

Fiordland Trips and Tramps Ltd Greenhouse Emission Report 2020

1. INTRODUCTION

This report is the third annual greenhouse gas (GHG) emissions¹ inventory report for Fiordland Trips & Tramps Ltd (Trips & Tramps). The inventory is a complete and accurate quantification of the amount of GHG emissions that can be directly attributed to the organisation's operations within the declared boundary and scope for the specified reporting period. The inventory has been prepared in accordance with the requirements of the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) and ISO 14064-1:2006 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals.²

2. STATEMENT OF INTENT

This Inventory forms part of Trips & Tramps commitment to measure and manage our emissions. It is a goal for our company to become carbon neutral and to encourage other local businesses to follow this path.

3. ORGANISATION DESCRIPTION

Fiordland Trips & Tramps Ltd is a small business based in Te Anau on the edge of Fiordland National Park. Steve and Kate Norris are the Directors of Fiordland Trips & Tramps and work full time in the business. Post covid 2020 our work has reduced considerably, and we now employ 1 full time, seasonal guide, plus up to 6 casual guiding staff during the summer. They are supported year-round by a Senior Guide and Reservations Manager alongside the directors.

¹ Throughout this document 'emissions' means GHG emissions

² Throughout this document 'GHG Protocol' means the GHG Protocol Corporate Accounting and Reporting Standard and 'ISO 14064- 1:2006' means the international standard Specification with Guidance at the Organizational Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals.

Trading as Trips & Tramps the business offers transport and small guided tours, with an emphasis on knowledgeable local guides and quality equipment. Tours can be on a scheduled or private basis. Post covid, our scheduled guided walks on the Milford, Routeburn and Kepler Tracks, packaged as the 'Fiordland Great Walk Package' has been the mainstay of our business. This is only available in the summer months due to access and weather conditions, so our business is increasingly seasonal. We do have the Milford Sound mail contract and take freight year-round, which means we must go regardless of bookings. By the very nature of a small business, we work with other local operators (contractors) to supply additional skill sets and resources to support our activities and products. These can include transport operators such as, boat, or helicopter companies, to food providers for our lunches. Trip & Tramps run a fleet of 9 late-model vehicles catering for 1-16 people (Mercedes Sprinters, Ford Transit, Hyundai I-Max, Nissan Pathfinder and a Mitsubishi Triton).

Trips & Tramps recognises that it operates in a special area of the world, Fiordland National Park and that its operations and resource use will impact the environment. The business is committed to operating in an energy-efficient environment and considers the management of its GHG emissions to be the next step in creating a sustainable business model we can be proud of. It is our aim to use all opportunities for energy savings throughout the business, to establish ourselves as an environmentally responsible organisation.

By enabling an energy-conscious culture within the company, we aim to balance our environmental and financial priorities throughout our operations and demonstrate regulatory compliance with existing and future legislation.

4. GHG EMISSIONN SOURCE INCLUSIONS

The GHG emissions sources included in this inventory were identified with reference to the methodology in the GHG Protocol and ISO14064-1:2006 standards. As adapted from the GHG Protocol, these emissions were classified under the following categories:

- 4.1. Direct GHG emissions (Scope 1): emissions from sources that are owned or controlled by the company.
- 4.2. Indirect GHG emissions (Scope 2): emissions from the generation of purchased electricity, heat and steam consumed by the company.
- 4.3. Indirect GHG emissions (Scope 3): emissions that occur because of the company's activities but from sources not owned or controlled by the company.

The emissions sources in table 1 have been included in the GHG emissions inventory.

Table 1

GHG emission source	GHG emission level scope	Data source	Data Collection unit	Uncertainty (description)
Diesel	Scope 1	Fuelcard report from supplier	L	It is assumed the supplier reports are complete and accurate.
Premium Petrol	Scope 1	Fuelcard report from supplier	L	It is assumed the supplier reports are complete and accurate.

