

GREAT SOUTH



Southland Regional Development Agency

Great South Greenhouse Gas Emissions Inventory Report

FY 2024 - 2025





IMPARTIAL CARBON FOOTPRINT REVIEW

TO THE DIRECTORS OF SOUTHLAND REGIONAL DEVELOPMENT AGENCY

Reporter: Southland Regional Development Agency (Great South)
Registered address: 143 Spey Street, Invercargill, New Zealand

Ekos Kamahi Limited was engaged to conduct an impartial review of the greenhouse gas (GHG) calculations and associated organisational emissions reported by Great South. The review was completed on 20th March 2026. The intended users of this review are Ekos Kāmahī Limited (GHG Programme) and Great South. The determination of the GHG emissions and the sufficiency of the procedures is the sole responsibility of the intended users. Ekos Kamahi Limited was not involved in determining the GHG emissions. Our sole responsibility was to provide an impartial review on the accuracy of the GHG emissions quantification based on agreed-upon procedures.

The procedures as agreed with the Ekos GHG Programme included select parts of ISO 14064-1:2018, specifically:

- Organisational Boundary and Reporting Boundary.
- Consolidation Approach (Operational Control) and its application.
- Quantification of emissions.
- Materiality is set at 5%.
- Remote/desk-top review, and
- No verification of source activity data.

A separate findings log was documented and issued to Great South. There were no material findings issued.

- Total Gross GHG Emissions: 210.55 tonnes CO₂e
- Period: 1 July 2024 to 30 June 2025
- Quantification reference: GS emissions inventory_2025FY_Ekos_v2

A handwritten signature in black ink, appearing to read "Josh Leenhouders".

Josh Leenhouders, Reviewer

Ekos Kamahi Limited
Nelson, New Zealand

23rd March 2026

\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 ekos@ekos.co.nz

Report Title:	Greenhouse Gas Emissions Inventory Great South FY 2024-2025
Measurement period:	1/07/2024 to 30/06/2025
Base year period:	1/07/2018 to 30/06/2019
Prepared by:	Jongwook Kim Strategic Projects Engineer
Peer Reviewed by:	Stephen Canny General Manager Strategic Projects
Independent external reviewed by:	Josh Leenhouders Carbon Analyst Ekos 20/03/2026
Contact:	Great South 143 Spey Street Invercargill 9840 Southland New Zealand

Disclaimer

This report has been prepared by Great South (Southland Regional Development Agency) with all reasonable skill and diligence. Great South does not accept any kind of responsibility for third parties' use of the content. Interpretations, analyses, or statements made by third parties based on this report are beyond Great South's responsibility.

The scope of this report includes emissions from Space Operations New Zealand Limited (Space Ops). Great South owns 100% of Space Ops and provides administrative and logistical support.

If you have any suggestions, complaints, or any other feedback, please contact us at info@greatsouth.nz

Availability

This report will be accessible electronically to the public through the sustainability section of our website. A summary of the inventory will also be published in our Annual Report.

Statement

This inventory is consistent with the International Standards Organisation's process for calculating and reporting GHG emissions 14064-1 (2018). However, while this measurement has been external reviewed as consistent with the ISO standard, it is an unverified inventory. This aim of this report and inventory is to achieve Ekos certification 'Carbon Conscious.'

Document Control

Version Log

Version	Date	Author	Description
v1	18/09/2025	J Kim	Initial draft revised
v2	21/10/2025	J Kim	Revised draft
v3	05/03/2026	J Kim	Revised draft
v4	20/03/2026	J Kim	Final draft revised

Review Log

Version	Date	Reviewed by	Comment
v1	05/03/2026	S Canny	Feedback and revision

Executive Summary

This report represents Great South's sixth greenhouse gas (GHG) emissions inventory for the 2024/25 Financial Year (FY). The inventory follows the World Resource Institute's Greenhouse Gas Protocol (GHG Protocol) and ISO 14064-1 (2018) standards. The scope of the analysis involves the Great South's operations in Invercargill and Te Anau including its solely owned Space Operations New Zealand sites in Invercargill, Awarua and Warkworth.

During this period, activities within the organisational boundaries generated about **210.5** metric tonnes of carbon dioxide equivalent (tCO₂e). The largest contributors were Electricity used (35.0%), Business travel (19.0%), and Staff commute & Working from home (WFH) (11.5%). Scope 3 emissions (we can influence, but not control indirect GHG emissions), accounted for most emissions, followed by Scope 2 emissions from electricity. Table 1 shows the emissions by scope and sector. Figure 1 shows the contribution of organisational emissions by sector.

Great South's emissions continue to decline due to active reduction efforts, whereas emissions from Space Operations New Zealand are rising as its business and operational activities expand.

Table 1 GHG emissions (tCO₂e) by scope and sector

Scope and Sector		2018/19 Base year	2022/23	2023/24	2024/25
Scope 1		53.5	18.4	16.3	18.8
	Great South Space Ops	53.2 0.3	13.5 4.9	13.3 3.0	13.5 5.3
	Stationary fuel	20.2	-	-	-
	Transport fuel	33.1	18.4	16.3	18.8
	Refrigerants	0.2	-	-	-
Scope 2		10.6	39.8	46.6	73.6
	Great South Space Ops	5.2 5.4	4.4 35.5	4.7 41.9	5.5 68.1
	Electricity used*	10.6	39.8	46.6	73.6
Scope 3		218.1	187.8	132.4	118.1
	Great South Space Ops	205.0 13.1	137.5 50.3	97.1 35.3	71.0 47.1
	Business travel	116.9	85.0	55.1	40.1
	Staff commute + WFH	38.6	50.6	32.4	24.2
	ILT Kidzone event	15.4	13.4	16.8	17.8
	Electricity T&D losses	0.9	4.6	3.4	5.6
	Waste, wastewater, and water supply	3.0	2.5	1.0	0.8
	Freight	0.02	0.05	0.84	0.07
	WTT**	43.4	31.6	22.9	20.0
	Facilitated emissions from land use***	-	-	-	9.5
Total emissions		282.2	246.0	195.3	210.5
Emissions intensity (tCO ₂ e per FTE)		6.56	6.23	4.28	5.74
Reduction % from baseline		n/a	13%	31%	25%

Note: Due to rounding, the numbers in the above table will not add correctly to give the total.

*Level of carbon emissions for the electricity sector will depend primarily on the amount of fossil fuel used in any given year to maintain electricity supplies.

**Well-To-Tank: all greenhouse gas emissions from the production, transport, transformation, and distribution of the fuel used.

*** As recommended by Ekos, GHG emissions associated with livestock grazing around the Awarua Satellite Ground Station have been included in this report.

