



Carbon Inventory Report: **Sustainability Trust**

Trading As Sustainability Trust

Period:	1 Jul 2022 - 30 Jun 2023
Base year:	1 Jul 2021 - 30 Jun 2022
Status:	Quality Reviewed Inventory
Assurance type:	No Assurance
Certification type:	Carbon Conscious
Last updated date:	2024-03-12



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1 Summary

This carbon inventory was prepared for Sustainability Trust, trading as Sustainability Trust.

Thereafter in the report, the organisation will be referred to as Sustainability Trust.

Report period 1 Jul 2022 - 30 Jun 2023

Base year 1 Jul 2021 - 30 Jun 2022

1.1 Organisation Information

Sustainability Trust is a social enterprise operating in Te Upoko o te Ika a Māui. We operate under a community/social enterprise model. We develop financial surpluses from a range of sustainability-focused business units which are used to support our social and environmental programmes. These programmes include the Wellington Curtain Bank and provide Wellingtonians with practical support to live warm and healthy lives with positive impacts on our environment. Our main activities are home assessments, electrical installs and insulation installs. We are split between staff on the road and those based in our main site in central Wellington. We also have a Curtain Bank supplying preloved curtains into low income households, an EcoShop selling a variety of products, drop-off points for a variety of waste items and delivery education & consultancy services. In the last financial year we also started a not for profit energy retailer.

2 Background

2.1 Statement of Intent

Essentially, we measure to offset the carbon emissions we can't yet avoid, so that we can plan for carbon emission reductions and so that we show leadership in the community in terms of Climate Action. Our Vision: A just and sustainable low-carbon future for Te Upoko o te Ika a Māui, the wider Wellington region. Our purpose: We're on a mission to create sustainable, healthy homes for our community, to support them to take climate change action, and to nurture their relationship with Papatūānuku. Two of our four long term goals: Climate action: We commit to courageous advocacy and action to educate and influence climate positive behaviours and policies. A Thriving Organisation: By 2024, we will ensure our own whare is in order, our diverse team is valued, our resources looked after and our future as a successful environmental social enterprise is assured. In meeting our long term goals we have set an objective to cut our carbon emissions in line with the Paris Agreement goals and the Zero Carbon Bill and being seen as an exemplar for sustainable & ethical business operations in the Wellington region.

2.2 Communication and dissemination

This inventory was prepared as a management tool for Sustainability Trust to:

- Assist it in managing its response to climate change and its reduction of GHG emissions.
- Be a communication tool that demonstrates to stakeholders that the organisation has identified its emissions profile,
- Is aware of the significant issues related to climate change and is taking action to mitigate these issues, including offsetting unavoidable emissions.

The users of this report will include, but are not limited to, the staff, manager and Board of Sustainability Trust, its shareholders and members. The summary of this inventory will be made available to all stakeholders on request.

3 Reporting methodology and compliance standards

3.1 Methods & Emissions factor sources

This report is the 4th annual greenhouse gas (GHG) emissions inventory that has been prepared by Sustainability Trust.

It was prepared in accordance with;

- The International Standards Organisation's process for calculating and reporting GHG emissions: ISO 14064-1 (2018).
- World Resource Institute's "Greenhouse gas protocol"

The calculation method used to quantify the GHG emissions was the activity data multiplied by the appropriate emission factor:

$\text{Tonnes CO}_2\text{e} = \text{Total GHG activity} \times \text{appropriate emission factor}$

Ekos' GHG calculation tool (Online based) was used for the calculation of emissions for this inventory.

GHG emission factors were generally sourced from New Zealand's Ministry for the Environment. Where appropriate emission factors were not available, other reliable sources such as international government agencies or published research were used. Full reference sources are listed in the Reference section of this report.

The methodology used is illustrated in figure 1 below:

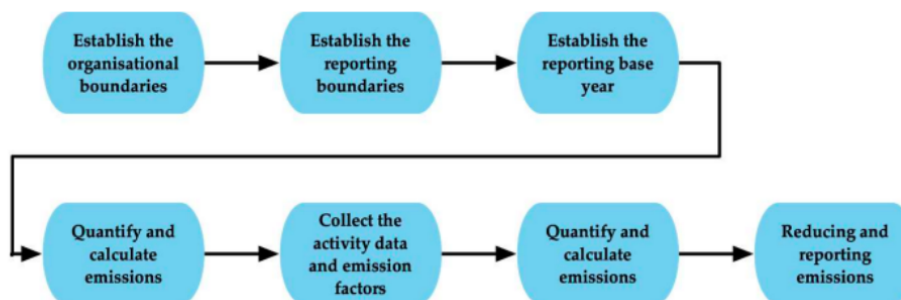


Figure 1: ISO 14064-1 (2018) methodology for measuring a GHG inventory

3.2 Consolidation approach

The organisational boundary identifies which facilities or subsidiaries are included or excluded from the carbon inventory. Emissions from all aspects of the organisation are consolidated to determine the total volume. Consolidation is done using one of these methods:

- Control, whereby all emissions over which the organisation has either financial or operational control are included in the inventory
- Equity share, whereby the organisation only includes emissions for the portion of the facilities and business that the organisation owns.

