GREENHOUSE GAS EMISSIONS INVENTORY REPORT

Prepared in accordance with ISO 14064-1:2018

Toitū Te Whenua
Land Information New Zealand

Land Information New Zealand

Prepared by (lead author): Melissa Ho

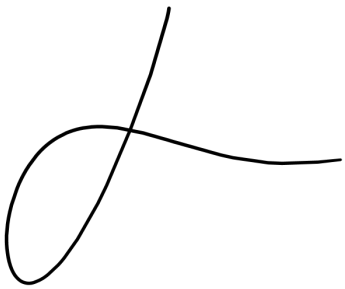
Dated: 23 August 2024

Verification status: Reasonable for category 1, 2, 3 excluding accommodation and working from home, 4 excluding paper use, wastewater treatment and water supply, Limited for remaining categories.

Measurement period: 01 July 2023 to 30 June 2024

Base year period: 01 July 2019 to 30 June 2020

Approved for release by:



Jonny McKenzie, Acting Kaihautū Organisational Effectiveness

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

AVAILABILITY

Summarised information from this report will be published in our annual report. This report will made available on our website, it will also be submitted to the Ministry for the Environment as part of the Carbon Neutral Government Programme (CNGP).

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, 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 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 Quantification and Reporting of Greenhouse Gas Emissions and Removals[1]. 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.

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.

[1] Throughout this document 'GHG Protocol' means the *GHG Protocol Corporate Accounting and Reporting Standard* and 'ISO 14064-1:2018' means the international standard *Specification with Guidance at the 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 report for Toitū Te Whenua Land Information New Zealand covering the measurement period 01 July 2023 to 30 June 2024.[2]

Toitū Te Whenua Land Information New Zealand (LINZ) has prepared this inventory which is a complete and accurate quantification of the amount of GHG emissions that can be directly attributed to LINZ's operations, within the declared boundary and scope for the stated period. The management and reduction plan records our reduction targets and planned initiatives to achieve our goals.

Table 1: Inventory summary

Category (ISO 14064-1:2018)	**Scopes (ISO 14064-1:2006)**	**2020**	**2023**	**2024**
Category 1: Direct emissions (tCO_2e)	Scope 1	177.39	207.34	181.36
Category 2: Indirect emissions from imported energy (location-based method*) (tCO_2e)	Scope 2	113.09	45.49	57.20
Category 3: Indirect emissions from transportation (tCO_2e)	Scope 3	616.23	354.30	341.42
Category 4: Indirect emissions from products used by organisation (tCO_2e)		35.16	25.64	21.63
Category 5: Indirect emissions associated with the use of products from the organisation (tCO_2e)		6.37	0.00	0.00
Category 6: Indirect emissions from other sources (tCO_2e)		0.00	0.00	0.00
Total direct emissions (tCO_2e)		**177.39**	**207.34**	**181.36**
Total indirect emissions* (tCO_2e)		**770.85**	**425.43**	**420.26**
Total gross emissions* (tCO_2e)		**948.24**	**632.77**	**601.61**
Category 1 direct removals (tCO_2e)		0.00	0.00	0.00
Purchased emission reductions (tCO_2e)		0.00	0.00	0.00
Total net emissions (tCO_2e)		**948.24**	**632.77**	**601.61**

*Emissions are reported using a location-based methodology.

[2] Throughout this document "emissions" means "GHG emissions". Unless otherwise stated, emissions are reported as tonnes of carbon dioxide equivalent (tCO_2e).

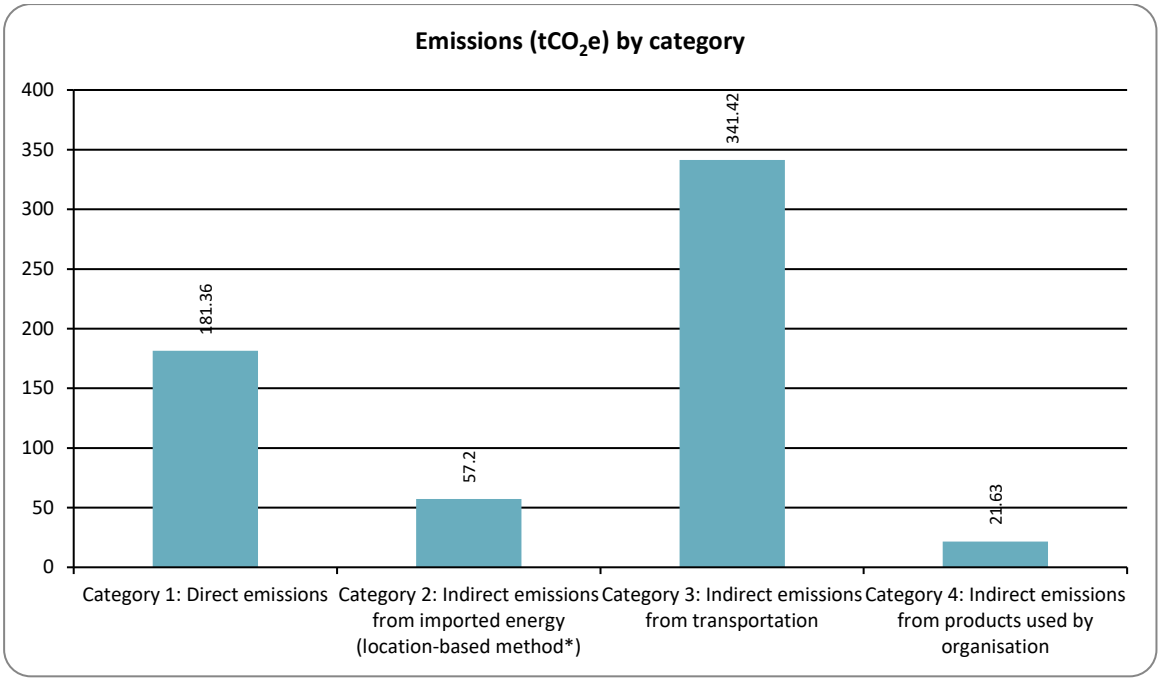

Figure 1: Emissions (tCO_2e) by Category for this measurement period

CHAPTER 1: EMISSIONS INVENTORY REPORT

1.1. INTRODUCTION

This report is the annual greenhouse gas (GHG) emissions inventory and management report for Toitū Te Whenua Land Information New Zealand.

The purpose of this report is to measure our emissions. This report will help us meet our reporting and emissions reduction requirements under the Carbon Neutral Government Programme (CNGP).

The inventory report and any GHG assertions are expected to be verified by a third-party verifier. The level of assurance is reported in a separate Assurance Statement provided to the directors of the entity.

1.2. EMISSIONS INVENTORY RESULTS

Table 2: Emissions inventory summary for this measurement period

Measurement period: 01 July 2023 to 30 June 2024.

Category	Emission Sources	Total emissions (tCO_2e)
Category 1: Direct emissions	Diesel, Petrol premium, Petrol regular, Natural Gas distributed commercial	181.36
Category 2: Indirect emissions from imported energy (location-based method*)	Electricity	57.20
Category 3: Indirect emissions from transportation	Air travel domestic (average), Air travel long haul (econ), Air travel long haul (econ+), Air travel short haul (econ), Aircraft - Aérospatiale/Alenia ATR 72, Aircraft - Airbus A320, Aircraft - Cessna Light Aircraft, Aircraft - De Havilland Canada DHC-8-300, Aircraft - Pilatus PC-12, Aircraft - Saab SF-340, Bus travel (average), Bus travel (electric), Bus/Coach travel (long distance), Car Average (unknown fuel type), Car Large (petrol 2000-2999cc) - 2015-2020, Car Medium (petrol 1600-2000cc) - 2015-2020, Car Medium (petrol PHEV 1600-2000cc) - electricity consumption - 2015-2020, Car Medium (petrol PHEV 1600-2000cc) - petrol consumption - 2015-2020, Car Micro (petrol PHEV under 1350cc) - electricity consumption - 2015-2020, Car Micro (petrol PHEV under 1350cc) - petrol consumption - 2015-2020, Car Micro (petrol under 1350cc) - 2015-2020, Car Small (petrol 1350-1600cc) - 2015-2020, Freight (pre-verified tCO_2-e), Taxi (regular) Accommodation - Australia, Accommodation - Austria, Accommodation - Fiji, Accommodation - France, Accommodation - Germany, Accommodation - Indonesia, Accommodation - Italy, Accommodation - New Zealand, Accommodation - Spain, Accommodation - United Kingdom, Accommodation - United States, Working from home	341.42
Category 4: Indirect emissions from products used by organisation	Electricity distributed T&D losses, Waste landfilled LFGR Mixed waste, Natural Gas distributed T&D losses Paper use - default, Wastewater for treatment plants (average), Water supply	21.63

Category	Emission Sources	Total emissions (tCO_2e)
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		**181.36**
Total indirect emissions*		**420.26**
Total gross emissions*		**601.61**
Category 1 direct removals		0.00
Purchased emission reductions		0.00
Total net emissions		**601.61**
Emissions intensity		**Total emissions**
Operating revenue (gross tCO_2e / $Millions)		2.70

*Emissions are reported using a location-based methodology.