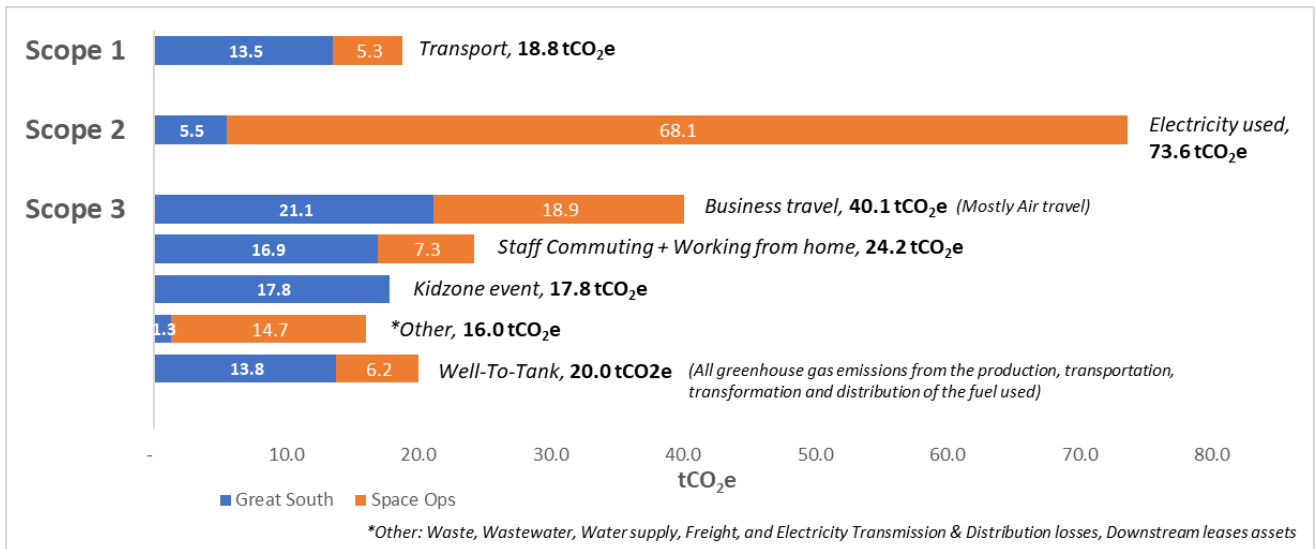


Figure 1 Great South's organisational emissions by sector for 2024/25

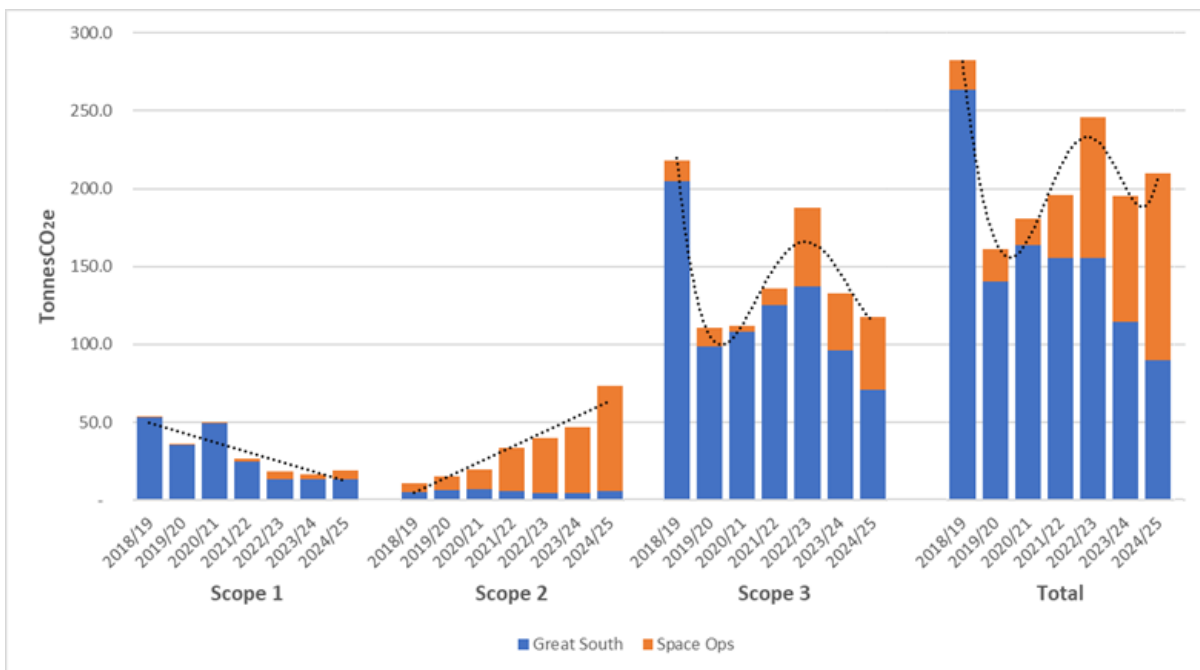


Figure 2 Summary of historical emissions inventories by scope

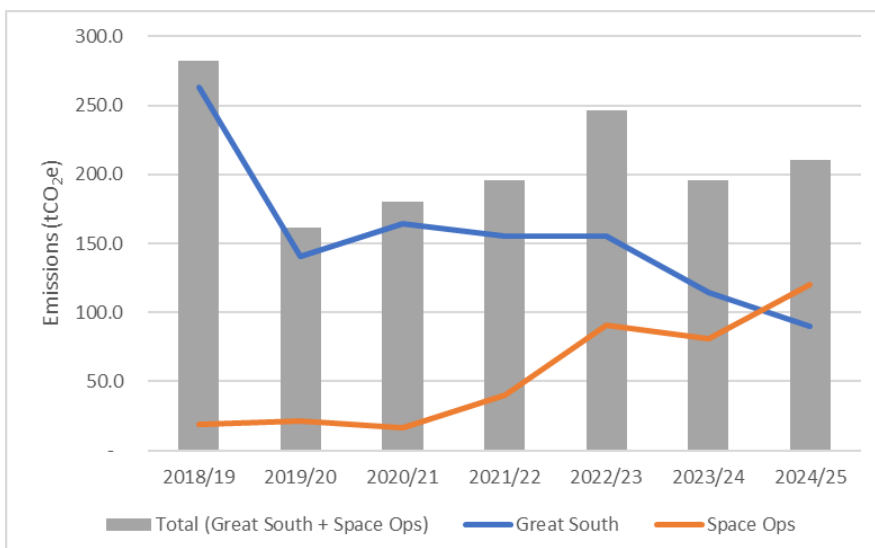


Figure 3 Annual Emissions by Source: Great South vs Space Ops

Changes from 2018 baseline:

Great South's total emissions decreased by **25%** between 2018/19 and 2024/25. The changes are largely a result of a decrease in business travel, the replacement of the old diesel boiler with heat pumps and switching to hybrid and plug-in hybrid vehicles.

- Electricity and Transmission and Distribution (T&D) losses from electricity were the only sectors with increased emissions (596% and 528% respectively), attributed to Space Ops NZ's business growth.
- Business travel emissions decreased the most (76.8 tCO₂e or 65.7%), due to staff efforts to replace many business trips with online meetings.
- Stationary fuel emissions reached zero in August 2022 after replacing the diesel boiler with heat pumps.
- Transport fuel emissions decreased by 14.3 tCO₂e or 43.2%, mainly due to the replacement of petrol and diesel vehicles with petrol hybrid and plug-in hybrid electric vehicles (PHEVs).
- Other sector emissions changed minimally.

Key findings:

- This year, for the first time, emissions from Space Ops have exceeded those from Great South (Space Ops: 120.6 tCO₂e, Great South: 90.0 tCO₂e).
- In 2024/25 GS emitted a total of 18.8 tCO₂e (Scope 1), 73.6 tCO₂e (Scope 2), and 118.1 tCO₂e (Scope 3). All scopes total 210.5 tCO₂e, a 25% (71.7 tCO₂e) reduction from the baseline.
- Electricity has now become the largest source of emissions, overtaking all other categories, and accounting for 35.0% of the total footprint. This marks a significant shift, driven by the continued growth of Space Ops NZ. Electricity-related emissions have steadily increased year-on-year, and around 93% of these originate from the satellite ground stations in Awarua and Warkworth.
- Business travel is the second largest contributing sector, accounting for 19.0% of total emissions, with domestic and international flights accounting for 95.8% of this. Emissions from this sector surged post Covid-19 but decreased again this year due to many staff efforts to avoid business trips with online meetings.
- Staff commute & WFH contributes for 11.5% of total emissions, with Staff commute making up 98.2%.
- Emissions from Kidzone event contributes for 8.5% of total emissions. However, as the event is tentatively suspended starting this year, these emissions will be reduced in future reports.
- The top three sources shown in the table below accounted for 65.5% of GS's total emissions during the 2024/25 reporting period.

Table 2 Historical top three emissions sources for all reporting periods

Reporting Period	Emission Sources	% of total emissions	Emissions (tCO ₂ e)
Base year 2018/2019	1. Business travel	41.4%	116.9
	2. Staff Commuting & Working from home	13.7%	38.6
	3. Transport (company cars)	11.7%	33.1
2022/2023	1. Business travel	34.5%	85.0
	2. Staff Commuting & Working from home	20.6%	50.6
	3. Electricity	16.2%	39.8
2023/2024	1. Business travel	28.2%	55.1
	2. Electricity	23.9%	46.6
	3. Staff Commuting & Working from home	16.6%	32.4
2024/2025	1. Electricity	35.0%	73.6
	2. Business travel	19.0%	40.1
	3. Staff Commuting & Working from home	11.5%	24.2

Main recommendations

To be carbon neutral organisation by 2026, it's important to emphasise that we cannot achieve this on our own. Even with our best efforts, the maximum reduction we can achieve is estimated to be **119 tonnes by June 2026**. Therefore, to reach neutrality, we will need to offset the remaining emissions.

Scope 1: Direct emissions from the combustion of petrol in vehicles.

- Transition to Electric vehicles: Replace I-MEV, *Travis-Toyota RAV4* (NYE819) and *Niro-Kia Niro* (NFY390) with electric vehicles (EVs) upon the disposal or at the lease termination with EV's of 420 km + range.

Scope 2: Emissions from purchased electricity.

- Investigate Installation of solar PV on the Spey Street building and Awarua Ground station and report back to the Great South Board with a cost benefit analysis and a financing recommendation for both systems.
- *Change electricity provider to Ecotricity or similar. By doing this we can claim our emissions from electricity as zero. Or:
- *Renewable Energy Certificates (RECs): GS and SO keep current providers Contact - Meridian and buy RECs.

*There are some questions about the efficacy and veracity of Carbon Zero grid electricity and REC's, accordingly the use of solar electricity is the preferred option.

Scope 3: Indirect emissions that we do not fully control but we can influence.

- Travel policy: Set out a budget for flight travel per business unit and SO and define a process for approving flights.
- Board flights: Increase the number of online board meetings a year.

Reduction Targets

GS is committed to managing and reducing its emissions in accordance with Te Ara Toitū – GS's Sustainability Plan. Based on a 1.5-degree scenario¹ of global warming, GS commits **by 2026** to:

- **Reduce Scope 1 emissions 81%** from a 2018 base year (equivalent to a 43 tCO₂e reduction from the 2018/19, or 9 tCO₂e reduction from the reporting year).
- **Reduce Scope 2 emissions 100%** (equivalent to a 11 tCO₂e reduction from the 2018/19, or 74 tCO₂e reduction from the reporting year) by generating solar electricity or purchasing from a carbon neutral provider or RECs*.
- **Reduce Scope 3 emissions 50%** from a 2018 base year (equivalent to a 109 tCO₂e reduction from the 2018/19, or 9 tCO₂e reduction from the reporting year).

*Renewable Energy Certificates- Certificate of origin for electricity from a renewable source

Table 3 Summary of reduction targets for each scope

Emissions (tCO ₂ e)	Base year (2018/19)	Most recent year (2024/25)	Reduction by target year	Remaining carbon footprint	Target year (June 2026)
Scope 1	53	19	-9	10	10
Scope 2	11	74	-74	0	0
Scope 3	218	118	-9	109	109
Total	282	211	-92	119	119

¹ A 1.5-degree scenario refers to a set of strategies and pathways aimed at limiting global warming to 1.5 degrees Celsius above pre-industrial levels, as outlined in the Paris Agreement.

Contents

Executive Summary	5
Introduction	11
Methodology	12
Results	16
Reduction Plan	24
References	26
Appendix 1: Detailed GHG Inventory	27
Appendix 2: Organisational / Reporting Boundaries	28
Appendix 3: Great South Financial Statements	30
Appendix 4: Quantified Inventory of Emissions and Removals	30
Appendix 5: GHG emission sources included in the inventory.	31

Acronyms and Abbreviations

AR5	IPCC's fifth assessment report
CH ₄	Methane
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
Electricity T&D losses	Electricity Transmission and distribution losses
EV	Electric Vehicle
FTE	Full-time equivalent Staff
FY	Financial Year
GHG	Greenhouse Gas
GS	Great South, Southland Regional Development Agency
GWP	Global Warming Potential
HEV	Hybrid Electric Vehicle
IPCC	Intergovernmental Panel on Climate Change
NZECS	New Zealand Certificate System
PHEV	Plug-in Hybrid Electric Vehicle
REC	Renewable Energy Certificate – Certificate of origin for electricity from a renewable source
SGHS	Southland Girls High School
T&D	Transmission and Distribution losses from purchased electricity
WFH	Working from home
WTT	Well-To-Tank, all greenhouse gas emissions from the production, transportation, transformation, and distribution of the fuel used

Introduction

This is Great South's (GS) sixth greenhouse gas (GHG) emissions inventory report, measuring GHG emissions from activities during the 2024/25 Financial Year (FY). It aims to share the progress GS has made towards reaching its goal of becoming carbon neutral by 2026 and becoming a low waste and water hero.

GS was established as Southland's regional development agency in March 2019 and is responsible for economic development and promotion of the Murihiku Southland region. Its vision is 'even better lives through sustainable regional development.'

GS is a council-controlled organisation, with eight shareholders (Invercargill City Council, Southland District Council, Gore District Council, Environment Southland, Invercargill Licensing Trust, Maitaha Licensing Trust, Southland Chamber of Commerce and Southern Institute of Technology/Te Pūkenga) and member company, Community Trust South. GS is governed by an independent Board of Directors and has a memorandum of understanding with all four Murihiku Papatipu Rūnaka. GS receives funding from its shareholding councils to cover operational and core costs in line with agreed KPIs, Central Government agencies who contract GS to perform specific services, as well as private sector partners.