The consolidation method used in this inventory to determine Sustainability Trust's emissions is Control - Operational.

3.3 Base year recalculation policy

Base year data may need to be revised when material changes occur and have an impact on calculated emissions. When the changes are estimated to represent more than 5% of Scope 1, 2 or 3 emissions, or when there are significant changes to the reporting boundaries or calculation methodology, Ekos' policy is to recalculate base year data with explanation.

3.4 GHG information management and monitoring procedures

The organisation is responsible for appropriate document retention, archiving and record keeping for each emissions source. Ekos' annual review requirement is in place to ensure any errors and omissions in the GHG Inventory report is addressed.

3.5 Changes to methodology

No methodology changes since Financial Year 2022.

4 Reporting boundary

The below diagram describes the organisational boundary and outlines the business units that are included and excluded in this inventory.

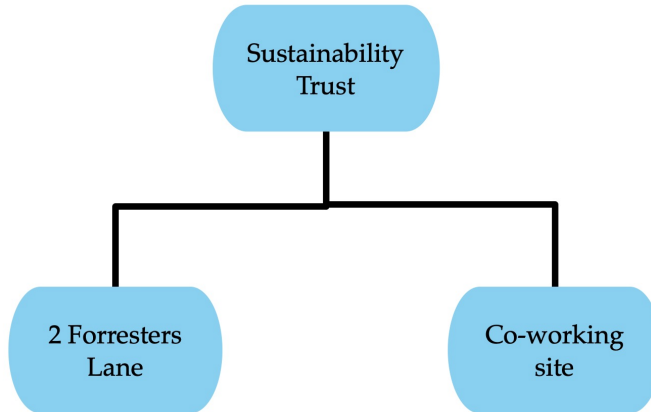


Figure 2: Sustainability Trust's Organisational Boundary.

Table 1: Business units included/excluded

Legal entities (Include any subsidiaries)	Business unit / Location	Activities / Purpose	Included / Excluded	Reason for exclusion
Sustainability Trust	2 Forresters Lane		Included	
Sustainability Trust	Courtney Place (co-working space)		Included	

5 Reporting Scopes

5.1 Include/ Excluded Categories

ISO 14064-1(2018) categorises emissions as follows:

- Scope 1 - (Category 1) Direct GHG emissions and removals.
- Scope 2 - (Category 2) Indirect GHG emissions from imported energy, heat or steam generated elsewhere.
- Scope 3 - (Category 3) Indirect GHG emissions from transportation.
- Scope 3 - (Category 4) Indirect GHG emissions from products used by organization.
- Scope 3 - (Category 5) Indirect GHG emissions associated with the use of products from the organization.
- Scope 3 - (Category 6) Indirect GHG emissions from other sources.

In compliance with the ISO Standard, the organisation has included all relevant direct and indirect emissions in this GHG inventory.

*As per ISO14064-1 clause 5.2.3, Ekos shall define its own pre-determined criteria for significance. The following qualitative criteria for Non-mandatory status have been considered;

1. Source data likely to be difficult/expensive to obtain and
2. The accuracy of the quantified emissions likely to be poor due to nature of the emissions factor or
3. The large amount of assumptions likely to result in unreliable emissions total.

The included/excluded emissions sources are shown in the following table:

Table 2: emissions categories included and justification if excluded

ISO & GHG Protocol Categories	Example of Emissions Sources	Ekos' Position	Include/ Exclude	Exclusion Criteria	Notes
Category 1) Direct GHG emissions and removals: (GHG Protocol scope 1)					
Stationary Combustion	Coal, diesel and gas use for heating, generation of energy etc	Mandatory	Not Applicable	None	
Mobile Combustion	Fuel use for company owned vehicles, forklift/mowers or if you lease vehicles but have operational control.	Mandatory	Include	None	
Chemical & Industrial Processes	Use of CO2 or nitrous oxide in bottling, packaging, beer taps etc	Mandatory	Not Applicable	None	
Fugitive Emissions	Top up of refrigerant gases when maintaining any fridges, freezers or Air-conditioning units	Mandatory	Not Applicable	None	
Land Use & Land Use Changes	Fertiliser use and animals (ruminants) on land.	Mandatory	Not Applicable	None	
Category 2) Indirect GHG emissions from imported energy: (GHG Protocol scope 2)					
Purchased Electricity	Electricity use in all facilities	Mandatory	Include	None	
Category 3) Indirect GHG emissions from transportation: (GHG Protocol scope 3)					
Inward/Outward Freight	Upstream transport and distribution of goods	Mandatory	Include	None	
Business Travel	Business travel (flights, accommodation etc)	Mandatory	Include	None	
Staff Commuting	Employee commuting, including emissions related to the transportation of employees from their homes to their workplaces.	Non-mandatory	Include	None	
Downstream Transport & Distribution of Goods	Downstream transport and distribution for goods, freight services that happen throughout the supply chain but not paid for by the organization	Non-mandatory	Not Applicable	None	
Work From Home	Staff working from home	Non-mandatory	Include	None	

Table 2: emissions categories included and justification if excluded continued.

