tasman district council | Te Kaunihera o te tai o Aorere

Greenhouse Gas Emissions Inventory Report

2021 – 2022

Contents

Summary

Tasman District Council's net emissions for the July 2021 – June 2022 period were 20,813 tCO_2e (tonnes of carbon dioxide equivalents). Our net emissions for 2021-2022 period were 0.4% less than last year (2020-2021).

The Council's primary emissions source was from landfills by a significant margin. The Council's other large emission sources were wastewater treatment plants, supplier transport fuels, purchased electricity, and Council's transport fuels. These are the same major sources as last year. These sources make up 97.6% of our gross carbon emissions for the 2021-22 period.

Figure 1: Gross greenhouse gas (GHG) emissions by source

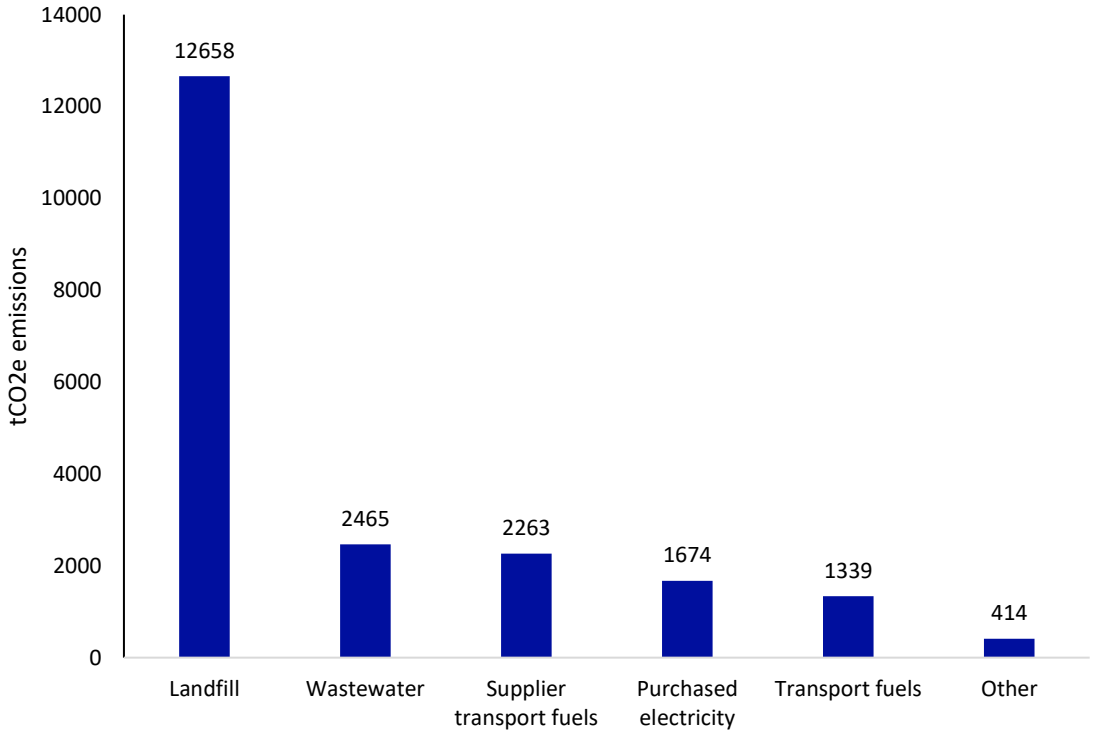


Figure 2: Percentage of gross GHG emissions attributed to sources

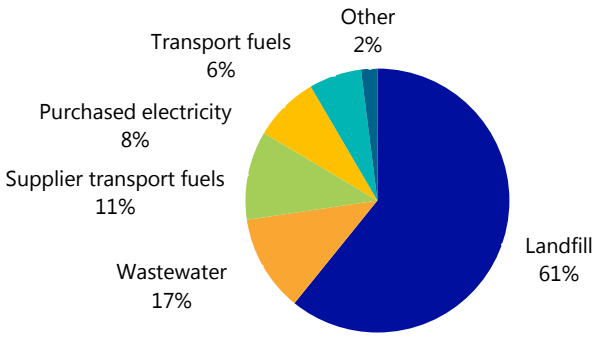


Table 1: Emissions summary

Category	tCO_2e
Category 1: Direct emissions	16,511
Category 2: Indirect emissions from imported energy	1,674
Category 3: Indirect emissions from transportation	70
Category 4: Indirect emissions from products used by the organisation	2,593
Total direct emissions	16,511
Total indirect emissions	4,337
Total gross emissions	20,848
Category 1 direct removals	(35)
Total net emissions	20,813