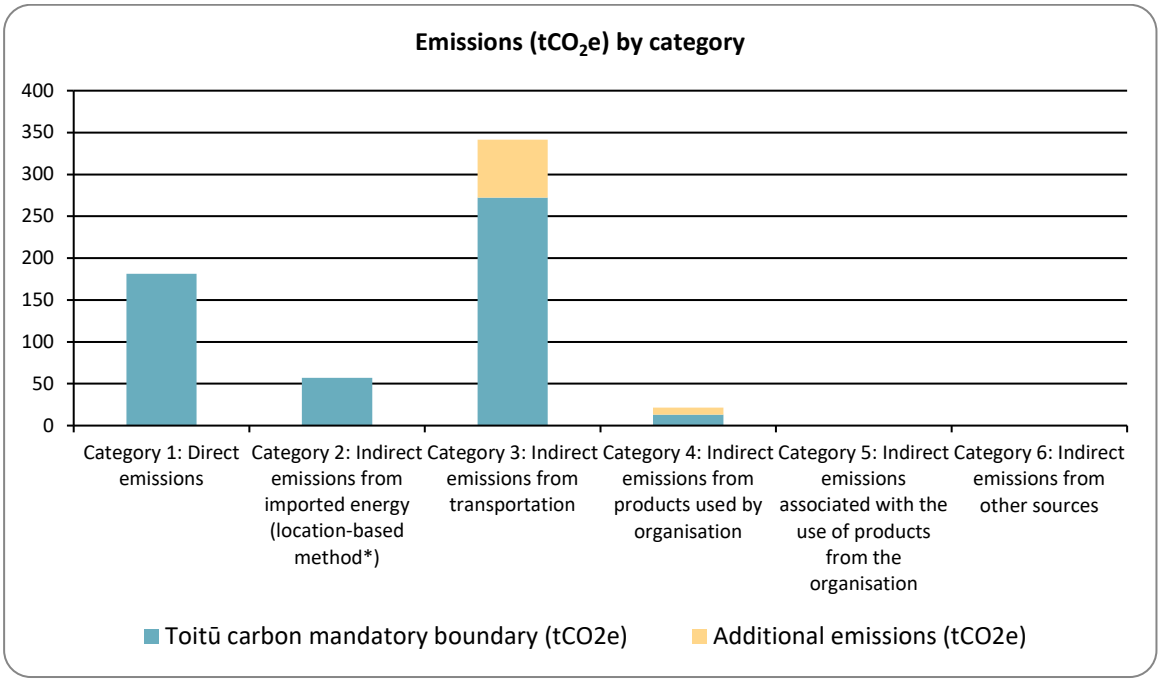

Figure 2: Emissions (tCO_2e) by category

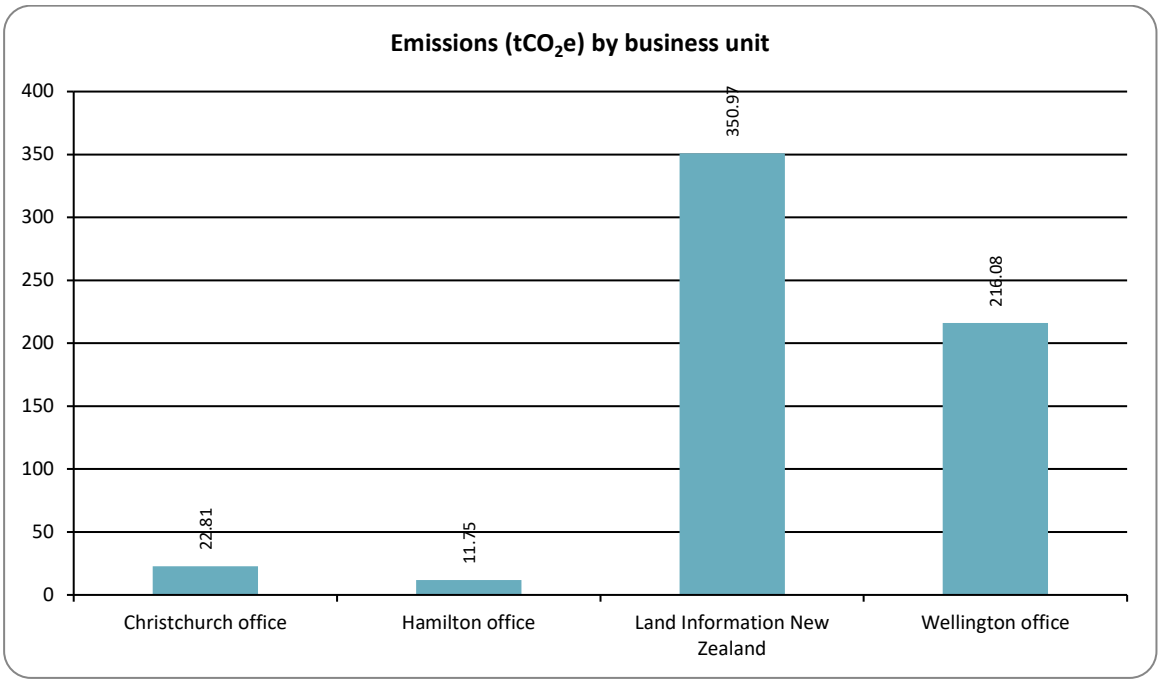

Figure 3: Emissions (tCO_2e) by business unit

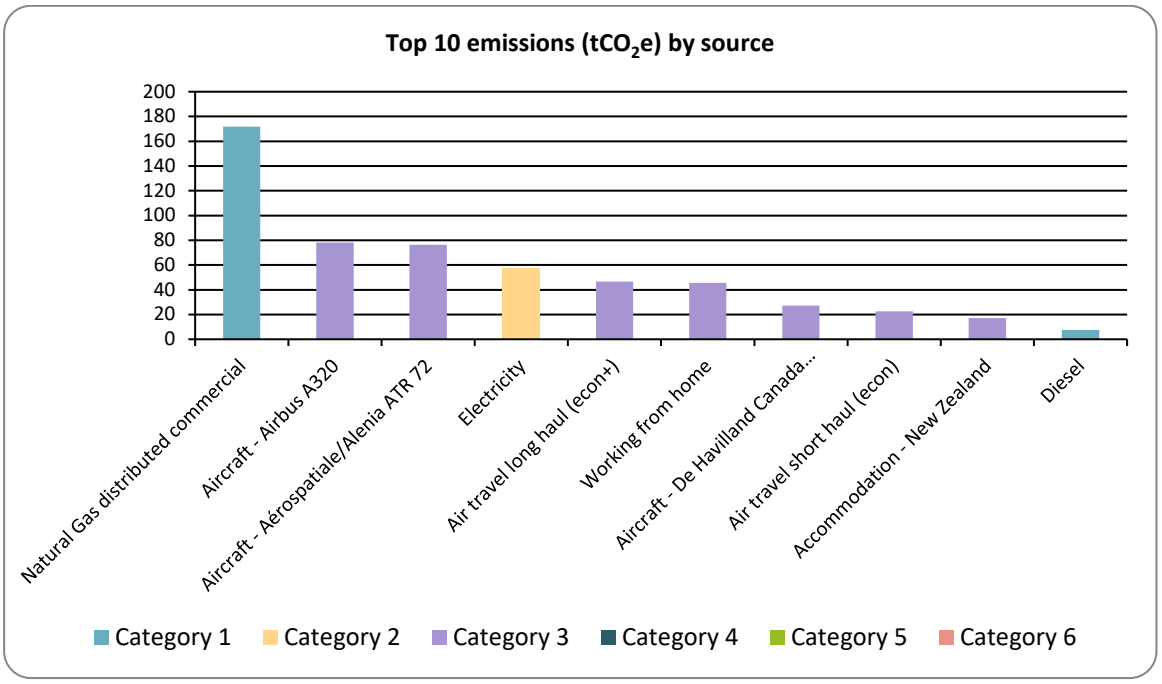

Figure 4: Top 10 emissions (tCO_2e) by source

1.3. ORGANISATIONAL CONTEXT

1.3.1. Organisation description

Toitū Te Whenua Land Information New Zealand (LINZ) is the Government's lead agency for property, and location information, Crown property and managing overseas investment – working across land, sea, data, and regulatory areas. LINZ services drive economic productivity, enhance public safety, and support environmental outcomes.