ISO & GHG Protocol Categories	Example of Emissions Sources	Ekos' Position	Include/ Exclude	Exclusion Criteria	Notes
Category 4) Indirect GHG emissions from products used by organization: (GHG Protocol scope 3)					
Waste Generated in Operations	Waste generated in operations (solid waste to landfill and wastewater to water treatment plants)	Mandatory	Include	None	
Fuel and Energy related Activities (T&D Losses)	Fuel and energy related activities (T&D losses for electricity & natural gas)	Mandatory	Include	None	
Fuel and Energy related Activities (WTT Emissions for Fuel)	Coal, diesel and gas use for heating, generation of energy etc	Mandatory	Include	None	
Emissions From Purchased Goods	Emissions from purchased goods, i.e. contract growers or processing to your key production	Non-mandatory	Exclude	Source data difficult/ expensive to obtain	
Emissions from the Use of Services	Emissions from the use of services (i.e. IT servers, consulting, cleaning, maintenance, bank)	Non-mandatory	Exclude	Source data difficult/ expensive to obtain	
Capital Goods	Capital goods	Non-mandatory	Not Applicable	None	
Upstream Leased Assets	Upstream leased assets (leased vehicles - fuel use should be reported under scope 1, leased office space - the electricity use is passed on by the landlord to the company, therefore should be included in scope 2.)	Non-mandatory	Include	None	Included in scope 2 electricity
Category 5) Indirect GHG emissions associated with the use of products from the organization: (GHG Protocol Scope 3)					
Downstream Leased Assets	Downstream leased assets (If you own a rental car or camper van company, you should include the customer's fuel use of the vehicles. If you own warehouses and office buildings, you should include all scope 1 & 2 emissions of lease's use of the asset)	Mandatory	Not Applicable	None	
Processing of the Sold Product	Emissions from the Processing of the sold product	Non-mandatory	Not Applicable	None	
Use Stage of the Product	Emissions from the use stage of the product	Non-mandatory	Exclude	Limited level of influence	
End of Life Stage of the Product	Emissions from end of life stage of the product	Non-mandatory	Exclude	Limited level of influence	
Franchises	Franchises (To be considered only if already included under the consolidation approach. Scope 1 and 2 of each franchisee requires collection)	Non-mandatory	Not Applicable	None	
Investments	Investments (Mandatory for financial industries such as Banks and Investment Fund organisations., Non-mandatory for other sectors)	Non-mandatory	Not Applicable	None	
Category 6) Indirect GHG emissions from other sources:					
Any other relevant emissions	Any relevant emissions which do not fall within the other categories	Non-mandatory	Not Applicable	None	

6 Greenhouse Gas (GHG) emissions profile

Data was collected by Sustainability Trust's staff with guidance where required from Ekos. The table below provides an overview of the data collected for each emission source. All emissions were calculated using Ekos-developed calculator.

6.1 Emissions Summary

Table 3: Emissions Summary by GHG Scopes and ISO Categories.