Figure 3: Gross greenhouse gas (GHG) emissions by source compared to 2020-2021

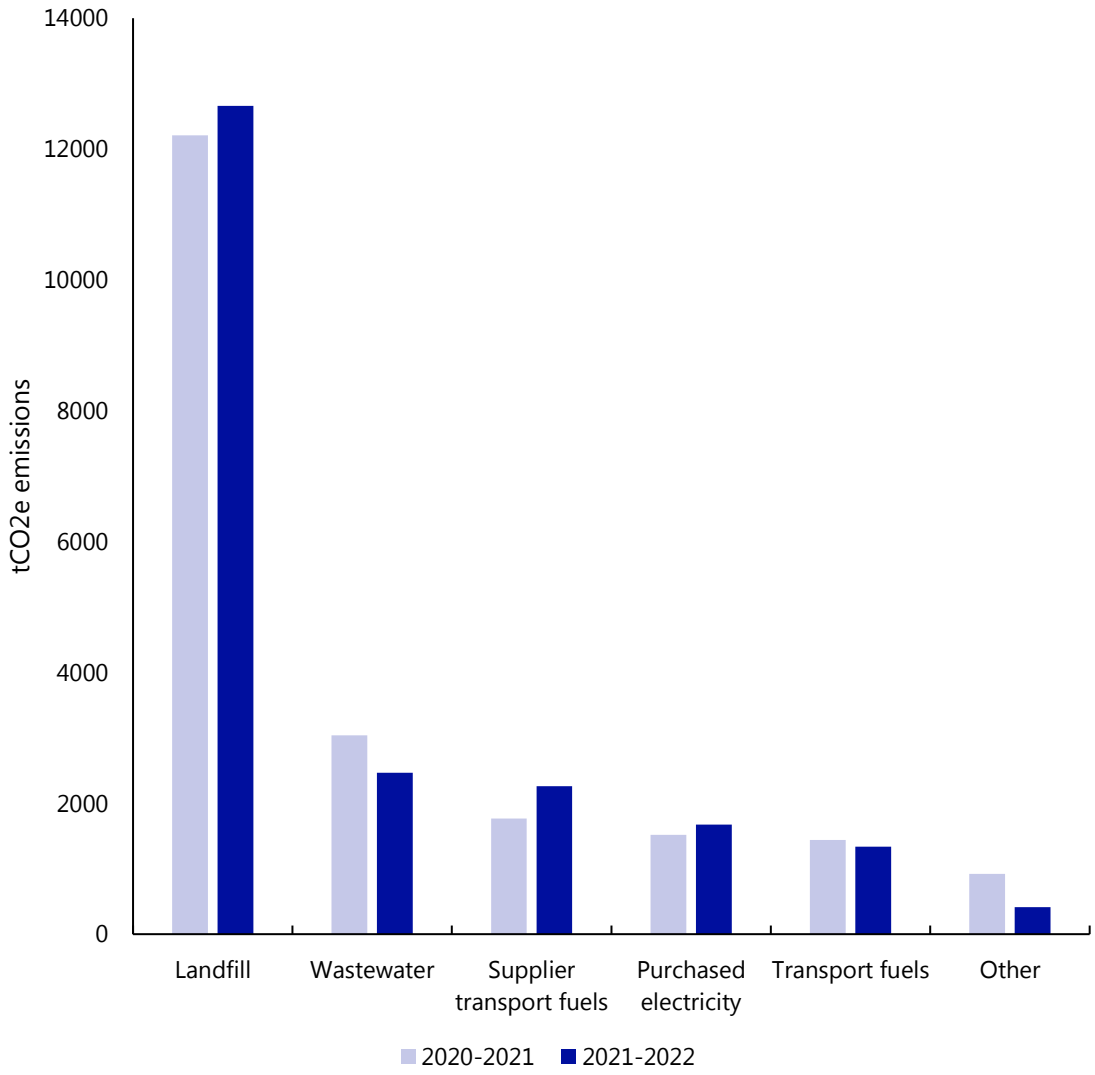
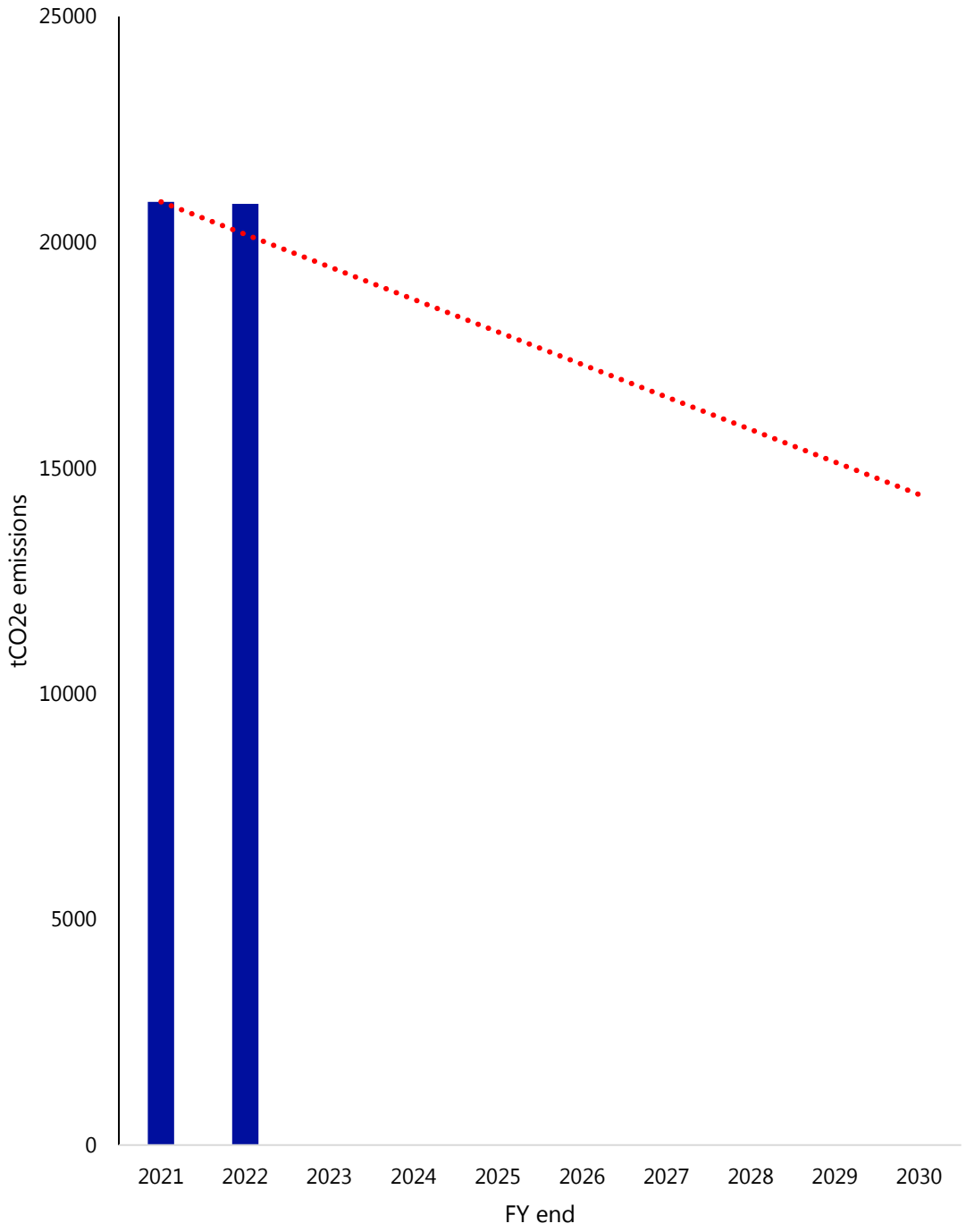


Figure 4: Gross greenhouse gas (GHG) emissions compared to the Tasman Climate Action Plan target for council emissions[1]



[1] Council targets are from the Tasman Climate Action Plan. The targetis net zero by 2050.

1 Introduction

This report is the baseline greenhouse gas (GHG) emissions[2] inventory report for Tasman District Council. The inventory quantifies the GHG emissions directly attributed to Tasman District Council's operations within the declared boundary and scope for the 2021 – 2022 period.

