



Greenhouse Gas Emission Inventory Report

Financial Year 2025

Prepared for
Tonkin & Taylor Group Ltd

Prepared by
Tonkin & Taylor Ltd

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Table of contents

Executive summary	i
1 Background	1
1.1 Communication and dissemination	1
1.1.1 Statement of intent	1
1.2 Reporting period and base year	1
1.2.1 2018 Rebaseline	1
1.2.2 Bligh Tanner	2
1.3 Verification and compliance with standard	3
2 Organisational boundary	4
3 Operational boundary	5
3.1 Exclusions	6
4 Greenhouse gas (GHG) inventory	8
4.1 Methodology	8
4.2 Changes in methodology since the last reporting year	9
4.3 Data collection	9
4.4 Tonkin & Taylor Group Ltd’s GHG profile	10
4.4.1 Emissions breakdown by scope	10
4.4.2 Scope one emissions by gas type	11
4.4.3 Emission intensity	12
4.4.4 Other emissions	12
5 Offsets	13
6 Glossary	13
7 Applicability	14
Appendix A	Emission factors
Appendix B	Uncertainty, data quality and key assumptions

Executive summary

This emissions inventory was prepared for Tonkin & Taylor Group Ltd for the 2025 Calendar year.

Table 0.1: Executive summary

Organisational background	<p>Name: Tonkin & Taylor Group Ltd Contact person: Magnus Williams Contact email: carbondata@tonkintaylor.co.nz Area of business: New Zealand and Australia Full Time Equivalent (FTEs) at 31 December 2025: 1202.29 Full Time Equivalent (FTEs) at 31 December 2018: 807.12¹ Business description: Tonkin & Taylor Group Ltd is one of Australasia's leading environmental and engineering consultancies with offices in New Zealand and Australia and projects in New Zealand, Australia, the wider Asia-Pacific region and beyond.</p>
Reporting period	1 January 2025 – 31 December 2025 (Financial & Calendar Year)
Organisational boundary	<p>As at 31/12/2025, the activities collectively cover all our legal entities: Bligh Tanner Pty Ltd Chadwick Geotechnics Pty Ltd Geosales Ltd Geotechnics Ltd Landcheck Ltd The Measurement and Calibration Centre Ltd Tonkin & Taylor Environmental Pty Ltd Tonkin & Taylor Group Holdings Pty Ltd Tonkin & Taylor Group Ltd Tonkin & Taylor International Ltd Tonkin & Taylor Ltd Tonkin & Taylor Pty Ltd</p>
Reporting boundary	<p>Business operations direct and indirect emissions resulting from:</p> <ul style="list-style-type: none"> • Direct (Scope 1) <ul style="list-style-type: none"> – Mobile combustion (internal combustion engine vehicles) • Indirect electricity (Scope 2) <ul style="list-style-type: none"> – Office Electricity – Offsite Data Centre Electricity • Indirect (Scope 3) • Fuel and energy related emissions (Well-to-tank emissions) <ul style="list-style-type: none"> – Business travel – Transmission and distribution losses – Working from home – Downstream Business freight – Employee commute – Business waste
Exclusions	<ul style="list-style-type: none"> • Direct (Scope 1)

¹ At Dec 31st 2018, Tonkin & Taylor Group Ltd had 768.12 FTE, whilst Bligh Tanner Pty Ltd had 39 FTE.

	<ul style="list-style-type: none"> – LPG – TTNZ Fanshawe back-up generator • Indirect (Scope 3) <ul style="list-style-type: none"> – Project office electricity – Business travel by bus, train, boat, ferry and non-commercial air – Water supply and wastewater – Capital goods – Purchased Goods and Services • Spend-based & employee commute well-to-tank
Market-based emissions	Total market-based emissions: 3,046.95tCO ₂ e
Location-based emissions	Total location-based emissions: 3,111.42tCO ₂ e
Emission intensity	2.53tCO ₂ e / FTE ²
Offsets required for Net Zero Carbon Certification	Total emissions: 3,046.95tCO ₂ e

Table 0.2: Market-based emissions comparison to baseline

	Scope 1 tCO ₂ e	% of total	Scope 2 tCO ₂ e	% of total	Scope 3 tCO ₂ e	% of total	Total tCO ₂ e	Emissions per FTE
2018	934.49	26%	355.88	10%	2,294.14	64%	3,584.51	4.44
2025	770.29	25%	223.64	7%	2,053.02	67%	3,046.95	2.53

Note: 2018 values are restated in response to a rebase line undertaken after Tonkin & Taylor Group Ltd acquired Bligh Tanner Pty Ltd (Feb 2025) as well as the reporting boundary additions of employee commute and business waste.

Table 0.3: Location-based emissions comparison to baseline

	Scope 1 tCO ₂ e	% of total	Scope 2 tCO ₂ e	% of total	Scope 3 tCO ₂ e	% of total	Total tCO ₂ e	Emissions per FTE
2018	934.49	26%	406.03	11%	2,294.14	63%	3,634.66	4.50
2025	770.29	25%	288.11	9%	2,053.02	66%	3,111.42	2.59

Note: 2018 values are restated in response to a rebase line undertaken after Tonkin & Taylor Group Ltd acquired Bligh Tanner Pty Ltd (Feb 2025) as well as the reporting boundary additions of employee commute and business waste.

² Market-based emissions

1 Background

This report is the seventh annual greenhouse gas (GHG) emissions inventory, prepared for Tonkin & Taylor Group Ltd. It was prepared in accordance with the requirements of ISO 14064-1 (2018) and covers the period 1 January 2025 – 31 December 2025.

1.1 Communication and dissemination

This inventory was prepared as a management tool for Tonkin & Taylor Group Ltd 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 Tonkin & Taylor Group Ltd 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, managers and Board of Tonkin & Taylor Group Ltd, its shareholders and employees, and clients. The summary of this inventory will be made available to all stakeholders on request.