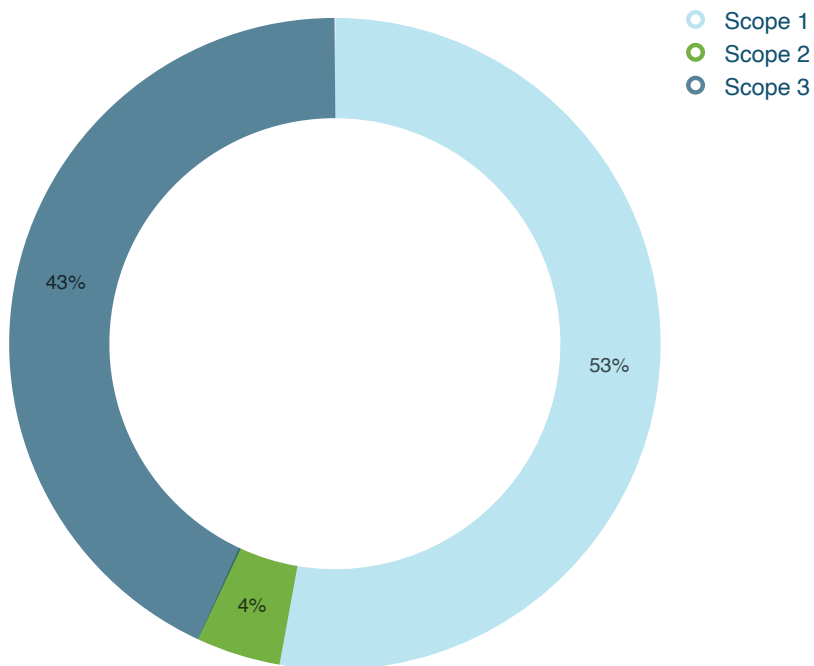
Scope	Emissions Category	tCO ₂ e (location-based)
1	(1) Direct GHG Emissions	48.44
2	(2) Indirect GHG Emissions From Imported Energy	3.85
3	(3) Indirect GHG Emissions From Transportation & Distribution	21.04
3	(4) Indirect GHG Emissions From Products & Services Used By The Organisation	18.49
3	(5) Indirect GHG Emissions From The Use Of The Organisation's Products	0.00
3	(6) Indirect GHG Emissions From Other Sources	0.00
Total Gross GHG Emissions		91.82
GHG Removals/ Sinks		NR

Electricity emissions are usually calculated and reported using the location-based methodology, which is the average generation emissions for the region or the national grid. The standard requires the electricity to be also reported using the market-based methodology where this is relevant or available, this is commonly known as "dual reporting". In this report, if market-based factor is available and used in the inventory, dual reporting will occur in Table 3 of the report. Thereafter, the emissions will be represented in only the method that is most relevant.

Table 4 shows the emissions intensity, if emissions intensity metrics were provided.

Table 4: Emissions Intensity Summary

Emission Intensity Metrics	Input	tCO ₂ e per Intensity Metric (Location based)
Number of FTE	34.30	2.68
Gross Revenue (\$Mil)	6.60	13.91
Production (MT)	0.00	0.00



Note: labels for less than 2% are not displayed.

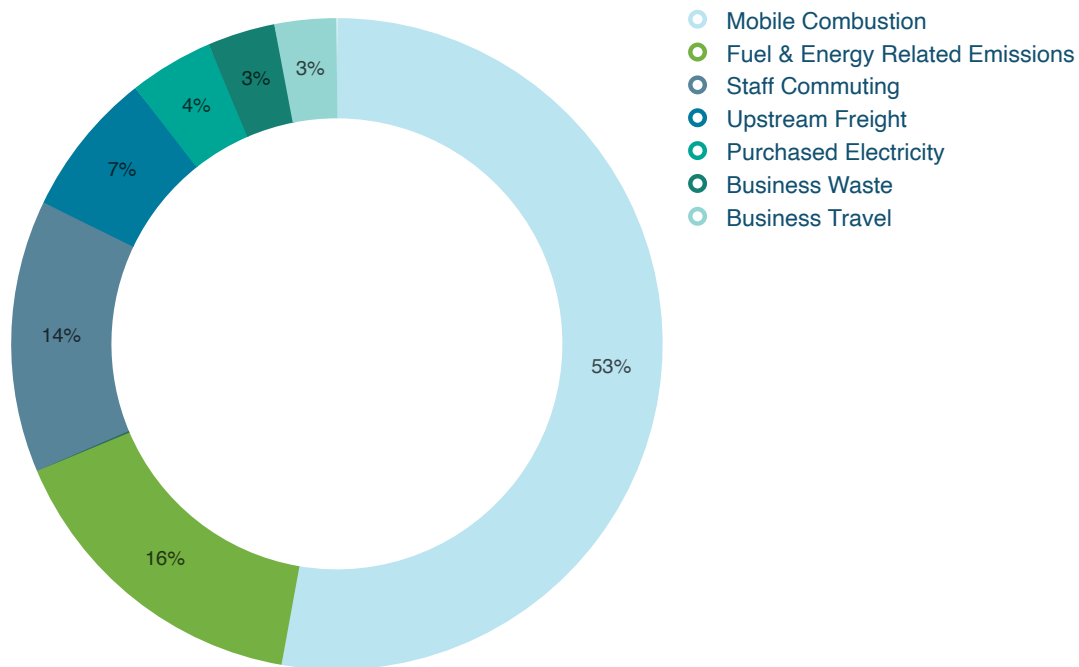
Figure 3: Emissions by Scopes

6.2 Emissions by Activities

Table 5 and Figure 4 below shows the emissions by Activity groups and the % it represents.