Business Plan

Great South's Business priorities are:

1. Regional development leadership
2. Regional promotion
3. Business Support and Diversification
4. Net Zero Southland

Within the Net Zero Southland priority, its goals are to

- Monitor emissions
- Net Zero Planning
- Regional Energy planning

Intended users of this report include or will include, but are not limited to:

- Great South staff
- Great South shareholders
- General public

Persons responsible

Responsibility for the preparation of the inventory and report:

- Strategic Projects Engineer

Responsibility for reduction performance as well as reporting results to the Chief Executive

- Sustainability Committee

Assisting with background data and supporting information:

- GM Corporate Services
- Management Accountant
- Business Events Manager
- Front Desk Administrator
- Visit Fiordland Tourism and Communication Executive
- Operations Manager (Space Operations NZ)
- Operations Coordinator (Space Operations NZ)

Responsibility for an impartial review of the greenhouse gas calculations

- Ekos Kamahi Limited

The GS emissions inventory will be included as an agenda at the GS Sustainability Committee meetings. These meetings will have at least one representative per business unit. Emissions performance and related projects will be reviewed along with follow-up actions, as and when required to ensure the organisation is on track for meeting our emissions performance targets (Table 3).

Staff Engagement

In June 2023 Te Ara Toitū –Sustainability Plan was launched. The Committee’s role includes the full implementation of the plan and empowering GS to take positive action towards carbon neutrality and minimise its environmental impact. Great South’s sustainability goals are:

1. Integrate environmental sustainability consideration in all we do
2. Be a carbon neutral organisation by 2026²
3. Reduce waste and water consumption

Each goal has specific actions and KPIs that are intended to be achieved during the financial year. GS’s staff are kept informed about our emissions reduction commitments through monthly general meetings, the company intranet, and the introduction of environmental awareness sessions.

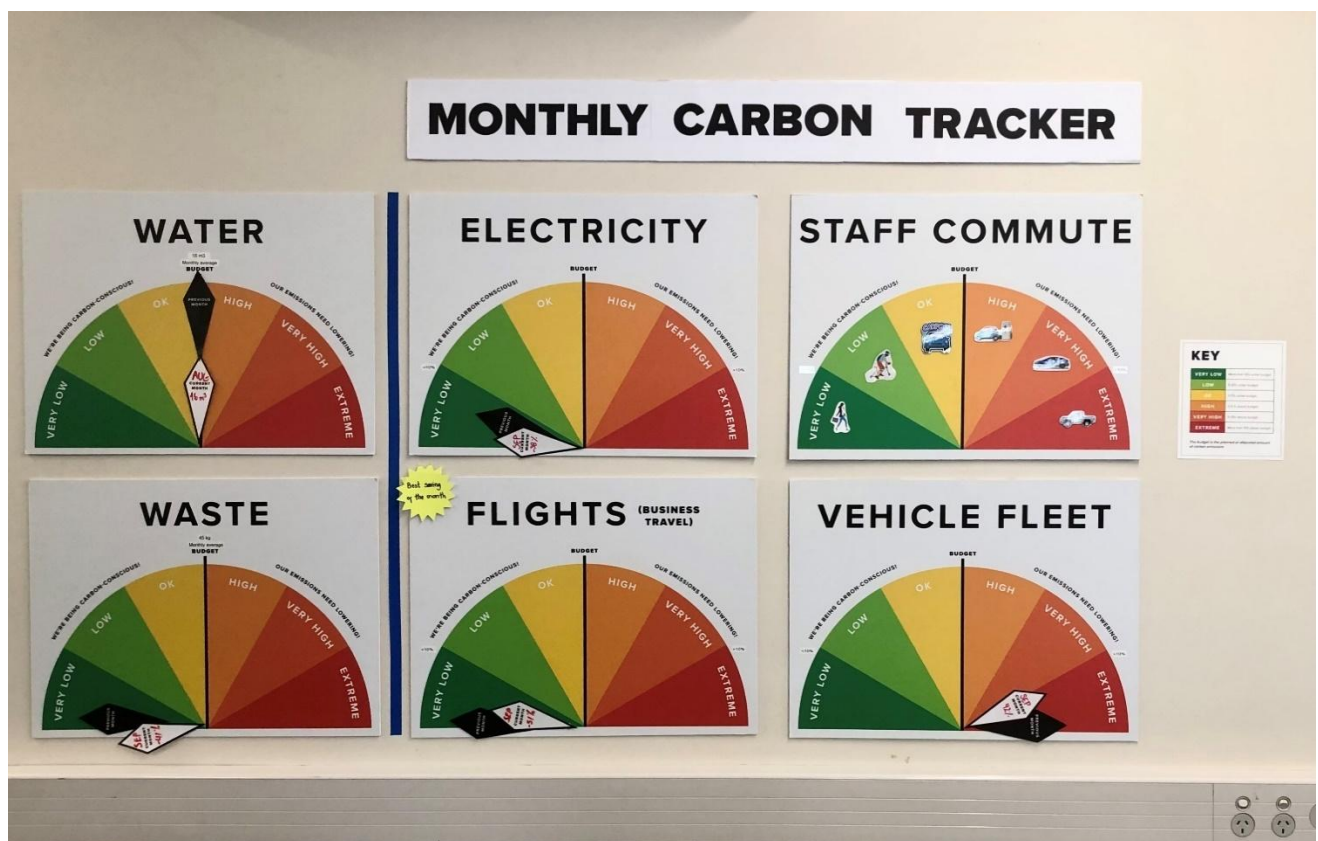


Figure 4 Monthly carbon tracker for staff engagement display in Spey Street office

The Great South Board receives regular update reports on the progress of the Te Ara Toitū plan to approve recommendations for its implementation.

Methodology

This GHG inventory was prepared in accordance with the international Standards for calculating GHG emissions. The standards followed 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

² On 6 Aug 2024 the Board decided to defer the carbon neutral goal to 2026 instead of 2025.

organisation level for quantification and reporting of GHG emissions and removals. In measuring this inventory, the five principles of ISO 14064-1:2018 were strictly applied.

Emissions factors were obtained from the Ministry for the Environment’s ‘2025 Emission Factors Workbook’ and UK government’s ‘Greenhouse gas reporting: conversion factors 2025’. The methodology used in measuring GS’s organisational GHG inventory is illustrated in the following diagram:

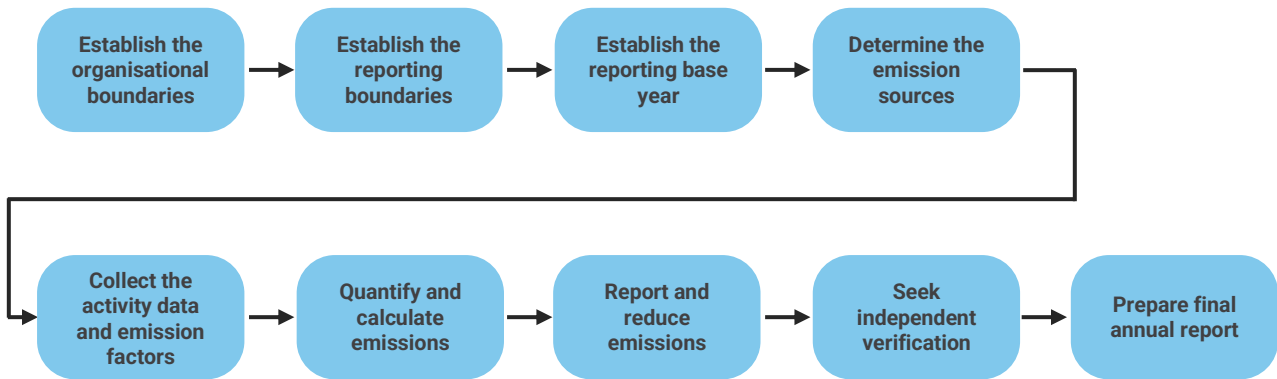


Figure 5 Emission Inventory Process Diagram

Organisational boundary

Organisational boundaries were set with reference to the methodology described in the ISO 14064-1:2018 and the GHG Protocol 2004. The standard allows two distinct approaches to be used to consolidate GHG emissions: the equity share or control (either financial or operational) approaches³.

An operational control approach was used to account for emissions. This consolidation approach aligns with our intended users. In particular, it is considered to be more effective at reflecting our carbon risk exposure across the subsidiaries in which we have 100% ownership (Space Ops), but no financial control. Figure 6 shows the organisational structure of Great South.

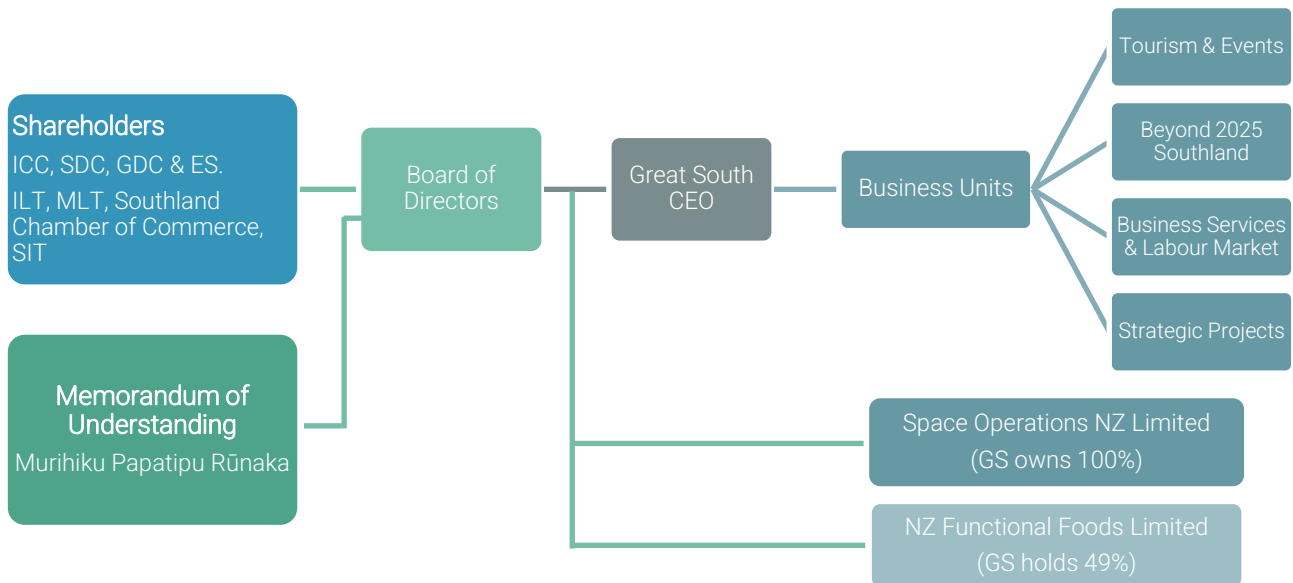


Figure 6 Southland Regional Development Agency Limited (trading as Great South) organisational structure

³Control: the organisation accounts for all GHG emissions and/or removals from facilities over which it has financial or operational control. Equity share: the organisation accounts for its portion of GHG emissions and/or removals from respective facilities.

Physical operational sites

A storage unit at 115 Clyde Street, Invercargill only uses lights. As power consumption data is not available, it is excluded from this inventory. GS has a 49% share in NZ Functional Foods, and this facility is excluded under the control approach. The table below shows what physical sites have been included in the context of the entire organisational profile.