The Council has prepared this inventory following the requirements of the *Ministry for the Environment Detailed Guide for Organisations*, 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*[3].

This inventory forms part of the Council's commitment to measure and manage our emissions, as adopted in our *Climate Action Plan*[4]*.* This report aims to understand where our emissions are coming from and monitor our progress in reducing them.

1.1 Organisational description

Tasman District Council (TDC) is the territorial authority for the Tasman District of New Zealand. The Tasman District spans 9,786 square kilometres of Te Tau Ihu (the top of the South Island), extending from Richmond to Golden Bay in the north-west and Murchison in the south.

We are one of six unitary councils in Aotearoa, meaning we do the work of both a regional council and a district council. We provide a wide-ranging of services to our communities, including:

- Water supply, wastewater, and stormwater
- Rubbish collection and disposal
- Parks, reserves, and leisure facilities
- Roads and street lighting, subdivision
- Building and resource consents processing
- Libraries and museums
- Food premises and liquor licensing
- Animal control
- Biosecurity and pest control
- Civil defence and emergency management
- River and flood control
- Environmental protection
- Public transport
- Water quantity and quality regulation
- Maritime navigation and safety
- Local bylaw administration

[2] Throughout this document 'emissions' means GHG emissions.
[3] 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
[4] Our climate action plan and progress reports are available on our website.

The Council aims to work together for a Tasman District with a healthy environment, strong economy, and a vibrant community. We understand that climate change is a serious threat and that we will need to lead by example. Like many other councils, Tasman District Council knows that ongoing, sustained action on climate change is required. This report helps us understand how to reduce our emissions moving forward.

1.2 People responsible

Anna Gerraty, Senior Community Policy Advisor, is responsible for emissions measurement. Neil Lindsay and Andrew Bingham were also involved in developing this inventory.

1.3 Third-party verification

Independent verification was completed by McHugh & Shaw Limited. Mixed assurance has been achieved (Reasonable Assurance ISO Cat 1/2 and Limited Assurance ISO Cat 3-6).

1.4 Intended use and users

The Council has developed this report to help our staff and councillors identify, mitigate, and reduce our greenhouse gas emissions. This report forms part of the Council's commitment to measure and manage our emissions, as stated in our *Climate Action Plan*. We plan on annually reporting these results, so our community is kept aware of the Council's emissions and our progress in reducing them.

1.5 Dissemination policy

We will make this report publicly available on our website. In addition, we will update our website annually to report our emissions and what we are doing to reduce them.

1.6 Documentation retention and record-keeping

The Council keeps records associated with our GHG emissions on a secure internal server. The Council handles these documents following our GHG information management procedures.

1.7 Reporting period, base year, and frequency of reporting

This inventory covers the period from July 1, 2021, to June 30, 2022. This choice aligns with global standards and the Council's financial reporting. The base year is July 1, 2020 to June 30 2021. We will consider a base-year recalculation in the case of changes to reporting boundaries, improvements in reporting methodology (such as additional ISO Category 3-6 emission sources), or the identification of significant errors in the methodology. We will continue to measure our emissions annually.

1.8 Performance against targets

The Council's *Climate Action Plan* aims to reduce emissions from Council activities by 16% by 2030 and 34% by 2035, compared to our 2020-2021 baseline. This target is based on the annual averages of the emissions budgets[5] set in the national *Emissions Reduction Plan*[6]. Our baseline GHG emissions were 20,895 tonnes and were set in our 2020/2021 inventory. This means are targets are:

2029/2030: 17,552 tonnes

2034/2035: 13,791 tonnes

1.9 GHG information management procedures

The Council has established GHG information management procedures that conform with GHG Protocol and ISO 14064-1:2018 standards. These information management procedures provide regular checks to ensure the accuracy and completeness of our inventory. Our information management procedures document the following:

- Staff responsible for GHG inventory development
- Training procedures for staff responsible for GHG inventory development
- Organisational boundaries and how we review them
- GHG sources, sinks, and how we review them
- Quantification approaches (including data and models used for quantification) and how we review them
- Use, maintenance, and calibration of measurement equipment
- Data collection systems and how we review them
- How regular accuracy checks, internal audits, and reviews of information management take place

[5] Emissions budgets and the emissions reduction plan - Ministry for the Environment
[6] Emissions reduction plan - Ministry for the Environment

2 Organisational boundaries

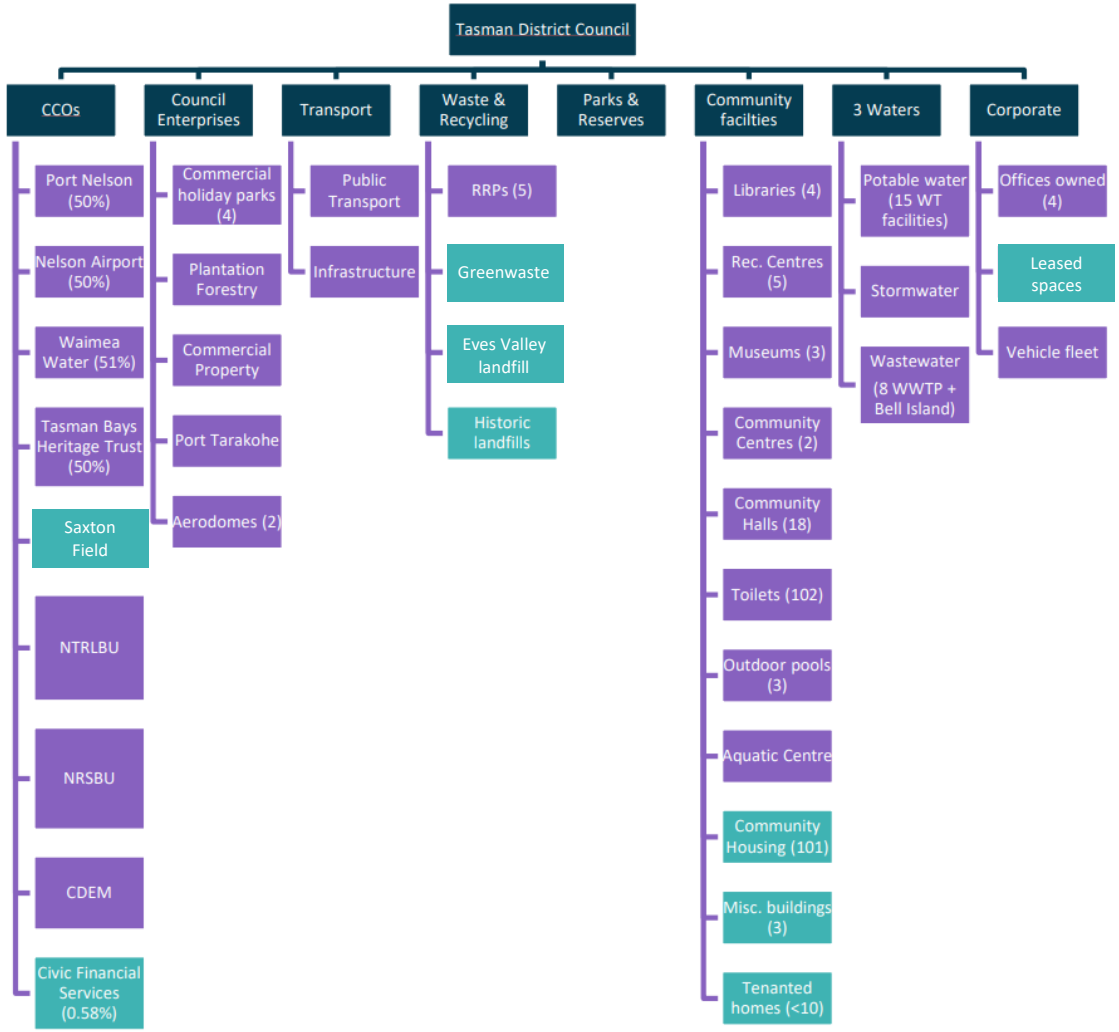
Tasman District Council sets our organisational boundaries using the methodology described in the GHG Protocol and ISO 14064-1:2018 standards. The standards allow us to use two distinct approaches to consolidate GHG emissions: equity share or control (financial or operational)[7].