Table 5: GHG emissions by Scope and Activity groups

GHG scope	Factor Groups	Sum of tCO ₂ e	% of Inventory
1	Mobile Combustion	48.44	52.75%
2	Purchased Electricity	3.85	4.19%
3	Fuel & Energy Related Emissions	14.60	15.91%
3	Staff Commuting	12.41	13.51%
3	Upstream Freight	6.64	7.23%
3	Business Waste	3.08	3.36%
3	Business Travel	2.80	3.05%
Grand Total		91.82	100.00%



Note: labels for less than 2% are not displayed.

Figure 4: Emissions by Activity Groups

Table 6 and Figure 5 below identifies the organisation's top emissions sources by ranking the largest to the smallest.

Table 6: GHG emissions sources ranked by largest to smallest

Emission Sources	GHG tCO₂e	% of Inventory
Mobile Combustion - Diesel	35.92	39.12%
Well to tank emissions	14.82	16.14%
Mobile Combustion - Petrol (regular)	12.51	13.63%
Staff Commuting - Petrol	6.87	7.49%
Inward Freight Other Freight - Truck	6.09	6.64%
Staff Commuting - Bus	3.70	4.03%
Electricity - New Zealand (Forrester Lane - Unit 1)	3.00	3.27%
Waste & Wastewater General Waste to Landfill - With Gas Recovery (Unit 1)	2.90	3.16%
Domestic Air Travel - New Zealand Domestic Economy Class	2.37	2.58%
Staff Working From Home	0.48	0.52%
Electricity - New Zealand (Courtney Creative Space - Unit 2)	0.43	0.47%
EV Charging Stations - Mobile	0.41	0.44%
Electricity T&D Losses	0.40	0.43%
Staff Commuting - Rail	0.39	0.43%
Outward Freight Other Freight - Courier Van	0.39	0.42%
Staff Commuting - Electric Vehicle	0.18	0.20%
Waste Composting	0.18	0.20%
Business Accommodation - New Zealand	0.17	0.18%
Inward Freight Other Freight - Courier Van	0.16	0.17%
EV Electricity WTT - mobile	0.14	0.16%
Business Travel - Petrol	0.14	0.15%
Business Travel - Rental cars	0.09	0.10%
EV Electricity T&D - mobile	0.05	0.05%
Business Travel - Taxi	0.01	0.01%
EV Home Charging - Mobile	0.00	0.01%
Outward Freight - RoRo-Ferry - Average	0.00	0.00%
Inward Freight - Container Ship - Average	0.00	0.00%
Grand Total	91.82	100.00%