Table 4 Brief description of the structure (physical operational sites) included in this emission inventory

Physical operational sites	Location	Description
Spey Street office	143 Spey Street, Invercargill 9810	Great South Head Office accommodates most staff. Two storey building, with an approximate floor area 760m ² – 450m ² on the first floor and 310m ² on the ground floor. There are 4 meeting rooms and a board room, 2 kitchens, 2 bathrooms and 2 EV charging stations.
Te Anau office	116 Town Centre, Te Anau 9600	GS took acquired this office on April 1, 2021. The upper floor is 200m ² , with open plan office space, separated offices/meeting rooms, and one kitchenette and bathroom.
ILT Kidzone	328 Tweed Street, Invercargill 9812	Annual event run by GS held over six days in July 2024 at SGHS.
Hargest House (Space Ops office)	62 Deveron Street, Invercargill 9810	Space Ops NZ head office. 98m ² , 50% open plan and 4 office spaces, 1 office is sub leased to a customer, one kitchen and shared use of toilets with the other tenants on the floor.
Awarua Satellite Ground Station (Satellite ground and radio tracking Space Ops)	781 Colyer Road, Awarua, Invercargill	Awarua Station operates antenna and electronics for both clients and SO. 31 hectares, 14 hectares is native vegetation, property with a 100m ² control centre (office and IT systems), a 17m ² generator shed and 40 plus antennas.
Warkworth Space Centre	121 Satellite Station Road, Warkworth, Auckland 0983	It includes two buildings—1×1300m ² and 1×20ft container (~46m ²)—both housing office and IT equipment. Warkworth also has 1 generator and 2 antennas: a 1X30m unit mounted on the main building and a 12m unit located separately on a hill.

GS (including Space Ops) has ten company cars and five physical sites, Spey St office, Te Anau office, Hargest House (Space Ops office), Awarua Satellite Ground Station, Warkworth Space Centre, and runs one main annual event – the ILT Kidzone event currently held at Southland Girls High School (SGHS).

- As the Kidzone event in July 2024 was the last to be held, it will no longer be included in the list of physical sites from the next reporting period onward.

Scope and Approach

As adapted from the GHG Protocol 2004, the emissions sources included in this inventory were classified into the following scopes.

- Scope 1: Direct GHG emissions from sources that are owned or controlled by the company. For example, emissions from combustion of fuel in vehicles owned or controlled by the organisation.
- Scope 2: Indirect GHG emissions (in the form of electricity, heat, or steam) from the generation of purchased energy that the organisation uses.
- Scope 3: Indirect GHG emissions that occur because of the company's activities but from sources not owned or controlled by the company. For example, air travel and staff commuting.

Reporting Period

Base year measurement period: 01/07/2018 to 30/06/2019. This base year period was selected because it represents the first year in which we have access to a materially complete set of data records for forming the inventory. A financial year was chosen to align to our annual reporting cycles.

Measurement period of this report: 01/07/2024 – 30/06/2025. The frequency of reporting will be annual.

GHG Information Management and monitoring procedures

GS is responsible for appropriate document retention, archiving, and record keeping for each emissions source. Ekos⁴ annual review requirement is in place to ensure any errors and emissions in the GHG inventory report are addressed.

Recalculation Policy

GS uses 2018/19 as baseline year. To accurately track progress towards carbon reduction targets, the base year emissions inventory will be adjusted for significant changes (>5% emission increase/decrease). Additionally, recalculations may occur for changes <5% if organisational structure changes occur.

Organisational structure changes: Including acquisition, divestment, mergers and permanent closures of business or facilities that existed during 2018/19.

Methodology changes: Include updated emission factors, improved data access/updated calculation methods or protocols, and the Global Warming Potential (GWP)⁵.

Other changes: We will recalculate our emissions if we discover a significant error resulting in an increase or decrease of more than 5%, if there are multiple cumulative errors, or if there is a change in our organisational⁶ or operational boundaries⁷.

Historical Recalculation

No historical data has been recalculated for this reporting year.

Changes to methodology to FY 2023/24

GHG emissions associated with petrol use for lawn mowing and livestock grazing around the Awarua Satellite Ground Station have been included in this report. As the organisational boundary has been set using the operational control approach, petrol use for lawn mowing is included as Scope 1, while livestock grazing by third parties, who do not provide any financial gain to the organisation, is included as Scope 3 under Category 5 (indirect GHG emissions associated with use of products from the organisation).

⁴ Ekos Kamahi Limited is GS'S preferred supplier, as carbon certification company.

⁵ All greenhouse gases (GHGs) in this report are reported in CO₂e using Global Warming Potential (GWP100) values from the IPCC Fifth Assessment Report (AR5).

⁶ Organisational boundary defines whether to account for GHG emissions by equity share or financial control.

⁷ Operational boundary defines the scope of direct (Scope 1) and indirect emissions (Scope 2, Scope 3) for operations that fall within a company's established organisational boundary (WRI, 2004).

Results

This section details the 2024/25 emissions profile by scope and emissions sector, and changes from baseline.

Overview of Emissions

Total emissions came to **210.5** tonnes of carbon dioxide equivalent (tCO₂e). Scope 3 is the largest contributor to the total emissions for GS (56%), primarily from business travel and staff commute. There has been a 25% reduction in total emissions compared to the 2018/19 baseline year. While employees continued to make efforts to reduce emissions, including replacing physical meetings with virtual ones, total emissions saw a slight increase this year compared to the previous year. This was mainly attributable to newly accounted emissions from lawn mowing and livestock grazing around the Awarua Station, and increased electricity usage resulting from Space Ops' business expansion. Emissions intensity per full time employee was 5.74 tCO₂e.

Table 5 Summary emissions (tCO₂e) by scope and category

Scope	Emissions category	2018/19 Base year	2022/23	2023/24	2024/25	
1	(1) Direct GHG Emissions	53.5	18.4	16.3	18.8	
	Great South	53.2	13.5	13.3	13.5	
	Space Ops	0.3	4.9	3.0	5.3	
2	(2) Indirect GHG Emissions from Imported Energy	10.6	39.8	46.6	73.6	
	Great South	5.2	4.4	4.7	5.5	
	Space Ops	5.4	35.5	41.9	68.1	
3	(3) Indirect GHG Emissions from Transportation & Distribution	155.5	135.6	88.3	64.3	
	Great South	144.7	97.1	61.6	38.1	
	Space Ops	10.8	38.5	26.7	26.2	
	(4) Indirect GHG Emissions from products & services used by the organisation	62.7	52.2	44.1	44.3	
	Great South	60.4	40.4	35.6	32.9	
	Space Ops	2.3	11.8	8.5	11.4	
	(5) Indirect GHG Emissions from the use of the Organisations Products	-	-	-	9.5	
	Great South	-	-	-	-	
	Space Ops	-	-	-	9.5*	
	(6) Indirect GHG Emissions from other sources	-	-	-	-	
	Total Gross emissions (Location Based)		282.2	246.0	195.3	210.5
		Great South	264.3	155.4	115.1	90.0
	Space Ops	18.8	90.7	80.3	120.6	
GHG removals / sinks		-	-	-	-	
Purchased credits / Pre-offset (Location Based)		-	-	-	-	
Total Net GHG emissions (Location Based)		282.2	246.0	195.3	210.5	
	Great South	264.3	155.4	115.1	90.0	
	Space Ops	18.8	90.7	80.3	120.6	
Full Time Equivalent Employee (FTE)		43.0	39.5	45.6	36.7	
Gross revenue		\$4.4m**	\$9.5m	\$8.8m	\$9.4m	
Emissions intensity (tCO₂e per FTE per annum)		6.56	6.23	4.28	5.74	
Emissions intensity (tCO₂e per \$1m revenue per annum)		64.1	26.0	22.6	22.5	

Note: Due to rounding, the numbers in the above table will not add correctly to give the total.

*Based on Ekos' recommendation, GHG emissions from livestock grazing around the Awarua Satellite Ground Station have been added to this report.

**As Great South was established in March 2019, there was no revenue for 2018/19 FY. However, for comparison, the same revenue as in 2019/20 was applied in 2018/19 FY.

In 2024/25, Space Ops emissions surpassed those of Great South for the first time, marking a significant shift in the organisation’s emission profile. While Great South has steadily reduced its emissions since 2018/19, Space Ops has shown continuous growth, leading to a crossover this year.

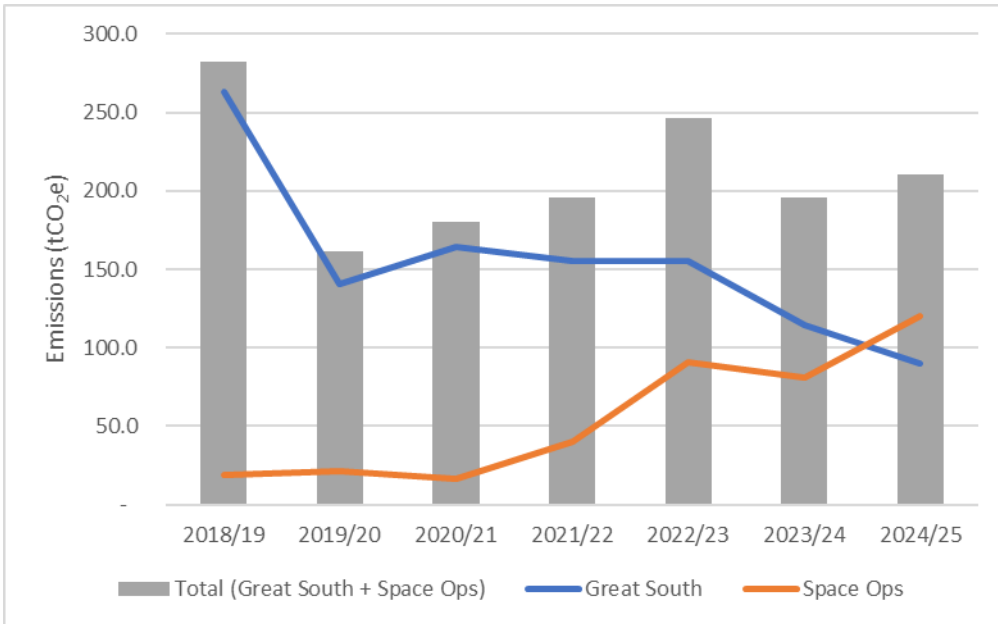


Figure 7 Annual Emissions by Source: Great South vs Space Ops

Since the 2018/19 baseline, Scope 2 emissions have continued to increase, while all other categories have shown a downward trend. This is primarily due to the growth of Space Operations, which has led to increased electricity consumption.

The noticeable changes during the reporting period include the increase in emissions from Space Operations, which is experiencing significant growth, and the addition of the Warkworth Ground Station site in Auckland last year. Details of these noticeable changes will be addressed in each sector.

