



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



Eke Panuku Development Auckland Limited

Prepared by (lead author): Kristen Webster, Head of Corporate Responsibility

Dated: 12 September 2022

Verification status: Reasonable

Measurement period: 01 July 2021 to 30 June 2022

Base year period: 01 July 2018 to 30 June 2019

Approved for release by:

A handwritten signature in blue ink, appearing to read "Kristen Webster".

Kristen Webster, Head of Corporate Responsibility

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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 assurance statement by Toitū Envirocare.

AVAILABILITY

The Carbon Inventory and Management Report will be made available on the Eke Panuku website.

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 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.

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

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 Eke Panuku Development Auckland covering the measurement period 01 July 2021 to 30 June 2022.³

This year there have been changes across our emissions profile, with some categories seeing an increase and others a decrease. Additional sources were added; employee commuting and working from home. Overall, against our base year there has been an increase in absolute emissions from category one and two of 14 per cent and a decrease in absolute emissions from all sources of 2 per cent. Category one emissions from transport this year were the lowest since our base year. This is in part due to the lengthy lockdown seen in Auckland over the reporting period as well as changed behaviour and practices around remote working and meetings which have arisen as a result of the pandemic. Category three emissions increased due to the addition of employee commuting. Emissions associated with marina energy use increased. The reason for this is not clear and further work will need to be done to ascertain how this can be reduced.

Table 1: Inventory summary

Category (ISO 14064-1:2018)	Scopes (ISO 14064-1:2006)	2019	2021	2022
Category 1: Direct emissions	Scope 1	46.87	32.29	29.64
Category 2: Indirect emissions from imported energy (location-based method*)	Scope 2	78.71	71.79	113.98
Category 3: Indirect emissions from transportation	Scope 3	25.56	4.73	88.37
Category 4: Indirect emissions from products used by organisation (location-based method*)	Scope 3	316.64	439.89	281.50
Category 5: Indirect emissions associated with the use of products from the organisation	Scope 3	427.98	515.25	363.24
Category 6: Indirect emissions from other sources	Scope 3	0.00	0.00	0.00
Total direct emissions		46.87	32.29	29.64
Total indirect emissions*		848.88	1,031.65	847.09
Total gross emissions*		895.76	1,063.94	876.73
Category 1 direct removals		0.00	0.00	0.00
Purchased emission reductions		0.00	0.00	0.00
Total net emissions		895.76	1,063.94	876.73

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

³ Throughout this document "emissions" means "GHG emissions".

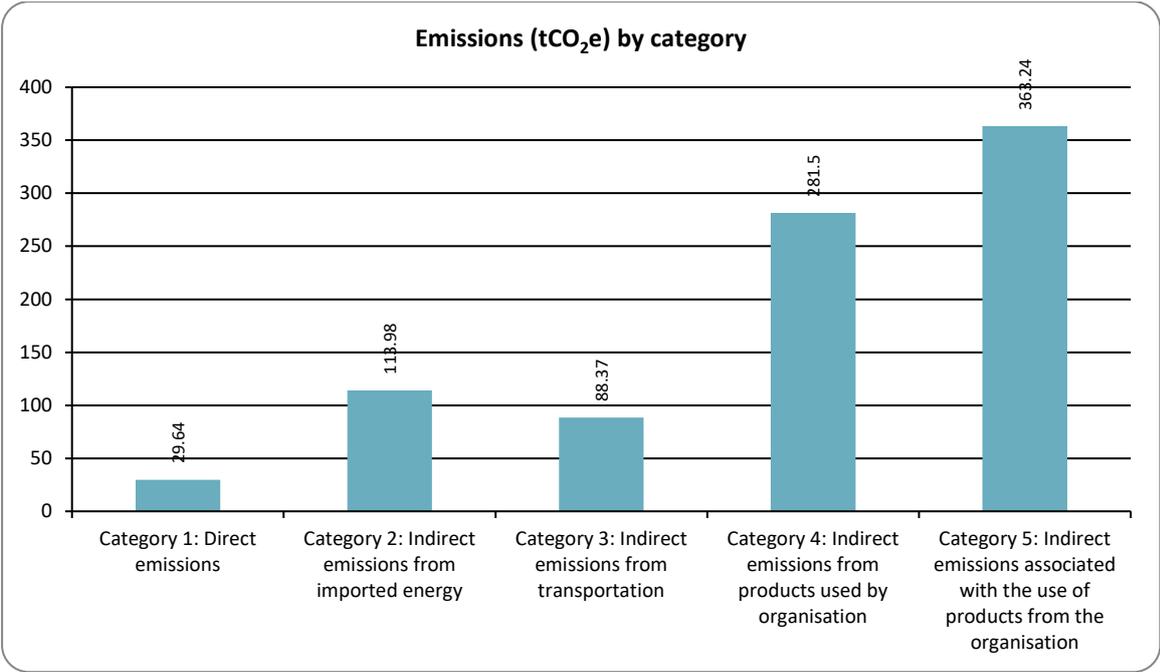


Figure 1: Emissions (tCO₂e) by Category for this measurement period

CHAPTER 1: EMISSIONS INVENTORY REPORT

1.1. INTRODUCTION

This report is the annual greenhouse gas (GHG) emissions inventory and management report for Eke Panuku Development Auckland.

The purpose of this report is to set out the emissions associated with Eke Panuku operations for the financial year ending June 2022.

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 Assurance Statement provided to the directors of the certification entity.

1.2. EMISSIONS INVENTORY RESULTS

Table 2: GHG emissions inventory summary for this measurement period

Measurement period: 01 July 2021 to 30 June 2022.