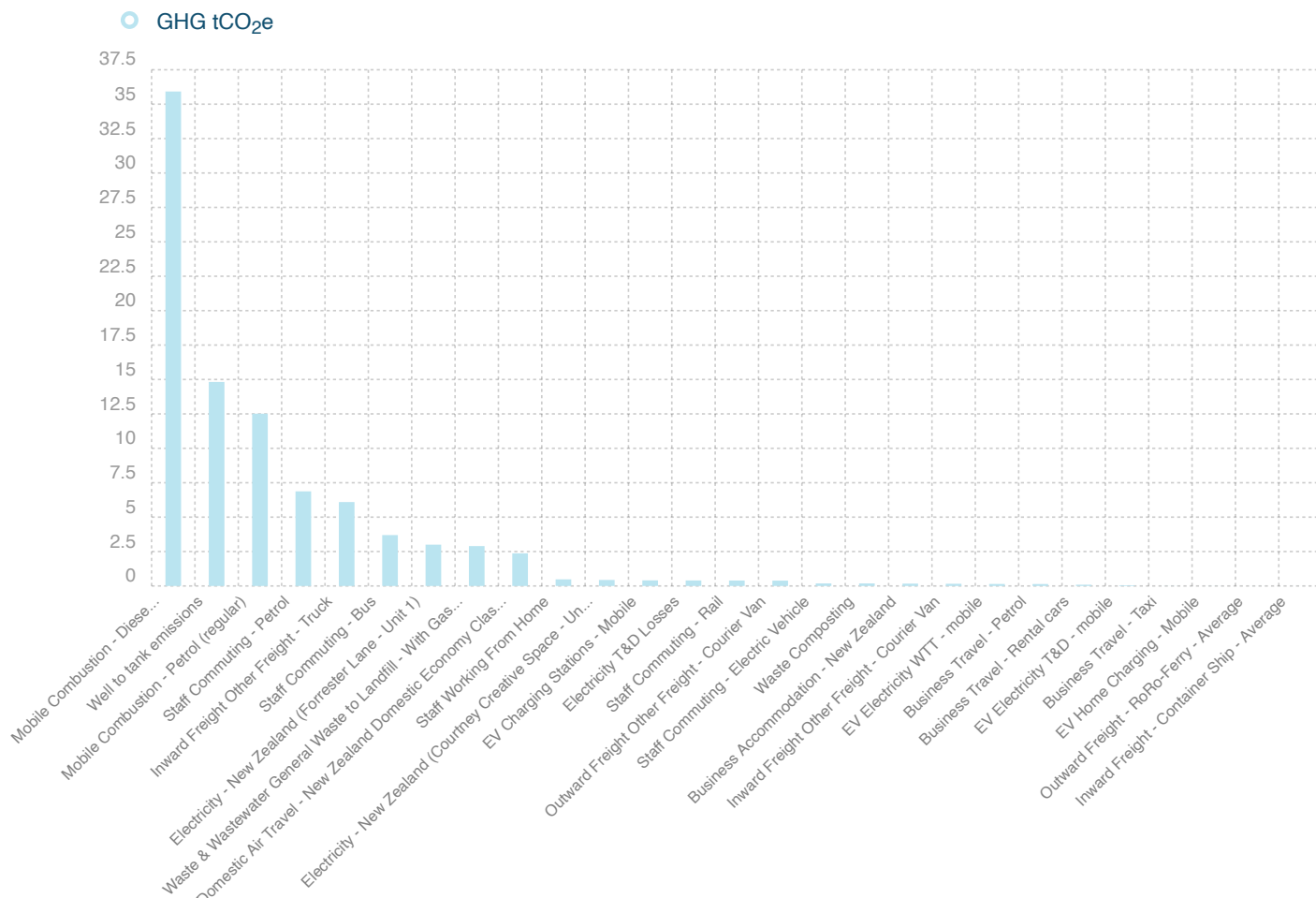


Figure 5: Emissions by Activities

7 Data Quality, Uncertainties and Assumptions

Activity data was obtained from a range of sources, and the data quality are ranked and outlined in Table 7 below.

Table 7: Activity data collection - quality and source

Emissions source	Scope	Unit	Data source	Data quality	Any assumptions made
Mobile Combustion - Fuels	1	L	Fuel supplier statements	Good	No assumptions made.
Electricity - Electricity Consumption	2	KWH	Electricity supplier statement	Medium	Usage for Courtney Creative Space is estimated based on the 50m ² floor space occupation using BRANZ default conversion factor.
Sea Freight Received	3	TKM	Internal inventory records	Low	Estimated weight based on FY2022 average for route. Added 20% margin to obtain conservative estimate. Destination town used rather than address to estimate distances.
Other Freight Received	3	TKM	Internal inventory records	Low	Estimated weight based on FY2022 averages for route. Added 20% margin to obtain conservative estimate. Destination town used rather than address to estimate distances.
Other Freight Received	3	TKM	Internal inventory records	Low	No assumptions made.
Other Freight Sent	3	TKM	Internal inventory records	Medium	Destination town used rather than address to estimate distances.
Waste & Wastewater - Landfill Waste	3	KG	Waste service provider statements	Medium	Individual monthly invoices available for 9 months; remainder estimated using monthly averages.
Wastewater Waste - Waste Composting	3	KG	Waste service provider statements	Low	Individual monthly invoices available for 5 months; remainder estimated using monthly averages.
Domestic NZ Business Flights	3	PKM	Airline invoices	Good	No assumptions made.
Business Accommodation	3	Person nights	Internal financial records	Good	No assumptions made.
Business Travel Vehicle Mileage	3	KM	Internal reimbursement records	Good	No assumptions made.
Business Travel Taxi Distance	3	KM	Internal financial records	Low	Some of data converted dollar value to km.
Business Travel Rental Cars	3	KM	Internal financial records	Low	Converted fuel usage into km using Waka Kotahi light vehicle default of 7.2L/100km.
Staff Vehicle Mileage	3	KM	Staff survey	Medium	Estimated by extrapolating average weekly commuting behaviour to typical weeks worked in FY23. Most common transport mode selected. Casual staff excluded. Working weeks reduced by 7% adjustment for sick days and public holidays.
Staff Working from Home	3	DAYS	Staff survey	Low	Estimated by extrapolating average weekly work-from-home behaviour to typical weeks worked in FY23. Most common transport mode selected. Casual staff excluded. Working weeks reduced by 7% adjustment for sick days and public holidays.
Staff Commute Public Transport	3	KM	Staff survey	Medium	Estimated by extrapolating average weekly commuting behaviour to typical weeks worked in FY23. Most common transport mode selected. Casual staff excluded. Working weeks reduced by 7% adjustment for sick days and public holidays.
EV Charging Stations - Mobile	2	tCO ₂ e	Supplier Invoices	Good	No assumptions made.
EV Home Charging - Mobile	2	tCO ₂ e	Reimbursement records	Low	Used Financial Year 2022 reimbursement data as FY23 unavailable. Dollar value divided by average kWh cost for Wellington region to determine usage.
EV Electricity T&D - mobile	3	tCO ₂ e	Supplier invoices & reimbursement records	Low	For home charging used Financial Year 2022 reimbursement data as FY23 unavailable. Dollar value divided by average kWh cost for Wellington region to determine usage.
EV Electricity WTT - mobile	3	tCO ₂ e	Supplier invoices & reimbursement records	Low	For home charging used Financial Year 2022 reimbursement data as FY23 unavailable. Dollar value divided by average kWh cost for Wellington region to determine usage.