1.1.1 Statement of intent

Tonkin & Taylor Group Ltd's reason for measuring its footprint is to understand the GHG footprint generated by its operational activities, identify efficiency improvements, reduce its emissions and offset those that haven't been avoided.

1.2 Reporting period and base year

This inventory is for the 2025 calendar year.

The base year for emissions inventory assessments is the 2018 calendar year. This year was chosen as the base year since it was the first year the Tonkin & Taylor Group Ltd reported its GHG emissions.

Base year data may need to be revised when material changes occur and have an impact on calculated emissions. Tonkin & Taylor Group Ltd's policy is to recalculate base year data and indicate in a footnote any recalculation of previously disclosed data. Reasons for revising base year data include:

- If the emission factors used change significantly and are relevant to prior years.
- If a significant estimation method has been changed/improved.
- If a significant data sourcing strategy has been changed/improved.
- If significant changes to reporting boundaries, including the outsourcing or insourcing of emitting activities, are made.
- If significant errors, or a number of cumulative errors that are collectively significant, are discovered in previous disclosures.

1.2.1 2018 Rebaseline

Our 2018 baseline has been recalculated in line with ISO 14064-1:2018 due to structural and methodological changes that materially affect emissions and SBTi-based targets. The changes triggering the rebaseline are the reporting boundary changes including:

- Merger with the specialist engineering consultancy, Bligh Tanner Pty Ltd, as at 1 February 2025
- Addition of employee commute as a newly identified material emission source.

- Correcting an outdated calculation methodology for air travel that had a material impact on base year emissions.

This ensures consistency and comparability of our 2025 emissions against the 2018 baseline. These changes are briefly described in Table 1.1. Only the 2018 baseline year was recalculated to maintain comparability with 2025. Business waste, whilst not material, has been added to the 2025 and 2018 inventories.

Table 1.1: Rebaselining summary – 2018

Rebaselining Driver	Change	Affected Scopes (GHG Protocol)	Addressed through
Merger with Bligh Tanner Ptd Ltd.	Operating company added to organisational boundary	Scopes 1, 2 & select Scope 3	Baseline recalculated using a mixture of actual and estimated data.
New emission source	Employee commuting following materiality assessment and exceedance of 5% materiality threshold.	Scope 3 Category 7	Baseline recalculated using activity data derived from 2025 Sustainability Survey ¹ survey results.
Identification of a material discrepancy in the base year from an outdated calculation methodology.	Recalculation of the 2018 air travel emissions to correct for the material impact (>5%) caused by the required methodological update from IPCC AR4 to AR5 Global Warming Potentials	Scope 3	2018 air travel emissions recalculated using domestic economy default air travel emission factor (with radiative forcing) from NZ MFE Measuring Emissions Guide 2025 ²

Note: Greater detail on data methodologies, uncertainty and mitigation measures provided in Appendix B.

¹2025 Sustainability survey asked employee commuting questions relating to 2025 and 2018 years (for relevant team in employment then).

²This was the first NZ MFE Measuring Emissions Guide document to incorporate the AR5 methodology. Whilst based on 2023 flight activity data, MfE's 2025 air travel factors were used to ensure methodological consistency, taking priority over aligning flight activity data from the corresponding year. Air travel emission factors based on 2018 activity data were not included in the 2025 MfE guide.

1.2.2 Bligh Tanner

Bligh Tanner is a specialist service provider in civil, environmental, water, structures and facade engineering consultancy based in Queensland, NSW and Victoria. It was merged with Tonkin & Taylor Group Ltd on 1 February 2025. As of 31 December 2025, it had 64 FTE.

This inventory marks the first inclusion of Bligh Tanner within Tonkin & Taylor Group Ltd's GHG reporting. As part of the ongoing integration process, Bligh Tanner's data collection practices are being aligned with Tonkin & Taylor Group Ltd's established reporting structure. Consequently, some activity data for the reporting year and baseline were not available. This meant efforts were focused

on identifying and quantifying available and relevant emissions sources with a priority for high materiality and data quality. Included sources were:

- Scope 1: Fleet vehicle fuel consumption
- Scope 2: Purchased electricity
- Scope 3: Business air travel & accommodation (electricity T&D losses and well-to-tank emissions were included as they could be calculated directly from primary data already collected).

1.3 Verification and compliance with standard

This inventory is consistent with the International Standards Organisation's process for calculating and reporting GHG emissions 14064-1 (2018). It was prepared by employees of Tonkin & Taylor Group Ltd and externally reviewed by McHugh & Shaw as being consistent with the ISO 14064-1 standard for measurement. Independent verification of this report was completed during March 2026. The level of assurance achieved is reasonable for Scope 1 and 2 and limited for Scope 3.

2 Organisational boundary

The organisational boundary identifies which facilities or subsidiaries of Tonkin & Taylor Group Ltd 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:

- Operational 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.

For Tonkin & Taylor Group Ltd's inventory, the operational control method has been used to consolidate emissions. This means that emissions over which Tonkin & Taylor Group Ltd has operational control have been included in the inventory.

Tonkin & Taylor Group Ltd, including all legal entities³, arranges its emission activities through five operating companies: Tonkin & Taylor in New Zealand, Geotechnics in New Zealand, Chadwick Geotechnics in Australia, Tonkin & Taylor in Australia, and Bligh Tanner Pty Ltd. This structure as of 31st December 2025 is shown in Figure 2.1 below with site locations.