Category	Toitū carbon mandatory boundary (tCO ₂ e)	Additional emissions (tCO ₂ e)	Total emissions (tCO ₂ e)
Category 1: Direct emissions	29.64 Petrol, Diesel	0.00	29.64
Category 2: Indirect emissions from imported energy (location-based method*)	113.98	0.00	113.98
Category 3: Indirect emissions from transportation	1.21 Bus travel (city), Car Average (unknown fuel type), Taxi (regular)	87.15 Bus travel (average), Car Average (unknown fuel type), Ferry travel (other), Rail metropolitan (electric), Taxi (regular), Working from home	88.37
Category 4: Indirect emissions from products used by organisation (location-based method*)	248.51	32.99	281.50
Category 5: Indirect emissions associated with the use of products from the organisation	0.00	Electricity 363.24	363.24
Category 6: Indirect emissions from other sources	0.00	0.00	0.00
Total direct emissions	29.64	0.00	29.64
Total indirect emissions*	363.70	483.39	847.09
Total gross emissions*	393.34	483.39	876.73
Category 1 direct removals	0.00	0.00	0.00
Purchased emission reductions	0.00	0.00	0.00
Total net emissions	393.34	0.00	876.73
Emissions intensity		Mandatory emissions	Total emissions
FTE (gross tCO ₂ e / per FTE per annum)		1.62	3.61
Operating revenue (gross tCO ₂ e / \$Millions)		6.84	15.24

