office, Carbon Auditing SME - ISO 14064-3:2019 (Accredited 2021)

Top management commitment

The University has made a commitment to Net Zero in its Vision 2030 and Strategic Plan 2025, Taumata Teitei and in 2022 published Te Taumata Tukuwaro-kore | Net Zero Carbon Strategy and Te Rautaki Aronga Toitū | Sustainability Strategy. Taumata Teitei is the key document in the University's cycle of planning, delivery and accountability. It sets out a vision to be internationally recognised for its unique contribution to fair, ethical and sustainable societies, and establishes priorities within five strategic portfolios. The Enabling Environment portfolio includes a commitment to achieve net-zero carbon status and to publish meaningful metrics of the University's progress towards overall sustainability. Annual progress toward achieving carbon and environmental sustainability priorities is reported under the Statement of Service Performance, 'KPI 23 Net CO₂ emissions' and 'KPI 24 Environmental sustainability measures' in the University's Annual Report.

Management involvement

The University's Chief Property Officer leads the direction of the delivery plans supported by the Sustainability Office in collaboration with teams across the University. The emissions inventory measurement and reduction performance monitoring are part of the overall remit, including reporting results to leadership. The Sustainability Office works with internal senior partners in other divisions to seek data from existing data bases and third-party suppliers, providing guidance, templates and subject matter expertise, including around maturity, progress and data improvement.

The Chief Property Officer also chairs the Sustainable Estate and Operations Governance Group. Membership of the governance group in 2025 included: Kaiarataki Pro Vice-Chancellor (Māori), Chief Financial Officer, Director of Planning and Information Office, and Chief Digital Officer.

1.3.4. Reporting period

Base year measurement period: 01 January 2019 to 31 December 2019

This University of Auckland's overall reporting period corresponds to a calendar year from January to December. The University has been reporting carbon emissions from utilities (electricity, water, gas), waste disposal, paper consumption and staff air travel since 2011. Base year 2019 responds to a comprehensive approach taken considering changes to international best practice, including expectations to set baselines no earlier than 2015.

Measurement period of this report: 01 January 2025 to 31 December 2025

Reporting is done annually, aligned with the University financial reporting year which coincides with the calendar year.

Alignment to financial reporting year which coincides with calendar year.

1.3.5. Organisational boundary and consolidation approach

An operational control consolidation approach was used to account for emissions.⁴

⁴control: the organisation accounts for all GHG emissions and/or removals from facilities over which it has financial or operational control. equity share: the organisation accounts for its portion of GHG emissions and/or removals from respective facilities.

Organisational boundaries were set with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards.

Justification of consolidation approach

This approach was chosen as the University has control over its operations and has authority to introduce operating policies and corresponding implementation plans.

Organisational structure

Figure 5 shows what has been included in the context of the overall structure.

The University of Auckland was established by The University of Auckland Act 1961. The University of Auckland (the University), Auckland UniServices Limited (AUL), and the University of Auckland Foundation (the Foundation) are all controlled entities and together form 'the Group'.

AUL operates in New Zealand and has a branch in the Kingdom of Saudi Arabia. The principal activities of the University and AUL are the provision of teaching and research services. The principal activities of the Foundation are raising and stewardship of funds for charitable purposes and advancement of education and health care, assistance of students to pursue courses of study at The University of Auckland, and the general advancement of the University.

The central office of the University’s management is located at the Clock Tower, 22 Princes St, Auckland, New Zealand.

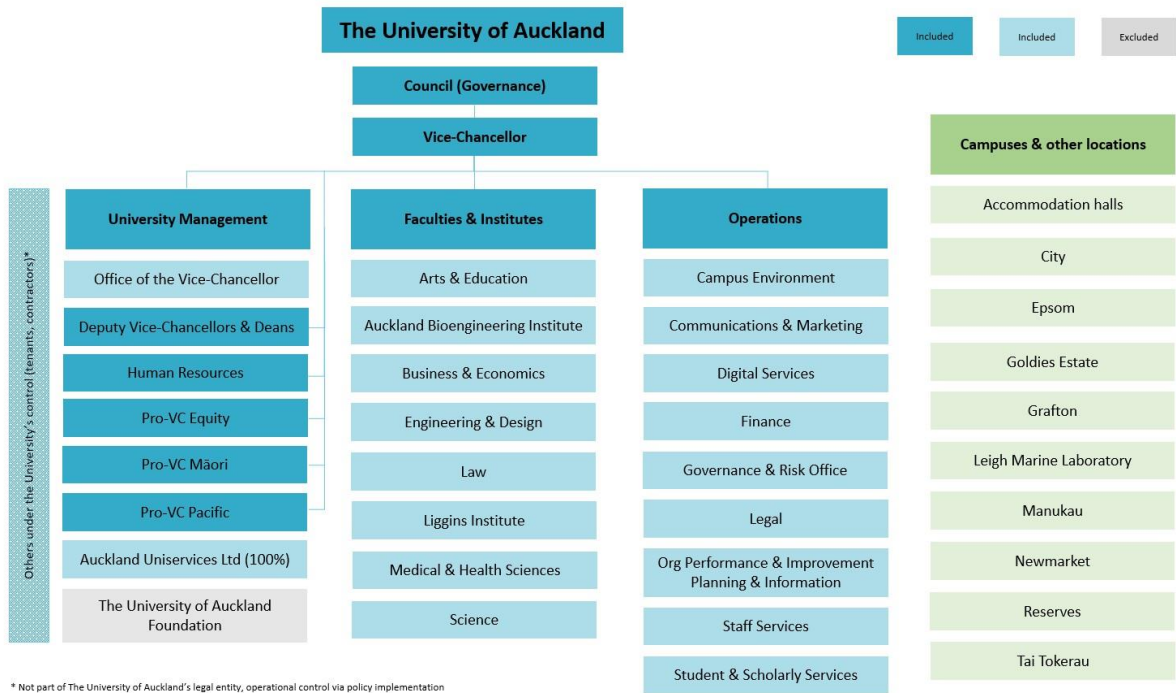


Figure 5: Organisational structure

Table 4. Brief description of business units, sites and locations included in this emissions inventory

Company/Business unit/Facility	Physical location	Description
Waipapa Taumata Rau University of Auckland		The Estate of Waipapa Taumata Rau University of Auckland spans the North Island of Aotearoa, from Wellington in the south to Tai Tokerau (Whangārei) in the north. There are three central Auckland campuses, three smaller satellite campuses, three ecological reserves, a vineyard and winery, and a field station. In 2025, the estate buildings encompass a gross floor area (GFA) of 785,364 m ² . Over 99% of the estate is located within the Auckland region.
Eight Accommodation Halls, Faculty of Arts and Education, Faculty of Business and Economics, Faculty of Engineering and Design, Faculty of Law, Faculty of Science, Staff Services, Campus Environment, Communications and Marketing, Digital Services (partial), Finance, Libraries and Learning Services, Org Performance and Improvement, Planning and Information, Human Resources, Equity, Māori, Office of the Vice Chancellor	City Campus	City Campus is comprised of 69 physical street addresses. This includes residential accommodation, office accommodation, a library, general teaching spaces, specialist teaching and research spaces including laboratories, student commons areas, recreation centre, retail spaces, early childhood education centres, infrastructure areas, marae, carparking areas, bike parking areas, and vacant land.
Campus currently unoccupied	Epsom Campus	Epsom Campus is comprised of 3 physical street addresses. Facilities are maintained but unoccupied.
Seven Accommodation Halls, Liggins Institute, Faculty of Medical and Health Sciences	Grafton Campus	Grafton Campus is comprised of 23 physical street addresses. This includes residential accommodation, office accommodation, general teaching spaces, specialist teaching and research spaces including laboratories, clinic spaces, student commons areas, an early childhood education centre, retail spaces, infrastructure areas, carparking areas and bike parking areas.
Digital Services, Faculty of Engineering and Design, Faculty of Science	Newmarket Campus	Newmarket Campus is comprised of 3 physical street addresses. This includes office accommodation, specialist teaching and research spaces including laboratories, a cafe, infrastructure areas, carparking areas and bike parking areas.
Digital Services, Campus Environment	Tamaki Campus	Tamaki Campus is comprised of 2 physical street addresses.
Faculty of Science	Leigh Campus - Marine Laboratory	Leigh Campus is comprised of 1 physical street address. This includes specialist teaching and research facilities, infrastructure areas, accommodation areas, and carparking areas.
Arts and Education, Libraries and Learning Services, Faculty of Medical and Health Sciences	Tai Tokerau Campus	Tai Tokerau Campus is comprised of 1 physical street address. This includes general teaching spaces, specialist teaching spaces, student commons areas, a library, infrastructure areas, and carparking areas.

Company/Business unit/Facility	Physical location	Description
Arts and Education, Libraries and Learning Services	Tai Tonga South Auckland Campus	Tai Tonga South Auckland Campus is comprised of 1 physical street address. This includes general teaching spaces, student commons areas, and a carparking area.
Faculty of Science, Campus Environment	Goldie Estate	Goldie Estate on Waiheke Island is comprised of 2 physical street addresses. This includes a winery, specialist teaching and research spaces, accommodation, infrastructure areas and carparking areas.
Faculty of Science	Ardmore	Ardmore research station is comprised of 1 physical street address. This includes specialist research areas.
Faculty of Science	Reserves	The reserves are comprised of 4 physical street addresses. These include steep coastal forest (Anawhata), kauri forest, mature kanuka scrub, areas of puriri, taraire, rewarewa and podocarps (Huapai), podocarp, broadleaf and kauri forest (Oratia).
Various	Other	Other locations are comprised of 6 physical street addresses.

1.3.6. Excluded business units

The University Foundation is excluded from the GHG emissions boundary as it is a separate entity and not under the operational control of the University. The principal activities of the Foundation are raising and stewardship of funds for charitable purposes and advancement of education and healthcare, assistance of students to pursue courses of study at the University of Auckland, and the general advancement of the University.

The Auckland UniServices Limited (AUL) operations in the Kingdom of Saudi Arabia are also excluded from the GHG emissions boundary as it is not under the University's operational control.

CHAPTER 2: EMISSIONS MANAGEMENT AND REDUCTION REPORT

2.1. EMISSIONS REDUCTION RESULTS

In 2025, the University carbon profile shows a clear improvement compared to the previous year. Total emissions decreased to 63,462 tCO₂e, representing an approximate 11% reduction from 2024, and remain 23.0% below the 2019 baseline. This indicates sustained progress against baseline levels, despite the year-on-year variability observed in recent reporting periods.

When extended baseline sources are excluded, emissions within the core reporting boundary are 27.6% below the baseline. Furthermore, focusing on the University's defined target boundary (work related air travel, energy including fuel, and waste), emissions are 41.4% below the 2019 baseline. This shows the University has exceeded its 2025 interim target of a 25% reduction and is making strong progress toward the 2030 target of a 50% reduction.

Performance in 2025 reflects a combination of operational efforts, decarbonisation initiatives, and updated emissions factors. Reductions in work related air travel and continued decreases in natural gas consumption have contributed to lower emissions.

Across the estate, decarbonisation continues to be characterised by a shift from gas to electricity, with fossil fuel-based systems progressively replaced by electrified alternatives. This is reflected in rising electricity consumption alongside declining gas use. In 2025, grid electricity purchased increased by 8.8% relative to baseline, while natural gas consumption reduced by 20% relative to baseline.

At the same time, the results are significantly influenced by changes in emissions factors, particularly a reduction in long-haul air travel factors, a decrease in electricity emission factors, and increases in certain waste related factors. Emissions from waste are also included in the University's target commitments and continue to be actively monitored.

The overall composition of the carbon profile has remained relatively stable since the 2019 baseline, with the biggest contributors being air travel and associated emissions, followed by energy-related emissions. Together with staff commuting emissions, these represent over 45% of total emissions in 2025.

The three primary sources of emissions for the 2025 reporting period continue to be work-related air travel, electricity, and gas.

Table 5: Comparison of historical GHG inventories

Category	2019	2020	2021	2022	2023	2024	2025
Category 1: Direct emissions (tCO ₂ e)	5,667.38	5,723.70	5,426.74	5,485.52	5,771.49	4,984.91	4,781.96
Category 2: Indirect emissions from imported energy (location-based method*) (tCO ₂ e)	8,066.06	8,058.39	7,865.56	5,432.63	5,395.07	7,570.48	6,129.96
Category 3: Indirect emissions from transportation (tCO ₂ e)	65,935.12	4,252.51	1,906.21	35,181.44	49,357.02	57,139.79	50,967.43

Category	2019	2020	2021	2022	2023	2024	2025
Category 4: Indirect emissions from products used by organisation (tCO ₂ e)	2,799.14	1,552.13	1,461.75	1,276.34	1,405.77	1,567.04	1,582.66
Category 5: Indirect emissions associated with the use of products from the organisation (tCO ₂ e)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Category 6: Indirect emissions from other sources (tCO ₂ e)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total direct emissions (tCO₂e)	5,667.38	5,723.70	5,426.74	5,485.52	5,771.49	4,984.91	4,781.96
Total indirect emissions* (tCO₂e)	76,800.31	13,863.02	11,233.52	41,890.42	56,157.86	66,277.31	58,680.05
Total gross emissions* (tCO₂e)	82,467.70	19,586.71	16,660.26	47,375.94	61,929.35	71,262.22	63,462.01
Category 1 direct removals (tCO ₂ e)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total net emissions (tCO₂e)	82,467.70	19,586.71	16,660.26	47,375.94	61,929.35	71,262.22	63,462.01
Emissions intensity							
Built environment (gross tCO ₂ e / m ²)	0.13	0.028	0.024	0.069	0.083	0.090	0.081
Built environment (gross mandatory tCO ₂ e / m ²)	0.071	0.028	0.023	0.032	0.040	0.041	0.034
Equivalent Full Time Student (gross tCO ₂ e / per FTE per annum)	2.39	0.57	0.45	1.32	1.75	1.95	1.62
Equivalent Full Time Student (gross mandatory tCO ₂ e / per FTE per annum)	1.30	0.56	0.43	0.61	0.85	0.89	0.67
FTE & EFTS - Full-time employees and Equivalent full-time students combined (gross tCO ₂ e / per FTE per annum)	2.04	0.49	0.39	1.13	1.49	1.66	1.40
FTE & EFTS - Full-time employees and Equivalent full-time students combined (gross mandatory tCO ₂ e / per FTE per annum)	1.11	0.47	0.37	0.52	0.72	0.76	0.58
Full Time Employee (gross tCO ₂ e / per FTE per annum)	13.81	3.27	2.78	7.75	9.78	11.06	10.15
Full Time Employee (gross mandatory tCO ₂ e / per FTE per annum)	7.54	3.20	2.64	3.58	4.76	5.05	4.23

Category	2019	2020	2021	2022	2023	2024	2025
Operating revenue (gross tCO ₂ e / \$Millions)	64.72	15.88	12.20	34.01	38.96	44.90	38.94
Operating revenue (gross mandatory tCO ₂ e / \$Millions)	35.31	15.50	11.57	15.72	18.96	20.51	16.22

*Emissions are reported using a location-based methodology. See section 1.2.1 for details.