Our responsibilities include managing land titles, geodetic and cadastral survey systems, topographic information, hydrographic information, managing Crown property, including implementing Te Tiriti o Waitangi settlement agreements, and supporting government decision-making around foreign ownership.

We are guided by, and our name is derived from our whakataukī:

Whatungarongaro te tangata toitū te whenua.

People come and go, but the land remains.

Land, sea, and waterways are taonga that connect us all. Our expertise and information help develop and protect these environments for the benefit of all New Zealanders, our visitors and future generations. We work with a diverse range of partners and stakeholders, including central and local government, businesses, Māori and iwi, surveyors and conveyancers, as well as the users of our products and services.

LINZ has over 900 staff and contractors based in offices in Wellington, Christchurch, and Hamilton as well as working remotely in various locations across New Zealand.

Commitment

LINZ is an agency that understands the role sustainability has in New Zealand's future. We are committed to measuring and reporting our carbon emissions and taking action to reduce them. We want to make continuous improvements, increasing the energy efficiency of our facilities and reducing the impact on our supply chains. We will use policy changes and raise awareness to change staff behaviours. We aim to meet our CNGP obligations and ensure we are doing our part to respond to climate change.

GHG Reporting

This report is a key part of our emissions reduction and sustainability programme. In addition to complying with our CNGP obligations, it enables us to understand our emissions, identify where we need to make changes and raise awareness across LINZ.

Climate Change Impacts

Climate change affects us all, and the public sector is required to aim for, and where possible, demonstrate best practices in this area. As property managers, responsible for residential and commercial properties, including properties in the Landbank for Treaty settlements, we need to understand the impacts of climate change across New Zealand. Work and services LINZ delivers help to provides insights and information on the impacts of climate change on land and sea, for example, the newly established 3D coastal mapping programme. LINZ also has an active role in coordinating and promoting the use of geographic data to support New Zealand to prepare for and respond to emergency events.

1.3.2. Statement of intent

The intended uses of this inventory are:

Intended use and users

This inventory will be used to meet our CNGP obligations. As part of the public sector there is an expectation for responsible leadership with respect to managing our climate change impacts. Our organisation must reduce our emissions and to do this we need the inventory to inform our short-term and long-term operational decisions.

There is an increasing awareness of environmental and climate change issues and organisational commitment to these issues is increasingly expected by staff, particularly younger people entering the workforce.

This report will inform senior management so that they can lead the required changes our organisation needs to make to reduce emissions. CNGP requires us to publish key data publicly in our annual report, as well as providing our inventory to the Ministry for the Environment.

Other schemes and requirements

This inventory is required to meet CNGP commitments.

1.3.3. Person responsible

Claire Richardson, Kaihautū Organisational Effectiveness, is responsible for overall emission inventory measurement and reduction performance, as well as reporting results to top management. Claire Richardson, Kaihautū Organisational Effectiveness, 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

Melissa Ho - Senior Data & Business Analyst

Darren Press - Leader - Property and Facilities

Craig Reid - Business Specialist - Property and Facilities

Lesley-Ann Watson - Business Partner - Commercial

Vivek Lala - Business Partner - Finance

Kevin Van Der Watt - Solution Delivery Specialist - Project Practice

Keerthi Vijay - Data & Business Analyst

External suppliers who provided data

Staff involved in preparing the data and reports attended CNGP presentations and cross government working groups. The data was collected and prepared by an experienced data analyst with prior knowledge of GHG emissions, and subject matter experts for various data sets were consulted as required. Our Manager of Property and Facilities is a Chartered Surveyor with over 25 years' experience in the construction and property sectors and has delivered several sustainable and renewable technology programmes in both the United Kingdom and Europe.

Top management commitment

Senior leadership will demonstrate commitment by enabling and supporting the changes required to reduce our emissions. They will lead by example and promote a culture of sustainability at LINZ.

Management involvement

Management gave approval for staff to collect and prepare the data required for this inventory. This report requires management approval and commitment to be finalised and incorporated into the work programme at LINZ.

1.3.4. Reporting period

Base year measurement period: 01 July 2019 to 30 June 2020

Our base year is July 2019 - June 2020 as this was when we began measuring our carbon emissions. We acknowledge that this may not be a "typical" year as March - June were impacted by COIVD-19 lockdowns, however this could well be representative of potentially disrupted years to come.

Measurement period of this report: 01 July 2023 to 30 June 2024

Reporting will be done annually.

Our reporting period aligns with our financial year and runs from July to June.

1.3.5. Organisational boundary and consolidation approach

An operational control consolidation approach was used to account for emissions.[3]

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

Justification of consolidation approach

Organisational boundaries for the base year were set with reference to the methodology described in the GHG Protocol and ISO 14064-1:2006 standards. The Programme specified that the operational control consolidation approach should be used unless otherwise agreed with the Programme. We continue to use the operational control consolidation approach to account for our emissions as it makes the most sense as we do not have any part-holding of other companies/businesses.

Organisational structure

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

LINZ is structured into the following business groups:

Māori Crown Relations

Digital Delivery

Organisational Effectiveness

Customer Delivery

Our business groups may be spread across any of our offices and can also include people who only work remotely. The locations of our offices are shown below:

Christchurch Office - 112 Tuam Street, Christchurch 8011

Hamilton Office - Level 3, 65 Bryce Street, Hamilton 3204

Wellington Office - Level 5-10, 155 The Terrace, Wellington 6011

Note: the revenue used to calculate our $ operating revenue KPI is for the whole organisation, not just office work.

[3]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.

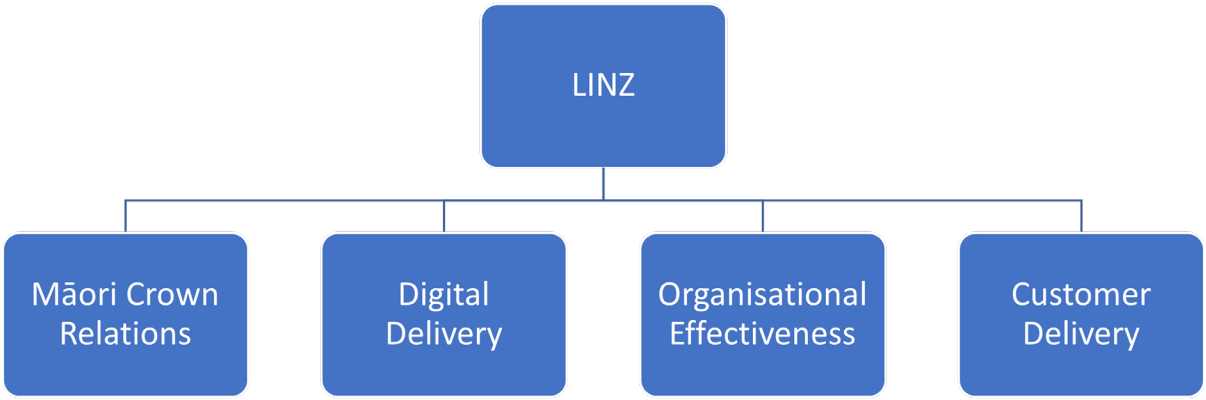

Figure 5: Organisational structure

Table 3. Brief description of business units, sites and locations included in this emissions inventory

Company/Business unit/Facility	Physical location	Description
Christchurch Office	112 Tuam Street, Christchurch 8011	All our business functions, whether they are core operational functions or digital and enabling functions, may be carried out at this office.
Hamilton Office	Level 3, 65 Bryce Street, Hamilton 3204	All our business functions, whether they are core operational functions or digital and enabling functions, may be carried out at this office.
Wellington Office	Level 5-10, 155 The Terrace, Wellington 6011	All our business functions, whether they are core operational functions or digital and enabling functions, may be carried out at this office.

1.3.6. Excluded business units

N/A

CHAPTER 2: EMISSIONS MANAGEMENT AND REDUCTION REPORT

2.1. EMISSIONS REDUCTION RESULTS

Our overall emissions have decreased from the previous year and are still below our base year and on track for our overall reduction pathway. The decrease is mainly from the Category 1 and Category 3 emissions. Emissions related to both overseas and domestic flights have decreased from previous year. An annual travel plan for international travel was reviewed and approved at executive level, with emissions reductions goals a key consideration. The same approach has been taken for the 24/25 financial year and there is ongoing prioritisation of domestic travel.