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

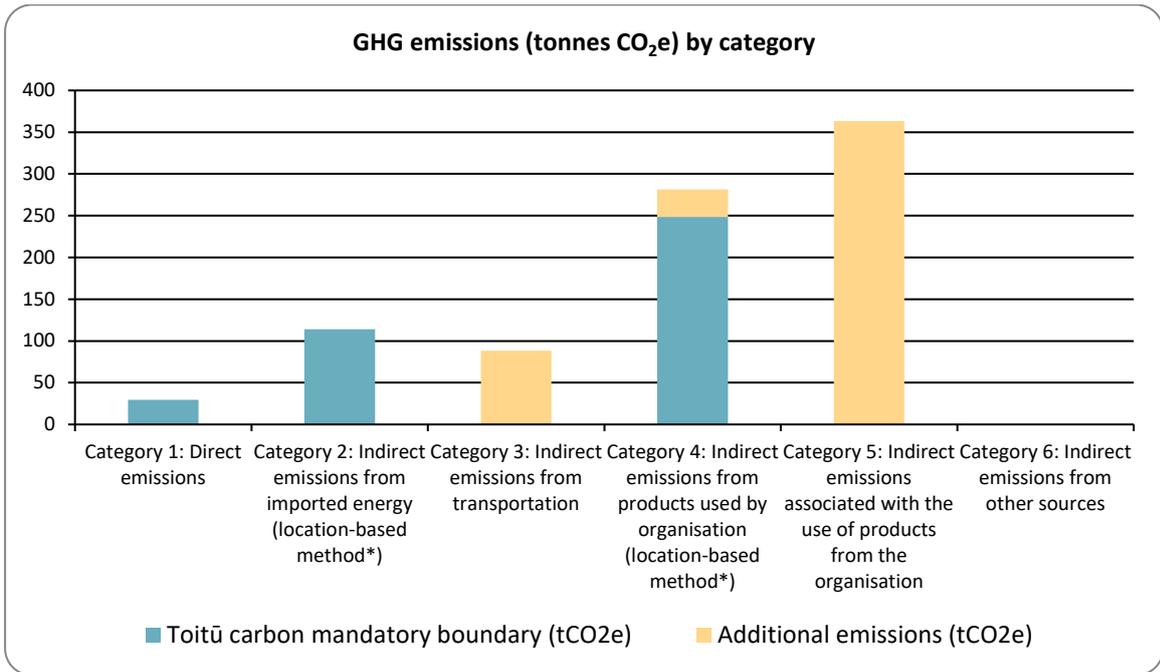


Figure 2: GHG emissions (tonnes CO₂e) by category

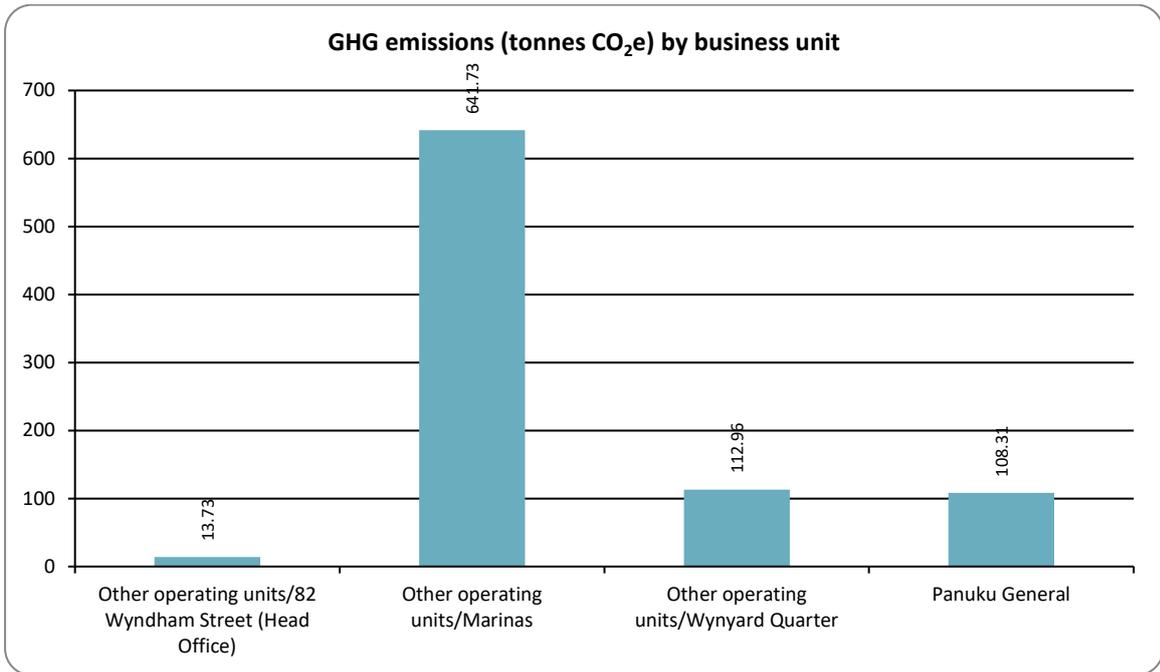


Figure 3: GHG emissions (tonnes CO₂e) by business unit

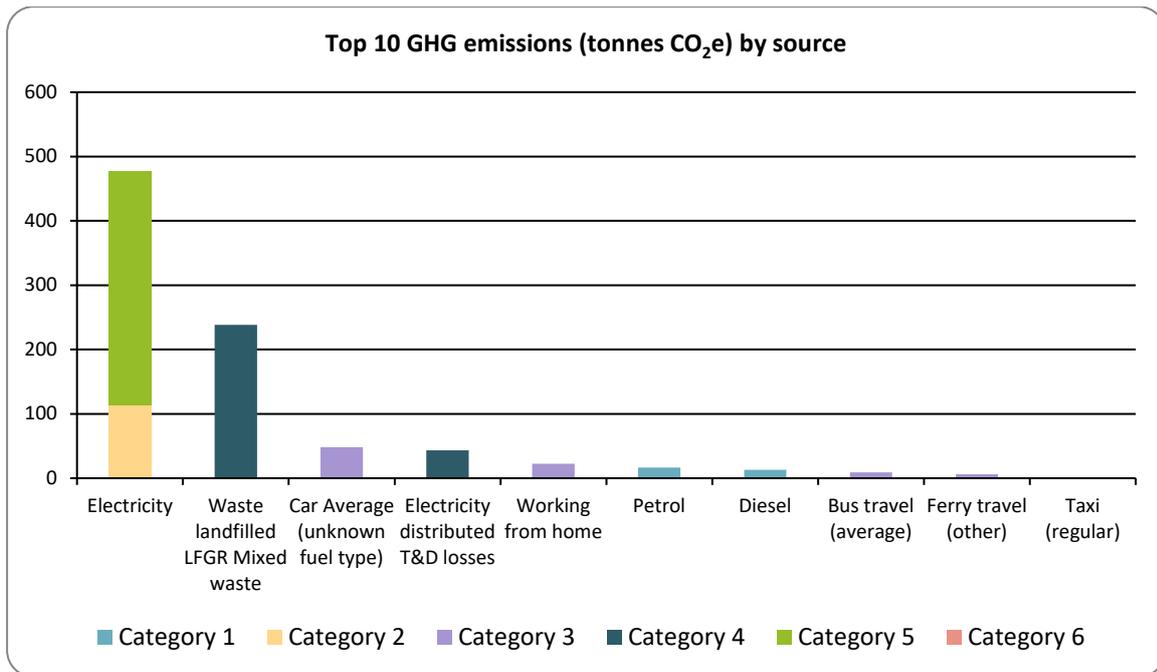


Figure 4: Top 10 GHG emissions (tonnes CO₂e) by source

1.3. ORGANISATIONAL CONTEXT

1.3.1. Organisation description

Eke Panuku is a Council Controlled Organisation (CCO) that delivers urban regeneration in Tāmaki Makaurau (Auckland). Eke Panuku also manages around \$3 billion of land and buildings on behalf of Council, optimising returns from the portfolio while also ensuring buildings contribute positively to their neighbourhoods.

Eke Panuku was formed in September 2015, from the merger of Waterfront Auckland and Auckland Council Property Limited and currently has ~236 employees across the following directorates: Community and Stakeholder Relations, Assets and Delivery, Strategy and Planning, Design and Place, People and Culture and Development, Corporate Services.

The activities of Eke Panuku cover two broad areas:

1. Urban regeneration leveraged off Council owned land, including master planning, public good investments and placemaking.
2. Management of Council's assets and portfolio, including strategic property advice, management, acquisitions and disposals.

Property and asset management is undertaken on behalf of Auckland Council (owners). Eke Panuku have some influence, but management parameters and spending are ultimately set by Council. An exception to this rule is found in Wynyard Quarter and the Marinas, which prior to July 2019 were Eke Panuku owned. These properties were then transferred under Council ownership in July 2019 with Eke Panuku continuing in a property/asset and marina management function.

Eke Panuku's core strategic objectives are to catalyse urban development to strategically create value from assets and demonstrate business leadership. Eke Panuku's approach to achieving these strategic outcomes is informed by the Corporate Responsibility Framework (CRF). This framework sets out how Eke Panuku balances commercial outcomes with strategic public good outcomes. Eke Panuku's intention is to operate in

an efficient, cost-effective way while minimising the impact activities have on the environment. A Toitū Carbonreduce rating contributes to this objective for Eke Panuku.

Commitment to certification

Eke Panuku is committed to taking climate action and responding to the direction set by Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan. Measurement and management of our emissions is a key part of this. We are also members of the Climate Leader's Coalition and reporting on our emissions and having a science-based target are requirements of our commitment.

GHG Reporting

This report sets out our emissions over the last financial year and provides us with valuable information as to which parts of our business these emissions have come from. The report also shows our progress against our reduction targets.

Climate Change Impacts

Eke Panuku is working to address both climate mitigation and adaptation. Climate change presents a number of risks to our organisation; physical, financial and reputational. We are working with Auckland Council and the CCOs to assess and manage the risks presented by current and future climate change and are working to reduce our emissions to limit further changes to the climate.

Parent Company Targets

Auckland Council has set emissions reduction targets of 50% by 2030 and net zero by 2050. Eke Panuku is working to help contribute to this.

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

The intended use of the inventory is two-fold: firstly, to ensure that management have oversight of emissions sources and quantities, in order to target reductions in the most effective way, and to track progress; and secondly, to demonstrate to our stakeholders that we are making a concerted effort to address climate mitigation in our operations, by measuring and managing our emissions.