We used an **equity share consolidation approach** to account for emissions. An equity share approach is where the Council accounts for its portion of GHG emissions and removals from respective facilities. We chose this approach to align with the structure of our Council and the intended use of this inventory. For example, Council directly accounts for 50% of Port Nelson's emissions using this approach because we are a 50% shareholder alongside Nelson City Council.

Figure 3 identifies what facilities and business units we have included and excluded from our inventory.

[7] **Control:** the organization accounts for all GHG emissions and/or removals from facilities over which it has financial or operational control.
Equity share: the organization accounts for its portion of GHG emissions and/or removals from respective facilities.

Figure 5: Organisational boundary for Tasman District Council emissions measurement[8]



[8] Business units in purple are included in the inventory. Business units in green are excluded from the inventory.
Eves Valley Landfill was closed in 2017. The landfill is a significant emissions source, but MfE emission factors do not currently account for closed landfills and we cannot account for these emissions at this stage.

3 Reporting boundaries

3.1 Excluded sources

While we have tried to account for all our emissions, some sources may be impracticable to measure. Therefore, we decided to exclude emissions for the following reasons:

- Emissions are minimal or non-significant (<1% of carbon emissions and, together with other excluded sources, do not exceed 5% of carbon emissions).
- The value of a contract with a supplier or the emissions intensity is low.
- The Council has minimal influence or control.
- The source is outside of the reporting boundaries.
- The source is not relevant to intended users.
- There is a lack of emissions factors.
- It is infeasible to gather data from the source.

We excluded five sources from our inventory. Table 3 explains why we excluded these sources.

Table 2: Business units, facilities, and activities excluded from emissions measurement

Source	Reason for exclusion
Richmond office diesel generator	Emissions are minimal
Rental car hire	Emissions are minimal
Personal vehicle use	Emissions are minimal
Postage/small courier package	Emissions are minimal
Working from home	It is infeasible to gather data from the source.
Waimea Water (51% share)	Waimea Water did not provide data on request.

We report emissions from our suppliers as part of our annual reporting. While we endeavoured to collect data from suppliers that contribute to significant emissions, some suppliers did not report emissions data for this year. We received data from 10 out of 18 suppliers (55%). Our intention is to improve on supplier reporting in future years by including this as a new contractual requirement.

3.2 Included sources

We decided to include sources for the following reasons:

- The emissions or removals are quantitatively substantial or are likely to contribute >1% to the overall emissions inventory.
- The extent to which the organisation can control the source is high.
- A member of the public would assume that the Council were responsible for the source.
- The source is deemed significant by other councils or public sector entities.
- The source is typically a core business activity.
- The source could motivate employees or customers (for example) to reduce energy use or inspire team spirit around climate change (e.g., energy conservation incentives, carpooling, internal carbon pricing).
- A certification claim (or other intended uses) implies that the inventory includes a source

We engaged Toitū Envirocare to run a scope and boundary workshop with staff, to help decide what sources we would include.

The emissions sources deemed significant for inclusion in this inventory were classified into the following categories:

- Category 1: Direct emissions and removals.
- Category 2: Indirect emissions from imported energy.
- Category 3: Indirect emissions from transportation.
- Category 4: Indirect emissions from products used by the organisation.

Table 4 provides detail on emission sources included in our inventory, an overview of how we collected for each emissions source, and an explanation of any uncertainties or assumptions.

Table 3: Sources included in emissions measurement

Activity	Category	Data source	Unit	Level of accuracy/uncertainty
Landfill	1	NTRLBU data	kg	This inventory includes pre-verified data supply by NTRLBU. We assume the NTRLBU have provided complete and accurate data.
Leased assets	1	Nelson Airport data	$kgCO_2e$	This inventory includes pre-verified data supply by Nelson Airport. We assume Nelson Airport have provided complete and accurate data.
Native planting	1	Project manager	ha	We only counted native planting that met the New Zealand parameters to define a forest (minimum area 1 ha, with the potential to reach a minimum height of 5 metres and a minimum crown cover of 30%). We assumed the likelihood of planting areas to reach this parameter, but as growing conditions are variable this will have a low level of accuracy.
Refrigerents	1	Aquatic centre data	kg	We assume the operator has provided complete and accurate invoice data.
Stationary fuels	1	Nelson Airport data	$kgCO_2e$	This inventory includes pre-verified data supply by Nelson Airport. We assume Nelson Airport have provided complete and accurate data.
Transport fuels	1	NPD Monthly Reports, Supplier data	L	We assume the suppliers have provided complete and accurate invoice data. This data will be slightly underestimated because we lack data from three holiday parks.
Wastewater	1	Calculations from the project engineer, NRSBU data	kg	We calculated these figures using Water NZ guidelines (2021). Some deviations were made from the guidelines to account for the proportion of holidaymakers during the year and more accurate monitoring data for the Motueka and Takaka areas. We assume the NRSBU have provided complete and accurate data.
Purchased electricity[9]	2	EBench database of electricity purchases, Supplier data	kWh	We assume the suppliers have provided complete and accurate invoice data. This data will be slightly underestimated because we lack data from three holiday parks.