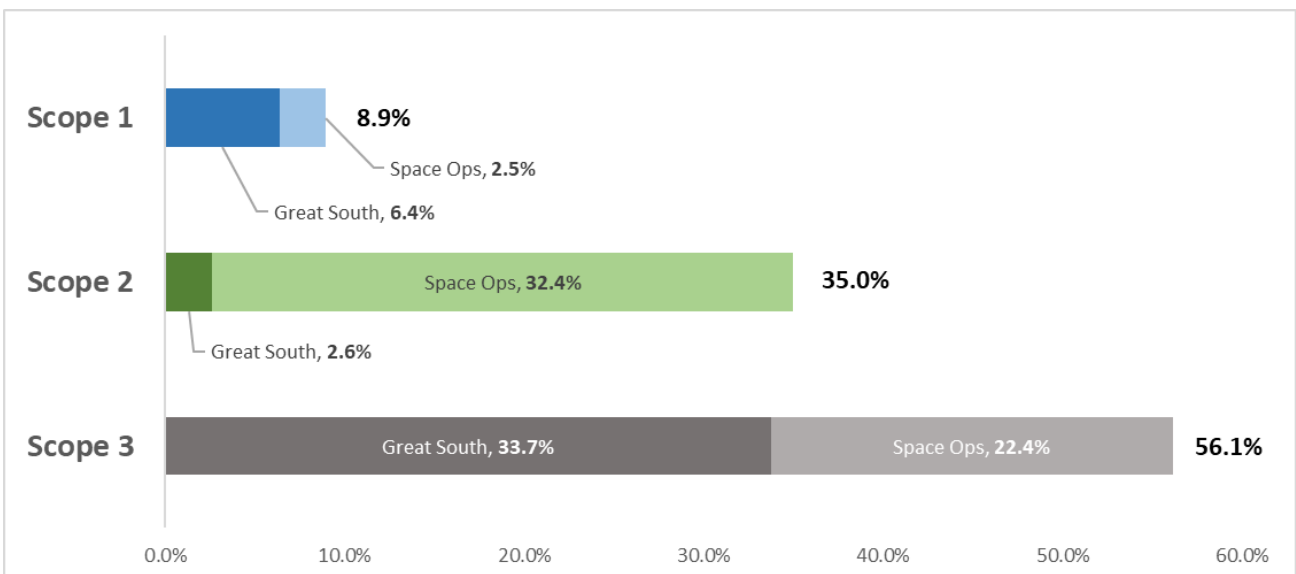


Figure 8 Emissions by scopes for this measurement period FY 2024-2025

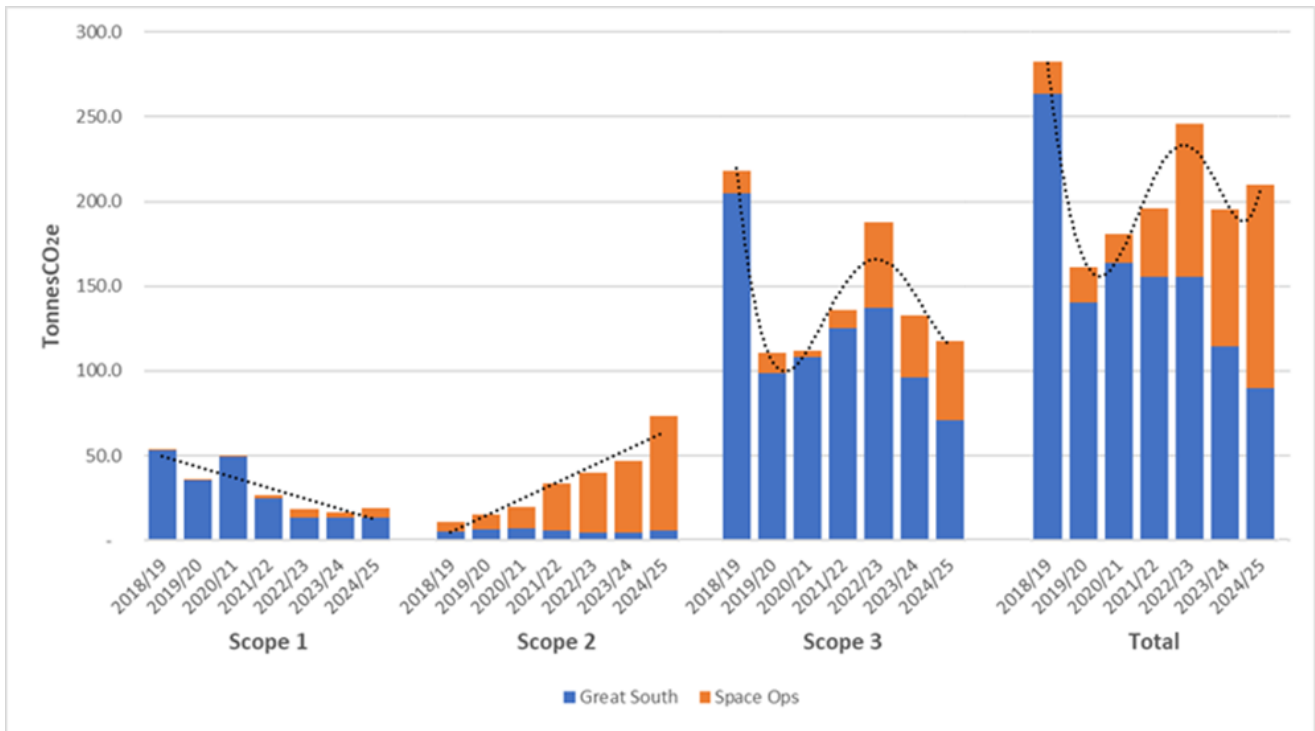


Figure 9 Summary of historical emissions inventories by scope

Scope 1

Scope 1 emissions represented **8.9%** of total emissions in 2024/25 (18.8 tCO₂e), the lowest contributor to organisational emissions. The sole source of emissions was transport fuel.

Table 6 Scope 1 emissions by sector (tCO₂e)

Sector	2018/19 Base year	2022/23	2023/24	2024/25
Stationary fuel	20.2	-	-	-
Great South	19.9	-	-	-
Space Ops	0.3	-	-	-
Transport fuel	33.1	18.4	16.3	18.8
Great South	33.1	13.5	13.3	13.5
Space Ops	-	4.9	3.0	5.3*
Refrigerants	0.2	-	-	-
Total	53.5	18.4	16.3	18.8
Great South	53.2	13.5	13.3	13.5
Space Ops	0.3	4.9	3.0	5.3

Note: Due to rounding, the numbers in the above table will not add correctly to give the total.

* Petrol use for lawn mowing around the Awarua Satellite Ground Station is included.

Emissions from the stationary fuel reached zero after replacing the diesel boiler with heat pumps and electric heaters in August 2022. Since 2018/19, the emissions from transport fuel decreased by 14.3 tCO₂e or 43.2% over the past six years by replacing petrol and diesel vehicles with hybrid and plug-in hybrid vehicles. Petrol consumption for lawn mowing around the Awarua Satellite Ground Station has been newly included under the transport sector beginning with this reporting period. Refrigerant emissions are negligible. The total emission under Scope 1 decreased by 34.7 tCO₂e or 64.9% since baseline.

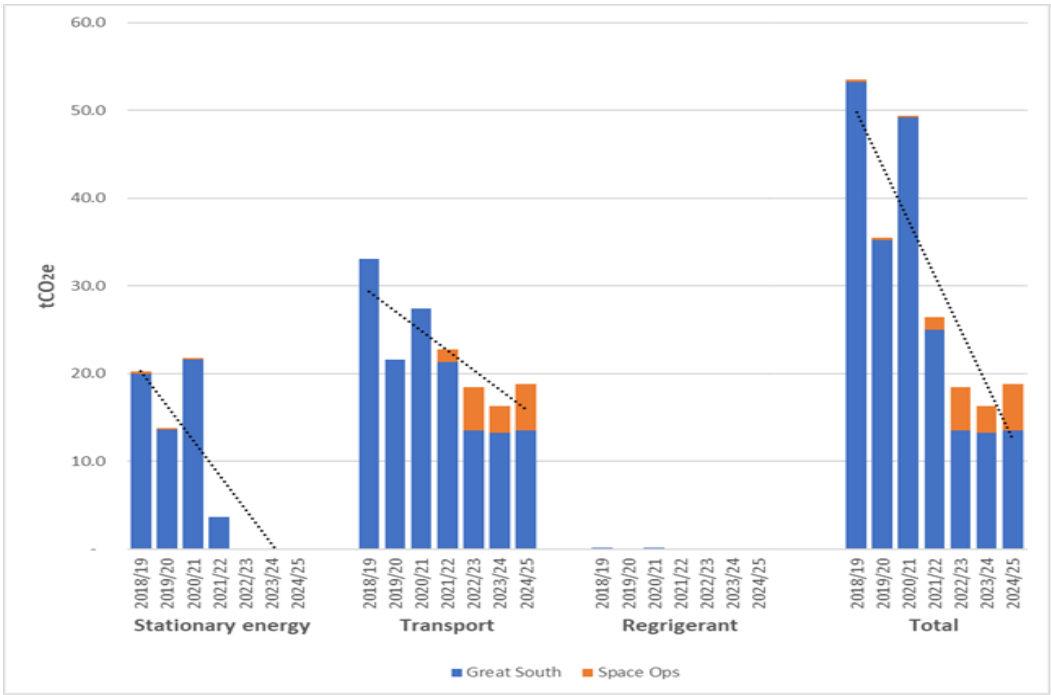


Figure 10 Scope 1 emissions by sector (tCO₂e)

Scope 2

Scope 2 emissions represented 35.0% of total emissions in 2024/25 (73.6 tCO₂e), mainly from electricity used in Awarua and Warkworth satellite ground station.

Electricity emissions have consistently increased every year due to Space Ops NZ’s business growth, with the addition of the Warkworth Ground Station site in Auckland last year further contributing to this rise. A breakdown of the emissions generated by business is provided in the table below.

Table 7 Scope 2 emissions (electricity) by business (tCO₂e)

Business	2018/19 Base year	2022/23	2023/24	2024/25
Great South	5.2	4.4	4.7	5.5
Space Ops	5.4	35.5	41.9	68.1
Total	10.6	39.8	46.6	73.6

Note: Due to rounding, the numbers in the above table will not add correctly to give the total.