Other schemes and requirements

As a signatory of the Climate Leaders Coalition, Eke Panuku Development Auckland (Eke Panuku) has a commitment to publicly report organisational greenhouse gas emissions and reduction targets and to work with suppliers to reduce emissions.

Eke Panuku is committed to taking climate action and responding to Te Tāruke-ā-Tāwhiri - Auckland's Climate Plan. Eke Panuku has developed and adopted a Climate Change Strategy to respond to the direction set in Te Tāruke-ā-Tāwhiri and to contribute to government targets. The Climate Change Strategy addresses mitigation and adaptation to climate change and the measurement and management of organisational carbon emissions is a key component of the Eke Panuku climate response.

1.3.3. Person responsible

Kristen Webster, Head of Corporate Responsibility is responsible for overall emission inventory measurement and reduction performance, as well as reporting results to top management. Kristen Webster, Head of Corporate Responsibility 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

There is a core team at Eke Panuku who are responsible for provision of data and creation of reporting. Representatives are involved from finance, operations and sustainability teams. These staff have all been involved for a number of years and have had experience with the audit process.

Top management commitment

Management is committed to Eke Panuku measuring and reducing our emissions. This commitment is demonstrated through regular oversight on climate-related KPIs and championing of carbon reduction projects.

Management involvement

This report will be presented to management and our progress against targets discussed. Future emissions reduction initiatives will be discussed with management to ensure an agreed way forward.

1.3.4. Reporting period

Base year measurement period: 01 July 2018 to 30 June 2019

This was the first year we committed to measuring our organisational emissions.

Measurement period of this report: 01 July 2021 to 30 June 2022

Reporting on our emissions inventory is undertaken annually.

A twelve month measurement period has been chosen to align with Eke Panuku financial reporting.

1.3.5. Organisational boundary and consolidation approach

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

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

Justification of consolidation approach

Given the nature and scope of our organisation, an operational control consolidation approach is most appropriate.

Organisational structure

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

Figure 5 shows the reporting structure chosen to account for Eke Panuku's emissions. The structure was developed based on operational ownership, control and influence with distinct spatial differences.

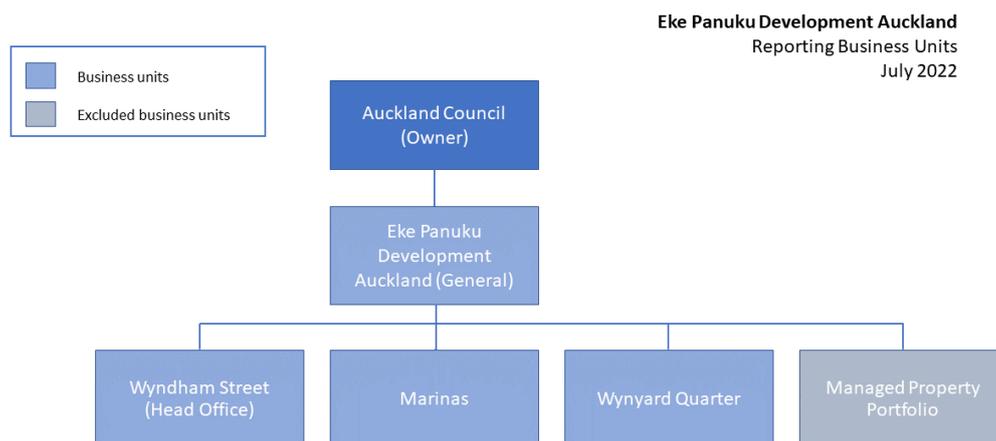


Figure 5: Organisational structure

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.

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

Company/Business unit/Facility	Physical location	Description
Eke Panuku Development Auckland (General)	82 Wyndham St	Organisation-wide activities - staff travel etc
Marinas	Westhaven, Wynyard Quarter and Viaduct.	Marina operations - energy and waste
Waterfront	Wynyard Quarter	Public space energy and waste in Wynyard Quarter
Wyndham Street (Head Office)	82 Wyndham St	Head office energy use and waste

1.3.6. Excluded business units

Council's property portfolio, containing residential property, commercial property, some land and forest is excluded from this emissions inventory. Eke Panuku exercises a property management function on behalf of Council for these properties, the majority of which are leased. Council has captured utility data, where available, for 20% of this portfolio in their independently reviewed emissions inventory. There is insufficient data to make assumptions and data calculations for the remaining 80%. Eke Panuku is continuing to support Council to improve our collective data records for future reporting and reduction activities.

CHAPTER 2: EMISSIONS MANAGEMENT AND REDUCTION REPORT

2.1. EMISSIONS REDUCTION RESULTS

This year there have been changes across our emissions profile, with some categories seeing an increase and others a decrease. Additional sources were added; employee commuting and working from home. Overall, against our base year there has been an increase in absolute emissions from category one and two of 14 per cent and a decrease in absolute emissions from all sources of 2 per cent. Category one emissions from transport this year were the lowest since our base year. This is in part due to the lengthy lockdown seen in Auckland over the reporting period as well as changed behaviour and practices around remote working and meetings which have arisen as a result of the pandemic. Category three emissions increased due to the addition of employee commuting. Emissions associated with marina energy use increased. The reason for this is not clear and further work will need to be done to ascertain how this can be reduced.