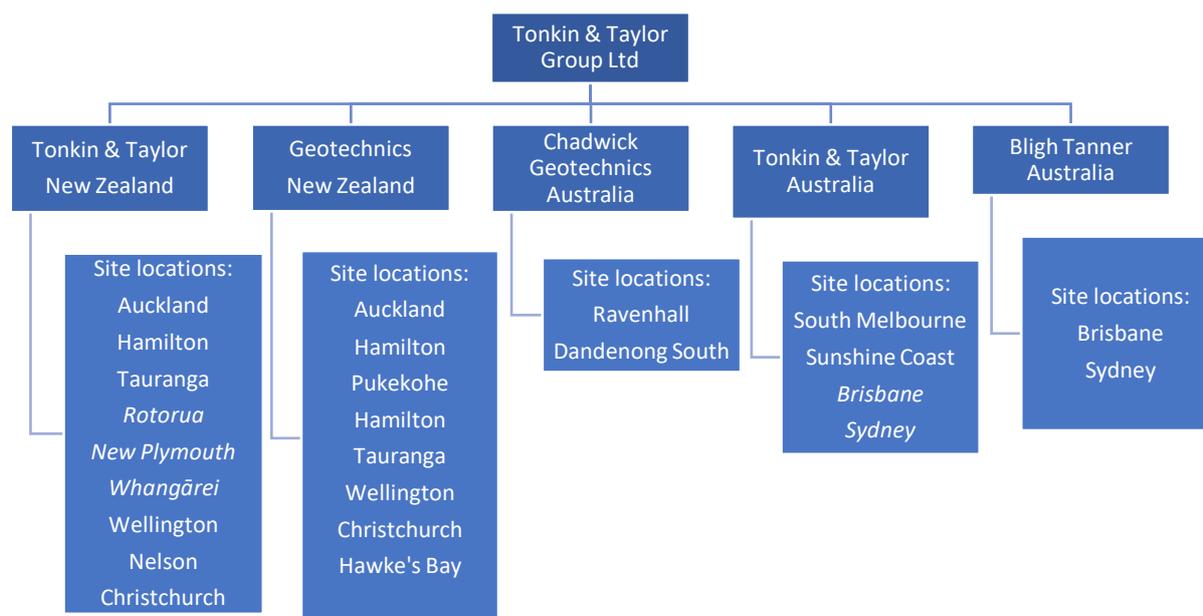


Figure 2.1: Tonkin & Taylor Group's Ltd's Organisational Boundary (*italics shows shared working spaces, not Tonkin & Taylor Group Ltd facilities*)

We rent a small number of seats in larger coworking spaces for our Whangārei, Rotorua, New Plymouth and Sydney (until June 2025) locations. These are shared arrangements with other businesses where we do not hold operational control of the building. These sites are excluded from

³ All legal entities: Tonkin & Taylor Group Limited, Tonkin & Taylor International Limited, Tonkin & Taylor Holdings Limited, Landcheck Limited, Tonkin & Taylor Limited, Geotechnics Limited, The Measurement & Calibration Centre Limited, Geosales Limited, Tonkin & Taylor Pty Ltd, Tonkin & Taylor Environmental Pty Ltd, Chadwick Geotechnics Pty Ltd, Bligh Tanner Pty Ltd.

our emissions inventory. From June 2025, the Tonkin & Taylor Australia Sydney coworking rental agreement ended with existing staff shifting to the Bligh Tanner North Sydney office. Similarly, Tonkin & Taylor Australia's Brisbane office was closed in February 2025, with remaining staff relocating to the Bligh Tanner Brisbane office.

3 Operational boundary

The operational boundary identifies which emission sources are included in the carbon inventory and which are excluded. ISO 14064-1(2018) categorises emissions as follows:

- Direct emissions (scope 1) are those resulting directly from the organisation's operations including stationary energy sources and vehicles owned by the company.
- Indirect emissions (scope 2 and 3) emissions are indirectly created by the company through the importation of electricity, heat or steam generated elsewhere, or from the organisation's purchase of goods and services (such as business travel and the production of waste) that cause emissions to be generated by others.

In compliance with the ISO Standard, Tonkin & Taylor Group Ltd has measured all relevant direct and indirect emissions shown below in this GHG inventory.

The included emission sources are shown in Figure 3.1 below:

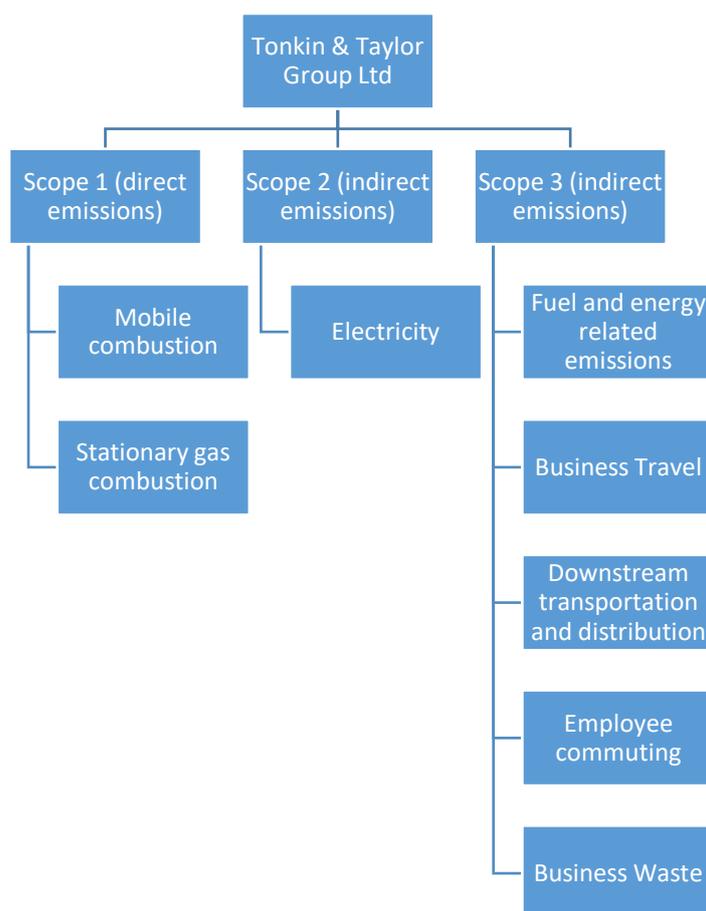


Figure 3.1: Tonkin & Taylor Group's Ltd's 2025 calendar year emission sources.