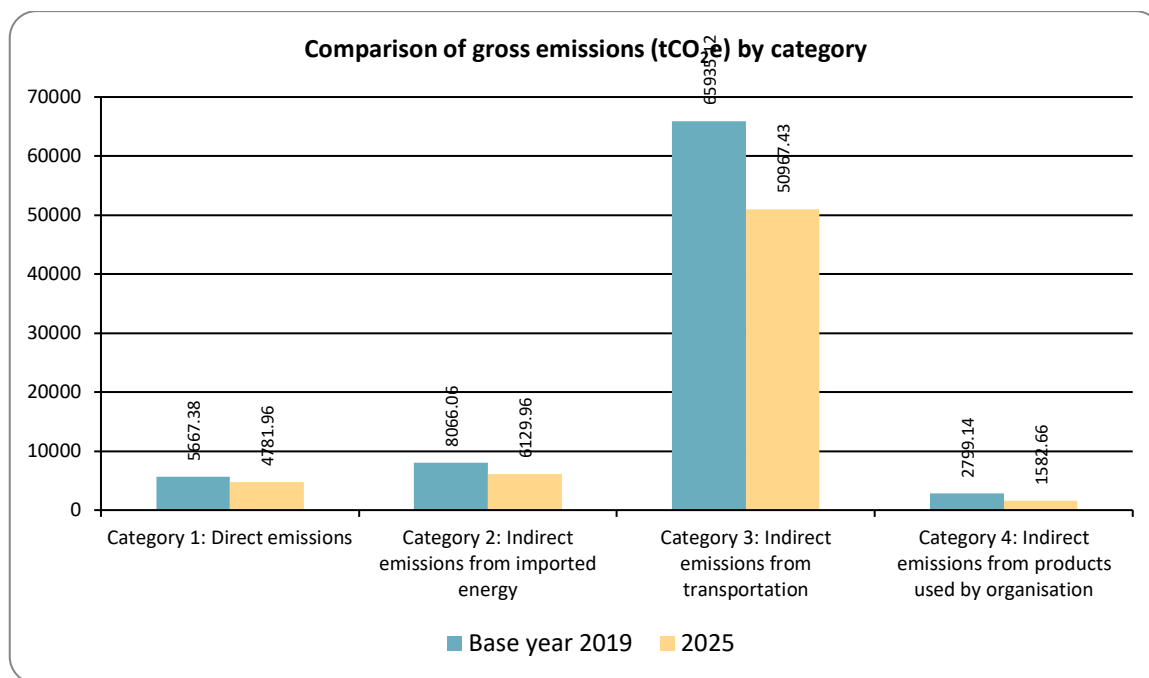


Figure 6: Comparison of gross emissions (tCO₂e) by category between the reporting periods

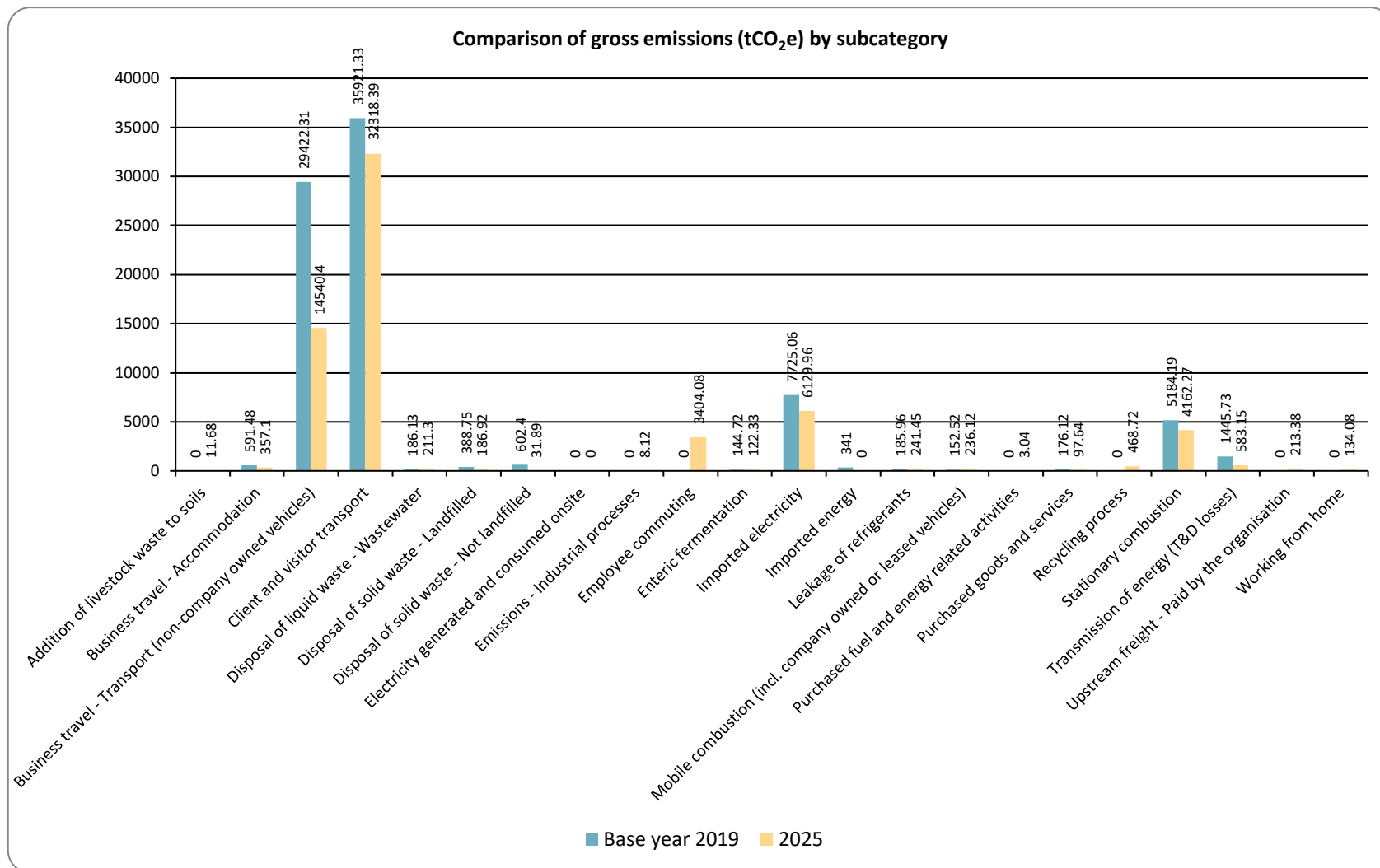


Figure 7: Comparison of gross emissions (tCO₂e) by subcategory between the reporting periods

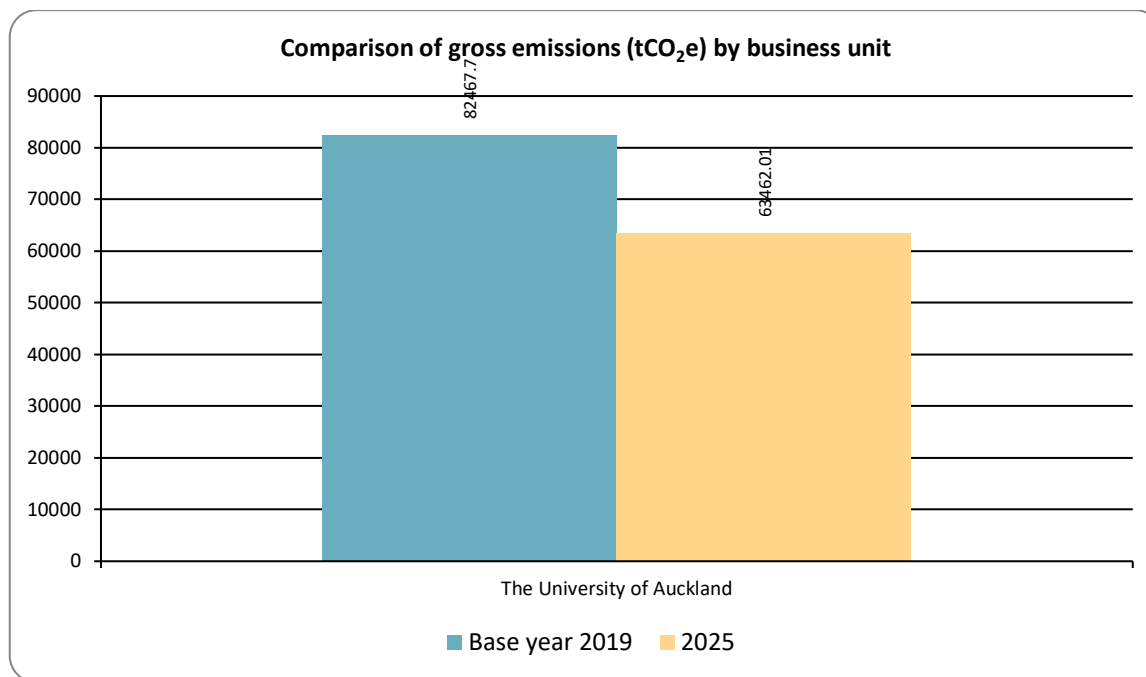


Figure 8: Comparison of gross emissions (tCO₂e) by business unit between the reporting periods

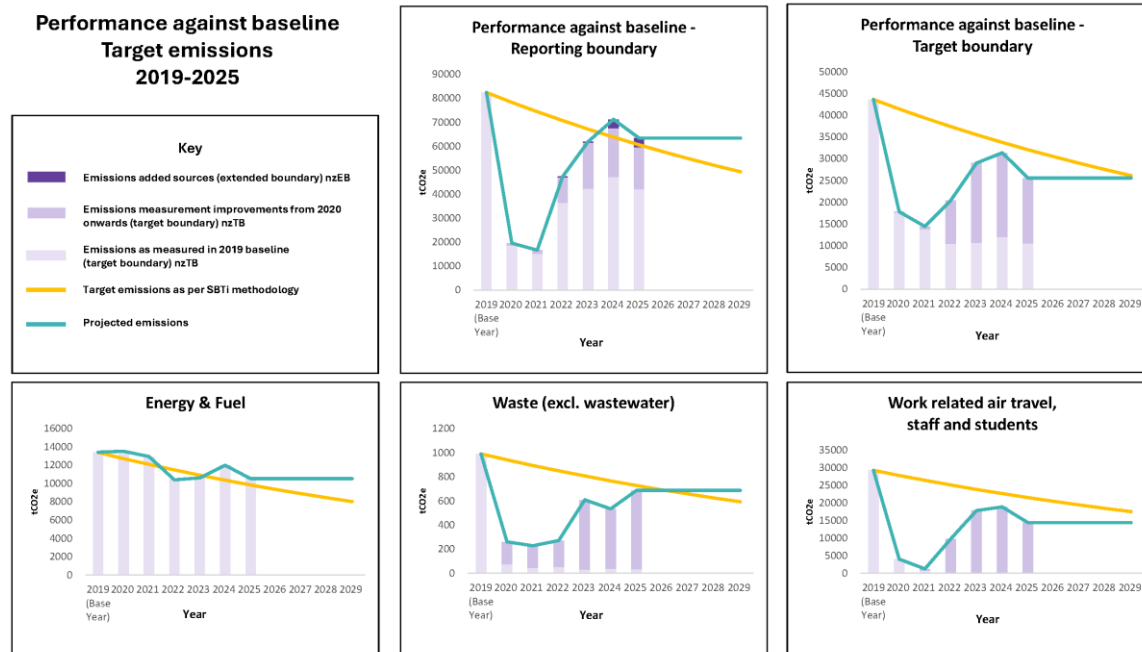


Figure 9: Performance against target since base year

Table 6. Performance against plan

Te Taumata Tukuwaro-kore Net Zero Carbon Progressive Pathway - Target name	Baseline period	Target date	Reduction target	Type of target (intensity or absolute)	Current performance (tCO ₂ e)	Current performance (%)	Comments	Interim target date	Interim reduction target	Current performance against 2025 interim target
Work related Air travel, staff and students	2019	2030	50%	Absolute	14,365	-50.9	Performance is based on 2019 figures and is influenced by: University's efforts to reduce emissions, data improvements via internal processes and supplier engagement, more accurate emission factors available, and emission factor changes beyond the University's control. Refer to the summary of emissions that includes quantities in units of measure for a more comprehensive assessment of the University's efforts to reduce emissions.	2025	25%	Achieved and surpassed
Energy and fuel	2019	2030	50%	Absolute	10,531	-21.6	Performance is based on 2019 figures and is influenced by: University's efforts to reduce emissions, data improvements via internal processes and supplier engagement, more accurate emission factors available, and emission factor changes beyond the University's control. Refer to the summary of emissions that includes quantities in units of measure for a more comprehensive assessment of the University's efforts to reduce emissions. Note the emission factor for grid source electricity is 22.2% lower than the previous reporting year due to increased renewable generation in New Zealand.	2025	25%	Based on location method, a further 3.4% reduction required to achieve the target. When accounting for Climate Positive (carbon zero) certified sourced electricity, the target has been met and surpassed.

Te Taumata Tukuwaro-kore Net Zero Carbon Progressive Pathway - Target name	Baseline period	Target date	Reduction target	Type of target (intensity or absolute)	Current performance (tCO ₂ e)	Current performance (%)	Comments	Interim target date	Interim reduction target	Current performance against 2025 interim target
Waste	2019	2030	50%	Absolute	688	-30.6	Performance is based on 2019 figures and is influenced by: University's efforts to reduce emissions, data improvements via internal processes and supplier engagement, more accurate emission factors available, and emission factor changes beyond the University's control. Refer to the summary of emissions that includes quantities in units of measure for a more comprehensive assessment of the University's efforts to reduce emissions.	2025	25%	Achieved and surpassed



2.2. SIGNIFICANT EMISSIONS SOURCES

Significant sources

The University relies on air travel as a key means of fostering and maintaining global connections and partnerships, supporting research, and ensuring access to academic opportunities. Work related air travel remains one of the largest operational sources of emissions, accounting for approximately 22.6% of total gross emissions in 2025. Emissions from this source decreased by 23.8% compared with 2024 and are 50.9% below the 2019 baseline, reflecting sustained changes in travel behaviour and reduced demand.

Notably, for the first time since the COVID period, work related air travel emissions and activity are both showing a downward trend. This coincides with the second year of implementation of the updated University Travel Policy (2023), which introduced carbon criteria into decision-making for work-related travel. This policy continues to be supported by the air travel dashboard, available monthly, providing insights to guide travel decisions for both academic and professional staff.

Activities responsible for generating significant emissions

The University manages a large and diverse portfolio of buildings, complex facilities, and a vehicle fleet to support services for staff, students, and the general public. Electricity and gas are the primary sources of energy related emissions and remain the main focus of decarbonisation efforts.

Beyond energy consumption, most significant emissions within the University's boundary originate from its supply chain. This includes a wide range of service contracts and suppliers involved in capital projects, as well as the procurement of IT products and infrastructure, food services, and other operational goods and services. The University progressive pathway to Net Zero has identified these supply chain emissions as a critical area of focus, highlighting the need for targeted action and engagement across procurement and operational planning. In 2025, capital project teams introduced a sustainability and carbon checklist to record the implementation of the Sustainable Design and Delivery Guidelines to ensure carbon and sustainability criteria are applied to projects across all stages.

Influences over the activities

Staff commuting represents the fourth largest source of total carbon emissions, accounting for approximately 5.4% of total emissions. This is the second reporting period in which this source of emissions has been included.

Efforts to better understand commuting behaviours have progressed in 2025, including the introduction of a staff commuting survey, which will be considered alongside other sources of data such as carparking utilisation and masterplanning activities. These insights will support the identification and implementation of initiatives to manage commuting emissions over time.

Significant sources that cannot be influenced

In 2025, air travel by international students accounted for 50.1% of the emissions recorded in the greenhouse gas inventory. In 2019, Waipapa Taumata Rau became the first university in New Zealand to formally acknowledge the significant impact of this activity on its carbon footprint.

Although travel decisions of international students fall outside the University's operational control, the University, actively engages with its international student community to promote lower-carbon travel options and foster climate conscious behaviours through education, outreach, and awareness initiatives.

2.3. EMISSIONS REDUCTION TARGETS

The organisation is committed to managing and reducing its emissions in accordance with the Programme requirements. Table 6 provides details of the emission reduction targets to be implemented. These are 'SMART' targets (specific, measurable, achievable, realistic, and time-constrained).

Targets have been set as part of the commitments of Te Taumata Tukuwaro-kore | Net Zero Carbon Strategy, published in Q4 2022.

As expressed in Te Taumata Tukuwaro-kore, Net Zero Carbon Strategy in 2022, the University made a strong commitment to meaningful change and alignment with scientific evidence by setting absolute targets for key sources of emissions. Based on progress to date and continued commitment to implementation of the strategy, these targets remain valid and relevant. As part of the mid-cycle review, the University also affirms its commitment to reducing emissions from all material and significant sources identified in its carbon profile.

The absolute target boundary falls from 43,654 tCO₂e at baseline to 25,583 tCO₂e in 2025, representing a 41.4% reduction against baseline and an 18.5% decrease compared with 2024.

- Work related air travel: 14,365 tCO₂e in 2025, a 50.9% decrease against baseline and 23.8% decrease compared with 2024.
- Energy including fuel: 10,531 tCO₂e in 2025, a 21.6% decrease against baseline and 12.2% decrease compared with 2024.

Combined, these two categories represent approximately 40% of the University's carbon profile, demonstrating material progress toward the emissions reduction targets.

These reductions are the result of two key actions: an active decarbonisation programme that has seen gas consumption decrease by over 20% in favour of electricity as the preferred energy source, and continued efforts toward more conscious work-related travel, resulting in 37.4 million less kilometres travelled compared to baseline and a 6.2% year-on-year decrease (6.8 million km).

Importantly, reductions in these two categories represent genuine decreases in emissions driven by changes in activity and energy use, rather than outcomes primarily influenced by changes in emission factors beyond the University's control.

Waste-related emissions were 687 tCO₂e in 2025, representing a 30.6% reduction against the 2019 baseline. This indicates that the 25% reduction target for waste emissions has been achieved and surpassed; however, this result should be interpreted with caution.

The overall waste profile, in terms of quantity, continues to trend upward. Waste volume is 38% above the 2019 baseline and 34.5% higher than 2024, while year-on-year emissions are also up by 28.7%. This indicates that the apparent emissions reduction is not driven by reduced activity, but is largely influenced by changes in emission factors, particularly updated assumptions relating to landfill methane recovery and corrections to previous methodologies.

Waste represents approximately 1% of the total carbon profile, and the scale of this source should be considered in context. Nonetheless, the upward trend in waste volumes indicates that continued efforts are required to reduce waste generation across the University's operations, alongside ongoing improvements in waste diversion, particularly given that waste remains a source of broader environmental impacts beyond carbon emissions.

When looking at intensity based indicators, these show:

Against 2019 baseline:

- 38% lower per m² of Built Environment (GFA),
- 32% lower per Equivalent Full-Time Student (EFTS),
- 26% lower per Full-Time Employee (FTE), and
- 40% lower per unit of operating revenue

and,

Against 2024 reporting period

- 10% lower per m² of Built Environment (GFA),
- 17% lower per Equivalent Full-Time Student (EFTS),
- 8% lower per Full-Time Employee (FTE), and

- 13% lower per unit of operating revenue

This signals improved efficiency across all key activity drivers, with emissions reductions being achieved not only through absolute decreases, but also through improved emissions performance relative to growth in the University's estate, population, and operations.