Table 4: Comparison of historical GHG inventories

Category	2020	2021	2022	2023	2024
Category 1: Direct emissions (tCO_2e)	177.39	197.00	181.87	207.34	181.36
Category 2: Indirect emissions from imported energy (location-based method*) (tCO_2e)	113.09	115.87	104.43	45.49	57.20
Category 3: Indirect emissions from transportation (tCO_2e)	616.23	195.85	134.34	354.30	341.42
Category 4: Indirect emissions from products used by organisation (tCO_2e)	35.16	36.10	29.88	25.64	21.63
Category 5: Indirect emissions associated with the use of products from the organisation (tCO_2e)	6.37	0.00	0.00	0.00	0.00
Category 6: Indirect emissions from other sources (tCO_2e)	0.00	0.00	0.00	0.00	0.00
Total direct emissions (tCO_2e)	**177.39**	**197.00**	**181.87**	**207.34**	**181.36**
Total indirect emissions* (tCO_2e)	**770.85**	**347.83**	**268.64**	**425.43**	**420.26**
Total gross emissions* (tCO_2e)	**948.24**	**544.82**	**450.51**	**632.77**	**601.61**
Category 1 direct removals (tCO_2e)	0.00	0.00	0.00	0.00	0.00
Purchased emission reductions (tCO_2e)	0.00	0.00	0.00	0.00	0.00
Total net emissions (tCO_2e)	**948.24**	**544.82**	**450.51**	**632.77**	**601.61**
Emissions intensity					
Operating revenue (gross tCO_2e / $Millions)	5.88	2.90	1.92	2.37	2.70
Operating revenue (gross mandatory tCO_2e / $Millions)	5.59	2.44	1.61	2.09	2.35

*Emissions are reported using a location-based methodology.

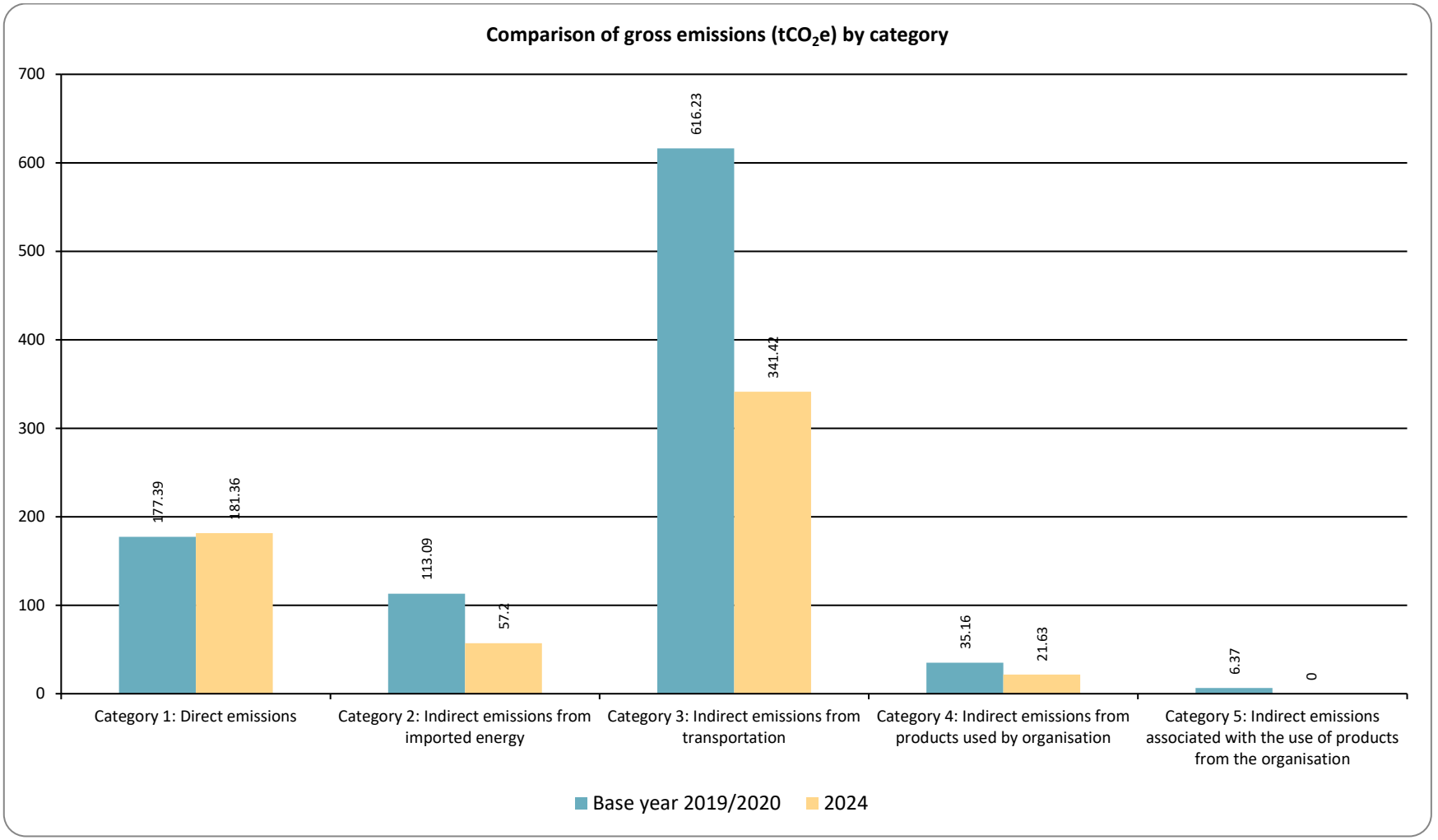

Figure 6: Comparison of gross emissions (tCO_2e) by category between the reporting periods

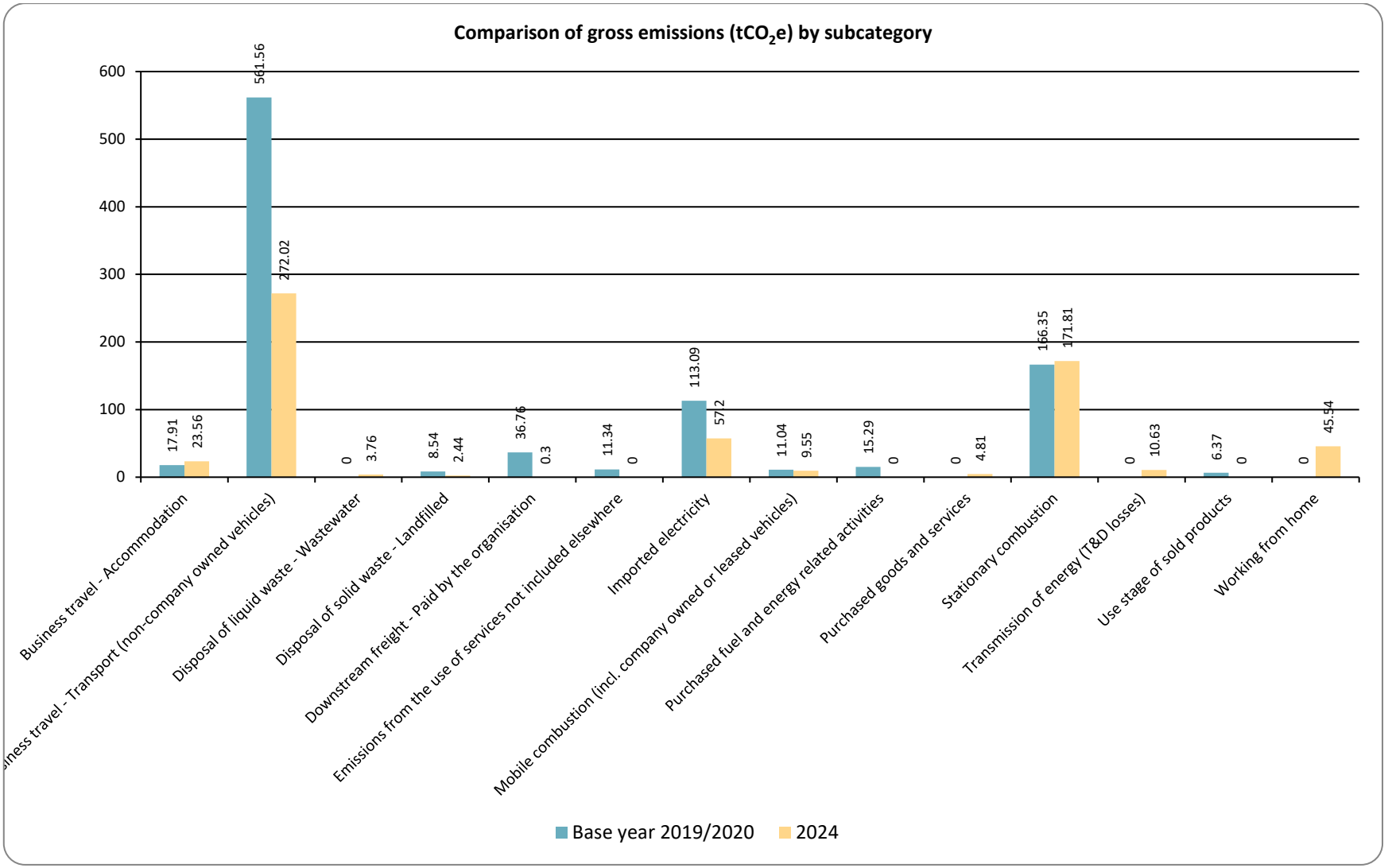

Figure 7: Comparison of gross emissions (tCO_2e) by subcategory between the reporting periods