3.1 Exclusions

The following emission sources have been excluded from the reporting boundary:

- LPG was excluded as de minimis. LPG is used for forklifts at Chadwick Geotechnics and for barbeques at some offices. Given its de minimis status in 2024, LPG has not been reinvestigated in 2025 as operations involving its use have not changed.
- Project office electricity consumption was excluded due to lack of data. As of 31 December, 2025 Tonkin & Taylor New Zealand shared project offices with several other consultants and contractors ('alliances'). The electricity bills for the project offices are paid for directly by the respective alliance. Tonkin & Taylor New Zealand has not historically had access to this data. This hasn't been pursued this year.
- Business travel by bus, train, boat, or ferry was excluded due to a lack of data. Tonkin & Taylor Group Ltd undertakes minimal travel by these modes.
- Business travel by non-commercial air operators was excluded. It was classified as de minimis in 2021, and no significant operational changes have occurred since. Tonkin & Taylor New Zealand occasionally uses charter helicopters and small planes for remote site access. Due to limited data access, non-commercial flights were excluded from the 2025 inventory. It's possible a portion of these flights have been captured under credit card spend for air travel.
- Water and wastewater related GHG emissions were excluded. They were classified as de-minimis in 2021, and no significant operational changes have occurred since. Whilst data collection was expected to start via the Office Champion's Network in 2025, other projects were prioritised.
- Capital Goods related GHG emissions were excluded. This is due to limited organisational control over asset production, significant data uncertainty, and challenges in obtaining reliable activity data and emission factors.
- Purchased Goods and Services were excluded due to insufficient data quality following initial screening.
- Diesel-use for the back-up generator at the Tonkin & Taylor Fanshawe office site was excluded as it sits outside of Tonkin & Taylor Group Ltd's operational control. The generator is under the operational control of the owner, Roxy Pacific and the property manager, Colliers Property.
- Well-to-Tank emissions for spend-based sources including fleet fuel, rental cars, taxis & air travel were excluded as de minimis.
- Well-to-Tank emissions for employee commute were excluded due to uncertainty in the underlying commuting dataset, including reliance on a partial survey response and extrapolation.
- Several emission sources relating to Bligh Tanner were excluded based on a lack of data. As this is the first year Bligh Tanner has been required to report, formal systems for collection and management of activity data are not yet established. Consequently, reliable data for certain sources were unavailable. Excluded emissions sources beyond the exclusions listed above were:
 - Scope 1: Fleet fuel credit card
 - Scope 2: Purchased electricity relating to data centre use
 - Scope 3: Private vehicle mileage; Rental Cars, Car Share and Taxis; Working from home electricity consumption; Employee commute; Business waste (not including waste-to-landfill)

A brief materiality assessment was undertaken in 2023 and revised in 2024, as seen in Table 3.1. This has been updated with minor changes for 2025 including two new material emission sources, (employee commuting and business waste). Emissions sources with an average score of more than 2 were classified as material.

Table 3.1: Emissions category, data quality and limitations

GHG Protocol reporting category	Emissions source	Size	Level of control	Ability to measure	Industry practice	Average
Stationary combustion	LPG	1	3	1	3	2
	Natural gas	1	3	3	3	2.5
Mobile combustion	Diesel	3	3	3	3	3
	Petrol	2	3	3	3	2.75
Fugitive emissions	Refrigerants (HFC)	2	1	1	2	1.5
Electricity ⁴	Electricity	3	3	3	3	3
Purchased Goods and Services	Contracted professional and business services; Subcontracted field and site services; Contracted utilities and facility management services	3	1	2	2	2
Capital Goods	Geotechnical lab and field equipment; Owned vehicles; Office and IT equipment.	3	1	1	1	1.5
Fuel and energy related activities	T&D losses (electricity)	2	2	3	3	2.5
	T&D losses (natural gas)	1	2	3	3	2.25
	Well-to-tank	3	2	2	2	2.25
Upstream transportation and distribution	Freight	1	2	2	2	1.75
Waste generated in operations	Waste to landfill	1	2	2	3	2
	Water & wastewater	1	2	1	1	1.25
	Recycling	1	2	1	1	1.25
Business travel	Rental cars	2	2	3	3	2.5
	Taxi	2	2	3	3	2.5
	Private mileage	2	3	2	3	2.5
	Air travel	3	2	3	3	2.75

⁴ Includes Scope 3 electricity consumption associated with 'Working-from-Home'.

GHG Protocol reporting category	Emissions source	Size	Level of control	Ability to measure	Industry practice	Average
	Public transport	1	2	2	2	1.75
	Accommodation	3	2	3	3	2.75
Employee commute	Employee commuting	2	2	2	3	2.25
Downstream transportation and distribution	Downstream Geo Sales freight	2	3	3	2	2.5
Processing of sold products	Project office electricity	1	1	1	1	1
Use of sold product	Project carbon footprint	3	2	1	1	1.75

4 Greenhouse gas (GHG) inventory

4.1 Methodology

This GHG inventory was prepared to be consistent with the international Standards for calculating GHG emissions. These Standards are the World Resource Institute's "Greenhouse Gas Protocol, a corporate accounting and reporting standard" (GHG protocol) and "ISO 14064-1 (2018) Specification with guidance at the organisation level for quantification and reporting of GHG emissions and removals" (ISO 14064-1 (2018)).