[9] We used a location-based reporting approach (using a national "grid average" emissions factor for electricity consumption provided by MfE) to source electric consumption data.

Activity	Category	Data source	Unit	Level of accuracy/uncertainty
Accommodation	3	Orbit Travel	Room nights	We assume the supplier has provided complete and accurate invoice data.
Air travel	3	Orbit Travel	Passenger/km	We assume the supplier has provided complete and accurate invoice data.
Car hire	3	Orbit Travel	km	We assume the supplier has provided complete and accurate invoice data
Freight	3	Library and Environmental Monitoring departments, Supplier data	Tonne/km	This figure is an estimate calculated by calculating the average parcel weight and distance travelled. We assume our suppliers have provided complete and accurate invoice data. For Council's direct freight emissions, the figure only includes the two Council departments that responsible for the vast majority of our freight
Helicopter fuel	3	Forestry contractor and Hydrology manager	L	We assume that the forestry contractor has provided complete and accurate data. The hydrology component is an estimate but is a much smaller proportion of the total.
Cloud storage	4	Storage provider	kWh	This inventory includes pre-verified data. We assume the supplier has provided complete and accurate data. The figure is an average of two calendar years to match our financial year.
Supplier construction materials	4	Suppliers' data	Kg	This inventory includes some pre-verified data. This figure will have a low level of accuracy and will be an underestimate because it is the estimated data from half of our significant suppliers.[10]
Supplier electricity	4	Suppliers' data	kWh	This inventory includes some pre-verified data. This figure will have a low level of accuracy and will be an underestimate because it is the estimated data from half of our significant suppliers.
Supplier transport fuels	4	Suppliers' data	L	This inventory includes some pre-verified data. This figure will have a low level of accuracy and will be an underestimate because it is the estimated data from half of our significant suppliers.
Supplier waste	4	Suppliers' data	kg	This inventory includes some pre-verified data. This figure will have a low level of accuracy and will be an underestimate because it is the estimated data from half of our significant suppliers.

[10] Last year the Council reported emissions specifically related to the construction of the Waimea Community Dam. The supplier related to its construction did not respond to requests this year, so these emissions have not been reported in this inventory.

Activity	Category	Data source	Unit	Level of accuracy/uncertainty
Transmission and distribution losses	4	EBench database of electricity purchases	kWh	We assume the supplier has provided complete and accurate invoice data. This data will be slightly underestimated because we lack data from three holiday parks.
Waste	4	Port Nelson and Nelson Airport annual reports, supplier data, waste audit	Kg	This inventory includes pre-verified data supply by Nelson Airport and Port Nelson. This data will be slightly underestimated because we lack data from three holiday parks. We assume suppliers have provided complete and accurate data. The waste audit figure is an estimate based on a 4-day waste audit of the main Richmond office. This figure was adjusted for all offices based on staff numbers and grossed up for the year.

3.3 Impact on uncertainties on the accuracy of GHG emissions and removals

A quantitative estimation of uncertainty was not cost-effective, so we conducted a qualitative assessment of uncertainty. The uncertainty of Category 1 emissions is medium because there is uncertainty within the Water New Zealand methodology used to calculate our wastewater emissions. The uncertainty for Category 2 emissions is low because there was only one source of emissions, and we assume our suppliers provided complete and accurate data. Uncertainty is high for Categories 3 and 4 as we only received data from 10 out of 18 suppliers. For all these categories, there are uncertainties in the emissions factors that MfE provided in their Detailed Guide to Measuring Emissions 2022.

4 Quantified GHG inventory of emissions and removals

4.1 Methodology

Tasman District Council used an Interactive Workbook (April 2022) developed by the Ministry for Environment[11] to complete this inventory. The Ministry for the Environment recommends that organisations use this workbook, and local governments widely use it to report their emissions. The workbook automatically calculates our emissions. We chose this quantification model to ensure our results align with the rest of the sector. MfE's Detailed Guide to Measuring Emissions 2022 documents this model and the GHG emission and removal factors used, based on New Zealand's Greenhouse Gas Inventory 1990-2020.

4.2 GHG inventory

ISO 14064-1:2018 recommends reporting six different greenhouse gases. Each gas has a *global warming potential* (GWP). The Global Warming Potential (GWP) compares the global warming impacts of different gases. Specifically, the GWP measures how much energy the emissions of one ton of a gas will absorb over a given time relative to one ton of carbon dioxide (CO2) emissions. The larger the GWP, the more that a given gas warms the Earth compared to CO_2 over a given period. The period usually used for GWPs is 100 years. GWPs provide a standard unit of measure, allowing analysts to add up the effects of different gases. Table 5 states the GWP of the greenhouse gases reported in this inventory.

Table 4: Global warming potential (GWP) of selected greenhouse gases[12]

Gas	GWP
CO_2	1
CH_4	28
NO_2	265
HFCs[13]	3,985[14]
SF_6	23,500
NF_3	16,100

The following table states our GHG emissions in detail. This table is organised by emissions category, as recommended by ISO 14064-1:2018.

[11] Greenhouse Gas Protocol – Global Warming Potential Values
[12] The listed potentials are provided by the Ministry for the Environment in their Interactive Workbook.
[13] Weighted average stated in ISO 4064-1. MfE does not state what GWP they use for HFCs.
[14] Average GWP for HFC-125 and HFC-143a used in refrigerant AZ50R507.