Table 7. Emission reduction targets

Progressive pathway and targets: Te Taumata Tukuwaro-kore Net Zero Carbon Strategy (Nov 2022)	Source	2022	2023	2024	2025	2030
Net Zero boundary (GHG baseline 2019)	- Travel (work related) - Energy - Waste (landfill and recycling)	Develop Implementation Plan	Launch implementation plan	Launch implementation plan	25 % Reduction Target	50% Reduction Target
Extended Net Zero boundary (GHG baseline 2019 gaps)	- Travel (international students inbound) - Waste: construction and demolition - Working from home - Staff and student commuting - Freight and couriers	Start/improve data gathering	Establish / Improve baseline	Set Targets		Achieve target set in 2024
Data improvement and monitoring (2025 target review cycle)	- Embodied Carbon (from materials) - Information and Communication Technology - Food on campus	Develop	Start data gathering	Assess significance	Set targets / develop implementation plan	Achieve targets set in 2025
Mitigation programme for residual emissions	- Mitigation boundary	Establish mitigation boundary	Develop a well-informed, evidence-based carbon mitigation programme	Develop a well-informed, evidence-based carbon mitigation programme	Begin mitigation programme	Achieve Net Zero Trajectory Status

2.4. EMISSIONS REDUCTION PROJECTS

In order to achieve the reduction targets identified in Table 6, specific projects have been identified to achieve these targets, and are detailed in Table 7 below.

Table 8. Projects to reduce emissions

Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
Energy and fuel	B114 Teaching Space Upgrade	Upgraded with LED lighting and modern control systems to improve energy efficiency	Campus Environment: Capital Works, Facilities Management	Completed	Reduced operational energy costs
		Decommissioned gas boiler system through transition to more efficient electric systems			
	B614 O'Rorke Hall Refurbishment	Decarbonised domestic hot water system to reduce reliance on fossil fuels	Campus Environment: Capital Works, Facilities Management	Completed	Circular economy outcomes (reuse of furniture)
		Replaced bedroom and dining hall furniture, and donated outgoing furniture			
		Diverted waste from landfill through recycling of materials, including metals from light fittings and heaters			
	B260 Carpark LED Upgrade	Replaced ageing carpark and emergency lighting with energy-efficient LED fittings and installed lighting controls to optimise performance	Campus Environment: Capital Works, Facilities Management	Completed	Verified annual savings of approximately \$58,000
		Reduced electricity consumption by approximately 292,000 kWh per year			

Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
	B260 Building Tuning	Identified and rectified control faults in pumps, valves and sensors to eliminate unnecessary operation and improve system efficiency	Campus Environment: Facilities Management	In progress	Improved occupant thermal comfort
		Optimised pump operation and air handling systems through control adjustments, setpoint tuning and improved sequencing			
		Replaced faulty components (including valves and sensors) to prevent simultaneous heating and cooling and reduce energy losses			Verified annual savings of ~\$73,900
		Completed after-hours audit to identify equipment operating unnecessarily, with remediation actions implemented			
		Implemented building-wide heating and cooling setpoint optimisation to improve performance and reduce demand			
		Used metering and monitoring data to support ongoing post-occupancy tuning and continuous optimisation			
		Delivering verified annual savings of approximately 480,000 kWh (12% electricity and 26% gas) and ~80 tCO ₂ e emissions			
	B405 Building Tuning	Completed after-hours audit to identify equipment operating unnecessarily and initiated remediation actions	Campus Environment: Facilities Management	In progress	Improved occupant thermal comfort in meeting rooms and postgraduate spaces



Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Identified and replaced faulty temperature sensors and control valves to improve system performance and reduce energy losses			
		Investigated and corrected temperature sensor configuration issues across the building			Anticipated annual savings of \$6,000
		Adjusted cooling and heating setpoints (including building-wide increases and targeted zone changes) to reduce energy use			
		Reduced minimum supply air settings in high-intensity spaces to optimise heating demand			
		Optimised setpoints in communications and specialist rooms to improve efficiency			
		Conducted heating hot water trials to assess feasibility of lower temperature operation and support boiler decarbonisation			
		Initiated updates to fan coil unit control methodology to address temperature variability			
		Established ongoing monitoring, data analysis and optimisation to support continuous building tuning			
	B201 Building Tuning	Investigated photovoltaic (PV) system outage and initiated maintenance to restore generation	Campus Environment: Facilities Management	Completed	Improved occupant comfort
		Achieved water consumption below target through effective rainwater harvesting system performance			



Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Maintained sector-leading performance at 65 kWh/m ² /year, the lowest energy intensity on campus			
		Used performance data to monitor building efficiency and support ongoing optimisation			
	B310 Building Tuning	Completed after-hours audit and implemented updated operating schedules to reduce unnecessary energy use	Campus Environment: Facilities Management	Completed	Improved occupant comfort
		Established ongoing energy monitoring and verification			
		Confirmed building performance is operating below design energy targets based on 12 months of monitoring			
		Investigated further efficiency opportunities in high-use areas, including pool and sports halls			
		Used monitored data to support continuous optimisation of building performance			
		Achieved 13% lower annual energy use than design target (3.73 GWh vs 4.30 GWh)			
	B315 Decarbonisation	Decommissioned gas from a catering tenancy, requiring tenant to use electric equipment only	Campus Environment: Capital Works	Completed	
	S200 East Power Infrastructure Upgrade	Upgraded electrical infrastructure, including new cable trays, ducting and submain connections, to support building electrification and decarbonisation	Campus Environment: Capital Works	Completed	Landscaping improvements enhance pedestrian experience

Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Enabled decarbonisation of multiple buildings through expanded electrical capacity, including Waipapa Marae and Fale Pasifika			
		Increased network capacity and resilience to support business continuity and future campus growth			
		Incorporated additional metering and spare capacity to support enhanced energy monitoring and future upgrades			
		Optimised underground services layout to support future redevelopment of the precinct, and delivered landscaping improvements to enhance biodiversity and reduce stormwater runoff			
	Project Sunshine Solar Energy	Exploring future solar energy procurement to support long-term cost stability and emissions reduction	Campus Environment: Commercial, Facilities Management, Sustainability Office	In progress	
		Completed request further information phase with potential vendors and evaluation of supplier responses			
		Initiating an energy demand study to inform the upcoming request for proposals stage			
	B260 Low-Load Cooling Resilience Project	Reviewing the current chilled water system at OGGB to determine if the plant can support low cooling loads after the data centre exit	Campus Environment: Facilities Management	In progress	



Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
	Space and Resource Booker adjustment	Introduced system prompts and communications to reduce unnecessary after-hours bookings, avoidable HVAC operation and after-hours energy use by aligning bookings more closely with actual occupancy	Campus Environment: Facilities Management, Sustainability Office	Completed	Increased awareness of space use impacts
		Updated booking system to require acknowledgement of operational impacts and reinforce cancellation requirements	Digital Services		
			Academic Services		
Water	UoA Water Improvement Project	Reviewing and upgrading water metering to capture time-of-use data, enabling more accurate reporting, earlier leak detection, and improved forecasting of water demand, with project delivery supported by an approved business case	Campus Environment: Facilities Management	In progress	
Staff commuting	Staff Commuting Dashboard	Integrated staff commuting survey results into internal Staff Commuting Dashboard within Enterprise Management System	Campus Environment:	Completed	
			Sustainability Office		
	Staff Benefits and Sustainability Phase 1	Integrated staff commuting survey results into a discovery project focused on the intersection of staff benefits and institutional sustainability commitments	Human Resources Campus Environment: Sustainability Office	Completed	
	B310 End of trip facilities	A secure bike cage for lightweight bikes (capacity of 52) was added as part of the redevelopment of the Recreation Centre	Campus Environment Planning & Development, Capital Works	Completed	Improved cyclist experience

Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
Waste	B_OCH recovery and recycling	Recovered ~800 tonnes of construction and demolition waste (69% of total weight) from adaptive reuse project, via contractor engagement and monitoring	Campus Environment: Capital Works	Completed	
	B242 Temporary courts reuse	Disassembled temporary sports courts for relocation and future reassembly	Campus Environment: Capital Works	Completed	
		Avoided demolition waste and embodied carbon from new construction through planned reuse of modular building elements			
	B241 Villa relocation	Relocated historic villa (former university early childhood education centre) for reuse as residential dwelling rather than demolition, to make room for B230 construction	Campus Environment: Capital Works	Completed	Villa became a family home
	Waste Dashboard	Developed a dashboard to consolidate data on key operational waste streams, including landfill, recycling, and organic waste from main contractor, displaying data from multiple catchment points across the campuses	Campus Environment: Facilities Management	Completed	
	Repair Café	Delivered inaugural Repair Café event on campus to extend life of household items	Faculty of Engineering & Design	Completed	Circular economy outcomes and repair skills for staff and students
		Reduced emissions associated with disposal and replacement purchases	Research Centres		
Other	Modern Slavery Clause	Included modern slavery clause in all Campus Environment contracts and contract variations	Campus Environment: Commercial	BAU	Improvements in supply chain human rights standards

Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
	Sustainable Procurement Guide	Developing Sustainable Procurement Guidelines to embed whole-of-life value and sustainability considerations across all procurement activities	Campus Environment: Sustainability Office	In progress	Improvements in supply chain (ESG outcomes)
		Strengthening integration of emissions reduction, circularity, and social outcomes through lifecycle assessment, supplier engagement and structured sustainability criteria	Strategic Procurement		
		Introducing minimum sustainability weightings and contract KPIs to drive improved supplier performance and ongoing emissions reductions			
		Establishing data and reporting requirements to improve visibility of Scope 3 emissions and support future automated sustainability reporting systems			
	Winter Warmer Clothes Drive	Enabled staff to donate 594 items of quality winter clothing to 204 students who attended dedicated events at Grafton and City campuses, with leftover items transferred to Te Tai Tokerau Campus	Student & Scholarly Services: Student Engagement	BAU	Circular economy outcomes and reduced costs for students
		Reduced emissions associated with disposal and new clothing consumption			
	Space Utilisation Survey	Conducted annual surveys of office spaces, teaching spaces, and PhD candidate spaces, to assess space utilisation and optimise allocation of space	Campus Environment: Planning & Development	BAU	Cost savings due to space consolidation
	OGGB Carpark PARCS Replacement Project	Implemented licence plate recognition (LPR) system to improve carpark access and occupancy data	Campus Environment: Facilities Management	In progress	Improved user experience and traffic flow



Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Replaced barriers, tickets and swipe cards with automated vehicle recognition and digital payment options			
		Introduced real-time entry and exit tracking to support analysis of usage patterns			
	Biodiversity Dashboard	Developing a biodiversity dashboard, drawing on data from iNaturalist platform, and showcasing the flora and fauna present across University campuses	Faculty of Science Campus Planning & Information	In progress	Increased staff and student understanding of ecology
	Sustainable Design and Delivery Guidelines	Introduced checklist for Planning & Development and Capital Works teams to begin using to operationalise Sustainable Design and Delivery Guidelines	Campus Environment: Planning & Development, Capital Works	In progress	Increase staff capability in sustainable design and delivery
		Monitoring usage and uptake across design and capital projects			
	Sustainable Design and Delivery: Uni Hall apartment refurbishment (B436)	Integrated energy efficiency measures, including LED lighting, improved insulation, double glazing, thermally broken frames and optimised ventilation and heating systems	Campus Environment: Planning & Development, Capital Works, Facilities Management	Completed	Improved occupant experience
		Reduced water consumption through installation of low-flow fixtures and efficient hot water systems			
		Enhanced building performance through warm roof system and improved thermal design			Improved accommodation hall staff capability
		Incorporated cultural design elements in landscape and screening			



Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Optimised space utilisation through reconfiguration of internal layouts and consolidation of waste and bike storage facilities			
		Embedded waste minimisation through reduced demolition scope, construction waste targets, recycling infrastructure and reuse of materials (e.g. recyclable mattresses)			
		Delivered landscaping improvements to enhance biodiversity and reduce stormwater runoff			
	Sustainable Design and Delivery: Old Choral Hall (B_OCH)	Replaced gas boiler with electric chiller system (decarbonisation)	Campus Environment: Planning & Development, Capital Works, Facilities Management	Post occupancy tuning phase	Increased daylight access and thermal comfort for occupants
		Maintained accessibility as a core design consideration			
		Integrated energy-efficient HVAC and lighting systems designed to operate on demand			
		Improved climate-resilience, assessed embodied carbon impacts and collected detailed construction and demolition waste data			
		Conducting tuning and performance monitoring to support ongoing operational optimisation			
	Sustainable Design and Delivery: B230 design	Designed to achieve Green Star 6 performance, embedding sustainability outcomes across all aspects of the project	Campus Environment: Planning & Development, Capital Works	In progress: Detailed design and early construction	



Emission source subcategories	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Enabling full electrification by excluding gas infrastructure and incorporating rooftop photovoltaic generation			
		Including end-of-trip facilities and no additional carparking to support low-emissions transport			
		Including Te Aranga design principles			



Table 8 highlights emission sources that have been identified for improving source the data quality in future inventories.

Table 9. Projects to improve data quality

Data improvement projects 2025

Emissions source	Actions to improve data quality	Responsibility	Completion date
Accommodation	Engaged with supplier to review methodology for reporting on accommodation nights	Finance: Strategic Procurement Campus Environment: Sustainability Office	Completed
Client and visitor transport (International student air travel)	Captured international travel data for domestic student exchange programme and included in GHG inventory	Planning and Information Campus Environment: Sustainability Office	Completed
Composting (Food waste)	- Installed scales in student accommodation halls so waste can be weighed before it is placed in external bins - Improved waste reporting from accommodation catering - Monitoring accommodation hall meal scans to compare with waste data in dashboard - Monitoring new buildings and cafés to ensure food waste diversion data is captured	Campus Environment: Facilities Management	In progress
Construction and demolition waste	Engaged with suppliers to improve reporting capabilities for capital works projects, including gaining access to one supplier's waste data consolidation portal	Campus Environment: Capital Works	Completed
Electricity	- Installed/upgraded 25 submeters in Building 260 in the Business School to improve visibility of energy usage at the building - Replacing manually-read monthly check meters with smart meters that give 15-minute interval data - Ensuring energy/heat meters will be installed in buildings during decarbonisation projects	Campus Environment: Facilities Management	In progress
	Developed an energy dashboard on Enterprise Insights Portal, which shows electricity consumption by building, and informs monitoring and analysis of electricity consumption across all facilities	Campus Environment: Facilities Management	Completed
Natural gas	Normalised natural gas data in the utilities monitoring system using metered periods rather than invoice dates to improve accuracy of consumption patterns	Campus Environment: Facilities Management	Completed

Employee commuting	- Conducted inaugural Staff Commuting Survey to understand employee commuting profile - Extrapolated survey data to estimate distance travelled (km) by transport mode - Developed staff commuting dashboard in Enterprise Insights Portal to support analysis	Campus Environment: Sustainability Office	Completed
Enteric Fermentation Sheep	Introduced monthly livestock movement reporting from farm manager	Liggins Institute: Farm Laboratory Campus Environment: Sustainability Office	Completed
Freight	Reviewing freight providers' definitions, including product codes that specify which packages are sent via domestic air freight versus road freight, to improve accuracy of freight data	Finance: Strategic Procurement Campus Environment: Sustainability Office	Ongoing
Fuel emissions	- Separated petrol emissions into regular and premium fuel types to improve emission factor accuracy - Conducted annual review of fuel assets with farm and campus managers	Liggins Institute: Farm Laboratory Finance: Strategic Procurement Campus Environment: Sustainability Office, Facilities Management	Completed
KPI: Built Environment (GFA)	Added Operational Boundary attribute to GFA reporting	Campus Environment: Planning & Development, Sustainability Office	Completed
Organisation description	Updated organisational structure chart	General Counsel Office of VC Campus Environment: Sustainability Office	Completed
Physical Locations list	- Updated physical locations list to align with Land Registry and include vacant land and reserves and added descriptions of premises and land - Documented methodology for using Space Planning data as source for physical locations within the operational boundary	Campus Environment: Planning & Development, Sustainability Office	Completed
Procurement	Improved supply chain data through enterprise licence, enabling enhanced general ledger coding	Finance: Strategic Procurement	Ongoing
Recycling	Established annual review of emission factors for recycling	Campus Environment: Sustainability Office, Facilities Management	Ongoing
Refrigerants and other gases	- Generated detailed annual usage and holdings data from asset management system - Introducing quarterly reporting	Campus Environment: Sustainability Office, Facilities Management	In progress
Staff and student work-related air travel	- Implemented monthly reporting from supplier to data warehouse and air travel dashboard - Conducted internal data accuracy checks between dashboard data and inventory data	Planning and Information Finance: Strategic Procurement Campus Environment: Sustainability Office	Completed
Staff reimbursements	Engaged supplier to review accommodation reporting methodology	Finance: Strategic Procurement Campus Environment: Sustainability Office	Completed

Utilities	Utilised the comprehensive monitoring capabilities of B201 (electrical, thermal and water metering) for issues identification in post-occupancy building tuning, and in environmental performance reporting	Campus Environment: Facilities Management	Completed
Waste to landfill	- Engaged suppliers to improve waste reporting and methodologies - Updated methodologies for special waste streams and processes - Developed and implemented internal waste dashboard - Mapped waste catchment locations to improve analysis - Investigated waste management service coverage across the University - Completed waste services review and initiated development of new contract focused on waste reduction and innovation - Reviewed e-waste data definitions with supplier - Improved chemical waste reporting to include weight (kg) and defined waste streams	Campus Environment: Facilities Management, Sustainability Office	Completed
Working from Home	Used Staff Commuting Survey data to estimate working-from-home days across the reporting year	Campus Environment: Sustainability Office	Completed

The emissions inventory chapter identified various emissions liabilities (see Liabilities section). Table 9 details the actions that will be taken to prevent GHG emissions from these potential emissions sources.