In measuring this inventory, the five principles of ISO 14064-1 (2018) were applied:

Relevance - Select the GHG sources, GHG sinks, GHG reservoirs, data and methodologies appropriate to the needs of the intended user.

Completeness - Include all relevant GHG emissions and removals.

Consistency - Enable meaningful comparisons in GHG-related information.

Accuracy - Reduce bias and uncertainties as far as is practical.

Transparency - Disclose sufficient and appropriate GHG-related information to allow intended users to make decisions with reasonable confidence.

The methodology used in measuring Tonkin & Taylor Group Ltd's organisational GHG inventory is illustrated in Figure 4.1.

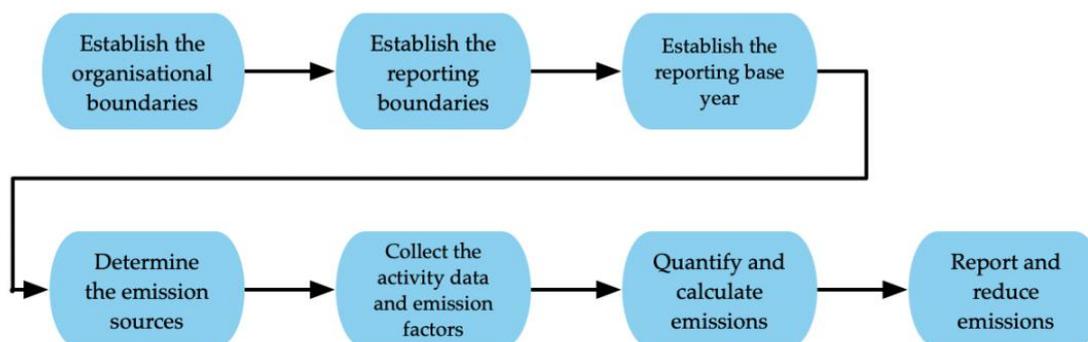


Figure 4.1: ISO 14064-1 (2018) Methodology for Measuring a GHG Inventory.

4.2 Changes in methodology since the last reporting year

The following changes have been made for this reporting year:

- Change in business travel data source from CTM to Orbit Travel
- Exclusion of immaterial well-to-tank emissions associated with spend-based proportion of business travel sources (including fleet fuel, rental cars, taxis and air travel).
- Introduction of the LRET renewable energy percentage for market-based Australian electricity reporting (17.91% in 2025).
- Disclosure of Ecotricity sourced market-based NZ electricity emissions changed to include Ecotricity residual emissions (18.021 tCO₂e) and then applied as a removal.⁵

The following emission source additions have been made for this reporting period:

- Employee commute
- Waste to Landfill

4.3 Data collection

Data were provided by Tonkin & Taylor Group Ltd's staff or suppliers through the BraveGen CSR software system. 2025 is the second year this software solution has been used by the business.

BraveGen's CSR software helps collect raw data and calculate emissions using 'Processes' and 'Tasks'. 'Processes' define how data is collected, such as from utility bills, fuel usage, or travel records. 'Tasks' support or automate data entry, facilitate reminder emails to data providers, and arrange approvals.

The table below provides an overview of the data collected for each emission source. The calculation method used to quantify emissions was the activity data multiplied by the appropriate emission factor:

Tonnes CO₂e = Total GHG activity x appropriate emission factor.

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, as provided in Appendix A.

Table 4.1: Data sources for Tonkin & Taylor Group Ltd's 2025 calendar year emissions

ISO Category	Source	Unit	Data Source
1) Direct GHG Emissions and removals	Fuel	Litres of Fuel and dollar value	Fuel cards and credit cards
2) Indirect GHG emissions from imported energy	Purchased electricity	kWh	Supplier invoices
(3) Indirect GHG emissions from transportation	Business travel – private mileage	Km	Private mileage claims
	Business travel – Taxi	Km & Dollar spend	Uber account records and credit card spend

⁵ See table 4.3.

	Business travel – Rental Cars and Car Share	Km	Budget account records and credit card spend
	Business travel – Air travel	Passenger.km	Orbit account records and credit card spend
	Accommodation	No. of nights	Orbit account records and credit card spend
	Working from home	Days	Office key card access data, office specific whereabouts data and assumptions from flexible working policy
	Downstream Business Freight	\$	Geo Sales freight spend data from TTG Accounts
	Employee commute	Km	Commuting-specific questions from 2025 Sustainability survey
(4) Indirect GHG emissions from products an organisation uses	Transmission and distribution losses	kWh	Supplier invoices
	Well to Tank	Litres, kWh, passenger km and km	Fuel cards, supplier invoices, travel records and credit card spend
	Business waste	Tonne	Waste Management, EnviroNZ and BraveGen Utilities office waste records

4.4 Tonkin & Taylor Group Ltd's GHG profile

Tonkin & Taylor Group Ltd's total emissions (market-based) for the 2025 calendar year were 3,046.95 tonnes of CO₂e. Our location-based emissions were 3,111.42 tonnes of CO₂e.

Tonkin & Taylor Group Ltd continues to report Scope 2 emissions using the market-based approach. This is in response to a strategic decision to procure electricity for our New Zealand offices from 100% renewable sources where possible. Table 4.3 shows the break down in reporting between market-based and location-based.

4.4.1 Emissions breakdown by scope

Below, Figure 4.2 shows Tonkin & Taylor Group Ltd's emissions (market based) by scope, with the majority of emissions coming from Scope 3 at 67% and Scope 1 at 25%. Scope 2 was 7%.