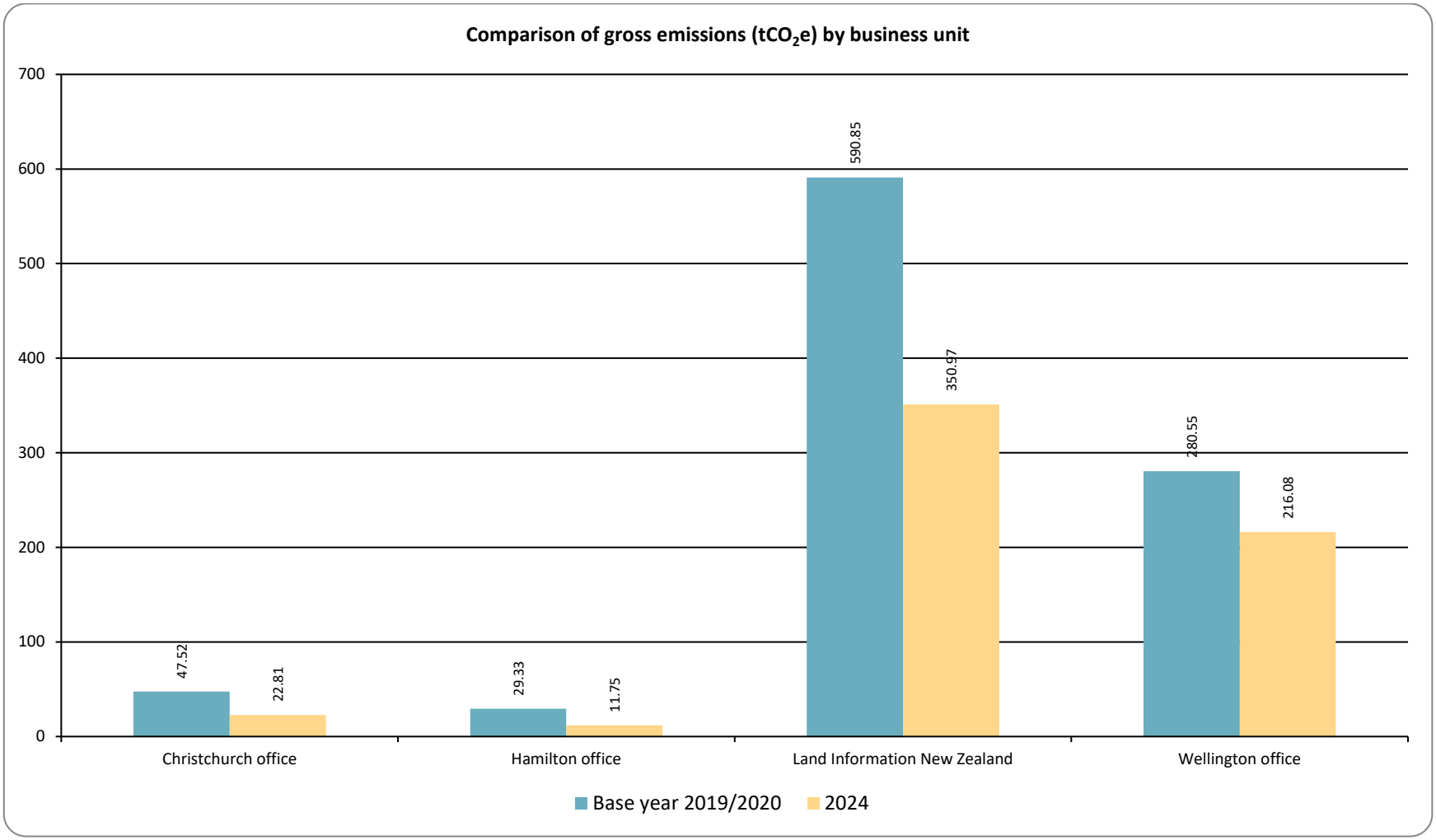

Figure 8: Comparison of gross emissions (tCO_2e) by business unit between the reporting periods

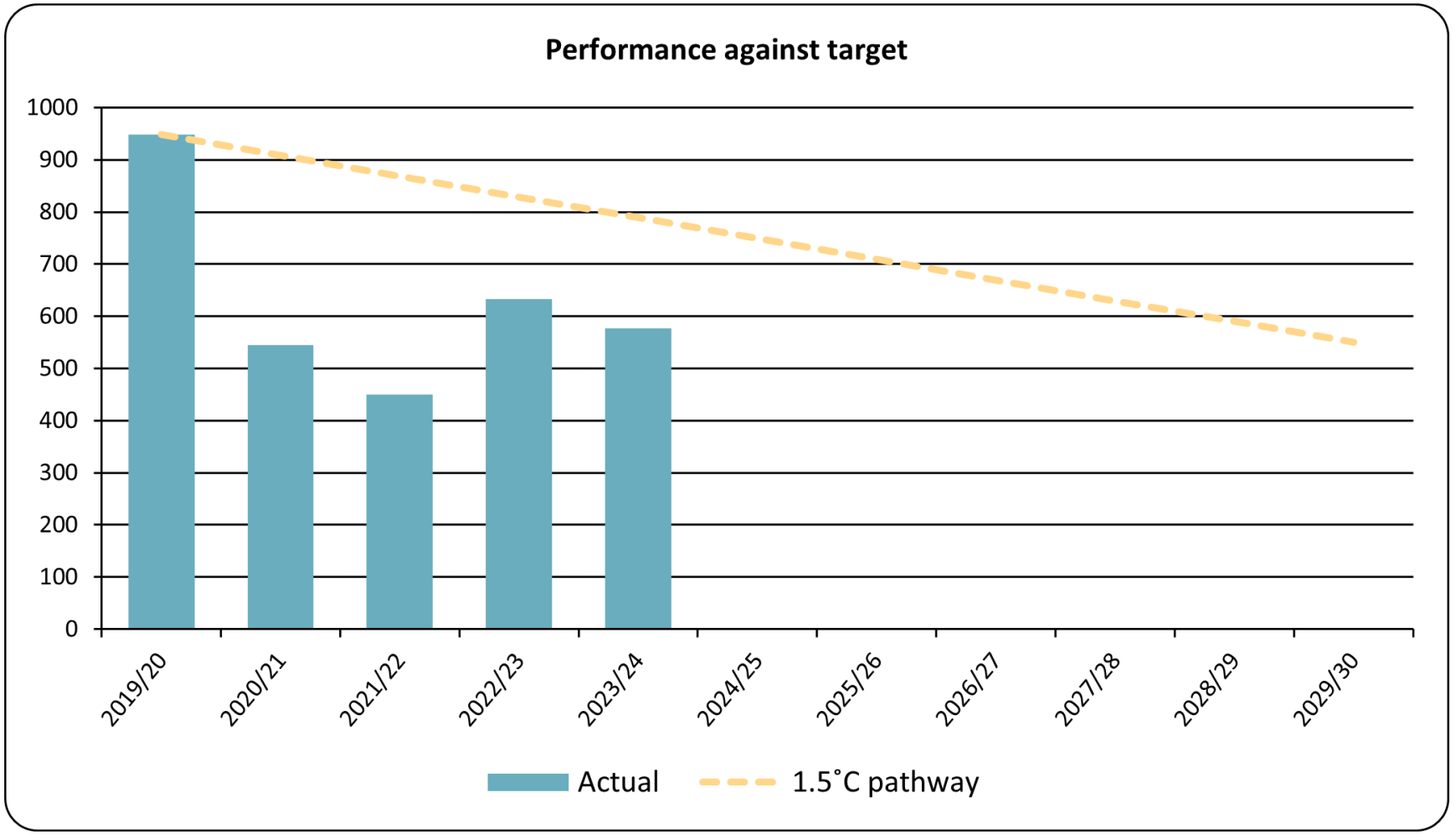

Figure 9: Performance against target since base year

Table 5. Performance against plan

Target name	Baseline period	Target date	Type of target (intensity or absolute)	Current performance (tCO_2e)	Current performance (%)	Comments
Overall emissions	July 2019 - June 2020	30/06/2025	Absolute	577	39% reduction	This is the second year since our base year where travel has not been highly impacted by Covid-19.
Overall emissions	July 2019 - June 2020	30/06/2030	Absolute	577	39% reduction	This is the second year since our base year where travel has not been highly impacted by Covid-19.
Electricity (including T&D losses)	July 2019 - June 2020	30/06/2024	Absolute	54	57% reduction	This target was met. Various initiatives to improve energy efficiency in our offices contributed to this, including installing LED lighting and sensors for lighting in the Wellington office.
Natural Gas (including T&D losses)	July 2019 - June 2020	30/06/2027	Absolute	177	2% decrease	This target was set based on a planned change that has not occurred yet.
Emissions from Flights	July 2019 - June 2020	30/06/2025	Absolute	238	54% decrease	This is the second year since our base year where travel has not been highly impacted by Covid-19. Decrease is across both overseas and domestic flights.
Petrol & Diesel for fleet vehicles	July 2019 - June 2020	30/06/2024	Absolute	10	13% decrease	This target was not met even though there was the usage of more efficient vehicles. Our fleet vehicles are used for field-based work. They were mostly used for carrying out inspections of properties, including demolition sites and Pastoral leases, and meeting our health and safety obligations by assessing work being undertaken on LINZ's behalf. These activities are necessary to deliver services or meet our obligations.