Table 10. Projects to prevent emissions from liabilities

Liability source	Actions to prevent emissions	Responsibility	Completion date
Refrigerants accidental release from units	Facilities Management actively manages and oversees contracted maintenance programmes to ensure refrigerant systems are regularly serviced, compliant, and operating efficiently. This includes ongoing monitoring through compliance and risk management processes.	Facilities Management (Campus Environment) - oversight of centrally managed plant and contracted maintenance delivery	Ongoing (business-as-usual activity)

2.5. STAFF ENGAGEMENT

Net Zero carbon commitments continue to be embedded in the University's strategic plans under the Enabling Environment portfolio. These strategies remain accessible to all staff and are publicly available on the University website. Updated information on the University's pathway to Net Zero carbon – including its climate action plan, progress against targets, emissions sources, and reduction initiatives – has been maintained and refreshed through the annual reporting cycle. Sustainability webpages were

updated throughout the year to reflect progress and engage with internal and external members of the University community.

Active engagement with staff and students remained a key focus throughout 2025. The Sustainable Estate and Operations Working Group continued to provide a primary platform for staff awareness and capability development in relation to emissions management and reduction. With representation from key operational service divisions, this group remained the primary forum through which detailed information on emissions sources, targets, and reduction initiatives was shared and translated into operational actions. The group was supported by specialist expertise within the Environment and Sustainability Office, including two staff with carbon auditing capabilities who provided guidance on emissions sources, materiality, and the relative significance of activities, helping to inform prioritisation and decision-making.

During the year, portfolio changes brought together Planning & Development, Capital Works, Commercial, Sustainability & Environment, and Facilities Management with Sport & Recreation, Accommodation and Operations and Commercial Services into a newly formed Campus Environment division, replacing the former Property Services and Campus Life service divisions. Working group membership was strengthened as a result and continued to be overseen by a Governance Group that met quarterly, providing organisational oversight of progress against commitments.

Beyond these core groups, awareness of the University's sustainability programme and reduction commitments was built through targeted engagement with staff and students. This included presentations to staff sustainability groups across multiple cohorts, a guest lecture to students in the Sustain 200 course, and an invited lecture to an international academic audience. These sessions were tailored to audience context and focused on building understanding of sustainability challenges and opportunities in the university context.

An Estate and Operations sustainability communications framework was developed, offering high-level guidance on strategic commitments and targets, and reference material to support consistent messaging across the communications function. Sustainability related content was also delivered through a range of internal channels, including staff news stories, Campus Kōrero (internal social platform), and fortnightly newsletters. These channels were used to promote awareness, share examples of operational excellence, and reinforce behaviours aligned with emissions reduction goals.

A significant area of development in 2025 was the expansion of data led engagement through a suite of sustainability and operational dashboards designed to support transparency and informed decision-making. This work aligns with the University's Data Strategy, which seeks to enhance access to institutional data and support data informed decision-making across the organisation. Sustainability dashboards were made available to staff via Enterprise Insights Portal during the year, providing accessible insights into key emissions sources and operational activities.

These included an air travel dashboard providing detailed insights into university funded travel activity, including distances flown and flight volumes, with the ability to view data at both organisational and departmental levels. The dashboard supports consideration of travel behaviours and contributes to improved data quality over time. An energy and utilities dashboard was also established, integrating meter data to provide visibility of electricity consumption across campuses and facilities, supporting both reporting and operational decision making. In addition, a staff commuting dashboard, built from the inaugural staff commuting survey results and car parking permit data, was developed to enable greater understanding of travel modes and opportunities to encourage more sustainable commuting options.

Further dashboards progressed through discovery and development phases during 2025. A waste dashboard was developed to consolidate data on key operational waste streams, including landfill, recycling, and organic waste, drawing on data from multiple collection points across the campuses. A sustainable events dashboard is under development to capture and analyse information provided through event planning processes, supporting improved visibility of sustainability considerations in event delivery. A campus biodiversity dashboard is also in development, drawing on citizen science data in the iNaturalist platform, and showcasing the flora and fauna present across University campuses.

Sustainable event practices were demonstrated at scale through the ASPIRE professional staff conference, attended by over 500 staff. The conference applied the University’s Sustainable Events Guide and checklist through measures such as increased use of reusable serveware, reduced reliance on single-use items, redistribution of surplus food, and the establishment of front of house “waste free” zones supported by back of house waste sorting and composting systems. Post event communications were used to highlight these approaches and share practical learnings with staff, supporting wider adoption of waste prevention practices across the University.

A hands-on approach to staff and student engagement was demonstrated through the University’s first Repair Café, which brought together staff, students, and volunteers to diagnose and repair broken household items. Approximately 50 participants attended the event, with around 80% of items successfully repaired, diverting materials from landfill and reducing associated emissions. The initiative promoted a culture of repair and reuse while building practical skills and awareness among participants.

Energy, waste, and resource recovery remained integrated into the regular agenda of meetings between Campus Environment Services and the six faculties, reinforcing operational alignment with sustainability goals.

The Environment and Sustainability Office also maintained a visible presence at major University events, including Manawa Mai Open Day, where sustainability initiatives and strategic priorities were shared with prospective students and the wider community.

2.6. KEY PERFORMANCE INDICATORS

Additional KPIs are in line with University's existing service performance indicators included in the Annual Report. The KPI, EFTS & FTE (Equivalent full-time students and Full-time employees combined) from the 2024 Inventory Management Report corresponds to the Statement of Service Performance indicator 23. Net CO₂ Emissions, as published in the Annual Report 2025.

Table 11. Key Performance Indicators (KPIs).

KPI	Rationale of using the additional KPI
GFA (Gross Floor Area)	In line with University's existing environmental service performance indicators included in the Annual Reporting
EFTS (Equivalent Full Time Student)	In line with University's existing service performance indicators included in the Annual Reporting
FTE (Full Time Employee)	In line with University's existing service performance indicators included in the Annual Reporting
EFTS & FTE (Equivalent full-time students and Full-time employees combined)	In line with University's existing service performance indicators included in the Annual Reporting. See KPI 23 in the Annual Report.

2.7. MONITORING AND REPORTING

Progress to Net Zero takes effect via distributed delivery model. Portfolio managers across University wide services monitor the activity of the main sources of emissions monthly. Overall progress is reported annually by the Sustainability Office as part of the Net Zero Strategy implementation as well as via Statement of Service Performance in the University's Annual Report.

Boundary definitions:

nzTB - Net Zero Target Boundary, measures included in the University's Net Zero targets (incl.

nzRB - Net Zero Reporting Boundary, all measures within the GHG inventory

nzEB - Net Zero Extended Boundary, new measures added to the inventory after 2019 baseline

Unit Key: pkm (person kilometres), v.ngt (visitor nights), km (kilometres), \$ (New Zealand dollars), kWh (kiloWatt hours), t (tonnes), tkm (tonnes kilometre), L (litres), m³ (cubic metres), epd (employee per day), head (animal count), tCO₂e (metric tonnes of carbon dioxide equivalent)

Table 12. Monitoring and reporting

Boundary	Activity	Unit	2019 Quantity	2019 Carbon Emissions Location- based (tCO ₂ e)	2024 Quantity	2024 Carbon Emissions Location- based (tCO ₂ e)	2025 Quantity	2025 Carbon Emissions Location- based (tCO ₂ e)	Progress against prev. year Quantity (%)	Progress against prev. year Emissions (%)	Progress against baseline Quantity (%)	Progress against baseline Emissions (%)
nzTB	Air travel domestic total (staff and students)	pkm	8,281,640.00	2,007.80	7,442,327.00	1,512.90	6,637,757.00	1,341.26	-10.8	-11.3	-19.8	-33.2
nzTB	Air travel short haul total < 3700km (staff and students)	pkm	19,752,947.00	3,207.09	16,077,887.00	2,451.88	15,903,382.65	2,025.26	-1.1	-17.4	-19.5	-36.9
nzTB	Air travel long haul total > 3700km (staff and students)	pkm	112,981,420.00	24,015.33	86,927,417.00	14,735.80	81,054,626.69	10,926.80	-6.8	-25.8	-28.3	-54.5

Boundary	Activity	Unit	2019 Quantity	2019 Carbon Emissions Location- based (tCO ₂ e)	2024 Quantity	2024 Carbon Emissions Location- based (tCO ₂ e)	2025 Quantity	2025 Carbon Emissions Location- based (tCO ₂ e)	Progress against prev. year Quantity (%)	Progress against prev. year Emissions (%)	Progress against baseline Quantity (%)	Progress against baseline Emissions (%)
nzTB	Air travel (NZ & international) reimbursements				190,221.87	149.85	90,603.32	71.38	-52.4	-52.4		
nzTB	Electricity generated onsite (Cat 1/Scope 1)	kWh			82,709.59	-	121,043.30	-	46.3			
nzTB	Electricity Toitū carbonzero certified factor*	kWh	808,493.00	7.96	49,948,763.49	4,518.64	77,202,415.67	6,129.96	54.6	35.7	9448.9	76875.8
nzTB	Electricity (Purchased)*	kWh	70,179,484.00	7,717.09	25,567,479.46	3,051.84	-	-	-100.0	-100.0	-100.0	-100.0
nzTB	NZ energy certificates (NZEC) purchased*	kWh			25,567,410.00	-	-	-				
nzTB	Natural gas distributed commercial	kWh	26,427,303.00	5,146.61	21,362,585.63	4,168.86	21,130,462.20	4,129.54	-1.1	-0.9	-20.0	-19.8
nzTB	Steam generation Pre-calculated (tCO ₂ e)	t	341.00	341.00	-	-	-				-100.0	-100.0
nzTB	Electricity used (Cat 4/Scope 3)	kWh					44,346.00	3.04				

Boundary	Activity	Unit	2019 Quantity	2019 Carbon Emissions Location- based (tCO ₂ e)	2024 Quantity	2024 Carbon Emissions Location- based (tCO ₂ e)	2025 Quantity	2025 Carbon Emissions Location- based (tCO ₂ e)	Progress against prev. year Quantity (%)	Progress against prev. year Emissions (%)	Progress against baseline Quantity (%)	Progress against baseline Emissions (%)
nzTB	Diesel stationary combustion (generators)	L	11,340.00	30.73	10,089.10	27.04	9,876.40	26.43	-2.1	-2.3	-12.9	-14.0
nzTB	Diesel stationary combustion (fire pumps)	L	1,480.40	4.01	1,530.00	4.10	2,356.00	6.30	54.0	53.8	59.1	57.2
nzTB	Diesel mobile combustion (fuel cards)	L	27,430.81	73.90	51,980.03	139.34	57,075.37	152.49	9.8	9.4	108.1	106.4
nzTB	Petrol (fuel cards)	L	20,074.21	49.22	36,094.33	86.07	35,099.77	82.95	-2.8	-3.6	74.9	68.5
nzTB	LPG stationary > updated to mobile combustion from 2024 (forklifts)	kg	938.40	2.84	270.00	0.82	225.00	0.68	-16.7	-16.7	-76.0	-76.0
nzTB	Diesel (inter-campus staff shuttle) DISCONTINUED	L	10,915.00	29.40	-	-	-				-100.0	-100.0
nzTB	Bus travel (city) Tamaki - City loop student bus DISCONTINUED	pkm	350,020.00	29.98	-	-	-				-100.0	-100.0
nzTB	Composting	kg	108,126.00	18.55	177,443.00	31.16	165,320.00	29.03	-6.8	-6.8	52.9	56.5

Boundary	Activity	Unit	2019 Quantity	2019 Carbon Emissions Location- based (tCO ₂ e)	2024 Quantity	2024 Carbon Emissions Location- based (tCO ₂ e)	2025 Quantity	2025 Carbon Emissions Location- based (tCO ₂ e)	Progress against prev. year Quantity (%)	Progress against prev. year Emissions (%)	Progress against baseline Quantity (%)	Progress against baseline Emissions (%)
nzTB	Waste disposal mixed recycling transport (cans, glass, paper, plastic)	kg	393,512.00	583.85	400,542	2.57	609,762	2.86	52.2	11.4	55.0	-99.5
nzTB	Recycling process (cans, glass, paper, plastic)	kg			390,985	316.96	598,573	468.72	53.1	47.9		
nzTB	Waste landfilled total	kg	1,604,824.00	388.75	1,583,642.42	183.44	1,533,557.50	186.92	-3.2	1.9	-4.4	-51.9
nzRB	Accommodation (NZ & international)	v.ngt	19,447.00	591.48	28,572.00	512.86	12,007.00	139.22	-58.0	-72.9	-38.3	-76.5
nzRB	Accommodation (NZ & international) reimbursements				1,712,638.48	256.39	1,455,372.86	217.88	-15.0	-15.0		
nzRB	Rental car average (diesel)	km	49,544.00	9.96	72,151.00	13.13	61,695.00	11.13	-14.5	-15.2	24.5	11.8
nzRB	Rental car average (hybrid)	km	799.00	0.13	77,334.00	11.23	82,395.00	11.78	6.5	4.9	10212.3	9017.9
nzRB	Rental car average (petrol)	km	315,964.00	65.35	170,174.00	31.29	156,359.00	28.31	-8.1	-9.5	-50.5	-56.7
nzRB	Rental car EV - average				6,357.00	0.14	16,847.00	0.30	165.0	105.2		

Boundary	Activity	Unit	2019 Quantity	2019 Carbon Emissions Location- based (tCO ₂ e)	2024 Quantity	2024 Carbon Emissions Location- based (tCO ₂ e)	2025 Quantity	2025 Carbon Emissions Location- based (tCO ₂ e)	Progress against prev. year Quantity (%)	Progress against prev. year Emissions (%)	Progress against baseline Quantity (%)	Progress against baseline Emissions (%)
nzRB	Petrol reimbursements				89,988.63	80.66	85,407.97	76.55	-5.1	-5.1		
nzRB	Taxi (regular)	\$	1,160,109.40	86.67	1,347,451.84	60.40	1,171,411.30	47.64	-13.1	-21.1	1.0	-45.0
nzRB	Air travel short haul < 3700km (international students inbound)	pkm	300,525.00	48.79	338,744.00	51.98	373,098.00	47.70	10.1	-8.2	24.1	-2.2
nzRB	Air travel long haul > 3700km (international students inbound)	pkm	168,764,308.00	35,872.54	174,102,766.00	33,599.20	199,915,446.00	30,551.08	14.8	-9.1	18.5	-14.8
nzRB	Air travel short haul < 3700km (exchange students outbound)						857,263.00	109.61				
nzRB	Air travel long haul > 3700km (exchange students outbound)						10,535,279.00	1,610.00				
nzRB	Electricity Toitū carbonzero certified factor (T & D losses)*	kWh			49,948,763.49	384.12	77,202,415.67	459.83	54.6	19.7		

Boundary	Activity	Unit	2019 Quantity	2019 Carbon Emissions Location- based (tCO ₂ e)	2024 Quantity	2024 Carbon Emissions Location- based (tCO ₂ e)	2025 Quantity	2025 Carbon Emissions Location- based (tCO ₂ e)	Progress against prev. year Quantity (%)	Progress against prev. year Emissions (%)	Progress against baseline Quantity (%)	Progress against baseline Emissions (%)
nzRB	Electricity distributed T&D losses (Electricity Cat 2 & Cat 4)	kWh	70,987,977.00	842.39	25,567,479.46	196.62	44,346.00	0.26	-99.8	-99.9	-99.9	-100.0
nzRB	Natural gas distributed T&D losses	kWh	26,427,303.00	603.34	21,362,585.63	132.71	21,130,462.20	123.06	-1.1	-7.3	-20.0	-79.6
nzRB	Paper use - default	kg	170,520.00	162.45	69,011.35	92.43	59,944.74	80.63	-13.1	-12.8	-64.8	-50.4
nzRB	Wastewater for treatment plants (average)	m ³	407,761.00	186.13	396,831.62	204.60	426,875.09	211.30	7.6	3.3	4.7	13.5
nzRB	Water supply	m ³	436,912.00	13.67	462,116.90	22.44	450,467.71	17.01	-2.5	-24.2	3.1	24.4
nzRB	Refrigerant totals	kg	22,813.29	185.96	12,084.20	346.96	13,855.62	249.57	14.7	-28.1	-39.3	34.2
nzRB	Enteric fermentation dairy - cattle	head	12.00	24.72	-	-	-				-100.0	-100.0
nzRB	Enteric fermentation - sheep	head	400.00	120.00	555.00	193.52	351.00	122.33	-36.8	-36.8	-12.3	1.9
nzEB	Freight (extended baseline)	tkm			48,882.43	56.90	156,193.08	213.38	219.5	275.0		

Boundary	Activity	Unit	2019 Quantity	2019 Carbon Emissions Location- based (tCO ₂ e)	2024 Quantity	2024 Carbon Emissions Location- based (tCO ₂ e)	2025 Quantity	2025 Carbon Emissions Location- based (tCO ₂ e)	Progress against prev. year Quantity (%)	Progress against prev. year Emissions (%)	Progress against baseline Quantity (%)	Progress against baseline Emissions (%)
nzEB	Working from home (extended baseline)	epd			352,970.00	169.30	359,952.00	134.08	2.0	-20.8		
nzEB	Staff commute (all transport combined)	km			22,030,753.50	3,445.86	22,382,370.00	3,404.08	1.6	-1.2		
nzEB	Agricultural soil - sheep	head			555.00	16.10	351.00	10.35	-36.8	-35.7		
nzEB	Manure management - sheep	head			555.00	2.09	351.00	1.32	-36.8	-36.8		
TOTAL nzRB	Total reporting boundary	tCO ₂ e		82,467.70		71,262.21		63,462.00		-10.9		-23.0
TOTAL nzRB excl. nzEB	Total reporting boundary (excl. extended boundary)	tCO ₂ e		82,467.70		67,571.96		59,698.79				
TOTAL nzTB	Total target boundary only (inlc. Improvements)	tCO ₂ e		43,654.12		31,381.28		25,583.61				



APPENDIX 1: DETAILED GREENHOUSE GAS INVENTORY

Additional inventory details are disclosed in the tables below, and further GHG emissions data is available on the accompanying spreadsheet to this report (Appendix1-Data Summary Waipapa Taumata Rau | The University of Auckland.xls).