Table 5: Consolidated statement of GHG emissions[15]

Category 1: Direct emissions								
Source	tCO_2e	tCO_2	tCH_4	tNO_2	tHFCs	tSF_6	tNF_3	X[16]
Landfill	12657.6	-	12657.6	-	-	-	-	3.7%
Wastewater	2464.9	-	1132.9	359.3	-	-	-	-18.9%
Transport fuels	1338.9	230.2	1.3	5.4	-	-	-	-7.1%
Leased assets	46.5	-	-	-	-	-	-	1158.0%
Water	0.4	-	-	-	-	-	-	-21.0%
Stationary fuels	0.1	-	-	-	-	-	-	-99.2%
Refrigerants[17]	-	-	-	-	-	-	-	-100%
Total Category 1 emissions	**16511.0**							**-3.5%**
Category 2: Indirect emissions from imported energy								
Source	tCO_2e	tCO_2	tCH_4	tNO_2	tHFCs	tSF_6	tNF_3	X
Purchased electricity	1674.4	1282.7	30.5	2.5	-	-	-	10.4%
Total Category 2 emissions	**1674.4**							**10.4%**
Category 3: Indirect emissions from transportation								
Source	tCO_2e	tCO_2	tCH_4	tNO_2	tHFCs	tSF_6	tNF_3	X
Air travel	27.7	15.9	0.1	0.2	-	-	-	5.7%
Freight	22.0	21.8	-	0.1	-	-	-	814.9%
Staff commuting (Nelson Airport)	11.9	-	-	-	-	-	-	
Helicopter fuels	6.4	6.2	-	0.2	-	-	-	-94.2%
Accommodation	1.9	1.9	-	-	-	-	-	-1.1%
Car hire	0.6	0.5	-	-	-	-	-	185.3%
Total Category 3 emissions	**70.4**							**-49.9%**

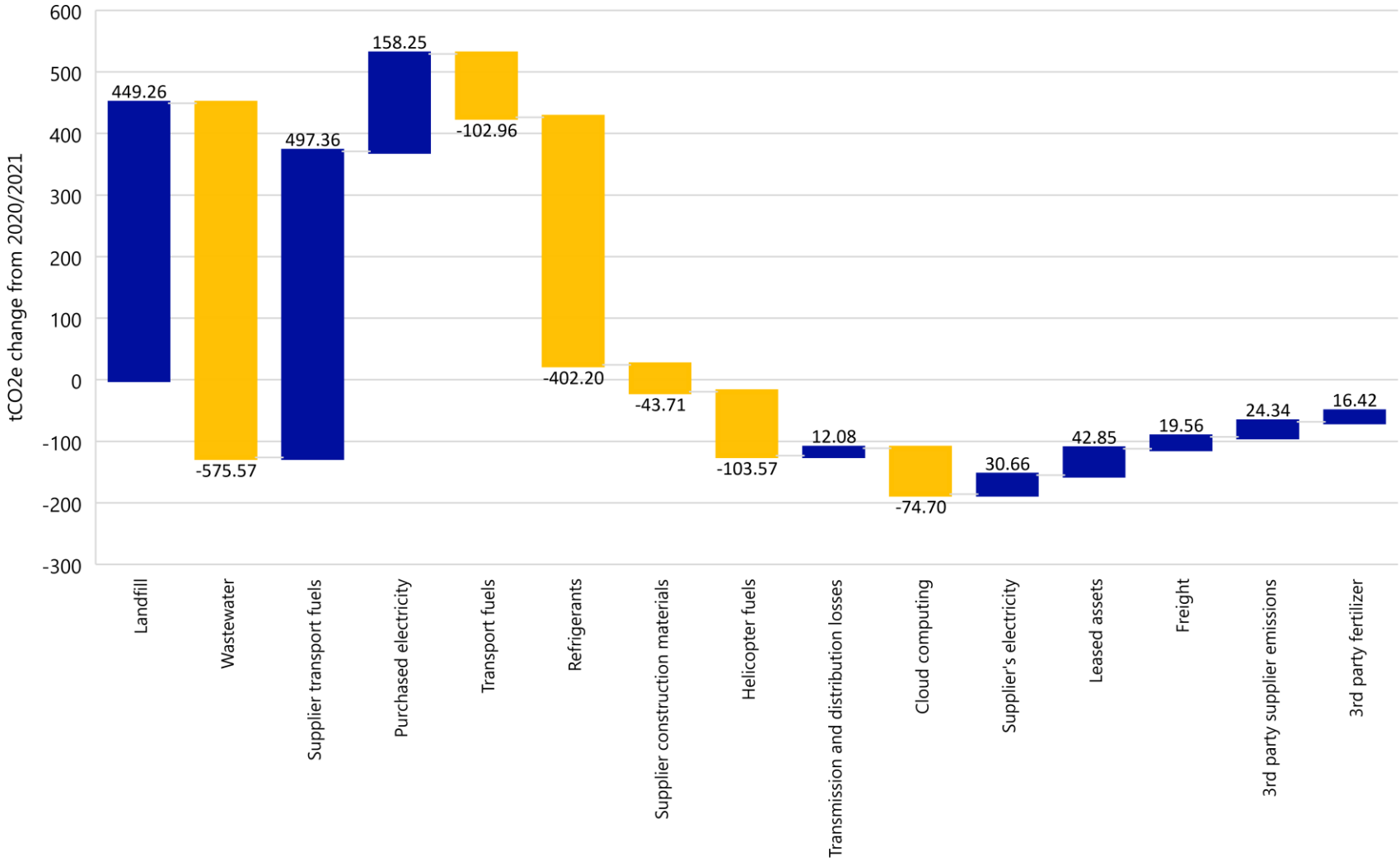
[15] Numbers in brackets indicate converted tCO_2e units. Numbers may not add up to tCO_2e due to rounding or lack of data. Numbers may not be reported if they are minimal (<0.5 tCO_2e). Some emission sources were only reported as tCO_2e rather than split into constituent gases.

[16] % change from 2020/2021 inventory

[17] Based on refrigerants purchased, not refrigerants used. No refrigerants were purchased this year.