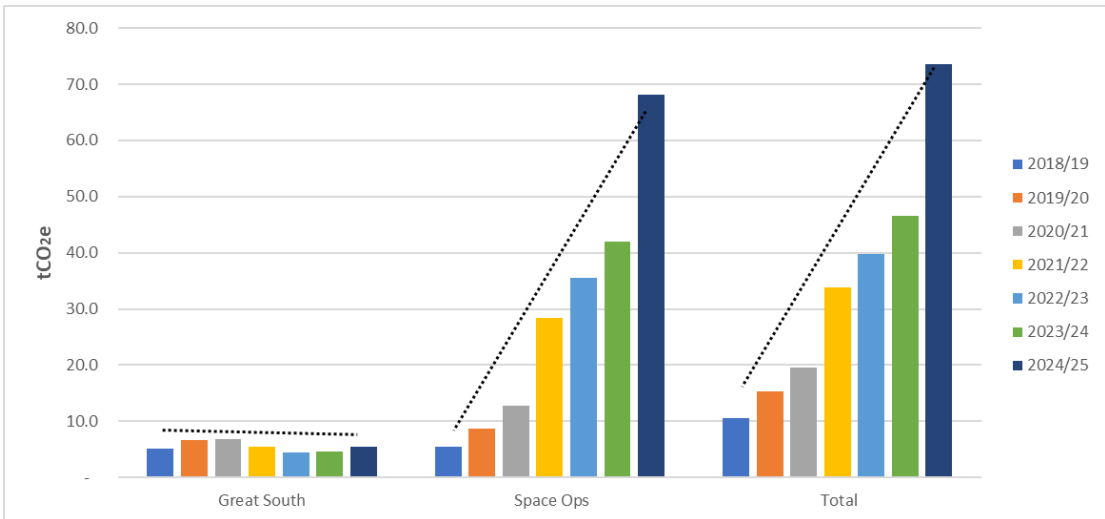


Figure 11 Scope 2 emissions (electricity) by business (tCO₂e)

Scope 3

Scope 3 accounted for 56.1% of the 2024/25 emissions (118.1 tCO₂e), with business travel as the largest contributor at 19.0% of the total emissions. Staff commute & WFH contributes 11.5%. A breakdown of the emissions generated by sector under Scope 3 is provided in the table below.

Table 8 Scope 3 emissions by sector (tCO₂e)

Sector		2018/19 Base year	2022/23	2023/24	2024/25
Business travel		116.9	85.0	55.1	40.1
	Great South	106.1	51.8	35.4	21.1
	Domestic flights	63.4	41.1	32.0	20.6
	International flights	36.7	9.0	2.1	-
	Hotel stay + Rental&Personal car	6.1	1.7	1.3	0.5
	Space Ops	10.8	33.2	19.7	18.9
	Domestic flights	2.2	4.1	7.2	5.5
	International flights	8.6	27.3	10.1	12.3
	Hotel stay + Rental&Personal car	-	1.8	2.4	1.1
	Staff commute & WFH		38.6	50.6	32.4
	Great South	38.6	45.3	25.4	16.9
	Space Ops*	-	5.3	7.0	7.3
Kidzone event		15.4	13.4	16.8	17.8
Electricity T&D losses		0.9	4.6	3.4	5.6
	Great South	0.4	0.5	0.3	0.4
	Space Ops	0.5	4.1	3.1	5.2
Waste, wastewater, and water supply		3.0	2.5	1.0	0.8
Freight		0.02	0.05	0.84	0.07
WTT**		43.4	31.6	22.9	20.0
	Great South	41.6	24.0	17.4	13.8
	Space Ops	1.8	7.7	5.5	6.2
Downstream leased assets***		-	-	-	9.5
Total		218.1	187.8	132.4	118.1
	Great South	205.0	137.5	97.1	71.0
	Space Ops	13.1	50.3	35.3	47.1

Note: Due to rounding, the numbers in the above table will not add correctly to give the total.

*There is no separate data for the first three years.

**Well-To-Tank: all greenhouse gas emissions from the production, transportation, transformation, and distribution of the fuel used.

***GHG emissions from livestock grazing around the Awarua Satellite Ground Station

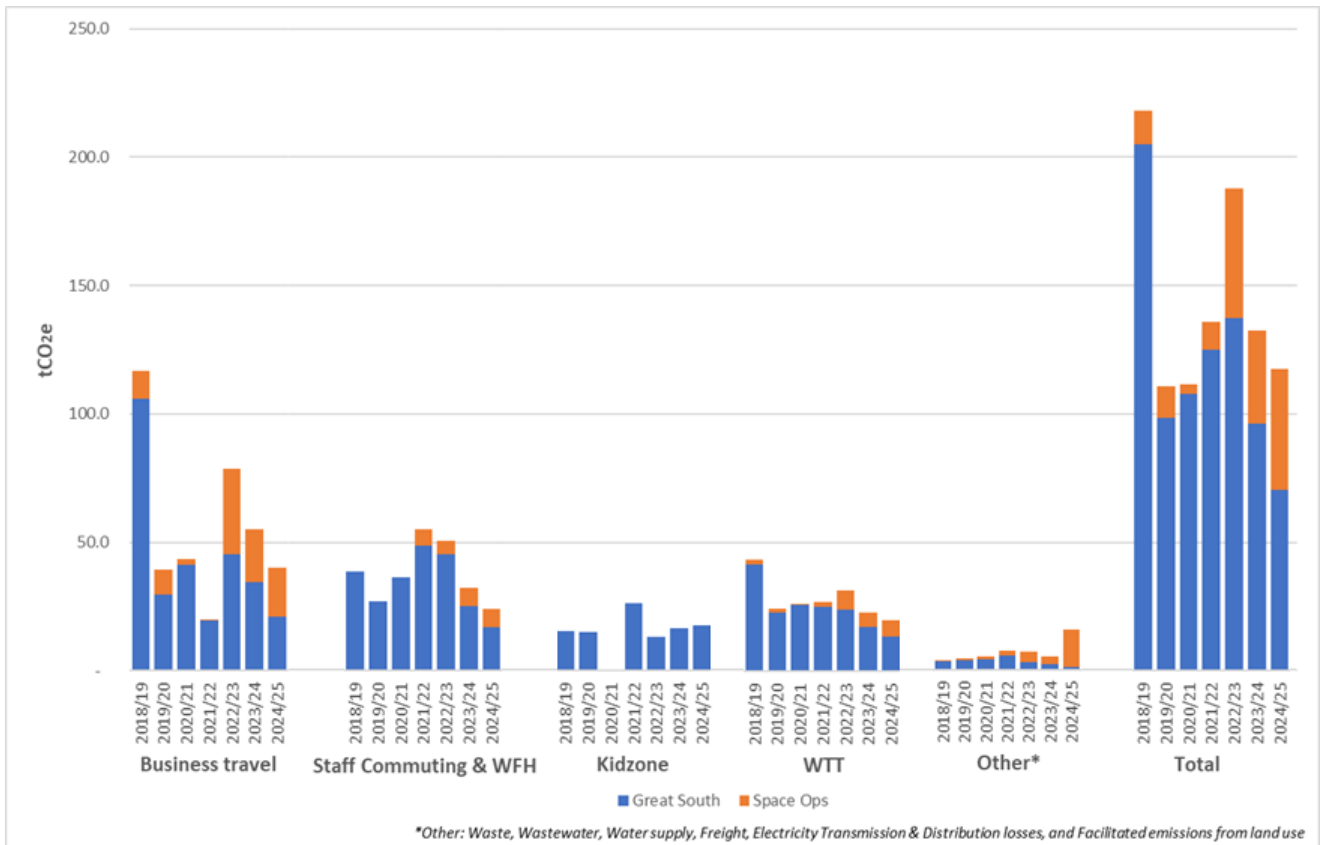
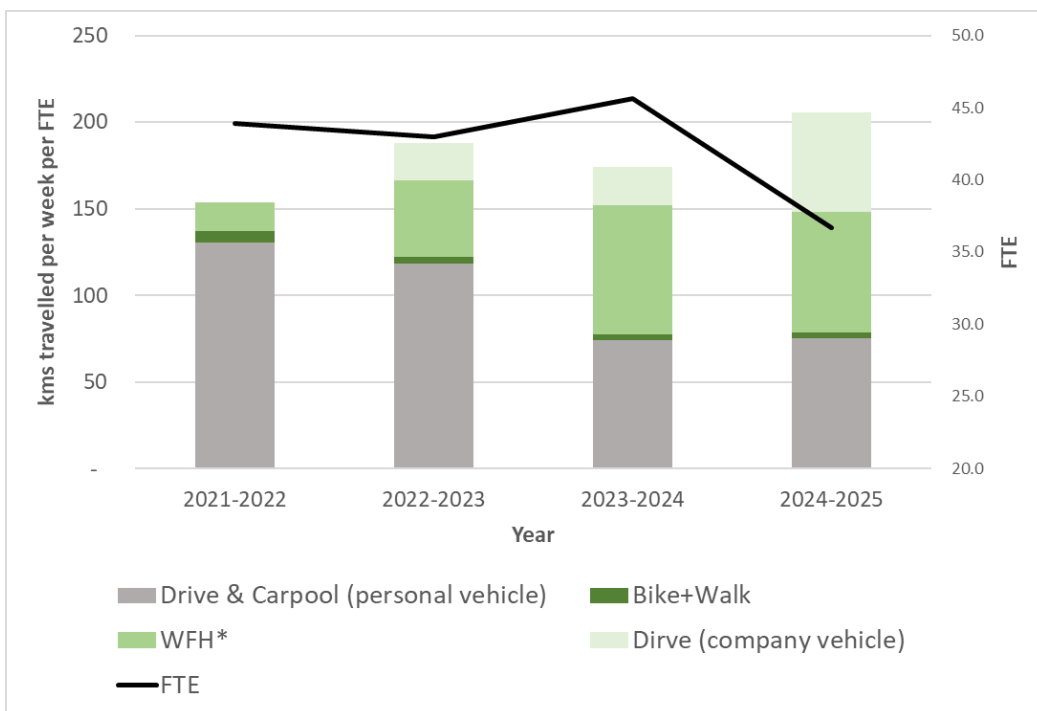


Figure 12 Scope 3 emissions by sector (tCO₂e)

Employees have consistently made efforts to reduce emissions since last year, including replacing physical meetings with virtual ones. As a result of these continued efforts, emissions from business travel have decreased again this year, following the reduction observed in the previous year. This is a 27% or 15.1 tCO₂e decrease from the previous year and a 66% or 76.8 tCO₂e decrease from the base year.



*Working From Home: there is no travel for WFH, but to show the effect of it, the travel distance avoided by WFH was added.

Figure 13 Staff commute (kms travelled per week per FTE)

Staff commuting surveys have been conducted five times since the base year. Commuting means include Drives, Carpools, Walks, Bikes, and WFH, of which only Drives and Carpools emit greenhouse gases. In case company vehicles are used for commute, the emissions are included to the Transport sector in Scope 1, and only if personal vehicles are used for it, it is included under the Staff commute sector. In the graph above, the grey columns represent Drive and Carpool using personal vehicles. Although the total kilometres travelled through drives and carpools remained similar to last year, emissions from staff commuting decreased by 8.2 tCO₂e, or 25%, due to a significant reduction in FTE.