Table 12. Direct GHG emissions and removals, quantified separately for each applicable gas

Category	CO ₂	CH ₄	N ₂ O	NF ₃	SF ₆	HFC	PFC	Desflurane	Sevoflurane	Isoflurane	Emissions total (tCO ₂ e)
Stationary combustion	4,150.67	9.71	1.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4,162.27
Mobile combustion (incl. company owned or leased vehicles)	230.25	1.30	4.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	236.12
Emissions - Industrial processes	8.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.12
Removals - Industrial processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Leakage of refrigerants	5.62	0.00	0.00	0.00	0.00	235.83	0.00	0.00	0.00	0.00	241.45
Fugitive Emissions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Treatment of waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Treatment of wastewater	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Emissions - Land use, land-use change and forestry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Removals - Land use, land-use change and forestry	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fertiliser use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Addition of livestock waste to soils	0.00	1.32	10.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.68
Addition of crop residue to soils	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Enteric fermentation	0.00	122.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	122.33
Addition of lime to soils	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Category	CO ₂	CH ₄	N ₂ O	NF ₃	SF ₆	HFC	PFC	Desflurane	Sevoflurane	Isoflurane	Emissions total (tCO ₂ e)
Open burning of organic matter	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity generated and consumed onsite	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medical gases	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry, Land and Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total net emissions	4,394.66	134.66	16.81	0.00	0.00	235.83	0.00	0.00	0.00	0.00	4,781.96

Table 13. Non-biogenic, biogenic anthropogenic and biogenic non-anthropogenic CO₂ emissions and removals by category

Category	Anthropogenic biogenic CO ₂ emissions	Anthropogenic biogenic (CH ₄ and N ₂ O) emissions (tCO ₂ e)	Non-anthropogenic biogenic (tCO ₂ e)
Category 1: Direct emissions	0.00	134.00	0.00
Category 2: Indirect emissions from imported energy	0.00	0.00	0.00
Category 3: Indirect emissions from transportation	0.00	0.00	0.00
Category 4: Indirect emissions from products used by organisation	0.00	355.99	0.00
Category 5: Indirect emissions associated with the use of products from the organisation	0.00	0.00	0.00
Category 6: Indirect emissions from other sources	0.00	0.00	0.00
Total gross emissions	0.00	489.99	0.00

A1.1 REPORTING BOUNDARIES

A1.1.1 Emission source identification method and significance criteria

The GHG emissions sources included in this inventory are those required for Programme certification and were identified with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards as well as the Programme Technical Requirements.

The methods used to identify relevant sources for previous years remain valid. These include:

1. Preliminary gap analysis conducted in 2019
2. Direct communication with relevant staff
3. High level review of main categories of expenditure reports
4. Direct communication with key suppliers. Note: supplier engagement work that included development of new templates for reporting to ensure data was complete and accessible, and that measures and metrics were correctly defined is ongoing. This work is included in the 'progress against targets' charts and identified as 'data improvements'.

The sector-specific significance criteria added in 2023, has been applied again in 2025 and is included in Appendix 2, under Carbon Neutral Government Programme.

Significance of emissions sources within the organisational boundaries has been considered in the design of this inventory. The significance criteria used comprise:

- All direct emissions sources that contribute more than 1% of total Category 1 and 2 emissions
- All indirect emissions sources that are required by the Programme.

No changes to the significance criteria have been made since this inventory was initially developed in the base year.

A1.1.2 Included sources and activity data management

As adapted from ISO 14064-1, the emissions sources deemed significant for inclusion in this inventory were classified into the following categories:

- **Direct GHG emissions (Category 1):** GHG emissions from sources that are owned or controlled by the company.
- **Indirect GHG emissions (Category 2):** GHG emissions from the generation of purchased electricity, heat and steam consumed by the company.
- **Indirect GHG emissions (Categories 3-6):** GHG emissions that occur as a consequence of the activities of the company but occur from sources not owned or controlled by the company.

Table 14 provides detail on the categories of emissions included in the GHG emissions inventory, an overview of how activity data were collected for each emissions source, and an explanation of any uncertainties or assumptions made based on the source of activity data. Detail on estimated numerical uncertainties are reported in Appendix 1.

Data are collected and collated following the requirements of ISO14064-1:2018 and in alignment with the technical guidelines of the Carbon Neutral Government Programme and Toitū CarbonReduce Programme. Data for this report were collected in 2025 and collated in 2026.

Table 14. GHG emissions activity data collection methods and inherent uncertainties and assumptions

GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
Category 1: Direct emissions and removals	Stationary combustion	Diesel stationary combustion LPG stationary commercial Natural Gas distributed commercial	Assumed all supplier reports are accurate data comes from contractors via Campus Services Manager, Facilities Management using templates provided.	Default unit and emission factor selected to report on these sources	NO
	Mobile combustion (incl. company owned or leased vehicles)	Diesel mobile combustion (fuel cards) Petrol mobile combustion (fuel cards) LPG mobile combustion (fork lifts)	Assumed all supplier reports are accurate. Data comes from Procurement Manager, Finance.	Default unit and emission factor selected to report on these sources	NO
	Leakage of refrigerants	Dry ice CH ₄ CO ₂ HCFC-22 (R-22, Genetron 22 or Freon 22) R-404A R-410A	UoA prepared a reporting template and requested suppliers to fill it in, following MfE 2022 guidelines for monitoring and reporting of GHG. Purchases/top-ups and leakage assumed as equal during measurement period.	Default unit and emission factor selected to report on these sources	NO
	Emissions - Industrial processes	Acetylene use	Assumed all supplier reports are accurate. Data comes from Procurement Manager, Finance.	Default unit and emission factor selected to report on these sources	NO

GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
	Addition of livestock waste to soils	Agricultural Soils Sheep Manure Management Sheep	Data provided by farm manager is assumed to be accurate.	Default unit and emission factor selected to report on these sources	NO
	Enteric fermentation	Enteric Fermentation Sheep	Data provided by farm manager is assumed to be accurate.	Default unit and emission factor selected to report on these sources	NO
Overall assessment of uncertainty for Category 1 emissions and removals			Low		
Category 2: Indirect emissions from imported energy	Imported electricity	Electricity Toitū carbonzero certified factor Ecotricity Electricity Toitū carbonzero certified factor Prime Energy Electricity	Assumed all supplier invoices are accurate. Data comes from Energy Manager, Facilities Management.	Supplier specific emission factors provided by Toitū have been used for carbonzero certified electricity when using market-based reporting. Otherwise, default unit and grid emission factor selected to report on these sources (location-based)	YES for Toitū carbonzero certified suppliers NO for grid electricity supplier
	Imported energy	Steam generation - Pre-calculated (tCO ₂ e)	Assumed all supplier invoices are accurate. Data comes from Energy Manager, Facilities Management.	Default unit and emission factor selected to report on these sources	NO
Overall assessment of uncertainty for Category 2 emissions and removals			Low		
Category 3: Indirect emissions from transportation	Business travel - Accommodation	Accommodation - Australia	Assumed data from supplier is correct and accurate - Accommodation data is based on number of room nights paid for by the University. Data comes from Procurement Manager, Finance.	Default unit and emission factor selected to report on these sources	NO

GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
		Accommodation - Austria Accommodation - Belgium Accommodation - Canada Accommodation - Chile Accommodation - China (Hong Kong) Accommodation - Czech Republic Accommodation - Fiji Accommodation - Finland Accommodation - France Accommodation - French Polynesia Accommodation - Germany Accommodation - Greece Accommodation - India Accommodation - Indonesia	Not all countries have a specified emission factor. As more countries are added assessed, these emissions will have more certainty on accuracy.	For countries without a specified emission factor, the New Zealand emission factor has been selected as the default.	

GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
		Accommodation - Ireland Accommodation - Italy Accommodation - Japan Accommodation - Malaysia Accommodation - Netherlands Accommodation - New Zealand Accommodation - New Zealand Accommodation - Portugal Accommodation - Singapore Accommodation - South Korea Accommodation - Spain Accommodation - Switzerland Accommodation - Taiwan Accommodation - Thailand			

GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
		Accommodation - Turkey Accommodation - United Arab Emirates Accommodation - United Kingdom Accommodation - United States			
	Business travel - Transport (non-company owned vehicles)	Air travel domestic (Aerospatiale ATR 7) Air travel domestic (Airbus 320) Air travel domestic (Cessna Light Aircraft) Air travel domestic (De Havilland Dash) Air travel domestic (Pilatus PC-12) Air travel domestic (Saab 340B) Air travel domestic (average) Air travel long haul (average) Air travel long haul (business) Air travel long haul (econ)	Assumed data from supplier is correct and accurate - Air transport data is based on flights boarded. Rental car data is based on bookings paid for by the University. Data comes from Procurement Manager, Finance.	Emission factor specific to aircraft size (domestic), class booked (international) and short/long haul flights (international). When an average emission factor is selected, this is due to not knowing the type of aircraft or class booked.	YES - Travel reports are carbon compatible report (CCR).

GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
		Air travel long haul (econ+) Air travel short haul (average) Air travel short haul (econ) Air travel short haul b/f class Accommodation (spend-based) Air passenger transport (spend-based) Petrol (spend-based) Rental Car average (diesel) Rental Car average (hybrid) Rental Car average (petrol) Rental Car EV - average Taxi (regular)			



GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
	Client and visitor transport	Air travel long haul (average) Air travel short haul (average)	High uncertainty. Assumptions: departure airport allocated by student's country of citizenship. It is assumed 80% of international students located in New Zealand took a return to their countries of citizenship within the same year. The remaining 20% are assumed to have taken a one-way flight to New Zealand from their countries of origin.	The average emission factor was selected due to not knowing the type of aircraft or class booked.	NO
	Upstream freight - Paid by the organisation	Freight Air travel Domestic (average) Freight Air travel long haul (average) Freight Air travel short haul (average) Freight Road all trucks (average) Freight Road van (average)	Medium uncertainty. Assumed supplier reports are accurate, some estimation required. When distance (km) is not included in a report, assumptions are made to estimate the distance. If weight (kg) is not included, assumptions are made to estimate the average package size based on a similar freight report.	The average emission factor was selected due to not knowing the type of aircraft or vehicle used for transit.	NO
	Employee commuting	Bus travel (average) Car Average (diesel) Car Average (hybrid) Car Average (petrol) Car Average (PHEV petrol) Car EV - average Electric bike Electric scooter (Commuting)	High uncertainty. Data taken from staff commuting survey and extrapolated for all full time equivalent staff. Further statistical analysis of survey results focusing on the distance range variable was conducted. The results indicate the following trends: commute distances below 20 km tend to be underrepresented, while commute distances above 20 km tend to be overrepresented. No adjustments have been made to the data in this IMR to reflect the above trend.	The average emission factor was selected for each vehicle type and fuel type due to unknown engine size of vehicle used for the commute.	NO

GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
		Ferry travel (foot passengers) Motorcycle Rail metropolitan (diesel) Rail metropolitan (electric) Taxi (regular)			
	Working from home	Working from home	High uncertainty. Data taken from staff commuting survey and extrapolated for all full-time equivalent staff. This data set is used, as it is based on estimates of actual employee days.	Default unit and emission factor selected to report on these sources	NO
Overall assessment of uncertainty for Category 3 emissions and removals			Medium to High		
Category 4: Indirect emissions from products used by organisation	Purchased goods and services	Paper use - default Water supply	Assumed supplier reports are accurate	Default unit and emission factor selected to report on these sources	NO
	Disposal of solid waste - Landfilled	Decontamination of medical waste - Autoclaving Incineration of clinical waste Waste landfilled - Hampton Downs	Recycling of plastic, aluminium and glass carries higher level of uncertainty. Assumptions based on 2019 baseline waste analysis of 'bottles and cans' materials distribution.	Where landfill location is known, specific emission factor is applied. Default unit and emission factor selected to report on all other sources.	YES for Hampton Downs Landfill NO for remaining emission factors

GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
		Waste landfilled LFGR Mixed waste			
	Disposal of solid waste - Not landfilled	Waste disposal recycling of Aluminium Waste disposal recycling of Batteries Waste disposal recycling of Glass Waste disposal recycling of Paper Waste disposal recycling of Plastic Waste disposal recycling of Steel cans	Assumed supplier reports are accurate	Default unit and emission factor selected to report on these sources	NO
	Recycling process	Recycling - Aluminium Recycling Recycling - Batteries (non-automotive) Recycling - Card Recycling - Mixed Glass Recycling - Mixed Plastic Recycling - Mixed Plastics Recycling - Paper Recycling - Steel cans	Assumed supplier reports are accurate	Default unit and emission factor selected to report on these sources	NO



GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
	Disposal of solid waste - Not landfilled	Composting	Assumed supplier reports are accurate	Default unit and emission factor selected to report on these sources	NO
	Disposal of liquid waste - Wastewater	Wastewater for treatment plants (average)	Assumed supplier reports are accurate	Default unit and emission factor selected to report on these sources	NO
	Transmission of energy (T&D losses)	Electricity distributed T&D losses Electricity Toitū carbonzero certified factor Ecotricity (T & D losses) Electricity Toitū carbonzero certified factor Prime Energy (T & D losses) Natural Gas distributed T&D losses	Assumed supplier reports are accurate	Default unit and emission factor selected to report on these sources	NO
Overall assessment of uncertainty for Category 4 emissions and removals			Low		
For more detail refer to:	University of Auckland Information Management Procedures for Carbon Audit				

GHG emissions category	GHG emissions source or sink subcategory	Overview of activity data and evidence	Explanation of uncertainties or assumptions around your data and evidence	Use of default and average emissions factors	Pre-verified data
	University of Auckland GHG Inventory Definitions & Source Information				



A1.1.3 Excluded emissions sources and sinks

Emissions sources in Table 16 have been identified and excluded from this inventory.

Table 15. GHG emissions sources excluded from the inventory

Business unit	GHG emissions source or sink	GHG emissions category	Reason for exclusion
The University of Auckland	Products and services (≤ \$99,000)	Indirect - category 4 - (From products and services used by the organisation)	Supply chain assessment is expected to be included in the next reporting cycle. Procurement analytics system has been commissioned.
The University of Auckland	Sinks		Data is not systematically collected in a way that enables analysis of this kind. Phase 1 is under way to identify land which may fit the programme criteria for sinks.
The University of Auckland	Waste - printer recycling	Indirect - category 4 - (From products and services used by the organisation)	Excluded due to de minimis.
The University of Auckland	Waste - Goldies vineyard	Indirect - category 4 - (From products and services used by the organisation)	Excluded as the quality of the supplier data is not sufficient this year, and it is deemed to be de minimis.
The University of Auckland	Construction and demolition	Indirect - category 4 - (From products and services used by the organisation)	C&D waste monitoring is now part of major projects delivery via sustainable design and delivery guidelines and reported under Greenstar accreditation requirements. For minor capital works, structured process will be established over the next two reporting cycles as part of the wider waste management procurement.
The University of Auckland	Fertiliser use - Grounds maintenance	Category 1: Direct emissions and removals	Excluded due to de minimis.
The University of Auckland	Fertiliser use - Epsom Sports Field	Category 1: Direct emissions and removals	Excluded due to de minimis.
The University of Auckland	Fertiliser use - Ngapouri Research Farm	Category 1: Direct emissions and removals	Excluded as it falls outside of the university's operational control.

A1.2 QUANTIFIED INVENTORY OF EMISSIONS AND REMOVALS

A1.2.1 Calculation methodology

A calculation methodology has been used for quantifying the emissions inventory based on the following calculation approach, unless otherwise stated below:

$$\text{Emissions} = \text{activity data} \times \text{emissions factor}$$

The quantification approach(es) has not changed since the previous measurement period

All emissions were calculated using Toitū emanage with emissions factors and Global Warming Potentials provided by the Programme (see Appendix 1 - data summary.xls). Global Warming Potentials (GWP) from the IPCC fifth assessment report (AR5) are the preferred GWP conversion⁵.

Where applicable, unit conversions applied when processing the activity data has been disclosed.

There are systems and procedures in place that will ensure applied quantification methodologies will continue in future GHG emissions inventories.

A1.2.2 GHG Storage and liabilities

A1.2.2.1 GHG STOCKS HELD ON SITE

Refrigerants and fuels may be stored on site, but their accidental leakage or release could result in a large increase in emissions for that period. Refrigerants such as HFCs, PFCs and SF₆ are GHGs with high global warming potentials, so material volumes of these or fuel are reported as potential liabilities.

Table 16. Total storage as of year end with potential GHG emissions liabilities.

GHG gas stock held	Quantity	Unit	Potential liability (tCO ₂ e)
Acetylene use	133.16	kilograms	0.45
Ammonia R717 (also known as NH ₃)	33.00	kilograms	0.00
Argon	1,313.33	kilograms	0.00
Argoshield	324.85	kilograms	0.04
CO ₂	8,164.90	kilograms	8.16
Diesel stationary combustion	46,571.00	litres	124.80
HFC-32	2.00	kilograms	1.35
Isoflurane	3.99	kilograms	1.96
LPG stationary commercial	351.00	kilograms	1.04
Methane (CH ₄)	23.27	kilograms	0.65
N ₂ O	16.18	kilograms	4.29
Petrol	250.00	litres	0.60
R-404A	47.00	kilograms	185.31
R-407A	0.00	kilograms	0.00
R-407C	0.00	kilograms	0.00
R-410A	86.00	kilograms	165.42
Sevoflurane	3.83	kilograms	0.83
Sulphur Hexafluoride (SF ₆)	27.90	kilograms	655.65
Total potential liability			1,150.56

⁵ If emission factors have been derived from recognised publications approved by the programme, which still use earlier GWPs, the emission factors have not been altered from as published.