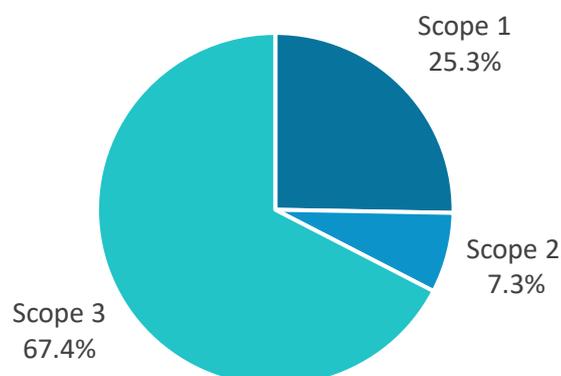


Figure 4.2: Tonkin & Taylor Group Ltd's 2025 Emissions by Scope.

Absolute total 2025 emissions have reduced by 20% compared to our 2018 baseline.

Scope 1 emissions in 2025 have decreased 18% against the 2018 baseline, contributing 25% of total 2025 emissions. Diesel consumption, particularly by Tonkin & Taylor Group Ltd's testing businesses (Geotechnics and Chadwick Geotechnics) continues to be a large contributor of Scope 1 emissions, comprising 81% of Scope 1 emissions in 2025. Overall fuel consumption is down 23% from the 2018 baseline, mainly due to a marked decrease in petrol use across our companies and the divestment of our drilling business from Chadwick Geotechnics.

2025 Scope 2 market-based emissions have reduced by 37% against the 2018 baseline. There are thirteen New Zealand offices under contract with Ecotricity. There is a continued interest in pursuing other building credentials like Green Star for Tonkin & Taylor Group Ltd's offices, noting the achievement of three Green Star Interiors ratings to date.

Scope 3 emissions decreased by 11% since the 2018 baseline. Flights accounted for 24% of total emissions in 2025. Since 2018 emissions associated with flights have decreased by 27%. This decrease is attributed to a 33% reduction in passenger kilometres travelled, as well as improvements to methodology and changes in relevant emission factors between 2018 and 2025. Well-to-tank emissions contributed 9% of total emissions, whereas accommodation accounted for 3% and personal vehicle mileage for 2%.

Table 4.2: Tonkin & Taylor Group Ltd's market-based emissions by scope year on year comparison

Scope	2025 Tonnes of CO ₂ e	% of total	2018 Tonnes of CO ₂ e	% change from 2018
Scope 1	770.29	25%	934.49	-18%
Scope 2	223.64	7%	355.88	-37%
Scope 3	2,053.02	67%	2,294.14	-11%
Total	3,046.95	100%	3,584.51	15%

Table 4.3: 2025 dual reporting (market-based and location-based)

Scope	ISO Category	Location-based	Market-based
Scope 1	Cat 1: Direct GHG Emissions	770.29	770.29
Scope 2	Cat 2: Indirect GHG Emissions from imported energy	289.18	223.64
Scope 3	Cat 3: Transportation and distribution:	1,707.13	1,707.13
	Cat 4: Products and services used by the organisation:	345.90	345.90
	Total GHG Emissions (Tonnes Gross)	3,111.42	3,046.95
	Removals	N/A	N/A
	Total GHG Emissions (Tonnes Net)	3,111.42	3,046.95

4.4.2 Scope one emissions by gas type

ISO 14064-1 (2018) requires that scope 1 emissions are reported separately by gas type. Table 4.4 below shows each scope 1 emissions source separated into gas types.

Table 4.4: Tonkin & Taylor Group Ltd's 2025 calendar year scope 1 emissions by gas type

Scope 1 activity	tCO ₂ e	tCO ₂	tCH ₄	tN ₂ O	tHFC	tPFC	tSF ₆
Diesel – mobile	627.39	614.26	0.93	8.71	0	0	0
Petrol – mobile	117.03	112.31	1.49	3.43	0	0	0
Total	744.43	726.57	2.42	12.14	0	0	0

Note: Excludes emissions estimated under Scope 1 'Vehicle Expenses' as fuel type is unknown.

Constituent gases have been calculated using the NZ Ministry for the Environment, Measuring Emissions Guide 2025. They may not sum to provided tCO₂e totals which rely on a mixture of AU and NZ 2025 fuel emission factors.

Emission intensity Table 4.6 shows the emission intensity based on FTE for Tonkin & Taylor Group Ltd for 2018 and 2025 across market-based and location-based reporting. For 2025, the emission intensity for Tonkin & Taylor Group decreased by 43% compared to the 2018 baseline year.

Table 4.5: Market-based emissions intensity for Tonkin & Taylor Group

Year	FTE	Emission intensity	% change from baseline year (2018)
2018	807.12	4.44	N/A
2025	1202.29	2.53	-43%

Table 4.6: Location-based emissions intensity for Tonkin & Taylor Group

Year	FTE	Emission intensity	% change from baseline year (2018)
2018	807.12	4.50	N/A
2025	1202.29	2.59	-43%

4.4.3 Other emissions

4.4.3.1 Fugitive emissions

No sites have reported top-ups of gas for this reporting period and there are no operations that used PFC, NF₃ or SF₆.

4.4.3.2 Biogenic

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

4.4.3.3 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.

5 Offsets

Fulfilling the Ekos Net Zero Carbon certification requirements, Tonkin & Taylor Group Ltd has offset the entirety of its 2025 market-based emissions (3,046.95 tCO₂e) through a portfolio of NZ and international offsets, coordinated through Ekos. Of this total, 22.51 tCO₂e in offsets were derived through our use of Ecotricity as a renewable energy provider at NZ locations.

6 Glossary

De minimis

Certain activities contribute less than 1 percent of the total of CO₂e emissions. These may be excluded from the GHG inventory, provided that the total of excluded emissions does not exceed a materiality threshold of 5 percent of the total inventory.