The client source data is rated on a scale of Good, Medium, Low to Poor. The rating is given based on assessing the data source against our Data quality matrix. The classification is based on determining two criteria of uncertainties; Data completeness and Data accuracy. The higher the level of uncertainty due assumptions in the calculation or lack of data for the period, then the lower the quality of the data.

Where accurate data is not available, it is appropriate to estimate to ensure that a comprehensive inventory measurement is completed. Estimates must be carried out on a scientifically derived basis to ensure accuracy.

It is recommended that the organisation works to improve the data collections processes for any items listed above as having low data quality or high assumptions. This will increase the quality of the carbon inventory report in the future. These improvements should start as soon as possible/or as appropriate.

7.1 Scope 1 Emissions by gas type

ISO 14064-1 requires Direct emissions to be reported separately, showing emissions contribution by the 6 Kyoto GHG gas types. The breakdown by CO₂, CH₄ and N₂O is shown in Table 8 below. Breakdown by HFCs, PFCs and SF₆ will be shown in Table 8a, if applicable. If none displayed it is not applicable or none occurred.

Table 8: Direct emissions breakdown by gas types

GHG scope	1
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Emission Sources	tCO ₂ e	tCO ₂	tCH ₄	tN ₂ O
Mobile Combustion - Petrol (regular)	12.51	11.97	0.14	0.41
Mobile Combustion - Diesel	35.92	35.37	0.05	0.50
Grand Total	48.44	47.33	0.19	0.91

7.2 Other emissions

Fugitive emissions - (refrigerants)

No sites have reported any top-ups of gas for this reporting period. Air conditioning is excluded from the inventory where offices are leased.

There are no operations that use PFC, NF3 or SF6.

Combustion of Biomass - (e.g wood pellets)

No known combustion of biomass occurred from the operation during this measure period and therefore no emissions from the combustion of biomass are included in this inventory.

Land use and Land use change

No deforestation has been undertaken by the organisation on land it owns during this measurement period. Therefore no emissions from deforestation are included in this inventory.

Pre-verified data

No pre-verified data is included within the inventory.

8 Emission Performance against previous years

Table 9 and figure 6 below shows emissions comparison against base year and previous year, if applicable.

Table 9: Comparison against base year

Activities	Base year tCO ₂ e (market-based)	Current year tCO ₂ e (location-based)	% Change against base year
Mobile Combustion	52.54	48.44	-7.82%
Fuel & Energy Related Emissions	16.66	14.60	-12.35%
Staff Commuting	6.40	12.41	94.00%
Upstream Freight	8.26	6.64	-19.58%
Purchased Electricity	0.00	3.85	-
Business Waste	4.86	3.08	-36.60%
Business Travel	6.63	2.80	-57.74%
Grand Total	95.35	91.82	-3.70%