A1.2.3 Supplementary results

Holdings and transactions in GHG-related financial or contractual instruments such as permits, allowances, verified offsets or other purchased emissions reductions from eligible schemes recognised by the Programme are reported separately here.



APPENDIX 2: SIGNIFICANCE CRITERIA USED

Table 17. Significance criteria used for identifying inclusion of indirect emissions

Emission source	Magnitude	Level of influence	Risk or opportunity	Sector specific guidance	Outsourced	Employee engagement	Intended Use and Users	Include in inventory?
	The indirect emissions or removals that are assumed to be quantitatively substantial. (e.g. >1% when compared to the total Toitū carbon programmes boundary).	The extent to which the organisation has the ability to monitor and reduce emission and removals.	Exposure to risk (e.g. climate-related risks such as financial, regulatory, supply chain, product and customer, litigation, reputational risks) or its opportunity for business (e.g. new market, new business model).	CNGP	The indirect emissions and removals resulting from outsourced activities that are typically core business activities.	The indirect emissions that could motivate employees to reduce energy use or that federate team spirit around climate change (e.g. energy conservation incentives, carpooling, internal carbon pricing).	Does the emissions source need to be measured to cater for your intended use and/or users?	Use your significance criteria entries as a guide to make a decision on whether to include or exclude. There is no prescriptive rule on what number of 'Yes' and 'No' entries result in inclusion in the inventory.
Accommodation		•	•	•	•	•	•	YES
Agricultural soils sheep*	ALL Categories 1 and 2 deemed significant in principle		•	•				YES
Air travel domestic, short and long haul (average): Work-related (staff and students)	•	•	•	•	•	•	•	YES
Air travel short and long haul (average): Category 3 - Emissions from Client and visitor transport (International students)	•	•	•	•	•	•	•	YES

Emission source	Magnitude	Level of influence	Risk or opportunity	Sector specific guidance	Outsourced	Employee engagement	Intended Use and Users	Include in inventory?
Direct fugitive emissions arising from the release of GHGs	ALL Categories 1 and 2 deemed significant in principle		•	•				YES
Construction & demolition waste*		•	•		•			NO - In progress / will be reported separately once the data are available. Refer to IMR section targets section
Composting		•	•			•	•	YES
Diesel: Fuel cards	ALL Categories 1 and 2 deemed significant in principle	•	•	•				YES
Diesel stationary combustion: City campus generator	ALL Categories 1 and 2 deemed significant in principle	•	•	•				YES
Diesel stationary combustion: Fire pumps	ALL Categories 1 and 2 deemed significant in principle	•	•	•				YES
Purchased electricity	ALL Categories 1 and 2 deemed significant in principle		•	•				YES

Emission source	Magnitude	Level of influence	Risk or opportunity	Sector specific guidance	Outsourced	Employee engagement	Intended Use and Users	Include in inventory?
Electricity distributed T&D losses: Category 4 - Emissions from purchased fuel and energy related activities	ALL Energy T&D losses deemed significant in principle		•	•				YES
Enteric fermentation dairy cattle	ALL Categories 1 and 2 deemed significant in principle		•	•				YES
Enteric fermentation sheep	ALL Categories 1 and 2 deemed significant in principle		•	•				YES
Freight			•	•	•		•	YES
LPG stationary commercial	ALL Categories 1 and 2 deemed significant in principle		•	•				YES
Manure management sheep*	ALL Categories 1 and 2 deemed significant in principle		•	•				YES
Natural Gas distributed commercial	ALL Categories 1 and 2 deemed significant in principle		•	•				YES
Natural Gas distributed T&D losses: Category 4 - Emissions from the transmission of energy	ALL Energy T&D losses deemed significant in principle		•	•				YES

Emission source	Magnitude	Level of influence	Risk or opportunity	Sector specific guidance	Outsourced	Employee engagement	Intended Use and Users	Include in inventory?
Paper use: Category 4 - Emissions from purchased goods		•	•				•	YES
Petrol: Fuel cards	ALL Categories 1 and 2 deemed significant in principle	•	•	•				YES
Rental car average (All fuel types)	ALL Categories 1 and 2 deemed significant in principle	•	•	•				YES
Staff commute*						•	•	YES
Staff reimbursements	Although de minimis, included as it is material to the completeness of the business travel	•		•	•			YES
Steam generation CO ₂ e: Purchased from ADHB	ALL Categories 1 and 2 deemed significant in principle		•	•				YES
Taxi (regular)		•	•	•	•	•	•	YES
Waste recycling transportation & processing		•	•			•	•	YES
Waste landfilled		•	•	•				YES
Water supply		•	•	•				YES
Waste water				•		•	•	YES

Emission source	Magnitude	Level of influence	Risk or opportunity	Sector specific guidance	Outsourced	Employee engagement	Intended Use and Users	Include in inventory?
Working from home		•	•	•				YES
* Emission source added in 2024								



APPENDIX 3: CERTIFICATION MARK USE

Waipapa Taumata Rau | The University of Auckland may choose to make use of the Certification Marks for the period 2025 in marketing and communication materials both internally and externally.

APPENDIX 4: REFERENCES

International Organization for Standardization, 2018. ISO 14064-1:2018. Greenhouse gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals. ISO: Geneva, Switzerland.

World Resources Institute and World Business Council for Sustainable Development, 2004 (revised). The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. WBCSD: Geneva, Switzerland.

World Resources Institute and World Business Council for Sustainable Development, 2015 (revised). The Greenhouse Gas Protocol: Scope 2 Guidance. An amendment to the GHG Protocol Corporate Standard. WBCSD: Geneva, Switzerland.

APPENDIX 5: REPORTING INDEX

This report template aligns with ISO 14064-1:2018 and meet Toitū carbonreduce programme Organisation Technical Requirements. The following table cross references the requirements against the relevant section(s) of this report.

Section of this report	ISO 14064-1:2018 clause	Organisational Technical Requirement rule
Cover page	9.3.1 b, c, r 9.3.2 d,	TR8.2, TR8.3
Availability	9.2 g	
Chapter 1: Emissions Inventory Report		
1.1. Introduction	9.3.2 a	
1.2. Emissions inventory results	9.3.1 f, h, j 9.3.3	TR4.14, TR4.16, TR4.17
1.3. Organisational context	9.3.1 a	
1.3.1. Organisation description	9.3.1 a	
1.3.2. Statement of intent		TR4.2
1.3.3. Person responsible	9.3.1 b	
1.3.4. Reporting period	9.3.1 l	TR5.1, TR5.8
1.3.5. Organisational boundary and consolidation approach	9.3.1.d	TR4.3, TR4.5, TR4.7, TR4.11
1.3.6. Excluded business units		
Chapter 2: Emissions Management and Reduction Report		
2.1. Emissions reduction results	9.3.1 f, h, j, k 9.3.2 j, k	TR4.14, TR6.18
2.2. Significant emissions sources		
2.3. Emissions reduction targets		TR6.1, TR6.2, TR6.4, TR6.6, TR6.8,
2.4. Emissions reduction projects	9.3.2 b	TR6.8, TR6.11, TR6.12, TR6.13, TR6.14, TR6.15
2.5. Staff engagement		TR6.1, TR6.9
2.6. Key performance indicators		TR6.19
2.7. Monitoring and reporting	9.3.2 h	TR6.2
Appendix 1: Detailed greenhouse gas inventory	9.3.1 f, g	TR4.9, TR4.15
A1.1 Reporting boundaries		
A1.1.1 Emission source identification method and significance criteria	9.3.1 e	TR4.12, TR4.13
A1.1.2 Included emissions sources and activity data collection	9.3.1 p, q 9.3.2 i	TR5.4, TR5.6, TR5.17, TR5.18,
A1.1.3 Excluded emissions sources and sinks	9.3.1 i	TR5.21, TR5.22, TR5.23
A1.2 Quantified inventory of emissions and removals		
A1.2.1 Calculation methodology	9.3.1 m, n, o, t	
A1.2.2 Historical recalculations		
A1.2.3 GHG Storage and liabilities		
A1.2.3.1 GHG stocks held on site		TR4.18
A1.2.3.2 Land-use liabilities	9.3.3.	TR4.19

A1.2.4 Supplementary results		
A1.2.4.1 Carbon credits and offsets	9.3.3.3	
A1.2.4.2 Purchased or developed reduction or removal enhancement projects	9.3.2 c	
A1.2.4.3 Double counting and double offsetting		
Appendix 2: Significance criteria used	9.3.1.e	TR4.12
Appendix 3: Certification mark use		TR3.6
Appendix 4: References		
Appendix 5: Reporting index		

INDEPENDENT AUDIT OPINION

Toitū Climate Impact Programme certification

To the intended users

Organisation subject to audit: The University of Auckland

Toitū Carbon Programme: Toitū Carbon Reduce organisation certification

ISO 14064-1:2018

ISO 14064-3:2019

Toitū Programme Technical Requirements 3.1

Audit Criteria: Technical Requirements – Audit V3

Carbon Neutral Government Programme: A guide to measuring and reporting greenhouse gas emissions

Certification Mark Guide

Responsible Party: The University of Auckland

Intended users: This report is intended for use of members of the Sustainable Estate and Operations Governance Group, and the wider community of Waipapa Taumata Rau.
Alignment with international and local schemes such as the Science Based Targets Initiative (SBTi) and the New Zealand Carbon Neutral Government Programme (CNGP) are also intended

Registered address: Princes Street, Auckland, 1010, New Zealand

Inventory period: 1/01/2025 - 31/12/2025

Inventory report: IMR_2025_University of Auckland_CR_Org.pdf

We have reviewed the greenhouse gas emissions inventory report ("the inventory report") for the above named Responsible Party for the stated inventory period.

Responsible Party's Responsibilities

The Management of the Responsible Party is responsible for the preparation of the GHG statement in accordance with ISO 14064-1:2018 and the requirements of the stated Toitū carbon programme. This responsibility includes the design, implementation and maintenance of internal controls relevant to the preparation of a GHG statement that is free from material misstatement.

Verifiers' Responsibilities

Our responsibility as verifiers is to express a verification opinion to the agreed level of assurance on the GHG statement, based on the evidence we have obtained and in accordance with the audit criteria. We conducted our verification engagement as agreed in the audit letter, which define the scope, objectives, criteria and level of assurance of the verification. The International Standard ISO 14064-3:2019 requires that we comply with ethical requirements and plan and perform the verification to obtain the agreed level of assurance that the GHG emissions, removals and storage in the GHG statement are free from material misstatement.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit carried out in accordance with the ISO 14064-3:2019 Standards will always detect a material misstatement when it exists. The procedures performed on a limited level of assurance vary in nature and timing from, and are less in extent compared to reasonable assurance, which is a high level of assurance. Misstatements are differences or omissions of amounts or disclosures, and can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of readers, taken on the basis of the information we audited.

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.

Basis of verification opinion

Our responsibility is to express an assurance opinion on the GHG statement based on the evidence we have obtained. We conducted our assurance engagement as agreed in the Contract which defines the scope, objectives, criteria and level of assurance of the verification.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Verification

We have undertaken a verification engagement relating to the Greenhouse Gas Emissions Inventory Report (the 'Inventory Report')/Emissions Inventory and Management Report of the organisation listed at the top of this statement and described in the emissions inventory report for the period stated above.

The Inventory Report provides information about the greenhouse gas emissions of the organisation for the defined measurement period and is based on historical information. This information is stated in accordance with the requirements of International Standard ISO 14064-1 Greenhouse gases – Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals ('ISO 14064-1:2018') and the requirements of the stated Enviro-Mark Solutions Limited (trading as Toitū Envirocare) programme.

Verification strategy

Our verification strategy used a combined data and controls testing approach. Evidence-gathering procedures included but were not limited to:

- activities to inspect the completeness of the inventory;
 - interviews of site personnel to confirm operational behaviour and standard operating procedures;
 - reviewing emission factors for accuracy and appropriateness;
 - sampling of air travel staff, imported electricity, natural gas distributed commercial records to confirm accuracy of source data into calculations;
 - recalculation of air travel client and visitor transport, employee commuting emissions;
- The data examined during the verification were historical in nature.

Basis for modified verification opinion

The following qualifications have been raised in relation to the verification opinion:

The opinion is unmodified.

Verification level of assurance

ISO CATEGORY	LOCATION BASED tCO ₂ e	MARKET BASED tCO ₂ e	LEVEL OF ASSURANCE
Category 1	4,781.96	4,781.96	Reasonable
Category 2	6,129.96	0.00	Reasonable
Category 3 Staff Air Travel	14,364.70	14,364.70	Reasonable
Category 3 All other emissions	36,602.73	36,602.73	Limited
Category 4 (mandatory)	770.07	310.24	Limited
Category 4 (additional)	812.59	812.59	Limited
TOTAL NET EMISSIONS	63,462.01	56,872.22	

GHG PROTOCOL CATEGORIES

GHG SCOPE	tCO ₂ e
Scope 1	4,781.96
Scope 2	6,129.96
Scope 3	52,550.09
Total inventory	63,462.01

Responsible party's greenhouse gas assertion (certification claim)

Toitū carbonreduce organisation certified: Waipapa Taumata Rau | University of Auckland including Auckland Uniservices Limited, all campuses and operational emissions. Toitū carbonreduce certified means measuring emissions to ISO 14064-1:2018 and Toitū requirements; and managing and reducing against Toitū requirements.

Verification conclusion

EMISSIONS - REASONABLE ASSURANCE

We have obtained all the information and explanations we have required. In our opinion, the emissions, removals and storage defined in the inventory report, in all material respects:

- comply with ISO 14064-1:2018 and the requirements of the stated Toitū Climate Impact Programme; and
- provide a true and fair view of the emissions inventory of the Responsible Party for the stated inventory period.

EMISSIONS - LIMITED ASSURANCE

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 the emissions, removals and storage defined in the inventory report:

- do not comply with ISO 14064-1:2018 and the requirements of the stated Toitū Climate Impact Programme; and
- do not provide a true and fair view of the emissions inventory of the Responsible Party for the stated inventory period.

Other information

The responsible party is responsible for the provision of Other Information to meet Climate Impact Programme requirements. The Other Information may include emissions management and reduction plan and purchase of carbon credits, but does not include the information we verified, and our auditor's opinion thereon.

Our opinion on the information we verified does not cover the Other Information and we do not express any form of audit opinion or assurance conclusion thereon. Our responsibility is to read and review the Other Information and consider it in terms of the programme requirements. In doing so, we consider whether the Other Information is materially inconsistent with the information we verified or our knowledge obtained during the verification.



	VERIFIED BY	AUTHORISED BY
Name:	Stephanie Blackwell	Billy Ziemann
Position:	Verifier, Toitū Envirocare	Certifier, Toitū Envirocare
Signature:	 	

Date verification audit: 24 June 2026

Date opinion expressed: 13 July 2026 24 August 2026



STATEMENT OF TOITŪ CARBONREDUCE CERTIFICATION ⁱ

FOR WAIPAPA TAUMATA RAU |
UNIVERSITY OF AUCKLAND



Statement for 01 January 2025 to 31 December 2025

Toitū carbonreduce organisation certified: Waipapa Taumata Rau | University of Auckland including Auckland Uniservices Limited, all campuses and operational emissions

Toitū carbonreduce means committing to ongoing reductions while achieving annual requirements for at least the Toitū mandatory emissions.ⁱⁱ



Measured emissions to ISO 14064-1:2018 and [Toitū requirements](#)



Managing and reducing against [Toitū requirements](#)

This report provides a summary of the annual greenhouse gas (GHG) emissions inventory and management report for Waipapa Taumata Rau | The University of Auckland as part of the annual work to achieve Toitū carbonreduce certification. Additional details of the annual achievements, commitments, and verification are available on request from Waipapa Taumata Rau | The University of Auckland.

Toitū carbonreduce organisation certified: Waipapa Taumata Rau | University of Auckland including Auckland Uniservices Limited, all campuses and operational emissions. Toitū carbonreduce certified means measuring emissions to ISO 14064-1:2018 and Toitū requirements; and managing and reducing against Toitū requirements.

The overall purpose of this report is to support the implementation of Te Taumata Tukuwaro-kore | Net Zero Carbon Strategy and associated initiatives and plans. The main objective is to identify the Greenhouse Gas emissions profile of the University in a manner that is consistent with best practice and the international standards.

Achievements

These achievements have been verified in line with ISO 14064-3:2019 and Toitū carbonreduce Programme Technical Requirements for the 01 January 2025 to 31 December 2025 measurement period.

Emissions measurement

Waipapa Taumata Rau | The University of Auckland's greenhouse gas emissions for this year (01 January 2025 to 31 December 2025) were 63,462.01 tCO₂e. Waipapa Taumata Rau | The University of Auckland has measured the emissions resulting from its operational activities, purchased energy, and selected impacts from its value chain activities, including business travel, freight, and waste sent to landfill. The annual inventory is detailed in the following table. Emissions and reductions are reported using a location-based methodology.ⁱⁱⁱ

The data and information supporting the measurement of GHG emissions were historical in nature.