Electricity	Scope 2	Consumption report from landlord	kWh	It is assumed the landlord has provided the correct meter data.
Domestic Travel	Scope 3	Online calculator (www.airmilescalculator.com) for domestic travel distances. Financial report to provide accommodation nights. Online calculation of distance travelled for rental vehicles.	kph	Small amount of activity here as a business. It is assumed data represents a good approximation of the travel, as detailed transactions have not been recorded.
Waste and landfill	Scope 3	From monitoring waste for 1 month and extrapolating (using the fuel data percentage each month).	kg	Monitoring for the month was done at a quiet time of the year which may impact the annual result.

5. GHG EMISSION SOURCE EXCLUSIONS

We have chosen to declare the following notable emission sources from our emission inventory.

Table 2

GHG emission source	Reason for exclusion
Water supply and wastewater treatment	Water is not measurable in the local area. Water conservation is practiced within daily operations. Furthermore, this would not be considered a large resource use, forming less than 1% of the inventory. Given the small, estimated impact on the total, we have chosen to exclude this.
Contractors (helicopter, boat, food providers)	This is difficult to calculate as we do not have access to the data, e.g. the boat and helicopter companies we use to access the tracks. We recognise to incorporate this into our GHG emission calculation is outside the scope of our abilities at this stage of our journey. As a business we will endeavour to use companies who share the same environmental values whenever possible. This is an area we wish to expand and work on going forward.

6. DATA COLLECTION AND UNCERTAINTIES

Table 2 gives an overview of how data were collected for each GHG emissions source, the source of the data and an explanation of any uncertainties or assumptions.

A calculation methodology has been used for quantifying the emissions inventory using emissions source activity data multiplied by emission or removal factors. All emission factors were sourced from the Ministry for the Environment's 2019 Measuring Emissions: A Guide for Organisations.

7. GHG EMISSION CALCULATIONS AND RESULTS

GHG emissions for the organisation for this measurement period are provided in the GHG Inventory summary section at the start of this report.

Table 1: Summary of total emissions

Total calculated emissions 2018-2020													
Default scope		kg CO ₂ -e			kg CO ₂			kg CH ₄			kg N ₂ O		
		2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Scope 1	Fuel	104636.3	94577.6	58285.7	102639.7	92731.0	57237.9	219.0	213.4	98.2	1777.6	1633.2	949.6
Scope 2	Purchased energy	273.1	348.6	160.8	260.6	332.6	153.4	12.3	15.7	7.2	0.2	0.3	0.1
Scope 3	Travel	1016.0	1668.2	551.2	835.8	1446.1	493.7	7.4	10.0	5.0	25.2	39.9	15.7
Scope 3	Waste	469.7	469.7	138.2	0.0	0.0	0.0	469.7	469.7	138.2	0.0	0.0	0.0
	Total GHG Inventory Emissions	106395.1	97064.2	59135.9	103736.1	94509.8	57885.0	708.3	708.8	248.5	1803.1	1673.4	965.5
	Total scope 1	104636.3	94577.6	58285.7	102639.7	92731.0	57237.9	219.0	213.4	98.2	1777.6	1633.2	949.6
	Total scope 2	273.1	348.6	160.8	260.6	332.6	153.4	12.3	15.7	7.2	0.2	0.0	0.1
	Total scope 3	1485.7	2137.9	689.4	835.8	1446.1	493.7	477.1	479.7	143.1	25.2	39.9	15.7