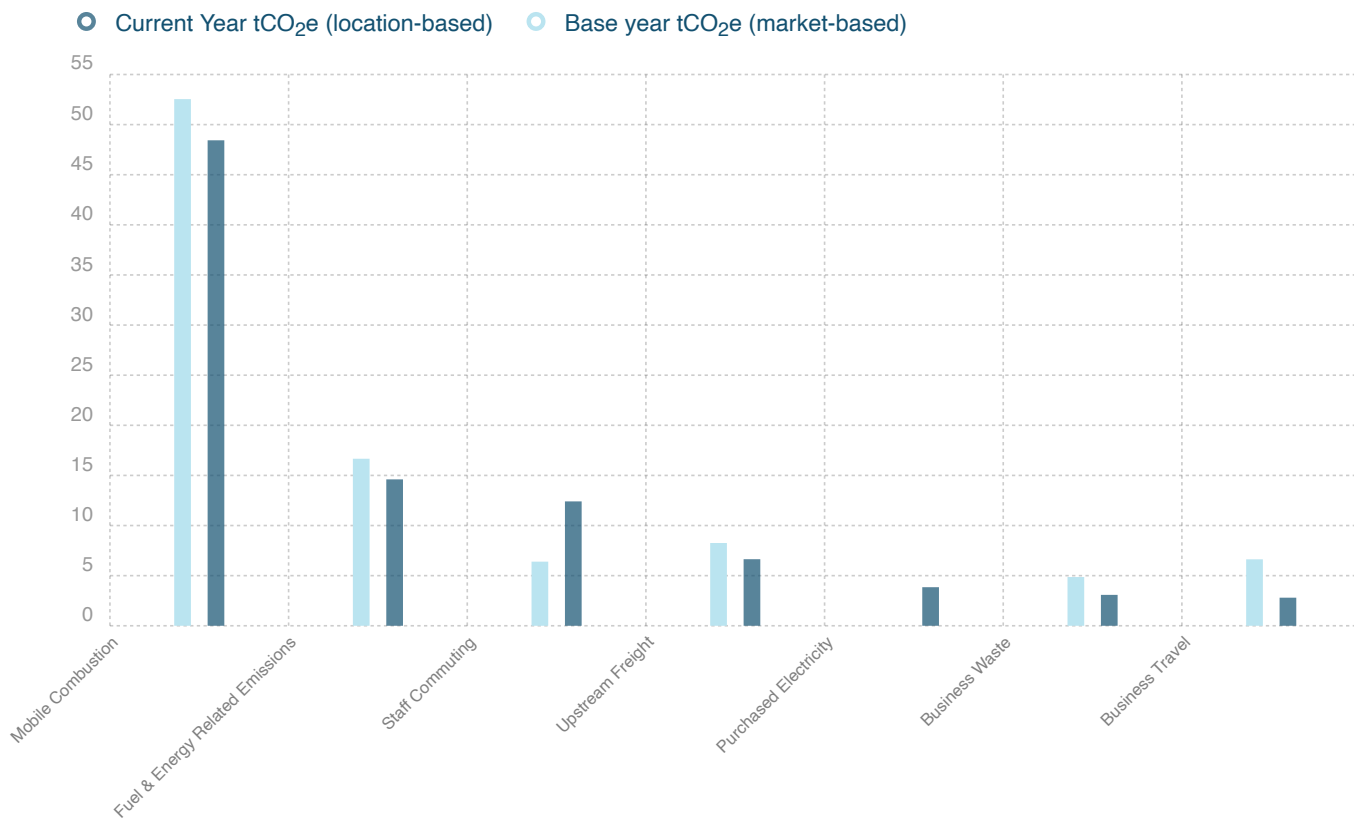


Figure 6: Emissions compared with previous years

Staff Commuting - upon review of Financial Year 2022 data it was determined this was underestimated as only one way distance to work was calculated rather than return trip to home.

9 Emission Reduction Recommendations

Please refer to a separate, detailed reduction plan prepared by the organisation which documents the targets, responsibilities, actions and top level management commitment.

10 Double counting and pre-offsets

Double counting can sometimes occur when 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 (Scope 2 and 3) emissions sources.

There may also be instances where an organisation uses the product or service of another company who has already measured and offset their product/service.

The programme recognises organisation, product or services which has been identified by the programme as having completed measurement and offset their emissions and in this case, the double counted emissions will be reported but do not require offset.

There were instances of recognised offset deductions in this inventory, and these are described below:

Recognised Offset Deductions		
Emissions Source	Additional Notes	tCO ₂ e deducted
Air NZ flight carbon offsets		0.51
Manual Emissions Source		0.00
Total Recognised Offset Deductions		0.51

There were no known instances of double counting of emissions within this inventory.

11 Offsets and Certification

11.1 Certification Type

Sustainability Trust has chosen to apply for Carbon Conscious Certification.

11.2 Offset amount

Table 10: Offset calculation

Total Gross GHG Emissions	Offset requirement		Purchased credits/ Pre-offset	Net offset requirement	Total Credits to offset
91.82	Carbon Conscious (User Selected)	0.00		0.00	0.00

11.3 Carbon credits

No offset required for this inventory.

12 References & Other information

12.1 Standards

International Organization for Standardization, 2006. ISO14064-1:2018. Greenhouse gases – Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas GHG 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.

12.2 Emission Factors

MfE - 2023 Emission Factors Workbook.

DESNZ - 2023 UK Government GHG Conversion Factors for Company Reporting

Radiative Forcing - Aviation GHG emission calculations take into account the greenhouse gases covered by the UNFCCC Paris Agreement relevant to aviation (carbon dioxide, methane and nitrous oxide). There are also additional global warming impacts of aviation emissions called "radiative forcing" (RF). These include water vapour, NO_x, and contrails. Some voluntary carbon offset suppliers make inclusion of RF mandatory and others exclude it. This is because of the scientific uncertainties associated with the methodology for accurately calculating radiative forcing.

Following the MFE methodology, Ekos uses a radiative forcing multiplier of 1.9 for all flight related activity

Uplift factor - does not apply to domestic air travel. However, it has been applied to international air travel. (section 7.5.4 and 7.5.5 of the MfE Emissions detailed Guide 2023).

Well to Tank factors were sourced from DESNZ and is automatically applied to relevant activity data. WTT Business travel EF is 'with RF'.

All NZ electricity factor are location-based unless otherwise stated.