Table 4: Comparison of historical GHG inventories

Category	2019	2020	2021	2022
Category 1: Direct emissions	46.87	48.95	32.29	29.64
Category 2: Indirect emissions from imported energy (location-based method*)	78.71	104.58	71.79	113.98
Category 3: Indirect emissions from transportation	25.56	6.91	4.73	88.37
Category 4: Indirect emissions from products used by organisation (location-based method*)	316.64	261.38	439.89	281.50
Category 5: Indirect emissions associated with the use of products from the organisation	427.98	391.39	515.25	363.24
Category 6: Indirect emissions from other sources	0.00	0.00	0.00	0.00
Total direct emissions	46.87	48.95	32.29	29.64
Total indirect emissions*	848.88	764.26	1,031.65	847.09
Total gross emissions*	895.76	813.22	1,063.94	876.73
Category 1 direct removals	0.00	0.00	0.00	0.00
Purchased emission reductions	0.00	0.00	0.00	0.00
Total net emissions	895.76	813.22	1,063.94	876.73
Emissions intensity				
FTE (gross tCO ₂ e / per FTE per annum)	3.73	3.58	4.67	3.61
FTE (gross mandatory tCO ₂ e / per FTE per annum)	1.64	1.73	1.73	1.62
Operating revenue (gross tCO ₂ e / \$Millions)	12.69	12.40	16.83	15.24
Operating revenue (gross mandatory tCO ₂ e / \$Millions)	6.63	6.43	7.98	6.84

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

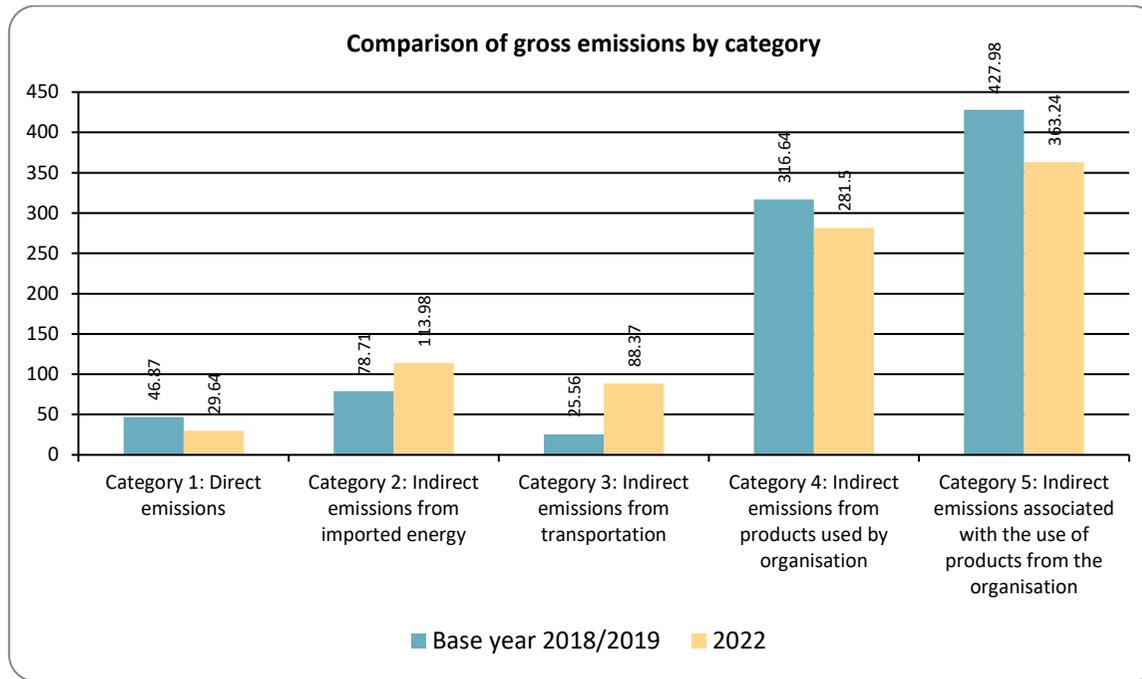


Figure 6: Comparison of gross emissions by category between the reporting periods