2.2. SIGNIFICANT EMISSIONS SOURCES

Significant sources

Air travel, and travel in general, has been identified as a key focus area and the priority is to continue to make changes. Our travel policy has been revised and reducing travel-related emissions is a focus for us.

Natural gas is one of our top emissions sources, however, we are unable to influence this in our current building in Wellington as a result of the shared ownership arrangements which limit our ability to implement an alternative.

Electricity is a significant source of emissions. We have made improvements in this area, and we actively seek ways to become more energy efficient in all our office spaces.

Emissions related to working from home make up a noticeable portion of our emissions. In the last few years, flexible working has become part of our way of working.

Activities responsible for generating significant emissions

As noted in the table in section 2.1, flights, and other travel modes, are taken for a variety of reasons including carrying out fieldwork and inspections of properties, meeting our health and safety obligations by assessing work being undertaken on LINZ's behalf, engaging with iwi and other partners and customers we deliver services to across New Zealand. There is also inter-office travel connecting staff in person across our offices or attending meetings with external parties. During FY2023/24 there was an increased drive to reduce travel where possible, prioritising for external reasons.

Operating our offices generates emissions, natural gas is used for heating and hot water in our Wellington office and emissions from electricity relates to all three of our offices. In addition, water supply, wastewater treatment, and waste are all necessary for running an office environment.

Influences over the activities

The COVID-19 pandemic has shown that we can operate without travelling as much as in previous years and online options have improved. Having clear decision criteria and being deliberate about when we need to travel, and efficient when we do travel has made a difference. This includes the use of public transport, such as encouraging people to use the airport bus in Wellington. Note that while we can reduce the need for travel, some travel will still be necessary for LINZ to deliver services and carry out its duties in various locations, to meet our Treaty Settlement responsibilities, and to connect with experts in our field.

Improving the energy efficiency of our buildings has made a difference in our electricity usage and there are further improvements that we can explore. This includes both making changes in our current premises or moving to a building with a better NABERS|NZ rating. We also need to think about the way we use our offices and what flexible working looks like going forward.

Significant sources that cannot be influenced

We are one of several tenants in our Wellington building. While we remain in this building, emissions from natural gas are largely outside of our control as responsibility for this fall under the Property Manager's control.

2.3. EMISSIONS REDUCTION TARGETS

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

Overall reduction targets for 2025 and 2030 have been set in accordance with the CNGP simplified method of defining '1.5°C-consistent' levels of reduction and are consistent with the intent of the Zero Carbon Act and the Paris Agreement of limiting global warming to 1.5°C above pre-industrial levels.

Reviewing our emissions shows that there is a reduction potential within LINZ.

The New Zealand Government is committed to making government office buildings energy efficient and this is a key area of focus for us. NABERS|NZ rating assessments have been done for all three offices and have shown that there are improvements that can be made, especially in our Wellington office. Implementing the required changes will be done over time, but the foundations have already been laid through work programmes within the organisation.

Travel is the other big focus for us and managing our travel across all modes of transport will be critical for us to meet our reduction targets. Travel is made up of interconnected elements, for example, many taxi rides are to and from airports, so reducing the number of flights should have a flow-on effect and reduce emissions from taxi trips.

We have reduced our emissions from the base year which aligns with our goal to reduce our reported emissions by 21% by 2025. Some of our targets are based on recent or planned changes and were not expected to be met this year. We have met the target for electricity based on several initiatives to improve energy efficiency in our offices. The target performance of Petrol & Diesel for fleet vehicles was not met even though there was the usage of more efficient vehicles. However, most of our travels related to this emission source cannot be avoided. It should be noted that improvements in data have made a significant difference, and reductions associated with these data improvements should be locked in for future years.

Table 6. Emission reduction targets

Target name	Baseline period	Target date	Type of target (intensity or absolute)	Categories covered	Target		KPI	Responsibility	Rationale
Overall emissions	July 2019 - June 2020	30/06/2025	Absolute	All Categories	21% reduction	Baseline: 948.3 tco2e Reduction of: 199 tco2e	Absolute emissions	Claire Richardson, Kaihautū Organisational Effectiveness	Target set in accordance with the CNGP guidance for '1.5°C-consistent' levels of reduction. We believe that there is reduction potential in LINZ to meet this target.
Overall emissions	July 2019 - June 2020	30/06/2030	Absolute	All Categories	42% reduction	Baseline: 948.3 tco2e Reduction of: 398 tco2e	Absolute emissions	Claire Richardson, Kaihautū Organisational Effectiveness	Target set in accordance with the CNGP guidance for '1.5°C-consistent' levels of reduction. This will be a more challenging target with potential changes in technology likely to be a factor in combination with other planned initiatives.
Electricity (including T&D losses)	July 2019 - June 2020	30/06/2024	Absolute	Category 2 & Category 4 (T&D losses)	20% reduction	Baseline: 124 tco2e Reduction of: 25 tco2e	Absolute emissions	Darren Press, Manager Property and Facilities	Installation of LED lighting in our Wellington office and other efficiency improvements should lead to savings. Target based on estimated saving for changes to LED lights by comparing electricity consumption for the office floor that had LED lighting with floors that did not have them installed in the base year. Note this target excludes electricity from working from home.
Natural Gas (including T&D losses)	July 2019 - June 2020	30/06/2027	Absolute	Category 1 & Category 4 (T&D losses)	100% reduction	Baseline: 182 tco2e Reduction of: 182 tco2e	Absolute emissions	Darren Press, Manager Property and Facilities	Target based on moving to premises that does not use natural gas for heating. Move likely to occur in 2026 with reductions seen in the following year's data.

Target name	Baseline period	Target date	Type of target (intensity or absolute)	Categories covered	Target		KPI	Responsibility	Rationale
Emissions from Flights	July 2019 - June 2020	30/06/2025	Absolute	Category 3	25% reduction	Baseline: 513 tco2e Reduction of: 128 tco2e	Absolute emissions	Claire Richardson, Kaihautū Organisational Effectiveness	Target based on adopting a reduction of 5% of baseline each year to give a 25% reduction by 2025. Note that this target includes both domestic New Zealand and overseas flights.
Petrol & Diesel for fleet vehicles	July 2019 - June 2020	30/06/2024	Absolute	Category 1	50% reduction	Baseline: 11 tco2e Reduction of: 5.5 tco2e	Absolute emissions	Procurement	Fleet optimisation carried out regularly will lead to a reduction of emission based on utilising more efficient vehicles. This reduction assumes similar vehicle usage in the future and no changes in demand.