The Kidzone event resulted in 17.8 tCO₂e emissions. However, as the event is tentatively suspended starting this year, this amount of emissions will be reduced in future reports. This reduction accounts for 8.5% of this year's total emissions.

WTT is the third largest contributor to organisational emissions under Scope 3. If emissions from other sectors decrease, WTT emission will decrease accordingly. A breakdown of the WTT emissions generated by sector is provided in table 9.

Table 9 WTT emissions by sector (tCO₂e)

Sector	2018/19 Base year	2022/23	2023/24	2024/25
Business travel	18.0	13.3	9.3	7.0
Great South	16.2	8.0	6.0	3.7
Space Ops	1.8	5.3	3.3	3.3
Staff commute	8.5	11.0	6.5	5.3
Great South	8.5	9.8	5.1	3.7
Space Ops*	-	1.1	1.4	1.6
Transport fuel	8.0	4.6	4.2	4.8
Great South	8.0	3.3	3.4	3.4
Space Ops*	-	1.2	0.8	1.3
Stationary fuel	4.7	-	-	-
Great South	4.6	-	-	-
Space Ops	0.1	-	-	-
Kidzone event	4.3	2.8	2.9	2.9
Freight	0.005	0.008	0.057	0.003
Total	43.4	31.6	22.9	20.0
Great South	41.6	24.0	17.4	13.8
Space Ops	1.8	7.7	5.5	6.2

Note: Due to rounding, the numbers in the above table will not add correctly to give the total.

*There is no separate data for the first three years.

Emissions Intensity

Per Full time Equivalent Employee (FTE)

Emissions per FTE increased by 34% compared to the baseline year. Using FTEs as a unit of measurement for business activity ensures that increased activity, like more business travel, is not penalised when calculating emissions or making comparisons across organisations of varying sizes.

While FTEs affect emissions in areas such as wastewater and travel, some categories remain unchanged even given FTE fluctuations – such as electricity or building heating. Therefore, an increase in FTEs is expected to reduce emission per FTEs, as the fixed emissions are shared across more employees.

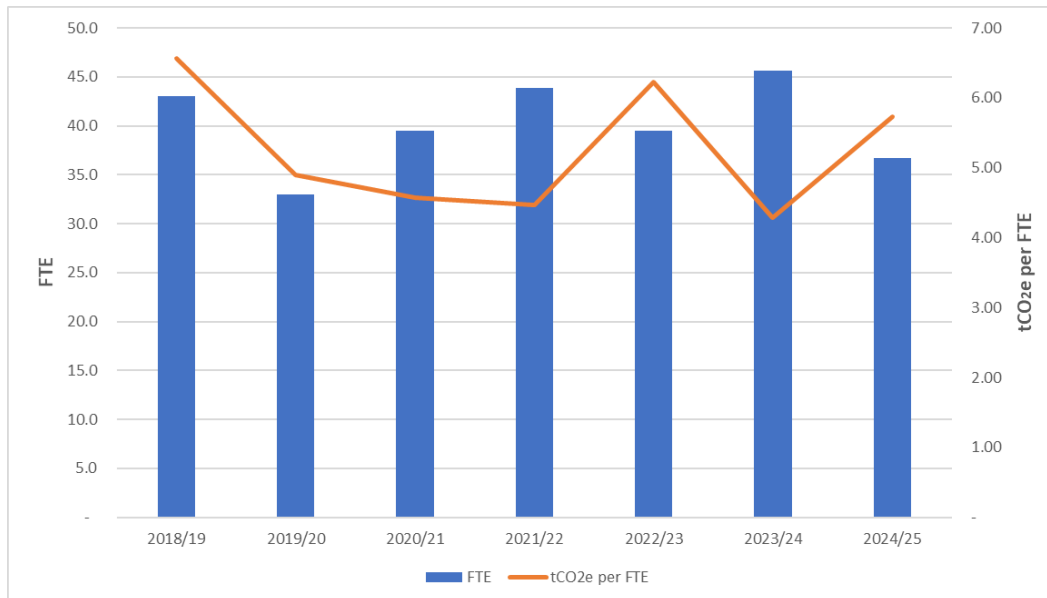


Figure 14 Summary of Great South's emissions per FTE over time, overlaid with actual FTEs reported in those periods

Per revenue

For every \$1,000,000 of revenue earned in the reporting period 22.5 tCO₂e were emitted. Based on \$ 9,375,631 gross revenue, 2025 Annual Report.

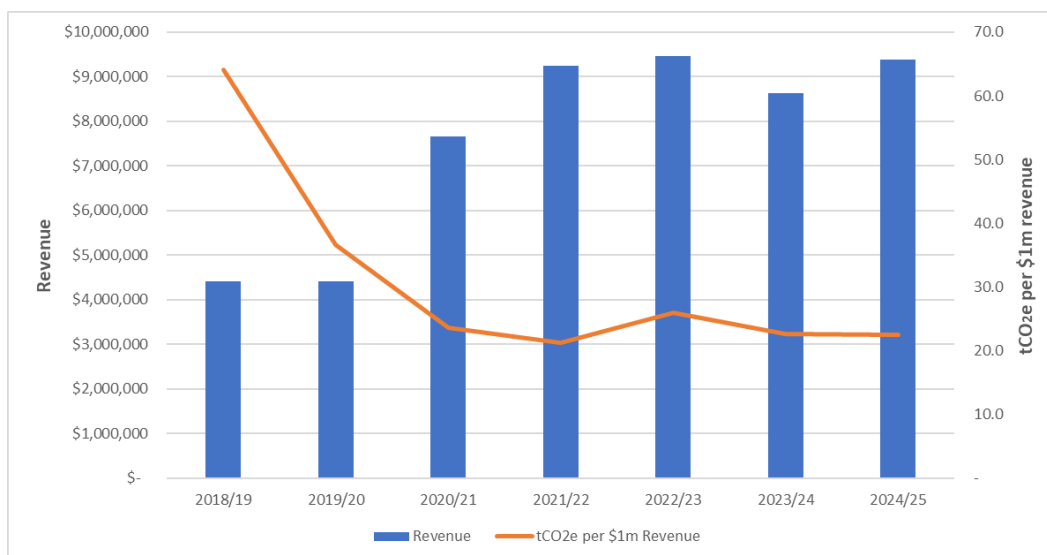


Figure 15 Summary of Great South's emissions per FTE over time, overlaid with actual FTEs reported in those periods

As Great South was established in March 2019, there was no revenue for 2018/19 FY. However, for comparison, the same revenue as in 2019/20 was applied in 2018/19 FY.

Reduction Plan

Based on a 1.5-degree scenario⁸ of global warming, GS commits **by 2026** to:

- **Reduce Scope 1 emissions 81%** from a 2018 base year (equivalent to a 43 tCO₂e reduction from the 2018/19, or 9 tCO₂e reduction from the reporting year).
- **Reduce Scope 2 emissions 100%** (equivalent to a 11 tCO₂e reduction from the 2018/19, or 74 tCO₂e reduction from the reporting year) by generating solar electricity or purchasing from a carbon neutral provider.
- **Reduce Scope 3 emissions 50%** from a 2018 base year (equivalent to a 109 tCO₂e reduction from the 2018/19, or 9 tCO₂e reduction from the reporting year).

Table 10 summarises the reduction targets for each scope for the target year 2026. To be carbon neutral organisation by 2026 it's important to emphasise that we cannot achieve this on our own. Even with our best efforts, the maximum reduction we can achieve is estimated to be **119 tonnes by June 2026**. Therefore, to reach neutrality, we will need to offset the remaining emissions.

Table 10 Summary of reduction targets for each scope

Emissions (tCO ₂ e)	Base year (2018/19)	Most recent year (2024/25)	Reduction by target year	Remaining carbon footprint	Target year (June 2026)
Scope 1	53	19	-9	10	10
Scope 2	11	74	-74	0	0
Scope 3	218	118	-9	109	109
Total	282	211	-92	119	119

Reduction Projects Progress

Table 11 Projects to reduce emissions

Scope	Emission Source	Project	Progress summary	Responsibility	Completion date
Scope 1	Company cars	Electric cars: Replace Travis-Toyota RAV4 (NYE819) and Niro-Kia Niro (NFY390) with electric vehicles (EVs) with a range of 400 to 420 km.	A Paper is being prepared to look at replacement options for the board in September	GM Corporate Services	Dec 2025
		EV charger: Add 2 new Wallbox Pulsar Pro EV chargers. The best and most cost-effective installation site is the west side wall where guests park, as it's closer to the current switchboard, eliminating the need for a long cable run.	It will depend on outcome of above	GM Corporate Services	Dec 2025
Scope 2	Electricity	Renewable Energy Certificates (RECs): GS and SO keep current providers Contact - Meridian and buy RECs.	Not going ahead at this stage	GM Corporate Services	
		Airlock sheet: install an airlock sheet in Spey Street building to	This has been booked in to be completed	GM Corporate Services	Dec 2025

⁸ A 1.5-degree scenario refers to a set of strategies and pathways aimed at limiting global warming to 1.5 degrees Celsius above pre-industrial levels, as outlined in the Paris Agreement.

Scope	Emission Source	Project	Progress summary	Responsibility	Completion date
		reduce energy needed for heating the room.			
Scope 3	Air travel	Board flights: Increase the number of online board meetings a year.	Completed - There are 2/3 board meeting scheduled as online attendance	Chief Executive	Feb 2025
		Travel policy: Set out a budget for flight travel per business unit and SO and define a process for approving flights.	Completed - Policy has been updated with a decision tree that will determine if they are required to fly or attend meetings online. There is a monetary budget for travel for each business unit.	Chief Executive	Dec 2024
	Waste	Recycling station: Upgrade the recycling station with award-winning bins and automated data tracking.	Not going ahead at this stage	GM Corporate Services	
		Reusable cups: Provide staff GS-branded reusable cups.	Completed	GM Corporate Services	Dec 2024

References

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- World Resources Institute and World Business Council for Sustainable Development, 2004 (revised). *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard*. WBCSD: Geneva, Switzerland.
- World Resources Institute and World Business Council for Sustainable Development (2011). *Corporate Value Chain (Scope 3) Accounting and Reporting Standard - Supplement to the GHG Protocol Corporate Accounting and Reporting standard*. World Resource Institute: USA. Accessed 16th January, 2020 from the Greenhouse Gas Protocol website at https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf

Appendix 1: Detailed GHG Inventory

Additional inventory details are disclosed in the tables below, and further GHG emissions data is available on the spreadsheet accompanying this report.

1. 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.

2. Combustion of Biomass

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

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.

4. Pre-verified data

Pre-verified data is included within the inventory are as follows: Electricity from a Carbon Neutral Source for the New Zealand office.

5. Double counting or pre-offsets

No double counting or offsets have been used by the organisation.