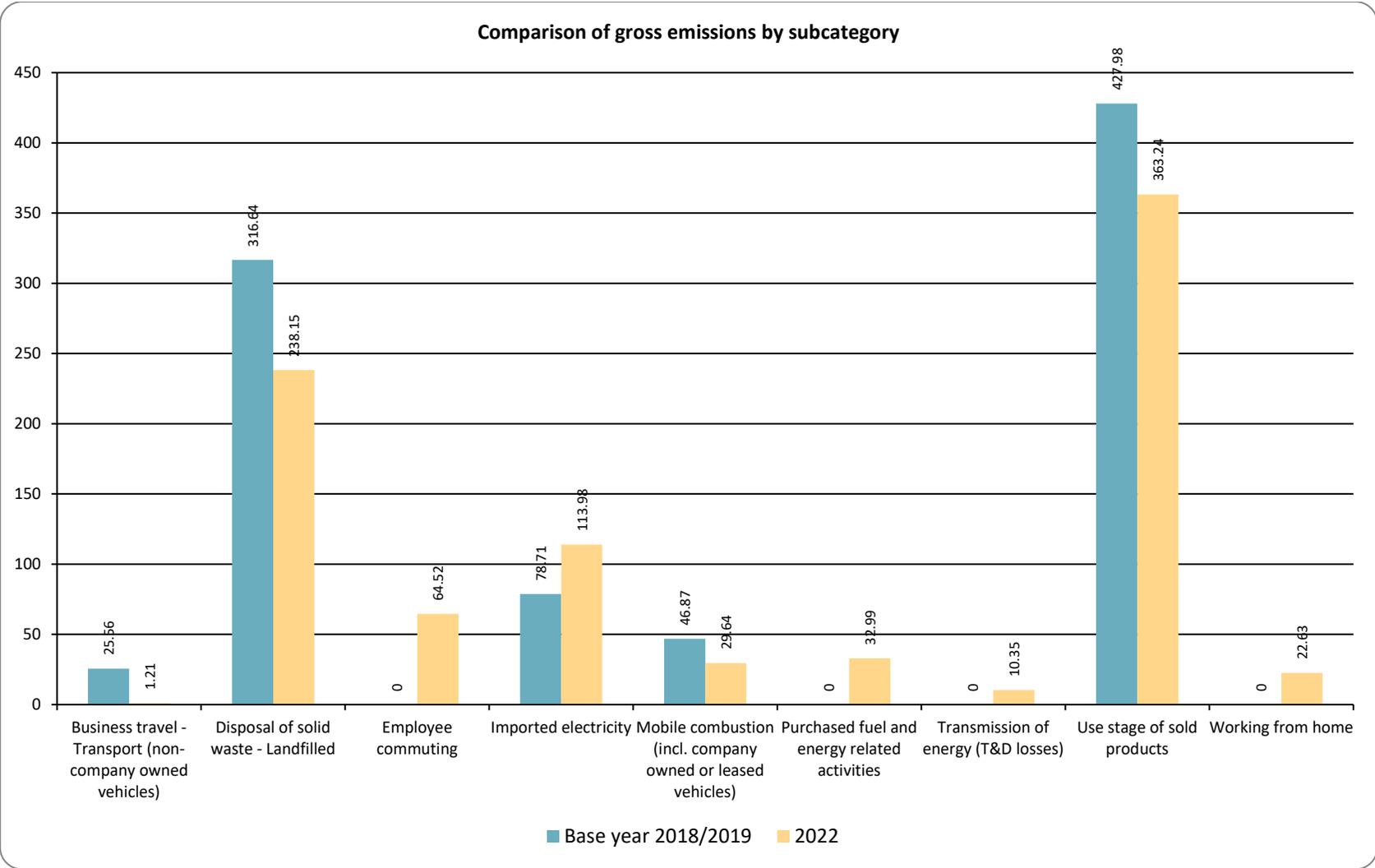


Figure 7: Comparison of gross emissions by subcategory between the reporting periods



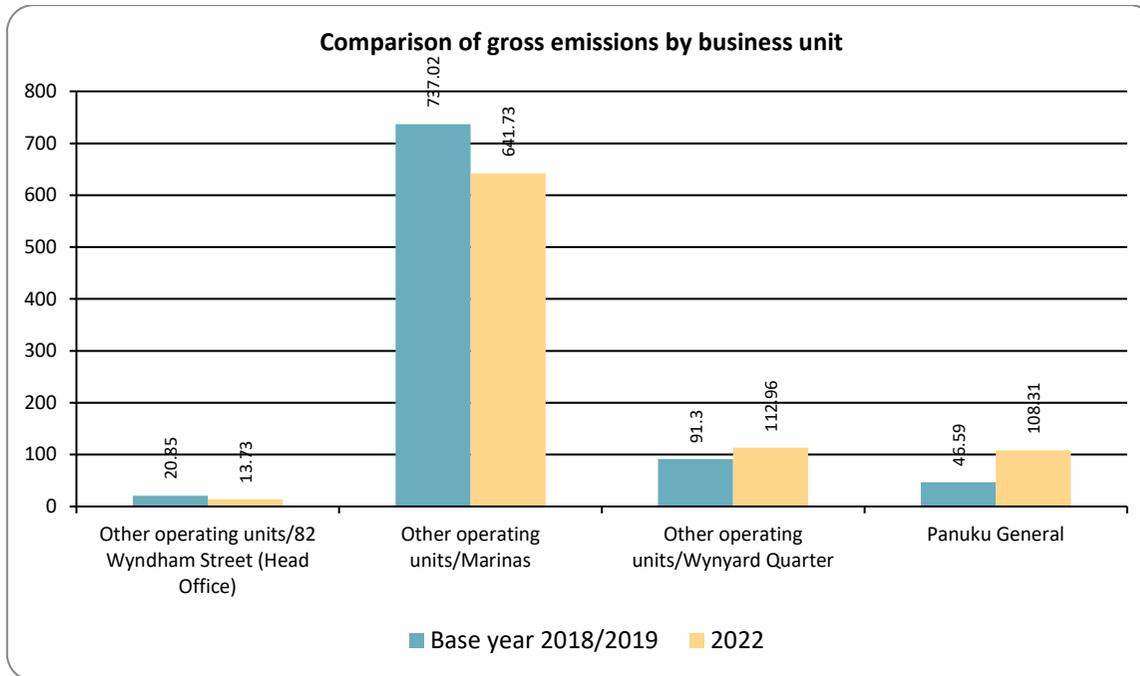


Figure 8: Comparison of gross emissions by business unit between the reporting periods

Performance against target has not been provided

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 ₂ e)	Current performance (%)	Comments
An absolute reduction in Scope 1 and Scope 2 GHG emissions (combined)	2018	2030	Absolute	143.62	14%	
An absolute reduction in Scope 1, Scope 2, and Scope 3 Mandatory GHG emissions (combined)	2018	2030	Absolute	393.34	-16%	
A reduction in GHG emissions intensity for Scope 1, Scope 2 and mandatory Scope 3 emissions (combined) reported as CO ₂ e per \$M Revenue	2018	2030	Intensity	6.84	3%	
A reduction in GHG emissions intensity for Scope 1, Scope 2 and mandatory Scope 3 emissions (combined) reported as CO ₂ e per FTE - Full Time Employee	2018	2030	Intensity	1.62	-1%	



2.2. SIGNIFICANT EMISSIONS SOURCES

Significant sources

Our top emission sources were Category 5 - oncharged electricity used by marina berth-holders, Category 3 - disposal of waste to landfill from Westhaven Marina, Eke Panuku head office and Wynyard Quarter public space and Category 2 - electricity used by Westhaven Marina, Eke Panuku head office and Wynyard Quarter public space.

Activities responsible for generating significant emissions

Significant emissions source activities TBC.

Influences over the activities

Emissions could be impacted by future marina growth and we will need to look at how we can further reduce energy from marina operations. Some work has been done in the past to improve the energy efficiency of marina infrastructure with new plinths installed and solar panels were installed on the Westhaven Marina office this year. Work has also been done to reduce waste through provision of recycling facilities and partnering with a fish waste collection operator. There is the opportunity for further awareness raising work with berth-holders.