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 7. Projects to reduce emissions

Objective	Project	Responsibility	Completion date	Potential co-benefits	Potential unintended consequences	Actions to minimise unintended consequence
Reduce air travel	Refresh the travel templates to include links to sensitive expenditure and travel policy.	Claire Richardson, Kaihautū Organisational Effectiveness	31/12/2024	Flow on effect for accommodation, car hire and taxis (many taxis taken are to and from the airport).	None anticipated	n/a

Objective	Project	Responsibility	Completion date	Potential co-benefits	Potential unintended consequences	Actions to minimise unintended consequence
	Continue to build a more consistent enterprise approach to travel including enterprise reporting on travel spend and emissions to improve oversight across the organisation to ensure we only travel when we need to, and that we choose efficient and environmentally friendly options when we do travel.	Claire Richardson, Kaihautū Organisational Effectiveness	Ongoing	Could collect more consistent data about why we travel.	None anticipated	n/a
	Educate our travel approvers to ensure all factors, including emissions, are considered when planning and approving travel.	Claire Richardson, Kaihautū Organisational Effectiveness	Ongoing	Greater staff awareness about the emissions related to travel.	None anticipated	n/a
	Improve AV technology to reduce need for travel.	Darren Press, Manager Property and Facilities	Ongoing	None anticipated	Increased electricity usage.	The number of online meetings that can be held for the carbon emissions of a single flight suggest this makes sense provided we follow best practise.
Reduce emissions from rental car use	Work with suppliers to book EVs as a default preference when renting cars as per our travel policy. Note that there may be circumstances where an EV is not appropriate for our needs. Note that the EV rental fleet is limited, however it is growing, and we should continue to request this option.	Craig Reid, Advisor - Property and Facilities Lesley-Ann Watson, Procurement Advisor	Ongoing	Suppliers will change the makeup of their fleet to meet demand.	None anticipated	n/a
Use more environmentally friendly options to taxis if feasible	Keep an eye out for alternative to taxis. Work with travel arrangers to promote available options, such as the airport bus, to staff.	Darren Press,	Ongoing	None anticipated	None anticipated	n/a

Objective	Project	Responsibility	Completion date	Potential co-benefits	Potential unintended consequences	Actions to minimise unintended consequence
		Manager Property and Facilities				
Reduce emissions from fleet vehicles	We will review our fleet annually or if our needs or available technology changes. The last fleet optimisation review was in 2023.	Darren Press, Manager Property and Facilities	Ongoing	None anticipated	None anticipated	n/a
Reduce electricity & natural gas usage in our offices	Standardise office fitout, e.g. standardise monitors to energy efficient models. Do this in bulk when we go to new building, current practice is to replace items as required.	Darren Press, Manager Property and Facilities	Ongoing	None anticipated	None anticipated	n/a
	We are currently looking at options for new premises for our Wellington and Hamilton offices and have set a criterion that allows us to achieve the All of Government (AoG) requirements for CNGP and Government Property Group (GPG) requirements for modern office developments. They include achieving a five-star NABERS|NZ rating for the new building.	Darren Press, Manager Property and Facilities	Ongoing	Adoption of the GPG's 8 principles for office design will create modern agile offices for our staff.	None anticipated	n/a
Reduce waste to landfill	Reduce contamination of organic waste and recycling through better education and signage and making changes to products where possible, e.g. plastic free tea bags, using compostable rubbish bags for organic waste.	Darren Press, Manager Property and Facilities	Ongoing	None anticipated	None anticipated	n/a

Objective	Project	Responsibility	Completion date	Potential co-benefits	Potential unintended consequences	Actions to minimise unintended consequence
	Encourage and enable recycling by raising awareness through events such as plastic free July. Sign up to schemes that recycle hard to recycle materials such as tetrapak, soft plastic and single-use coffee cups. Revive the container library.	Darren Press, Manager Property and Facilities	Ongoing	None anticipated	None anticipated	n/a
Influence our service providers and suppliers to consider environmental impacts	Ongoing review of our service and supply chains to choose sustainable and environmentally conscious options. This aligns with the government procurement broader outcomes framework.	Darren Press, Manager Property and Facilities	Ongoing	Supporting local social enterprises and influencing suppliers.	None anticipated	n/a

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

Table 8. Projects to improve data quality

Emissions source	Actions to improve data quality	Responsibility	Completion date
Travel	Implement a drop down rather than free text for travel reason	Lesley-Ann Watson, Procurement Advisor	31/12/2024
Water supply	Investigate feasibility of installing water meters in our Christchurch and Hamilton offices.	Darren Press, Manager Property and Facilities	30/06/2025
Wellington office utilities	Review methodology for measuring and apportioning water, gas and electricity in the Wellington office. Smart Power are working with us to assess the billing and may make some recommendations.	Darren Press, Manager Property and Facilities	30/06/2025
General	Work with accounts payable to improve coding for MasterCard and reimbursement claims.	Keerthi Vijay, Data & Business Analyst	Ongoing
General	Work with suppliers to get data supplied regularly in a useful format where possible, e.g. set up recurring reports or get access to self-service downloadable data.	Various team members	Ongoing

2.5. STAFF ENGAGEMENT

We publish news stories on our intranet on sustainability initiatives and our annual report will include key points from this report. We have developed resource pages on waste reduction and on the CNGP including our targets and initiatives. We regularly update our staff on travel guidance.

We include an introduction to sustainability to our staff induction and have information in our new starter induction handbook. We are planning to incorporate environmental and climate change considerations affected into our planning and reporting processes.

2.6. KEY PERFORMANCE INDICATORS

Table 9. Key Performance Indicators (KPIs).

KPI	Rationale of using the additional KPI
N/A	N/A

2.7. MONITORING AND REPORTING

Our emissions must be reported annually as part of the CNGP which will provide a key check point to assess our progress. During the year the business and commercial and sustainability teams will report to senior management to ensure that planned initiatives are on track and that emissions are in line with expectations. The emissions reporting team and relevant operational teams will monitor activity as we receive information throughout the year.

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 Toitū Te Whenua Land Information New Zealand.xls).

Table 10. Direct GHG emissions and removals, quantified separately for each applicable gas

Category	CO_2	CH_4	N_2O	NF_3	SF_6	HFC	PFC	Desflurane	Sevoflurane	Isoflurane	Emissions total (tCO_2e)
Stationary combustion	171.33	0.40	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	171.81
Mobile combustion (incl. company owned or leased vehicles)	9.35	0.03	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.55
Emissions - Industrial processes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	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
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 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
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
Enteric fermentation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Total net emissions	180.67	0.43	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	181.36

Table 11. Non-biogenic, biogenic anthropogenic and biogenic non-anthropogenic CO_2 emissions and removals by category

Category	Anthropogenic biogenic CO_2 emissions	Anthropogenic biogenic (CH_4 and N_2O) emissions (tCO_2e)	Non-anthropogenic biogenic (tCO_2e)
Category 1: Direct emissions	0.00	0.00	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	5.74	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**	**5.74**	**0.00**

A1.1 REPORTING BOUNDARIES

A1.1.1 Emission source identification method and significance criteria

The GHG emissions sources included in this inventory were identified with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards.

The inventory from the previous year was reviewed with relevant people including facilities, procurement, and finance staff to check for any new emissions sources or changes to previously reported sources. We also checked for changes in programme requirements and added CNGP mandatory and common emission sources if not previously reported.

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 listed.

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 12 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.

A carbon reporting lead was appointed and a team established. A spreadsheet was set up to record decisions made around scope, inclusions and exclusions, as well as documentation with details on each data source.

As part of continuous improvement, data sources were reviewed, and changes and improvements identified.

Documentation for each source includes who, how and where the data comes from with key contact persons recorded. Any required calculations or conversions for entry into the management tool are noted as well as any assumptions and uncertainties.

Original emails from suppliers are saved in the relevant folders along with spreadsheets containing our calculations and any additional documentation on our methodology. A consolidated workbook for each year has been set up.

All documentation is stored in our document management system which complies with the public records act.

Table 12. 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	Natural Gas distributed commercial	Natural gas is metered for the whole building which we share with other tenants and is a common service which is pro-rated across the tenants. The calculation used to calculate the LINZ share of natural gas is based on how the landlord calculates our invoices. We cannot be certain that this method accurately reflects our actual usage.	N/A - the most accurate emission factor was used.	N/A
	Mobile combustion (incl. company owned or leased vehicles)	Diesel, Petrol premium, Petrol regular	Assumes that people use fuel cards as they are supposed to when refuelling the fleet vehicles and that if they do not, that they clearly code their MasterCard or reimbursement claim so that it can be identified. Our most common type of fuel is diesel, so this is assumed when it is not specified in the transaction detail. Most fuel is purchased using a fuel card.	Litres are used if the fuel was purchased using the fuel card. For MasterCard or reimbursements, dollars are used.	N/A
Overall assessment of uncertainty for Category 1 emissions and removals		3%	Low		