Greenhouse gas (GHG)

Gaseous constituent of the atmosphere, both natural and anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere and clouds. These include:

- Carbon dioxide (CO₂)
- Methane (CH₄)
- Nitrous oxide (N₂O)
- Hydrofluorocarbons (HFCs)
- Perfluorocarbons (PFCs)
- Sulphur hexafluoride (SF₆)

GHG Scopes:

- Scope 1: Direct emissions from sources owned or controlled by reporting entity. For example, diesel generator, coal heating, own vehicle fleet, agriculture.
- Scope 2: Indirect emissions generated by purchased energy. For example, electricity, gas.
- Scope 3: Indirect emissions that are a consequence of activities undertaken by the reporting organisation or related individual, but not directly controlled by the organisation. For example, flights, freight, non-company vehicles, waste, electricity line distribution and transmission losses.

7 Applicability

This report has been prepared for the exclusive use of our client Tonkin & Taylor Group Ltd, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

Tonkin & Taylor Group Ltd

Report prepared by:



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Appendix A Emission factors

Tonkin & Taylor Group Ltd uses emission factors from the following sources:

- New Zealand Ministry for the Environment (MfE) publication Measuring Emissions: A Guide for Organisations July 2025.
- Australian Government Department of Industry, Science, Energy and Resources document National Greenhouse Accounts Factors for 2025:
- United Kingdom Department for Energy Security and Net Zero, Greenhouse gas reporting: conversion factors 2025.
- Auckland Council & Market Economics Limited, Consumption emissions modelling March 2023.

Where emission sources are not covered by the MfE publication, suitable factors have been sourced from an alternative source listed here.

Air travel emissions include radiative forcing for all flights, which helps organisations account for the wider climate effects of aviation, including water vapour and indirect GHGs.

Appendix B Uncertainty, data quality and key assumptions

Where accurate data is not available, it is appropriate in some situations to estimate activity data to ensure that a comprehensive carbon measurement and inventory is completed. Estimates must be carried out on a scientifically derived basis. Due to the complexity and independence of uncertainty sources, along with cost-benefit considerations, a qualitative assessment of uncertainties, data quality, and key assumptions was conducted for Tonkin & Taylor Group Ltd’s GHG inventory and is presented below.

Table Appendix B.1 : Data quality classification by management and collection method

Data Management	Data collection		
	Measured	Derived	Estimated
Robust	M1	D1	E1
Satisfactory	M2	D2	E2
Questionable	M3	D3	E3

Table Appendix B.2 : Qualitative assessment of uncertainty, data quality and key assumptions for Tonkin & Taylor Group Ltd

ISO Category	Source	Units measured	Data Source	Data quality, uncertainty & key assumptions	
1) Direct GHG Emissions and removals	Fuel	Litres of Fuel	Fuel card use represented by Fleetwise, Motorpass & BP.	Existing companies	M1: Accurate fuel litres downloaded from supplier portal.
				Bligh Tanner Pty Ltd	D2: Annual fuel report issued from supplier. Applied evenly across 12 months

ISO Category	Source	Units measured	Data Source	Data quality, uncertainty & key assumptions	
	Fuel	\$	Credit card spend	<p>E2: A spend-based diesel emission factor was applied to all spend data under 'Vehicle Expenses,' contributing 3% of Scope 1. This internal finance expense category includes non-fuel vehicle costs and occasionally misallocated travel expenses. There is not currently a way to parse fields freely entered by a team member. This emission source will include some non-fuel activities as a result. The factor, sourced from the 2023 Auckland Council Consumption Emissions Modelling report, would likely overestimate these incidental inclusions.</p> <p>Impact: Considered low due to conservative factor and the source's minor materiality.</p> <p>Mitigation: Introduce activity-specific expense categories and improve staff expense allocation to reduce uncertainty.</p>	
2) Indirect GHG emissions from imported energy	Purchased electricity - Offices	kWh	Supplier invoices and landlord portal access (Colliers)	Existing companies	<p>M1: Invoices provided by electricity suppliers.</p> <p>BraveGen normalises mid-month and quarterly electricity invoices to standard calendar months. Impact: Considered low.</p>
				Bligh Tanner Pty Ltd	<p>2025: M2: Supplier provided invoices monthly and quarterly. For one site, estimates are provided for November and December while the invoice is pending.</p> <p>2018: E2: Estimated 12-month usage for one site based on 2025 kWh and adjusted by FTE; other site was not yet established.</p>

ISO Category	Source	Units measured	Data Source	Data quality, uncertainty & key assumptions
	Purchased electricity - Data centres	kWh	Supplier invoices	M1: Invoices are supplied from the offsite data server provider monthly.
(3) Indirect GHG emissions from transportation	Business travel – personal vehicles emissions	KM	Deltek reimbursement extract	M2: Based on kilometre-specific staff mileage claims from the 2024 calendar year, processed via the Deltek finance system. Vehicles are assumed petrol.
	Business travel – Taxi	KM	Uber	M2: Uber provides monthly reports on kilometres travelled. TTAU and CGEO lack Uber accounts, so their taxi travel is captured via credit card spend. Uber's kilometre data is stated as estimated, Impact: Considered low.
	Business travel – Taxi	\$	Credit card spend	E2: Staff credit card spend is allocated to 'Taxis' in the Deltek finance system, relying on correct staff categorisation. Emissions are calculated using the MFE 2024 spend-based factor, which is less accurate than fuel or kilometre data but used in their absence. Impact: Considered low-medium.
	Business travel – Rental cars and Car share	KM	Budget Rentals, Zilch, CityHop	M2: Kilometres-travelled data provided monthly by travel companies.
	Business travel – Rental cars and Car share	\$	Credit card spend	M3: Staff credit card spend is allocated to 'Rental Costs – Vehicles' in Deltek, relying on accurate staff categorisation. Emissions are calculated using the 2023 Auckland Council spend-based factor for 'Road passenger transport', which is less accurate than fuel or kilometre data but used in their absence. Impact: Considered low, as rental cars/car shares are minor emission sources.