Table 12 GHG emissions, quantified separately for CO₂, CH₄, N₂O, NF₃, SF₆, and Total (tCO₂e)

Gas type	CO ₂ (tCO ₂ e)	CH ₄ (tCO ₂ e)	N ₂ O (tCO ₂ e)	NF ₃ (tCO ₂ e)	SF ₆ (tCO ₂ e)	HFC (tCO ₂ e)	PFC (tCO ₂ e)	Total (tCO ₂ e)
Direct emissions from stationary combustion	-	-	-	-	-	-	-	-
Direct emissions from mobile combustion	18.008	0.239	0.549	-	-	-	-	18.797
Direct emissions from Refrigerants	-	-	-	-	-	-	-	-
Electricity used	71.483	1.988	0.138	-	-	-	-	73.609
Business travel	39.190	0.017	0.197	-	-	-	-	40.060*
Staff commuting & WFH	23.501	0.188	0.511					24.200
Freight	0.072	0.001	0.002					0.075
Category 8 Upstream leased assets (Kidzone event)	17.635	0.143	0.064	-	-	-	-	17.843
Electricity T&D losses	5.436	0.151	0.010	-	-	-	-	5.598
Waste, water supply & wastewater treatment	0.019	0.780	0.037	-	-	-	-	0.838
WTT	-	-	-	-	-	-	-	19.991*
Downstream leases assets (Livestock_Awarua station)	-	8.811	0.725	-	-	-	-	9.537

Note: Due to rounding, the numbers in the above table will not add correctly to give the total.

* As the emissions factors for the hotel stay and WTT by GHG type are not available, only total emissions from these sectors are provided, not by GHG type.

Appendix 2: Organisational / Reporting Boundaries

2.1 Emission source identification method and significance criteria

The GHG emissions sources included in this inventory were identified as those required, with reference to the methodology described in the ISO 14064-1:2018 standard and the Greenhouse Gas Protocol 2004. This included personal communications with relevant staff, review of invoices and staff commuting survey.

2.2 Included emissions sources and activity data collection.

As adapted from the GHG Protocol 2004, the emissions sources deemed significant for inclusion in this inventory were classified into the following scopes.

- Scope 1: Direct GHG emissions from sources that are owned or controlled by the company. For example, emissions from combustion of fuel in vehicles owned or controlled by the organisation.
- Scope 2: Indirect GHG emissions (in the form of electricity, heat, or steam) from the generation of purchased energy that the organisation uses.
- Scope 3: Indirect GHG emissions that occur as a consequence of the company's activities but from sources not owned or controlled by the company. For example, air travel and staff commuting.

For the report period 2024/25 FY ISO 14064-1:2018 categories will be use.

Category 1 direct emissions

Category 1 direct removals

Category 2 indirect emissions (imported energy)

Category 3 indirect emissions (transportation & distribution)

Category 4 indirect emissions (products & services used by organisation)

Category 5 indirect emissions (use of products from the organisation)

Category 6 *indirect* emissions (other sources)

Table 13 Inclusions and exclusions of emissions

Emissions category & sources	Ekos rule	Include/ Exclude/ Not relevant	Data source difficult/expensive to obtain	Limited level of influence	Insignificant / de minimis
Category 1) Direct GHG emissions and removals; (GHG Protocol Scope 1)					
Stationary combustion	Mandatory	Not Relevant	NA	NA	NA
Mobile combustion	Mandatory	Include	NA	NA	NA
Chemical and industrial processes	Mandatory	Not Relevant	NA	NA	NA
Fugitive emissions	Mandatory	Include	NA	NA	NA
Land use and Land Use changes	Mandatory	Exclude	NA	NA	0
Category 2) Indirect GHG emissions from imported energy; (GHG Protocol Scope 2)					
Purchased electricity	Mandatory	Include	NA	NA	NA
Category 3) indirect GHG emissions from transportation (GHG Protocol Scope 3)					
Upstream transport and distribution of goods	Mandatory	Include	NA	NA	NA
Business travel	Mandatory	Include	NA	NA	NA
Employee commuting	Non-mandatory	Include	NA	NA	NA
Working from home – Default	Non-mandatory	Include	NA	NA	NA
Downstream transport and distribution of goods	Non-mandatory	Not Relevant	NA	NA	NA
Category 4) Indirect GHG emissions from products used by organization; (GHG Protocol Scope 3)					
Waste generated in operations	Mandatory	Include	NA	NA	NA
Fuel and energy related activities (T & D Losses)	Mandatory	Include	NA	NA	NA
Fuel and energy related activities (WTT emissions for fuel)	Mandatory	Include	NA	NA	NA
Emissions from purchased goods	Non-mandatory	Include	NA	NA	NA
Emissions from the use of services	Non-mandatory	Exclude	NA	NA	NA
Capital goods	Non-mandatory	Not Relevant	NA	NA	NA
Upstream leased assets	Non-mandatory	Include	NA	NA	NA
Category 5) Indirect GHG emissions associated with the use of products from the organisation; (GHG Protocol Scope 3)					
Downstream leased assets	Mandatory	Include	NA	NA	NA
Processing of the sold product	Non-mandatory	Not Relevant	NA	NA	NA
Use stage of the product	Non-mandatory	Not Relevant	NA	NA	NA
End of life stage of the product	Non-mandatory	Not Relevant	NA	NA	NA
Franchises	Non-mandatory	Not Relevant	NA	NA	NA
Investments	Non-mandatory	Not Relevant	NA	NA	NA
Category 6) Indirect GHG emissions from other sources (GHG Protocol Scope 3)					
Other indirect GHG emissions	Non-mandatory	Not Relevant	NA	NA	NA

Appendix 3: Great South Financial Statements

During the 2024/25 financial year the organisation had a revenue of \$9,375,631 and an expenditure of \$8,171,930. Organisational activities can be summarised as the delivery of projects, services, and events. Most of GS's expenditure was in its staff and other expenses. The only exception to this was the events it ran.

Table 14 Summary of GS areas of work, revenue, and expenditure budget 2024/25

Areas of work	Expenditure 2024/25	Our work examples
Regional Economic Development*	\$ 2,046,422	Support Space Operations New Zealand Ltd. Support implementation of Net Zero Southland Report Develop Southland Regional Energy Strategy Support energy planning in Rakiura Stewart Island and Piopiotahi Milford Sound
Business Support Services	\$ 583,711	Administer tourism business funding. Create a marketing toolkit with video and imagery to support businesses Deliver the Southland Youth Futures programme
Regional Tourism Development	\$ 1,003,171	Destination marketing and development Tourism product development
Regional Event Delivery	\$ 756,746	Southlandnz.com Support key events ILT Kidzone event
Total	\$4,390,050	

Appendix 4: Quantified Inventory of Emissions and Removals

A calculation methodology has been used for quantifying the emissions inventory based on the following calculation approach, unless otherwise stated below:

$$\text{Emissions} = \text{activity data} \times \text{emissions factor}$$

The quantification approach has not changed since the previous measurement period. All emissions were calculated using emissions factors and Global Warming Potentials provided by the MfE. Global Warming Potentials (GWP) from the IPCC fifth assessment report (AR5) are used.

Appendix 5: GHG emission sources included in the inventory.

Emissions Sources	Scope and Category	Data Source	Data collection unit	Data quality	Uncertainty (description)
Mobile fuel	Scope 1 Category 1	Fuel card purchase data Reimbursement data Petrol invoice for lawn mowing	SGfleet-Litres	High	The fuel purchased with the 'fuel card' and the fuel personally purchased and reimbursed have all been included. Mobile combustion for mowing at the Warkworth site has been included in this report.
Refrigerants		Plate units. Gas type and kg	GS team- kg	Medium	Minimal use of refrigerants. Refrigerants were only reported in base year 2018/19 and when new units were purchased in 2021/22, using Method B: Screening. The Spey Street building is leased, but refrigerant units are owned.
Electricity used	Scope 2 Category 2	Contact Energy and Meridian invoices	GS Finance team- kWh	High	Calculated exact kWh usage from electricity invoices for Spey Street and Te Anau office, Awarua, and Warkworth. There is no electricity invoice for Hargest House.
Business travel	Scope 3 Category 3	Orbit report. Flights, accommodation, and rental cars. Reimbursement data	GS Finance team - p.km, km, room per night	High	All flights, including those booked outside Orbit and reimbursed to staff, have been included. Additionally, there may be data gaps in the km of rental cars in Orbit Reports. When these gaps are identified, an email is sent to request additional information. And reimbursed fuel cost for personal cars has all been included.
Staff commute		Staff commute survey	GS team- km	Low-Medium	Survey carried out over a set period – provides a snapshot in time that is extrapolated to cover the whole reporting period. Staff and commuting changes will have occurred outside the survey window that are not represented.
Working from home		Staff commute survey	GS team- Days	Low	Survey carried out over a set period – provides a snapshot in time that is extrapolated to cover the whole reporting period. Staff and commuting changes will have occurred outside the survey window that are not represented.
Freight		Front desk courier register	GS administration team-tkm	Low	Actual weights are not recorded, therefore estimated weights are likely to provide a somewhat inaccurate measure. Sticker may not accurately represent type/size of parcels - i.e., staff may use the wrong sticker, with the difference paid later by accounts. Incoming freight is also not captured here. Since there were no records of inward freight, a conservative approach was taken by applying twice the amount of outward freight.
Water supply and wastewater	Scope 3 Category 4	Meter reading records	GS administration team-Litres	Medium-High	Only Spey Street office water meter is read. It is estimated that 95% of the potable water becomes wastewater. There is no information of water consumption and wastage in Te Anau or Hargest House. However, this is likely to be minimal.

Transmission & distribution losses		Contact Energy and Meridian invoices	GS Finance team- kWh	High	Calculated exact kWh usage from contact receipts for Spey Street and Te Anau office, Awarua, Warkworth and Kidzone. There is no electricity invoice for Hargest House.
Waste		Waste reading records	GS administration team-Litres	High	Waste weighed each time the bins are emptied at the Spey Street and Te Anau offices. This occurs daily, every second day or weekly. Scale accuracy and correct reading are not taken into account.
Upstream leased assets		Invoice from Southland Girls High School.	GS events team-kg	Medium	Kidzone. There is no electricity and coal invoice for Southland Girls High School. Coal and electricity consumption is estimated by the facility manager.
Well-to-tank		Above data sources	GS team-tkm, pkm, km, kg, and l.	Medium	As there is no WTT emission factors for New Zealand, UK's emission factors are used. And as UK's emission factors for overseas electricity are not available, WTT emissions for electricity and electricity T&D losses are not calculated. When WTT emission factors for electricity and electricity T&D losses are available, it will be calculated.
Downstream leases assets	Scope 3 Category 5	Space Operations	SO team-head	Low	There is a total of 31 Sheep on site, a flock of 12 and a flock of 19. The 19 sheep have been on site all year, their numbers do change but only by 2-5. The 12 sheep have been on site for up to 6 months.