Significant sources that cannot be influenced

Our largest emissions source is one that we have the least control over - oncharged electricity from the marina. Waste is another significant source that we have limited control over as the majority is generated from the marina or in the Wynyard Quarter public space.

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).

When we completed our first emissions inventory and reduction plan, we worked with Toitū to develop targets that were aligned with our commitment as members of the Climate Leaders Coalition.

Table 6. Emission reduction targets

Target name	Baseline period	Target date	Type of target (intensity or absolute)	Categories covered	Target		KPI	Responsibility	Rationale
An absolute reduction in Scope 1 and Scope 2 GHG emissions (combined)	2018	2030	Absolute	Category 1 and 2	-41%	Baseline 126.3, target 74.3	Absolute total tCO ₂ e	Kristen Webster, Head of Corporate Responsibility	Per CLC commitments
An absolute reduction in Scope 1, Scope 2, and Scope 3 Mandatory GHG emissions (combined)	2018	2030	Absolute	Category 1, 2, 3 and 4	-35%	Baseline 896.5, target 582.7	Absolute total tCO ₂ e	Kristen Webster, Head of Corporate Responsibility	Per CLC commitments
A reduction in GHG emissions intensity for Scope 1, Scope 2 and mandatory Scope 3 emissions (combined) reported as CO ₂ e per \$M Revenue	2018	2030	Intensity	Category 1, 2, 3 and 4	-48%	Baseline 12.8, target 6.7	\$M Revenue	Kristen Webster, Head of Corporate Responsibility	Acknowledging growth in business
A reduction in GHG emissions intensity for Scope 1, Scope 2 and mandatory Scope 3 emissions (combined) reported as CO ₂ e per FTE - Full Time Employee	2018	2030	Intensity	Category 1, 2, 3 and 4	-42%	Baseline 3.5, target 2.0	FTE - full time employee	Kristen Webster, Head of Corporate Responsibility	Acknowledging growth in business



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 on charged energy use at Westhaven Marina	Investigate options for improved electricity infrastructure, including solar generation.	Head of Corporate Responsibility/ Head of Marinas	30/06/2023	None anticipated	None anticipated	n/a
	Investigate behaviour change and awareness raising opportunities around energy use.	Head of Corporate Responsibility/ Head of Marinas	30/06/2023	None anticipated	None anticipated	n/a
Reduce waste to landfill - Westhaven Marina	Investigate behaviour change and awareness raising opportunities around waste in the marina.	Head of Corporate Responsibility/ Head of Marinas	30/06/2023	Reduced operating costs if waste is reduced.	None anticipated	n/a
Reduce waste to landfill - Wynyard Quarter public space	Investigate reduced waste at source via Wynyard Quarter businesses	Head of Corporate Responsibility/ Commercial manager	30/06/2023	Supply chain benefits, behaviour change	None anticipated	n/a
Reduced energy use at 82 Wyndham St	Implement energy reduction measures as identified in energy audit.	Head of Corporate Responsibility	30/06/2023	None anticipated	None anticipated	n/a
Reduced energy use at Westhaven Marina	Investigate energy reduction opportunities.	Head of Corporate Responsibility/Head of Marinas	30/06/2023	Reduced operating costs	None anticipated	n/a
Reduced energy use in Wynyard Quarter public space	Investigate energy reduction opportunities.	Head of Corporate Responsibility	30/06/2023	Reduced operating costs	None anticipated	n/a
Reduced employee commuting emissions	Continue awareness raising and behaviour change campaigns to encourage mode shift.	Head of Corporate Responsibility	Ongoing	None anticipated	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
Electricity (Managed Property Portfolio)	Compile property portfolio data to improve future reporting and management.	Ruth Jost	30/06/2023
	Sub actions:		
	<ul style="list-style-type: none"> Establish floor area data or number of bedrooms for properties in database where possible. 		
	<ul style="list-style-type: none"> Improve consistency of BU code use in suppliers billing system 		
	<ul style="list-style-type: none"> Investigate whether energy suppliers can provide Eke Panuku with consumption data for owned properties (where Panuku does not pay for or on-charge electricity and gas). 		

2.5. STAFF ENGAGEMENT

Staff are made aware of our emissions reduction commitments through company internal communication channels, including the Panuku InfoHub (intranet), the weekly newsletter, Kōrero, and group presentations. New staff are informed via the staff induction process under the wider banner of sustainability and corporate responsibility.

Key staff that either (a) provide emission source data and/or (b) have a major influence on the management of emission source activities, are engaged with by the Corporate Responsibility team in order to explore and implement emission reduction opportunities.

2.6. KEY PERFORMANCE INDICATORS

Emissions per FTE are also reported on to enable emissions intensity to be assessed.

2.7. MONITORING AND REPORTING

Progress against targets is monitored and reported on annually.



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 Eke Panuku Development Auckland.xls).

Table 9. 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile combustion (incl. company owned or leased vehicles)	28.69	0.20	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.64
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
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
Enteric fermentation	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
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
Total net emissions	28.69	0.20	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.64

Table 10. Non-biogenic, biogenic anthropogenic and biogenic non-anthropogenic CO₂ emissions and removals by category

Category	Anthropogenic biogenic CO₂ emissions	Anthropogenic biogenic (CH₄ and N₂O) emissions (tCO₂e)	Non-anthropogenic biogenic (tCO₂e)
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	238.15	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	238.15	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.

A review of all operational expenditure has been initiated, with an aim to identify any additional sources to report on. No additional sources have been added this year based on the significance work but more investigation is required.

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 11 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.

Information is extracted from financial records, when possible, otherwise provided by suppliers, e.g. waste collection data.