ISO Category	Source	Units measured	Data Source	Data quality, uncertainty & key assumptions	
				Mitigation: Support improvement of staff expense allocation to reduce uncertainty.	
	Business travel – Air travel	Passenger km	Orbit Travel records	Existing companies	M2: Air travel emissions are based on passenger-kilometre data from the travel provider portal, filtered by sector-departure date.
				Bligh Tanner Pty Ltd	All emission factors are secondary data and include radiative forcing.
Business travel – Air travel	\$	Credit card spend	Existing companies	<p>M3: Staff credit card spend is allocated to air travel in Deltek, relying on accurate staff categorisation.</p> <p>Emissions are calculated using the 2023 Auckland Council spend-based factor for 'Passenger Air Travel'. It is unclear if radiative forcing is included. Spend-based factors are less accurate than fuel or kilometre-based data but used in their absence.</p> <p>Impact: Considered low-medium. While air travel is material, spend-based emissions contribute only 9% of total air travel emissions.</p> <p>Mitigation: Continue to ensure team members use travel provider services first and</p>	

ISO Category	Source	Units measured	Data Source	Data quality, uncertainty & key assumptions	
					foremost to reduce reliance on spend-based data.
				Bligh Tanner Pty Ltd	E3: Flight distances were calculated with data derived from internal records of flight invoices and emissions estimated using an AU domestic economy emission factor. Impact: Low, due to minimal materiality. Mitigation: Most upcoming air travel bookings will be made using the Orbit travel provider.
	Business travel - Accommodation	No. of nights (Rooms per night - RPN)	Orbit Travel records	Existing companies	M1: Based on accurate 'Rooms per night' data sourced directly from Travel provider portal. Nights are filtered by 'Check-in date'.
				Bligh Tanner Pty Ltd.	
	Business travel - Accommodation	\$	Credit card spend	M3: Staff credit card spend is allocated to 'Accommodation' in Deltek, relying on accurate staff categorisation. Emissions are calculated using the 2023 Auckland Council spend-based factor for Domestic/Overseas Accommodation. Spend-based factors are less accurate than primary data (e.g., rooms per night). Spend-based accommodation emissions contribute 37% of total accommodation emissions. Impact: Considered low-medium.	
Working from home	Days	Staff records from lockdown, office key card access data, office specific whereabouts data and	E3: Key card access records are used for TTNZ Fanshawe, while WFH percentages at other offices are estimated by an office representative		

ISO Category	Source	Units measured	Data Source	Data quality, uncertainty & key assumptions	
			assumptions from flexible working policy.	and provided via a monthly smart form, introducing medium to high uncertainty. Impact: Considered low-medium, given the low materiality of this emission source. Mitigation: Investigate tools with IT to better track WFH time.	
	Downstream business freight	\$	Geo Sales Freight spend data	M2: Freight emissions are based on 2025 freight charges paid by GeoSales, assuming most freight is road-based. Emissions are calculated using the 2023 Auckland Council spend-based factor for road transport freight services. Spend-based factors are less accurate than fuel or kilometre data but used in their absence. Impact: Low, given the low materiality of this emission source.	
	Employee commute	pkm	Commuting-specific questions from 2025 Sustainability survey.	E2: Tonkin & Taylor Group Ltd (excluding Bligh Tanner Pty Ltd) employees were surveyed about their commute behavior for 2025 and, if applicable, for 2018. Proportions of travel modes and distances were estimated, adjusted for headcount and response rates (40% in 2025, 21% in 2018). Emission estimates depend on accurate reporting of commute distances and transport modes. Private vehicles assumed petrol. Working weeks per year calculated using 249 working days for 2025, 13 NZ public holidays and 4 weeks annual leave. Impact: Medium to high due to significant materiality and uncertainty from a lower response rate. Mitigation: Maintain yearly surveys to build data granularity across distance and transport mode behaviour.	
(4) Indirect GHG emissions from products an organisation uses	Transmission and distribution losses	kWh	Supplier invoices	Existing companies	M1: Invoices provided by electricity suppliers.
				Bligh Tanner Pty Ltd	2025: M2: Supplier provided invoices monthly and quarterly. For one site, estimates are

ISO Category	Source	Units measured	Data Source	Data quality, uncertainty & key assumptions	
					<p>provided for November and December while the invoice is pending.</p> <p>2018: E2: Estimated 12-month usage for one site based on 2025 kWh and adjusted by FTE; other site was not yet established.</p>
	Well-to-tank	Litres, passenger km and km	Fuel cards, travel records, Deltek vehicle mileage records,	<p>M2: Well-to-tank (WTT) emissions are based on primary and secondary data (fuel litres, PKM, or KM travelled) from supplier portals and invoices, covering fleet vehicles, air travel, and taxis/rental/car-share.</p> <p>Emission factors are sourced from UK DESNZ 2025. WTT factors have higher uncertainty due to the wide range of upstream activities covered but remain the most practical method available. WTT is applied per emission source using primary or secondary activity metrics (fuel litres or KM).</p> <p>Impact: Considered low.</p>	
	Business waste – Waste to landfill	tonne	Waste Management, EnviroNZ and BraveGen Utilities office waste records	Existing companies	<p>68% of waste to landfill: M1: Records from waste supplier monthly records.</p> <p>32% of waste to landfill: E2: For locations without supplier-reported waste-to-landfill data, figures were extrapolated from actual data at other sites and adjusted per site by FTE.</p> <p>Impact: Low given materiality of estimated sites.</p> <p>Mitigation: Request reports or consolidate suppliers for collective reporting.</p>
				Bligh Tanner Pty Ltd	

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