Category (ISO 14064-1:2018)	Scopes (GHG Protocol)	GHG emissions (tCO ₂ e)		
		Base Year 2019	Previous Year 2024	Current Year 2025
Category 1: Direct emissions (tCO ₂ e)	Scope 1	5,667.38	4,984.91	4,781.96
Category 2: Indirect emissions from imported energy (location-based method*) (tCO ₂ e)	Scope 2	8,066.06	7,570.48	6,129.96
Category 3: Indirect emissions from transportation (tCO ₂ e)	Scope 3	65,935.12	57,139.79	50,967.43
Category 4: Indirect emissions from products used by organisation (tCO ₂ e)		2,799.14	1,567.04	1,582.66
Category 5: Indirect emissions associated with the use of products from the organisation (tCO ₂ e)		0.00	0.00	0.00
Category 6: Indirect emissions from other sources (tCO ₂ e)		0.00	0.00	0.00
Total gross emissions* (tCO ₂ e)		82,467.70	71,262.22	63,462.01
Total net emissions (tCO ₂ e)		82,467.70	71,262.22	63,462.01

*Gross and net emissions are reported using a location-based methodology. Contact Waipapa Taumata Rau | The University of Auckland for full details.

The operational GHG emission sources included in this inventory are shown in Figure 1 below.

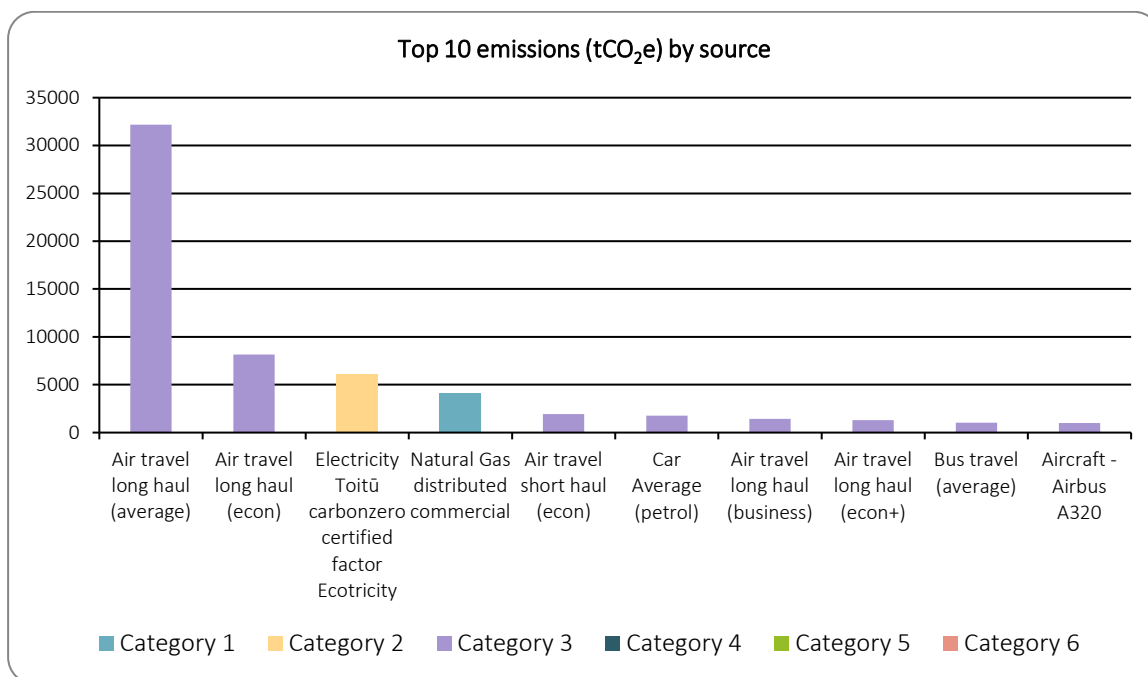


Figure 1: Top 10 GHG emissions (tonnes CO₂e) by source

Scope of Measured inventory

CONSOLIDATION APPROACH

An operational control consolidation approach was used to account for emissions. Organisational boundaries were set with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards.^{iv}

This approach was chosen as the University has control over its operations and has authority to introduce operating policies and corresponding implementation plans.

BOUNDARIES

The University of Auckland was established by The University of Auckland Act 1961. The University of Auckland (the University), Auckland UniServices Limited (AUL), and the University of Auckland Foundation (the Foundation) are all controlled entities and together form 'the Group'.

AUL operates in New Zealand and has a branch in the Kingdom of Saudi Arabia. The principal activities of the University and AUL are the provision of teaching and research services. The principal activities of the Foundation are raising and stewardship of funds for charitable purposes and advancement of education and health care, assistance of students to pursue courses of study at The University of Auckland, and the general advancement of the University.

The central office of the University's management is located at the Clock Tower, 22 Princes St, Auckland, New Zealand.

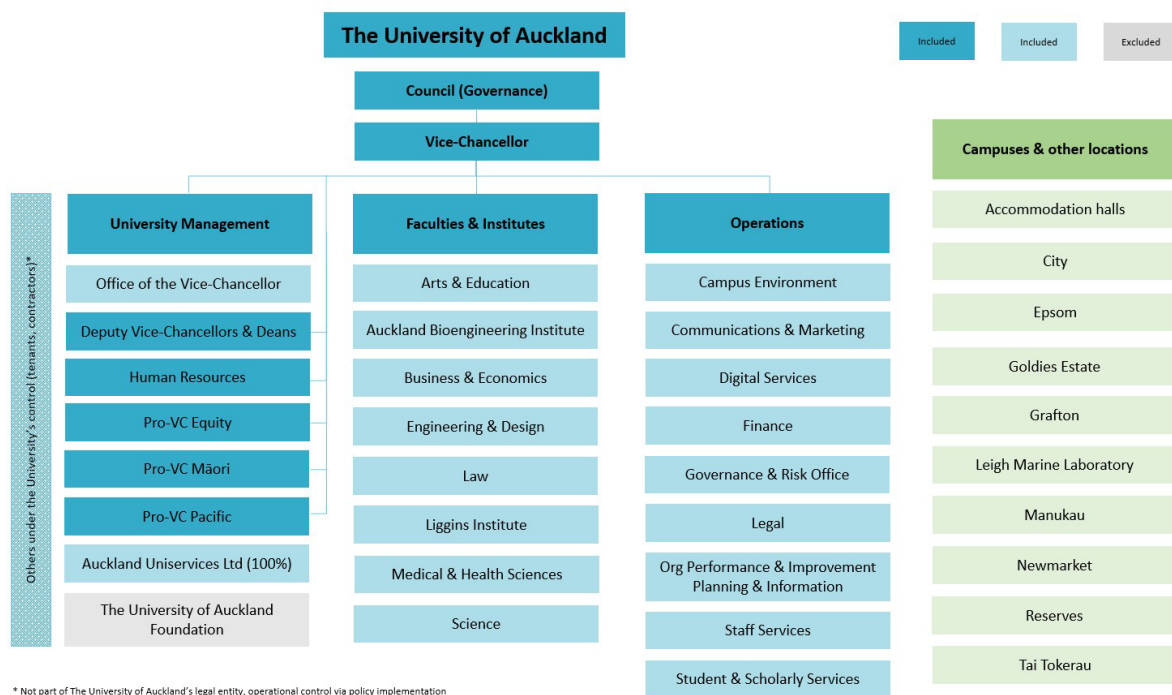


Figure 2: Organisational structure showing business units included and excluded

The University Foundation is excluded from the GHG emissions boundary as it is a separate entity and not under the operational control of the University. The principal activities of the Foundation are raising and stewardship of funds for charitable purposes and advancement of education and healthcare, assistance of students to pursue courses of

study at the University of Auckland, and the general advancement of the University. Excluded emissions do not exceed 5% of the total footprint within the organisation boundary stated.

The Auckland UniServices Limited (AUL) operations in the Kingdom of Saudi Arabia are also excluded from the GHG emissions boundary as it is not under the University's operational control.

Managing and reducing

This is the sixth year of reporting under the Toitū carbonreduce programme. An absolute reduction in Category 1 and 2 emissions of 2,821.52 tCO₂e has been achieved against base year. A reduction in emissions intensity (for Category 1, 2 and mandatory Category 3 and 4 emissions) of 15.44 tCO₂e/\$M has been achieved based upon a 5-year rolling average.

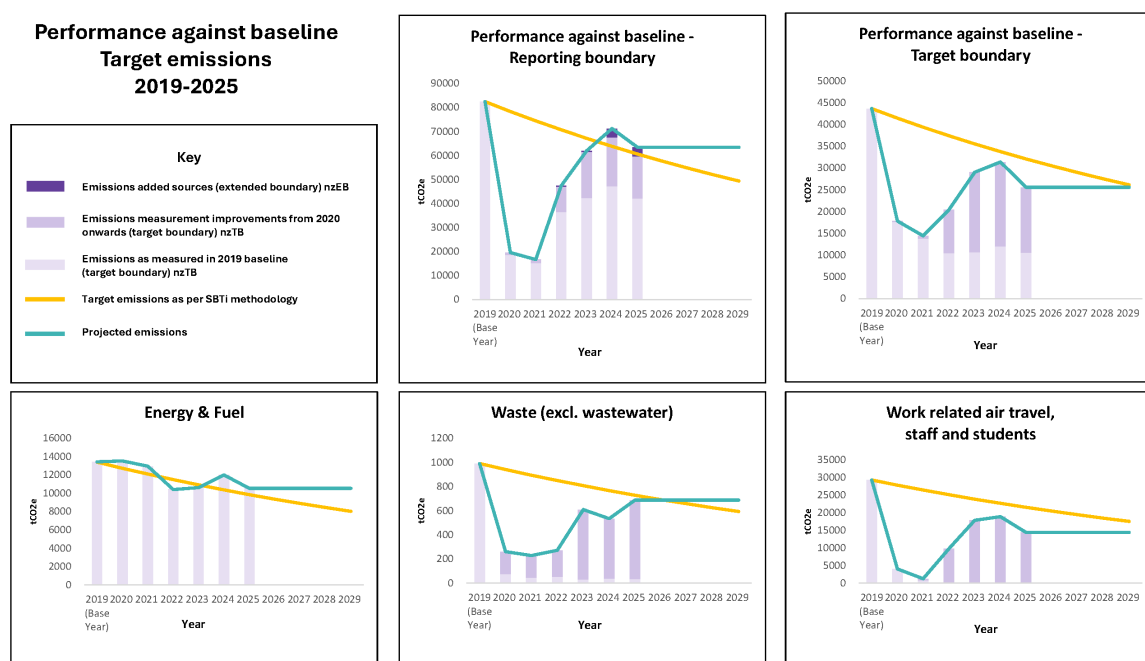


Figure 3: Performance against target since the base year

In 2025, the University carbon profile shows a clear improvement compared to the previous year. Total emissions decreased to 63,462 tCO₂e, representing an approximate 11% reduction from 2024, and remain 23.0% below the 2019 baseline. This indicates sustained progress against baseline levels, despite the year-on-year variability observed in recent reporting periods.

When extended baseline sources are excluded, emissions within the core reporting boundary are 27.6% below the baseline. Furthermore, focusing on the University's defined target boundary (work related air travel, energy including fuel, and waste), emissions are 41.4% below the 2019 baseline. This shows the University has exceeded its 2025 interim target of a 25% reduction and is making strong progress toward the 2030 target of a 50% reduction.

Performance in 2025 reflects a combination of operational efforts, decarbonisation initiatives, and updated emissions factors. Reductions in work related air travel and continued decreases in natural gas consumption have contributed to lower emissions.

Across the estate, decarbonisation continues to be characterised by a shift from gas to electricity, with fossil fuel-based systems progressively replaced by electrified alternatives. This is reflected in rising electricity consumption alongside declining gas use. In 2025, grid electricity purchased increased by 8.8% relative to baseline, while natural gas consumption reduced by 20% relative to baseline.

At the same time, the results are significantly influenced by changes in emissions factors, particularly a reduction in long-haul air travel factors, a decrease in electricity emission factors, and increases in certain waste related factors. Emissions from waste are also included in the University's target commitments and continue to be actively monitored.

The overall composition of the carbon profile has remained relatively stable since the 2019 baseline, with the biggest contributors being air travel and associated emissions, followed by energy-related emissions. Together with staff commuting emissions, these represent over 45% of total emissions in 2025.

The three primary sources of emissions for the 2025 reporting period continue to be work-related air travel, electricity, and gas.

As expressed in Te Taumata Tukuwaro-kore, Net Zero Carbon Strategy in 2022, the University made a strong commitment to meaningful change and alignment with scientific evidence by setting absolute targets for key sources of emissions. Based on progress to date and continued commitment to implementation of the strategy, these targets remain valid and relevant. As part of the mid-cycle review, the University also affirms its commitment to reducing emissions from all material and significant sources identified in its carbon profile.

The absolute target boundary falls from 43,654 tCO₂e at baseline to 25,583 tCO₂e in 2025, representing a 41.4% reduction against baseline and an 18.5% decrease compared with 2024.

- Work related air travel: 14,365 tCO₂e in 2025, a 50.9% decrease against baseline and 23.8% decrease compared with 2024.
- Energy including fuel: 10,531 tCO₂e in 2025, a 21.6% decrease against baseline and 12.2% decrease compared with 2024.

Combined, these two categories represent approximately 40% of the University's carbon profile, demonstrating material progress toward the emissions reduction targets.

These reductions are the result of two key actions: an active decarbonisation programme that has seen gas consumption decrease by over 20% in favour of electricity as the preferred energy source, and continued efforts toward more conscious work-related travel, resulting in 37.4 million less kilometres travelled compared to baseline and a 6.2% year-on-year decrease (6.8 million km).

Importantly, reductions in these two categories represent genuine decreases in emissions driven by changes in activity and energy use, rather than outcomes primarily influenced by changes in emission factors beyond the University's control.

Waste-related emissions were 687 tCO₂e in 2025, representing a 30.6% reduction against the 2019 baseline. This indicates that the 25% reduction target for waste emissions has been achieved and surpassed; however, this result should be interpreted with caution.

The overall waste profile, in terms of quantity, continues to trend upward. Waste volume is 38% above the 2019 baseline and 34.5% higher than 2024, while year-on-year emissions are also up by 28.7%. This indicates that the apparent emissions reduction is not driven by reduced activity, but is largely influenced by changes in emission factors, particularly updated assumptions relating to landfill methane recovery and corrections to previous methodologies.

Waste represents approximately 1% of the total carbon profile, and the scale of this source should be considered in context. Nonetheless, the upward trend in waste volumes indicates that continued efforts are required to reduce waste generation across the University's operations, alongside ongoing improvements in waste diversion, particularly given that waste remains a source of broader environmental impacts beyond carbon emissions.

When looking at intensity based indicators, these show:

Against 2019 baseline:

- 38% lower per m² of Built Environment (GFA),
- 32% lower per Equivalent Full-Time Student (EFTS),
- 26% lower per Full-Time Employee (FTE), and
- 40% lower per unit of operating revenue

and,

Against 2024 reporting period

- 10% lower per m² of Built Environment (GFA),
- 17% lower per Equivalent Full-Time Student (EFTS),
- 8% lower per Full-Time Employee (FTE), and
- 13% lower per unit of operating revenue

This signals improved efficiency across all key activity drivers, with emissions reductions being achieved not only through absolute decreases, but also through improved emissions performance relative to growth in the University's estate, population, and operations.

Te Taumata Tukuwaro- kore Net Zero Carbon Progressive Pathway - Target name	Baseline period	Target date	Reduction target	Type of target (intensity or absolute)	Current performance (tCO ₂ e)	Current performance (%)	Comments	Interim target date	Interim reduction target	Current performance against 2025 interim target
Work related Air travel, staff and students	2019	2030	50%	Absolute	14,365	-50.9	Performance is based on 2019 figures and is influenced by: University's efforts to reduce emissions, data improvements via internal processes and supplier engagement, more accurate emission factors available, and emission factor changes beyond the University's control. Refer to the summary of emissions that includes quantities in units of measure for a more comprehensive assessment of the University's efforts to reduce emissions.	2025	25%	Achieved and surpassed

Te Taumata Tukuwaro- kore Net Zero Carbon Progressive Pathway - Target name	Baseline period	Target date	Reduction target	Type of target (intensity or absolute)	Current performance (tCO ₂ e)	Current performance (%)	Comments	Interim target date	Interim reduction target	Current performance against 2025 interim target
Energy and fuel	2019	2030	50%	Absolute	10,531	-21.6	Performance is based on 2019 figures and is influenced by: University's efforts to reduce emissions, data improvements via internal processes and supplier engagement, more accurate emission factors available, and emission factor changes beyond the University's control. Refer to the summary of emissions that includes quantities in units of measure for a more comprehensive assessment of the University's efforts to reduce emissions. Note the emission factor for grid source electricity is 22.2% lower than the previous reporting year due to increased renewable generation in New Zealand.	2025	25%	Based on location method, a further 3.4% reduction required to achieve the target. When accounting for Climate Positive (carbon zero) certified sourced electricity, the target has been met and surpassed.

Te Taumata Tukuwaro- kore Net Zero Carbon Progressive Pathway - Target name	Baseline period	Target date	Reduction target	Type of target (intensity or absolute)	Current performance (tCO ₂ e)	Current performance (%)	Comments	Interim target date	Interim reduction target	Current performance against 2025 interim target
Waste	2019	2030	50%	Absolute	688	-30.6	Performance is based on 2019 figures and is influenced by: University's efforts to reduce emissions, data improvements via internal processes and supplier engagement, more accurate emission factors available, and emission factor changes beyond the University's control. Refer to the summary of emissions that includes quantities in units of measure for a more comprehensive assessment of the University's efforts to reduce emissions.	2025	25%	Achieved and surpassed

Commitments

Reduction targets

Waipapa Taumata Rau | The University of Auckland is committed to managing and reducing its emissions. Waipapa Taumata Rau | The University of Auckland's commitments, including GHG emissions reduction targets and plans, have been reviewed and are in line with Toitū carbonreduce programme requirements.