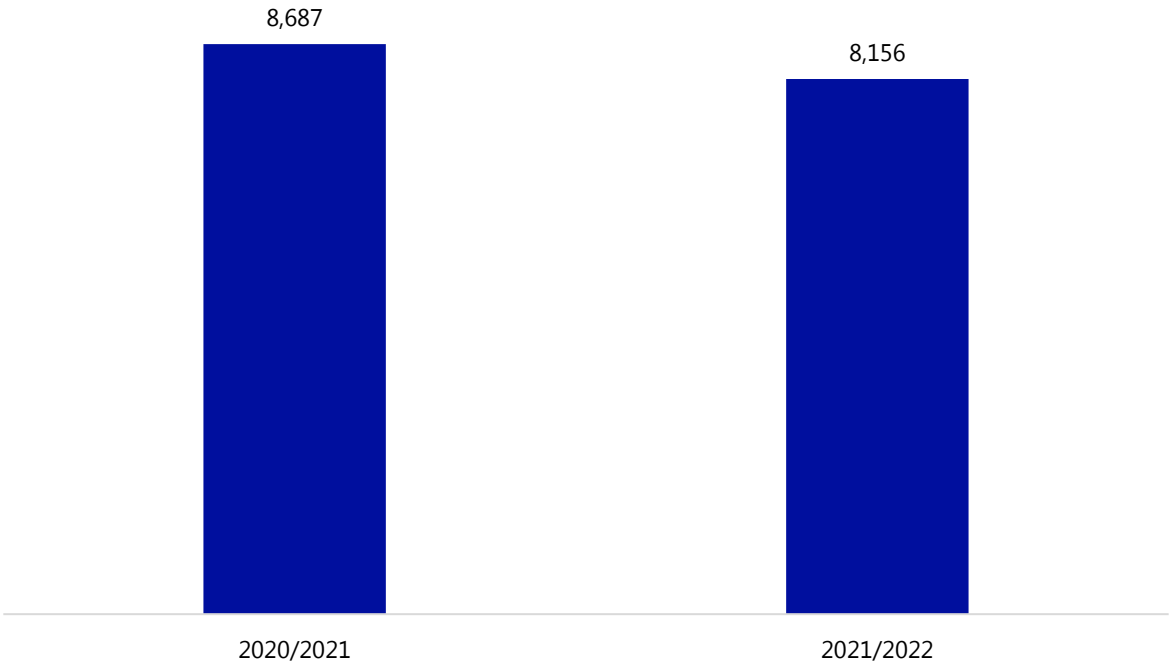
Category 4: Indirect emissions from products used by the organisation								
Source	tCO_2e	tCO_2	tCH_4	tNO_2	tHFCs	tSF_6	tNF_3	X
Supplier transport fuels	2263.4	2223.8	3.4	36.1	-	-	-	28.1%
Transmission and distribution losses	120.8	117.8	2.8	0.2	-	-	-	10.8%
Supplier construction materials	86.7	-	-	-	-	-	-	-33.5%
Supplier electricity	44.4	43.2	1.0	-	-	-	-	316.9%
Waste	27.1	-	7.1	-	-	-	-	-22.1%
3rd party supplier emissions	24.3	-	-	-	-	-	-	
3rd party supplier fertiliser	16.4	-	-	-	-	-	-	
Supplier waste	8.6	-	8.6	-	-	-	-	37.1%
Cloud computing storage	0.6	-	-	-	-	-	-	-99.2%
Supplier's air travel	0.3	0.3	-	-	-	-	-	
Total Category 4 emissions	**2592.6**							**21.4%**
Emission sources								
Total direct emissions	16511.0							
Total indirect emissions	4337.3							
Total gross emissions	**20848.3**							
Removals								
Activity	tCO_2e	tCO_2	tCH_4	tNO_2	tHFCs	tSF_6	tNF_3	X
Waimea planting	(30.9)	(30.9)	-	-	-	-	-	
Pigeon Valley planting	(2.4)	(2.4)	-	-	-	-	-	
Wetland restoration	(1.6)	(1.6)						
Total removals	(34.9)	(33.3)	-	-	-	-	-	
Total net emissions	**20813.3**							**-0.39%**

Figure 5: Impact of yearly emission changes by source on overall emissions profile changes (>10 tCO_2e only)[18]



[18] This graph shows the yearly changes for each major source and how they contributed to the overall increase in net emissions.

Figure 6: Net emissions excluding landfill



4.3 Anthropogenic biogenic CO_2 emissions

Anthropogenic biogenic emissions result from biomass combustion caused by human activity. Examples of this include burning biofuel or decomposition of organic matter.

We followed the Ministry for the Environment's Detailed Guide to Measuring Emissions 2022, which states that users should separately report biogenic emissions from biofuel or biomass combustion. Council does not have biofuel or biomass combustion sources. We used Water New Zealand's methodology to quantify our wastewater emissions, which excludes biogenic emissions.

We will report any other anthropogenic biogenic emissions separately and in our consolidated statement in future years.

4.4 Forestry emissions

We do not report on emissions associated with our commercial forestry activity as these emissions are accounted for in the Emissions Trading Scheme.

Due to the complexities in accounting for existing native planting and forestry on Council-owned land, the Council has decided to only account for native forestry planted or removed after July 1, 2021 (the baseline period).

5 References

2022 Interactive Workbook – Ministry for the Environment, 2022

2022 Summary of Emissions Factors – Ministry for the Environment, 2022

Carbon Accounting Guidelines for Wastewater Treatment – Water New Zealand, 2021

Climate Change 2022: Mitigation of Climate Change – IPCC, 2022

Corporate Greenhouse Gas Emissions 2019/2020 – Marlborough District Council, 2020

Emissions Reduction Plan – Ministry for the Environment, 2022

Global Warming Potential Values – Greenhouse Gas Protocol, n.d

Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised) – Greenhouse Gas Protocol, 2015

Greenhouse Gas Emissions Inventory Report – Nelson City Council, 2021

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

Measuring Emissions: A Guide for Organisations – Ministry for the Environment, 2020

Subnational population estimates by age and sex, from June 30 1996-2021– Stats NZ, n.d.

Tasman Climate Action Plan – Tasman District Council, 2022

McHugh & Shaw.

INDEPENDENT ASSURANCE STATEMENT

TO THE MANAGEMENT OF TASMAN DISTRICT COUNCIL

Reporter: Tasman District Council Te Kaunihera o te tai o Aorere
Registered address: 189 Queen Street, Richmond 7020, New Zealand

McHugh & Shaw Limited was engaged to conduct an independent verification of the greenhouse gas (GHG) emissions reported by Tasman District Council for the period of 1 July 2021 to 30 June 2022. The verification was completed during the months of February and March 2023. This Verification Statement applies to the related information included within the scope of work described below.

The determination of the GHG emissions is the sole responsibility of Tasman District Council. McHugh & Shaw Limited was not involved in determining the GHG emissions. Our sole responsibility was to provide independent verification on the accuracy of the GHG emissions reported, and on the underlying systems and processes used to collect, analyse and review the information.

This statement is only to be used for the purpose that it was intended i.e. to report against measured greenhouse gas emissions in accordance with the mandatory requirements of ISO 14064-1.

This statement is not to be used to make any claims including but not limited to:

- Certification to ISO 14064-1;
- Compliance to ISO 14064-1;
- Carbon neutral or net zero emissions claim (outside of the Ekos certification programme); and
- Verified emission reductions from base year where McHugh & Shaw Limited have not been the verifiers for all years covered by the reduction claim.