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 2: Indirect emissions from imported energy	Imported electricity	Electricity	Electricity for our Wellington office is metered for the whole building which we share with other tenants. The LINZ share of electricity is based on check meters on each floor. We assume the readings provided by the landlord are accurate. Electricity for our Christchurch and Hamilton offices is based on invoices from the electricity supplier.	N/A - the most accurate emission factor was used.	N/A
Overall assessment of uncertainty for Category 2 emissions and removals		1%	Very low		
Category 3: Indirect emissions from transportation	Business travel - Transport (non-company owned vehicles)	Car Large (petrol 2000-2999cc) - 2015-2020, Car Medium (petrol 1600-2000cc) - 2015-2020, Car Medium (petrol PHEV 1600-2000cc) - electricity consumption - 2015-2020, Car Medium (petrol PHEV 1600-2000cc) - petrol consumption - 2015-2020, Car Micro (petrol under 1350cc) - 2015-2020, Car Micro (petrol PHEV under 1350cc) - electricity consumption - 2015-2020, Car Micro (petrol PHEV under 1350cc) - petrol consumption - 2015-2020, Car Small (petrol 1350-1600cc) - 2015-2020, Car Average (unknown fuel type), Air travel domestic (average), Air travel long haul (econ), Air travel long haul (econ+), Air travel short haul (econ), Aircraft - Aérospatiale/Alenia ATR 72, Aircraft - Airbus A320, Aircraft - Cessna Light Aircraft, Aircraft - De Havilland Canada DHC-8-300, Aircraft - Pilatus PC-12, Aircraft - Saab SF-340	Flight and rental car data is provided by our supplier. We assume that the data they provide is accurate. We assume that the vehicle type provided by the supplier is accurate. A sense check is carried out before submitting the data and any anomalies are queried with the supplier.	The most accurate emission factors were used for flights and rental vehicles.	N/A

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
		Taxi (regular)	Taxis are identified in our finance system and will be MasterCard transactions or reimbursements. This assumes that transactions are clearly coded.	Dollars are used as the data is taken from our finance system. We do not have details on the type of vehicle of the taxi.	N/A
		Car Average (unknown fuel type)	This is used for milage claims. We assume that people submit their claims correctly.	As we do not know the litres of fuel consumed or details of the type of vehicle, an average must be used.	N/A
		Bus travel (average), Bus travel (electric), Bus/Coach travel (long distance)	Assume that transactions are clearly coded and that people claim for buses. Estimation of distance travelled based on narrative.	Assume bus travel to Wellington airport are using the electric airport bus. Other bus trips use the relevant "average" emission factor.	N/A
	Business travel - Accommodation	Accommodation - Australia, Accommodation - Austria, Accommodation - Fiji, Accommodation - France, Accommodation - Germany, Accommodation - Indonesia, Accommodation - Italy, Accommodation - New Zealand, Accommodation - Spain, Accommodation - United Kingdom,	Accommodation data is provided by our supplier. We assume that the data they provide is accurate. A sense check is carried out before submitting the data and any anomalies are queried with the supplier.	N/A - the most accurate emission factor was used.	N/A

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 - United States			
	Downstream freight - Paid by the organisation	Freight (pre-verified tCO_2-e)	Assume that our supplier's data is complete and accurate.	N/A - pre-verified data.	Yes - our freight provider provides a pre-verified 'Toitū compatible report'.
	Working from home	Working from home	We are using access card data and HR data to calculate the number of people working from home. This is based on the assumption that people swipe in at least once each day as they are supposed to, and that people who swipe in are working in the office that day. It assumes that if the HR record shows someone as working and they are not in the office they are most likely to be working from home (there may be other possibilities such as working offsite that day, but those should be minimal). The numbers calculated using this method were in line with expected values.	We do not know if heating is being used or not so the default emission factor has been used.	N/A
Overall assessment of uncertainty for Category 3 emissions and removals		6%	Medium		

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 4: Indirect emissions from products used by organisation	Purchased goods and services	Paper use - default	Assume that the report provided by our supplier is accurate.	Most of the paper we purchase has a carbon neutral claim that has not been verified yet, so we are using the default emission factor.	N/A
		Water supply	Water usage in the Wellington office is metered for the whole building which we share with other tenants. The LINZ share is calculated based on floor area and does not take into account the different water usage between tenants and we suspect that our actual usage may be lower than the calculation suggests. Water usage is not metered in our Christchurch and Hamilton offices and is estimated based on Wellington water usage per person/day. This assumes that water usage between our offices is similar and largely driven by the number of people in the office.	N/A - the most accurate emission factor was used.	N/A
	Disposal of solid waste - Landfilled	Waste landfilled LFGR Mixed waste	We have weighed waste data for most of the period. Assume the data provided by our suppliers is accurate.	N/A - the most accurate emission factor was used.	N/A
	Disposal of liquid waste - Wastewater	Wastewater for treatment plants (average)	Wastewater is not metered so we assumed that wastewater will be approximately equal to water supply. Refer to water supply for assumptions and uncertainties for that source.	N/A - the most accurate emission factor was used.	N/A
	Transmission of energy (T&D losses)	Electricity distributed T&D losses, Natural Gas distributed T&D losses	As for electricity above.	N/A - the most accurate emission factor was used.	N/A

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
	Transmission of energy (T&D losses)	Natural Gas distributed T&D	As for natural gas above.	N/A - the most accurate emission factor was used.	N/A
Overall assessment of uncertainty for Category 4 emissions and removals		5%	Low		

A1.1.3 Excluded emissions sources and sinks

Emissions sources in Table 13 have been identified and excluded from this inventory.

Table 13. GHG emissions sources excluded from the inventory

Business unit	GHG emissions source or sink	GHG emissions category	Reason for exclusion
Wellington Office	Diesel Stationary Combustion	Category 1	Outside of operational control.
Wellington Office	Refrigerant use	Category 1	Outside of operational control.
All Offices	Recycling	Category 4	Recycling (and the associated "avoided" emissions) is to be encouraged. Guidance suggests that it is not appropriate to report these "avoided emissions" in our inventory.
All LINZ	Datacentre/cloud hosting	Category 4	Difficulty getting accurate data for this.
All LINZ	Staff commute	Category 4	Difficulty in collating accurate data

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:

Emissions = activity data x 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 (see Appendix 1 - data summary.xls). Global Warming Potentials (GWP) from the IPCC fifth assessment report (AR5) are the preferred GWP conversion[4].

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 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 are reported separately here.

A1.2.2.1 DOUBLE COUNTING AND DOUBLE OFFSETTING

There are various definitions of double counting or double offsetting. For this report, it refers to:

[4] If emission factors have been derived from recognised publications, which still use earlier GWPs, the emission factors have not been altered from as published.

- Parts of the organisation have been prior offset.
- The same emissions sources have been reported (and offset) in both an organisational inventory and product footprint.
- Emissions have been included and potentially offset in the GHG emissions inventories of two different organisations, e.g. a company and one of its suppliers/contractors. This is particularly relevant to indirect (Categories 2 and 3) emissions sources.
- Programme approved 'pre-offset' products or services that contribute to the organisation inventory
- The organisation generates renewable electricity, uses or exports the electricity and claims the carbon benefits.
- Emissions reductions are counted as removals in an organisation's GHG emissions inventory and are counted or used as offsets/carbon credits by another organisation.

Double counting / double offsetting has been included in this inventory.

Details

Freight emissions will also be included in the NZ Couriers GHG inventory as they are a Toitū Carbonreduce member. It is possible that our other suppliers are also reporting emissions in their inventories.

To the best of our knowledge the services we use are not programme approved 'pre-offset' products or services.

APPENDIX 2: SIGNIFICANCE CRITERIA USED

Table 14. 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?
a) All Category 1 and 2 emissions	n/a	n/a	n/a	n/a	n/a	n/a	Yes	Include
b) Category 3 emissions associated with business travel and freight paid for by the organisation	n/a	n/a	n/a	n/a	n/a	n/a	Yes	Include
c) Category 4 emissions associated with waste disposed of by the organisation, and transmissions and distribution of electricity and natural gas, where appropriate	n/a	n/a	n/a	n/a	n/a	n/a	Yes	Include
d) any Sector specific mandatory emissions sources	n/a	n/a	n/a	n/a	n/a	n/a	Yes	Include
Diesel Stationary Combustion	De minimus (<1% of estimated total)	Low	None identified	Yes	No	No	Yes	Exclude
Refrigerant use	De minimus (<1% of estimated total)	Low	None identified	Yes	No	No	Yes	Exclude
Working from Home	Significant (>5% of estimated total)	Moderate	Opportunities	Yes	n/a	Yes	Yes	Include
Paper use	Moderate (1-5% of estimated total)	Moderate	None identified	Yes	No	Yes	No	Include

Emission source	Magnitude	Level of influence	Risk or opportunity	Sector specific guidance	Outsourced	Employee engagement	Intended Use and Users	Include in inventory?
Water Supply	De minimus (<1% of estimated total)	Low	None identified	Yes	No	Yes	Yes	Include
Wastewater Treatment	De minimus (<1% of estimated total)	Low	None identified	Yes	No	No	Yes	Include
Recycling	Moderate (1-5% of estimated total)	Moderate	None identified	No	No	Yes	No	Exclude
Datacentre/cloud hosting	Significant (>5% of estimated total)	Low	None identified	No	No	No	No	Exclude

APPENDIX 3: 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 4: REPORTING INDEX

This report template aligns with ISO 14064-1:2018. The following table cross references the requirements against the relevant section(s) of this report.

Section of this report	ISO 14064-1:2018 clause
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