Targets have been set as part of the commitments of Te Taumata Tukuwaro-kore | Net Zero Carbon Strategy, published in Q4 2022.

Progressive pathway and targets: Te Taumata Tukuwaro-kore Net Zero Carbon Strategy (Nov 2022)	Source	2022	2023	2024	2025	2030
Net Zero boundary (GHG baseline 2019)	- Travel (work related) - Energy - Waste (landfill and recycling)	Develop Implementation Plan	Launch implementation plan	Launch implementation plan	25 % Reduction Target	50% Reduction Target
Extended Net Zero boundary (GHG baseline 2019 gaps)	- Travel (international students inbound) - Waste: construction and demolition - Working from home - Staff and student commuting - Freight and couriers	Start/improve data gathering	Establish / Improve baseline	Set Targets		Achieve target set in 2024
Data improvement and monitoring (2025 target review cycle)	- Embodied Carbon (from materials) - Information and Communication Technology - Food on campus	Develop	Start data gathering	Assess significance	Set targets / develop implementation plan	Achieve targets set in 2025
Mitigation programme for residual emissions	- Mitigation boundary	Establish mitigation boundary	Develop a well-informed, evidence-based carbon mitigation programme	Develop a well-informed, evidence-based carbon mitigation programme	Begin mitigation programme	Achieve Net Zero Trajectory Status

Looking ahead, Waipapa Taumata Rau | The University of Auckland is currently focused on the following projects.

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
Energy and fuel	B114 Teaching Space Upgrade	Upgraded with LED lighting and modern control systems to improve energy efficiency	Campus Environment: Capital Works, Facilities Management	Completed	Reduced operational energy costs
		Decommissioned gas boiler system through transition to more efficient electric systems			
	B614 O'Rorke Hall Refurbishment	Decarbonised domestic hot water system to reduce reliance on fossil fuels	Campus Environment: Capital Works, Facilities Management	Completed	Circular economy outcomes (reuse of furniture)
		Replaced bedroom and dining hall furniture, and donated outgoing furniture			
		Diverted waste from landfill through recycling of materials, including metals from light fittings and heaters			
	B260 Carpark LED Upgrade	Replaced ageing carpark and emergency lighting with energy-efficient LED fittings and installed lighting controls to optimise performance	Campus Environment: Capital Works, Facilities Management	Completed	Verified annual savings of approximately \$58,000
		Reduced electricity consumption by approximately 292,000 kWh per year			
	B260 Building Tuning	Identified and rectified control faults in pumps, valves and sensors to eliminate unnecessary operation and improve system efficiency	Campus Environment: Facilities Management	In progress	Improved occupant thermal comfort
		Optimised pump operation and air handling systems through control adjustments, setpoint tuning and improved sequencing			

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Replaced faulty components (including valves and sensors) to prevent simultaneous heating and cooling and reduce energy losses			Verified annual savings of ~\$73,900
		Completed after-hours audit to identify equipment operating unnecessarily , with remediation actions implemented			
		Implemented building-wide heating and cooling setpoint optimisation to improve performance and reduce demand			
		Used metering and monitoring data to support ongoing post-occupancy tuning and continuous optimisation			
		Delivering verified annual savings of approximately 480,000 kWh (12% electricity and 26% gas) and ~80 tCO ₂ e emissions			
	B405 Building Tuning	Completed after-hours audit to identify equipment operating unnecessarily and initiated remediation actions	Campus Environment: Facilities Management	In progress	Improved occupant thermal comfort in meeting rooms and postgraduate spaces
		Identified and replaced faulty temperature sensors and control valves to improve system performance and reduce energy losses			
		Investigated and corrected temperature sensor configuration issues across the building			Anticipated annual savings of \$6,000
		Adjusted cooling and heating setpoints (including building-wide increases and targeted zone changes) to reduce energy use			

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Reduced minimum supply air settings in high-intensity spaces to optimise heating demand			
		Optimised setpoints in communications and specialist rooms to improve efficiency			
		Conducted heating hot water trials to assess feasibility of lower temperature operation and support boiler decarbonisation			
		Initiated updates to fan coil unit control methodology to address temperature variability			
		Established ongoing monitoring, data analysis and optimisation to support continuous building tuning			
	B201 Building Tuning	Investigated photovoltaic (PV) system outage and initiated maintenance to restore generation	Campus Environment: Facilities Management	Completed	Improved occupant comfort
		Achieved water consumption below target through effective rainwater harvesting system performance			
		Maintained sector-leading performance at 65 kWh/m ² /year, the lowest energy intensity on campus			
		Used performance data to monitor building efficiency and support ongoing optimisation			
	B310 Building Tuning	Completed after-hours audit and implemented updated operating schedules to reduce unnecessary energy use	Campus Environment: Facilities Management	Completed	Improved occupant comfort

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Established ongoing energy monitoring and verification			
		Confirmed building performance is operating below design energy targets based on 12 months of monitoring			
		Investigated further efficiency opportunities in high-use areas, including pool and sports halls			
		Used monitored data to support continuous optimisation of building performance			
		Achieved 13% lower annual energy use than design target (3.73 GWh vs 4.30 GWh)			
	B315 Decarbonisation	Decommissioned gas from a catering tenancy, requiring tenant to use electric equipment only	Campus Environment: Capital Works	Completed	
	S200 East Power Infrastructure Upgrade	Upgraded electrical infrastructure, including new cable trays, ducting and submain connections, to support building electrification and decarbonisation	Campus Environment: Capital Works	Completed	Landscaping improvements enhance pedestrian experience
		Enabled decarbonisation of multiple buildings through expanded electrical capacity, including Waipapa Marae and Fale Pasifika			
		Increased network capacity and resilience to support business continuity and future campus growth			
		Incorporated additional metering and spare capacity to support enhanced energy monitoring and future upgrades			

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Optimised underground services layout to support future redevelopment of the precinct, and delivered landscaping improvements to enhance biodiversity and reduce stormwater runoff			
	Project Sunshine Solar Energy	Exploring future solar energy procurement to support long-term cost stability and emissions reduction	Campus Environment: Commercial, Facilities Management, Sustainability Office	In progress	
		Completed request further information phase with potential vendors and evaluation of supplier responses			
		Initiating an energy demand study to inform the upcoming request for proposals stage			
	B260 Low-Load Cooling Resilience Project	Reviewing the current chilled water system at OGGB to determine if the plant can support low cooling loads after the data centre exit	Campus Environment: Facilities Management	In progress	
	Space and Resource Booker adjustment	Introduced system prompts and communications to reduce unnecessary after-hours bookings, avoidable HVAC operation and after-hours energy use by aligning bookings more closely with actual occupancy	Campus Environment: Facilities Management, Sustainability Office	Completed	Increased awareness of space use impacts
		Updated booking system to require acknowledgement of operational impacts and reinforce cancellation requirements	Digital Services		
			Academic Services		

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
Water	UoA Water Improvement Project	Reviewing and upgrading water metering to capture time-of-use data, enabling more accurate reporting, earlier leak detection, and improved forecasting of water demand, with project delivery supported by an approved business case	Campus Environment: Facilities Management	In progress	
Staff commuting	Staff Commuting Dashboard	Integrated staff commuting survey results into internal Staff Commuting Dashboard within Enterprise Management System	Campus Environment:	Completed	
			Sustainability Office		
	Staff Benefits and Sustainability Phase 1	Integrated staff commuting survey results into a discovery project focused on the intersection of staff benefits and institutional sustainability commitments	Human Resources Campus Environment: Sustainability Office	Completed	
	B310 End of trip facilities	A secure bike cage for lightweight bikes (capacity of 52) was added as part of the redevelopment of the Recreation Centre	Campus Environment Planning & Development, Capital Works	Completed	Improved cyclist experience
Waste	B_OCH recovery and recycling	Recovered ~800 tonnes of construction and demolition waste (69% of total weight) from adaptive reuse project, via contractor engagement and monitoring	Campus Environment: Capital Works	Completed	
	B242 Temporary courts reuse	Disassembled temporary sports courts for relocation and future reassembly	Campus Environment: Capital Works	Completed	
		Avoided demolition waste and embodied carbon from new construction through planned reuse of modular building elements			

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
	B241 Villa relocation	Relocated historic villa (former university early childhood education centre) for reuse as residential dwelling rather than demolition, to make room for B230 construction	Campus Environment: Capital Works	Completed	Villa became a family home
	Waste Dashboard	Developed a dashboard to consolidate data on key operational waste streams, including landfill, recycling, and organic waste from main contractor, displaying data from multiple catchment points across the campuses	Campus Environment: Facilities Management	Completed	
	Repair Café	Delivered inaugural Repair Café event on campus to extend life of household items	Faculty of Engineering & Design	Completed	Circular economy outcomes and repair skills for staff and students
		Reduced emissions associated with disposal and replacement purchases	Research Centres		
Other	Modern Slavery Clause	Included modern slavery clause in all Campus Environment contracts and contract variations	Campus Environment: Commercial	BAU	Improvements in supply chain human rights standards
	Sustainable Procurement Guide	Developing Sustainable Procurement Guidelines to embed whole-of-life value and sustainability considerations across all procurement activities	Campus Environment: Sustainability Office	In progress	Improvements in supply chain (ESG outcomes)
		Strengthening integration of emissions reduction, circularity, and social outcomes through lifecycle assessment, supplier engagement and structured sustainability criteria	Strategic Procurement		

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Introducing minimum sustainability weightings and contract KPIs to drive improved supplier performance and ongoing emissions reductions			
		Establishing data and reporting requirements to improve visibility of Scope 3 emissions and support future automated sustainability reporting systems			
	Winter Warmer Clothes Drive	Enabled staff to donate 594 items of quality winter clothing to 204 students who attended dedicated events at Grafton and City campuses, with leftover items transferred to Te Tai Tokerau Campus	Student & Scholarly Services: Student Engagement	BAU	Circular economy outcomes and reduced costs for students
		Reduced emissions associated with disposal and new clothing consumption			
	Space Utilisation Survey	Conducted annual surveys of office spaces, teaching spaces, and PhD candidate spaces, to assess space utilisation and optimise allocation of space	Campus Environment: Planning & Development	BAU	Cost savings due to space consolidation
	OGGB Carpark PARCS Replacement Project	Implemented licence plate recognition (LPR) system to improve carpark access and occupancy data	Campus Environment: Facilities Management	In progress	Improved user experience and traffic flow
		Replaced barriers, tickets and swipe cards with automated vehicle recognition and digital payment options			
		Introduced real-time entry and exit tracking to support analysis of usage patterns			

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
	Biodiversity Dashboard	Developing a biodiversity dashboard, drawing on data from iNaturalist platform, and showcasing the flora and fauna present across University campuses	Faculty of Science Campus Planning & Information	In progress	Increased staff and student understanding of ecology
	Sustainable Design and Delivery Guidelines	Introduced checklist for Planning & Development and Capital Works teams to begin using to operationalise Sustainable Design and Delivery Guidelines	Campus Environment: Planning & Development, Capital Works	In progress	Increase staff capability in sustainable design and delivery
		Monitoring usage and uptake across design and capital projects			
	Sustainable Design and Delivery: Uni Hall apartment refurbishment (B436)	Integrated energy efficiency measures, including LED lighting, improved insulation, double glazing, thermally broken frames and optimised ventilation and heating systems	Campus Environment: Planning & Development, Capital Works, Facilities Management	Completed	Improved occupant experience
		Reduced water consumption through installation of low-flow fixtures and efficient hot water systems			
		Enhanced building performance through warm roof system and improved thermal design			Improved accommodation hall staff capability
		Incorporated cultural design elements in landscape and screening			
		Optimised space utilisation through reconfiguration of internal layouts and consolidation of waste and bike storage facilities			

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Embedded waste minimisation through reduced demolition scope, construction waste targets, recycling infrastructure and reuse of materials (e.g. recyclable mattresses)			
		Delivered landscaping improvements to enhance biodiversity and reduce stormwater runoff			
	Sustainable Design and Delivery: Old Choral Hall (B_OCH)	Replaced gas boiler with electric chiller system (decarbonisation)	Campus Environment: Planning & Development, Capital Works, Facilities Management	Post occupancy tuning phase	Increased daylight access and thermal comfort for occupants
		Maintained accessibility as a core design consideration			
		Integrated energy-efficient HVAC and lighting systems designed to operate on demand			
		Improved climate-resilience, assessed embodied carbon impacts and collected detailed construction and demolition waste data			
		Conducting tuning and performance monitoring to support ongoing operational optimisation			
	Sustainable Design and Delivery: B230 design	Designed to achieve Green Star 6 performance, embedding sustainability outcomes across all aspects of the project	Campus Environment: Planning & Development, Capital Works	In progress: Detailed design and early construction	
		Enabling full electrification by excluding gas infrastructure and incorporating rooftop photovoltaic generation			

Emission source	Project	Detail	Responsibility	Status/Completion date/BAU	Potential-co-benefits
		Including end-of-trip facilities and no additional carparking to support low-emissions transport			
		Including Te Aranga design principles			

Certificate details

CERTIFICATION STATUS:	Toitū carbonreduce certified organisation
CERTIFICATE NUMBER:	2024337J, Year 3 of 3 year certificate period ^v
ISSUED:	24 August 2026
VALID UNTIL:	16 October 2027
MEASUREMENT PERIOD:	01 January 2025 to 31 December 2025
BASE YEAR:	01 January 2019 to 31 December 2019
AUDITED BY:	Toitū Envirocare
ASSURED BY:	Toitū Envirocare
CERTIFIED BY:	Toitū Envirocare
LEVEL OF ASSURANCE:	Reasonable for categories 1, 2 and category 3 Staff Air Travel Limited for remaining categories

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Disclaimer: This Certification Summary Statement is a summary of the information (validated and verified for relevant components of the certification) considered for certification and the certification decision. It should not be taken to represent the full submission for certification. Whilst every effort has been made to ensure that the information in this Statement is accurate and complete, Enviro-Mark Solutions Limited (trading as Toitū Envirocare) does not, to the maximum extent permitted by law, give any warranty or guarantee relating to the accuracy or reliability of the information.

Enviro-Mark Solutions Limited (trading as Toitū Envirocare) head office, located at Toitū Envirocare, The Formery, 87 Albert Street, Auckland Central, Auckland 1010, New Zealand, is a third-party validation / verification body.

ⁱⁱ The mandatory sources that must be included in any Toitū carbon programme inventory include:

- All direct emissions from the activities of the organisation, or the part of the organisation being certified. Direct emissions come from assets owned or controlled by the organisation, such as emissions from fleet vehicles, boilers, generators and HVAC systems.
- All emissions from imported energy (electricity, heat and steam)
- Emissions from business travel and freight paid for by the organisation
- Emissions associated with waste disposed of by the organisation, as well as the transmission and distribution of electricity, and natural gas

ⁱⁱⁱ All purchased and generated energy emissions are dual reported using both the location-based method and market-based method in the certified Inventory Report and appendices. This summary document presents the information using the location-based method. Note that reductions and any required compensation are assessed using that method. Dual reporting illustrates the role of supplier choice, onsite renewable energy generation and contractual instruments in managing indirect emissions from energy alongside any ongoing energy efficiency and reduction efforts. This dual reporting aligns with ISO 14064-1:2018 and the GHG Protocol. Please contact this organisation for the dual reporting details applicable to this inventory.

^{iv} Control: the organisation accounts for all GHG emissions and/or removals from facilities over which it has financial or operational control. Equity share: the organisation accounts for its portion of GHG emissions and/or removals from respective facilities.

^v In year 1 (recertification year) of the certificate validity period, this certification summary statement also serves as the verification/validation statement required by paragraph 9.7 of ISO 17029:2019. In year 2 or 3 (surveillance year) this certification summary statement serves only as a summary of the results of the verification/validation of the GHG Statement.



Toitū carbonreduce organisation certified: Waipapa Taumata Rau | University of Auckland including Auckland Uniservices Limited, all campuses and operational emissions



Measured emissions to **ISO 14064-1:2018** and Toitū requirements

ACHIEVEMENT CLAIMS

Measure period: 1/01/2025 - 31/12/2025

Toitū boundary, category 1: 4,781.96 tCO₂e

Toitū boundary, category 2: 6,129.96 tCO₂e

Toitū boundary, category 3-6: 15,523.85 tCO₂e

Toitū boundary, total: 26,435.77 tCO₂e

Additional emissions, category 3-6: 37,026.24 tCO₂e

All measured emissions: 63,462.01 tCO₂e



Managing and reducing against Toitū requirements

ACHIEVEMENT CLAIMS

Toitū boundary cat 1 and 2: - 2,821.52 tCO₂e against base year

Toitū boundary, total: - 15.44 tCO₂e/\$M based on a 5 year rolling average

COMMITMENT CLAIMS

Reduce absolute total work related air travel, energy and fuel, and waste emissions by
50% by the year 2030, relative to base year.

Date issued: 24 August 2026 | Valid until: 16 October 2027 | Certificate Number: 2024337J | Certification Status: Certified Organisation
Company Address: Princes Street, Auckland, 1010, New Zealand | Level of Assurance: Reasonable for categories 1, 2 and category 3 Staff Air Travel Limited for remaining categories
Audited by: Toitū Envirocare | Assured by: Toitū Envirocare | Certified by: Toitū Envirocare

This is a summary of the annual work to achieve Toitū carbonreduce certification. Additional details of this carbon inventory and associated verification, reductions and offsets are available on request from the certified Organisation.