Environmental claims

Information regarding your responsibility when making environmental or carbon claims under the Fair Trading Act is available at the New Zealand Commerce Commission website.

If you are making a claim outside of New Zealand, then check the legal requirements for that Country.

GHG verification objectives

McHugh and Shaw will perform such tests and procedures, as considered necessary under the particular circumstances, to enable McHugh and Shaw to express an opinion, on the level of assurance as specified below and that the GHG inventory reported (GHG Statement) meet the criteria stated.

Boundaries of the reporting company GHG emissions covered

- Equity Share
- Tasman District Council jurisdiction
- Tasman District Council, Richmond Aquatic Centre, Collingwood Holiday Park, Port Nelson, Nelson Airport, Tasman Bay Heritage Trust, NTRLBU, and NRSBU.

GHG emissions information assured (to which this statement applies)

- GHG Report Reference: Council GHG Emissions Inventory 2021 2022.pdf
- GHG Calculations Reference: Greenhouse Gas Emissions Data Collection 2021-22.xlsx

Verified GHG emissions and removals by category (metric tonnes CO_2e)

Scope 1	Cat 1: Direct GHG Emissions		16,511
Scope 2	Cat 2: Indirect GHG Emissions from imported energy (Electricity, location-based)		1,674
Scope 3	Indirect GHG Emissions		
	Cat 3: Transportation and distribution:	70	
	Cat 4: Products and services used by the organisation:	2,593	
	Cat 5: Use of products from the organisation:	NR	
	Cat 6: Other sources:	NR	2,663
		Total GHG Emissions (Gross)	20,848
		Removals	35
		Total GHG Emissions (Net)	20,813

Notes:

- The knowledge and methodologies used to determine the emission factors and processes to calculate or estimate quantities of GHG sources is evolving. Therefore, quantifying GHG emissions is subject to inherent uncertainty.
- Data and information supporting the Scope 1/Category 1 and Scope 2/Category 2 GHG emissions assertion were historical in nature.
- Data and information supporting the Scope 3/Category 3-6 GHG emissions assertion were in some cases estimated rather than historical in nature.
- Data quality: Good
- NR (not reported): out of scope, not applicable, or not verified.

Period covered by GHG emissions statement

- 1 July 2021 to 30 June 2022

Base year (baseline)

- 1 July 2020 to 30 June 2021
- 20,895 total Gross GHG Emissions (tCO_2e).
- 20,895 total Net GHG Emissions (tCO_2e).
- The base year was verified by McHugh & Shaw Limited and a separate Verification Statement issued.

GHG reporting protocols against which assurance was conducted

- ISO 14064-1: 2018 Greenhouse gases – Part 1: Specification with guidance at the organisational level for quantification.

GHG assurance protocol(s)

- ISO 14064-3:2019 Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions.

GHG assurance methodology

A risk assessment and evidence gathering plan was completed. Our assurance strategy (verification) used a combined data and controls testing approach. Evidence-gathering procedures included but were not limited to the following:

- Review of the GHG Report written by Tasman District Council;
- Review of the GHG Calculator as provided by Tasman District Council;
- Testing, tracing and retracing of data trails back to primary data;
- Evaluation of relationships among GHG and non-GHG data;
- Remote interview of personnel involved in data collection;
- Evidence to support the reporting boundaries, organisational and legal structure reported;
- Review of primary data including electricity supplier reports, fuel card reports, supplier surveys, pre-verified data from Nelson City Council (York Valley Landfill and Bells Island WWTP) and supporting evidence (inputs) into the calculations for the wastewater treatment plants.
- Review of emissions factors and conversion factors used within the calculations for source appropriateness; and
- Review of assumptions, quantification methodologies and the setting of operational boundaries.

Verification findings are issued and tracked on a separate Findings Log as part of the verification working papers.

Projected emission reductions or removal enhancements

The reporter did not seek validation of projected emission reductions or removal enhancements. There is a reduction strategy in place.

Achieved level of assurance

- Scope 1/ISO Category 1 and Scope 2/ISO Category 2 Emissions: Reasonable Assurance
- Scope 3/ISO Category 3-6 Emissions: Limited Assurance
- Scope 1/ISO Category 1 Removals: No assurance

Assurance opinion

Based on the assurance process and procedures conducted, we conclude that:

- The Scope 1/ISO Category 1 and Scope 2/ISO Category 2 GHG Emissions assertions shown above are materially correct and are a fair representation of the data and information
- There is no evidence that the Scope 3/ISO Category 3-6 GHG Emissions assertion shown above is not materially correct or not a fair representation of the GHG emissions data set; and
- Tasman District Council has established appropriate systems for the collection, aggregation and analysis of quantitative data for determination of GHG emissions for the stated period and boundaries, and has implemented underlying internal assurance practices that provide a reasonable degree of confidence that such information is complete and accurate.

Qualifications

- The WWTP emissions were calculated using an accepted model from Water New Zealand published in August 2021. The inputs into the model and the application of the model were verified. No assurance is given to the methodology provided by Water New Zealand.
- Biogenic emissions were not reported in this inventory.
- No assurance is provided over vegetation sequestration (removals) other than to confirm the hectares and the emission factor applied.
- Neither of the two items above materially impact on the intended use or users of the GHG Report.

Facts found after verification

There are no facts found after the verification was finalised.

Statement of independence, impartiality and competence

McHugh & Shaw Limited is an independent professional services company that specialises in greenhouse gas and environmental management with over 10 years history in providing auditing, assessment and verification services.

No member of the verification team has a business relationship with Tasman District Council, its elected members, managers or staff beyond that required of this assignment. We conducted this work independently and to our knowledge there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance over environmental, quality, sustainability and health and safety information, systems and processes, has over 20 years combined experience in this field and an excellent understanding of the methodology for both reporting and assurance of greenhouse gas emissions data.

Jeska McHugh, Assurance Lead
McHugh & Shaw Limited
Christchurch, New Zealand
29 March 2023

May Stewart, Independent Reviewer
May Stewart Consulting
Christchurch, New Zealand
30 March 2023

This verification statement, including the opinion expressed herein, is provided to Tasman District Council and is solely for the benefit of Tasman District Council in accordance with the terms of our agreement. We consent to the release of this statement by you to interested parties but without accepting or assuming any responsibility or liability on our part to any other party who may have access to this statement. Any correspondence regarding this statement is to be directed to info@mchughandshaw.co.nz