Table 11. GHG emissions activity data collection methods and inherent uncertainties and assumptions

Business unit	Activity	Category	Data source	Data collection unit	Assumption description	Uncertainty	Emission factor uncertainty
Other operating units/82 Wyndham Street (Head Office)	Electricity distributed T&D losses	Category 4: Indirect emissions from products used by organisation	Supplier invoice records/Eke Panuku accounts	kWh		Low. Data obtained by energy meters and assumed to be full record.	
Other operating units/82 Wyndham Street (Head Office)	Electricity	Category 2: Indirect emissions from imported energy	Supplier invoice records/Eke Panuku accounts	kWh		Low. Data obtained by energy meters and assumed to be full record.	
Other operating units/82 Wyndham Street (Head Office)	Waste landfilled LFGR Mixed waste	Category 4: Indirect emissions from products used by organisation	Waste data provided by landlord	t		Medium. Waste data for whole building pro-rated by FTE to our tenancy share.	
Other operating units/Marinas	Electricity distributed T&D losses	Category 4: Indirect emissions from products used by organisation	Eke Panuku accounts records	kWh		Low. Data obtained by energy metres and plinths and assumed to be full record. Oncharged in full.	
Other operating units/Marinas	Electricity distributed T&D losses	Category 4: Indirect emissions from products used by organisation	Eke Panuku accounts records	kWh		Medium. Data obtained by removing oncharged electricity from total billed electricity. Some usage assumed to be from commercial tenants included but cannot be clearly separated. Likely over estimated.	
Other operating units/Marinas	Electricity	Category 2: Indirect emissions from imported energy	Eke Panuku accounts records	kWh		Medium. Data obtained by removing oncharged electricity from total billed electricity. Some usage assumed to be from commercial tenants included but cannot be clearly separated. Likely over estimated.	
Other operating units/Marinas	Electricity	Category 5: Indirect emissions associated with the use of products from the organisation	Eke Panuku accounts records	kWh		Low. Data obtained by energy metres and plinths and assumed to be full record. Oncharged in full.	
Other operating units/Marinas	Petrol	Category 1: Direct emissions and removals	Eke Panuku accounts records	L		Low. Fuel purchased represents all boat fleet use.	

Business unit	Activity	Category	Data source	Data collection unit	Assumption description	Uncertainty	Emission factor uncertainty
Other operating units/Marinas	Waste landfilled LFGR Mixed waste	Category 4: Indirect emissions from products used by organisation	Supplier data	kg		Medium. Weight estimates provided for Westhaven Marina services. Spend data only available for Viaduct, so spend is used to assume volume based on Westhaven data (20%). Same supplier used.	
Other operating units/Wynyard Quarter	Electricity distributed T&D losses	Category 4: Indirect emissions from products used by organisation	Eke Panuku accounts records	kWh		Low. Data obtained by energy metres assumed to be full record. Note exclusion of leased properties in this business unit.	
Other operating units/Wynyard Quarter	Electricity	Category 2: Indirect emissions from imported energy	Eke Panuku accounts records	kWh		Low. Data obtained by energy metres assumed to be full record. Note exclusion of leased properties in this business unit.	
Other operating units/Wynyard Quarter	Waste landfilled LFGR Mixed waste	Category 4: Indirect emissions from products used by organisation	Supplier invoice records/Eke Panuku accounts	kg		Medium. Fixed contract based on volume (L).	
Panuku General	Bus travel (city)	Category 3: Indirect emissions from transportation	Auckland Transport account records for company HOP cards	pkm		Medium. Assumed all travel is captured. Not linked to personal HOP accounts so some additional personal use excluded.	
Panuku General	Car Average (unknown fuel type)	Category 3: Indirect emissions from transportation	Eke Panuku accounts records	km		High. Based on reimbursement claims where kilometres and mode are not always stated.	
Panuku General	Diesel	Category 1: Direct emissions and removals	Auckland Council Fleet fuel cards records	L		Low. Fuel purchased represents all fleet vehicle use.	
Panuku General	Petrol	Category 1: Direct emissions and removals	Auckland Council Fleet fuel cards records	L		Low. Fuel purchased represents all fleet vehicle use.	
Panuku General	Taxi (regular)	Category 3: Indirect emissions from transportation	Supplier account data, some reimbursement claims.	\$		Medium. Taxi represents transport made using a company taxi card and some domestic taxi travel claimed in reimbursement records.	

A1.1.3 Excluded emissions sources and sinks

Emissions sources in Table 12 have been identified and excluded from this inventory.

Table 12. GHG emissions sources excluded from the inventory

Business unit	GHG emissions source or sink	GHG emissions category	Reason for exclusion
Panuku General	Freight and courier	Category 4	Using the Appendix 1 template, the total spent on Freight represent less than 0.1% of our inventory and therefore is deemed de-minimis
Panuku General	Refrigerants	Category 1	Using the Appendix 1 template, fleet associated refrigerants represent less than 1% of our inventory and therefore is deemed de-minimis. Leased office air-con refrigerants supplied and maintained by Landlord.
Waterfront (for leased assets)	Electricity (for leased assets)	Category 2	Property assets are under lease agreements with other parties. For shared space electricity (Category 2), data is insufficient to make assumptions and is therefore excluded. A response to this is included in the management plan.
Waterfront	Waste (for leased assets)	Category 4	Property assets are under lease agreements with other parties. For shared space waste removal (Category 4), data is insufficient to make assumptions and is therefore excluded. A response to this is included in the management plan.
Marinas	Waste (for Panuku kiosks, offices)	Category 4	Using the Appendix 1 template, marina office/kiosk waste represents less than 0.1% of our inventory and therefore is deemed de-minimis

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.

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.

A1.2.2 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 recognised by the Programme 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:

- 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 not been included in this inventory.

Details

(No information supplied)

APPENDIX 2: SIGNIFICANCE CRITERIA USED

Table 13. Significance criteria used for identifying inclusion of indirect emissions

Appendix 2
(No information supplied)

APPENDIX 3: CERTIFICATION MARK USE

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		

Section of this report	ISO 14064-1:2018 clause	Organisational Technical Requirement rule
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 Liabilities		
A1.2.3.1 GHG stocks held		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		