Figure 1: GHG emissions by scope

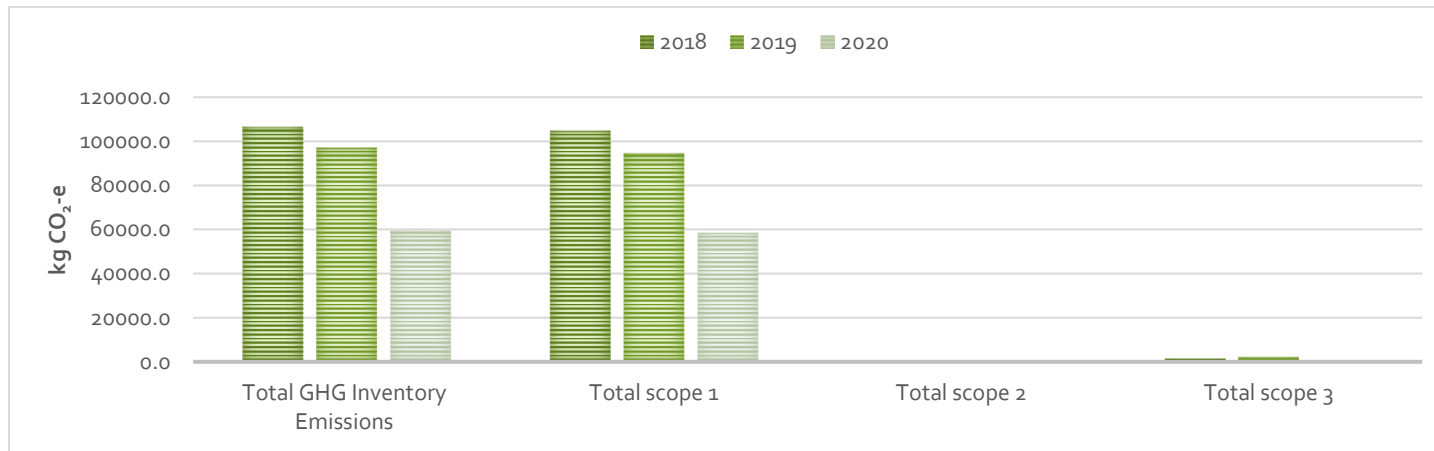
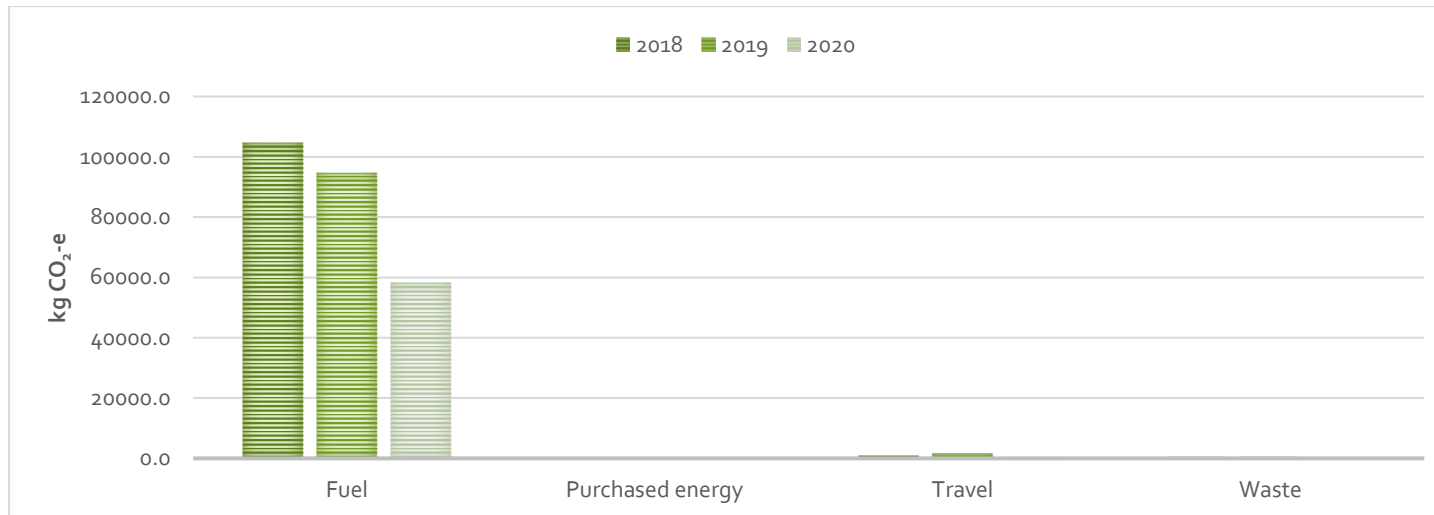


Figure 2: GHG emission by source



8. CARBON CALCULATOR

To calculate the number of trees required to offset our carbon we have used the calculator on the Tane's Trees website, page link <https://www.tanestrees.org.nz/resource-centre/carbon-calculator/>.

With a planting mix of 25% trees and 75% shrubs we have made the following calculations.

2018 - To remove 104 tonnes of CO₂ from the atmosphere by age 50 years, we will need to plant 470 native trees and shrubs.

2019 - To remove 94 tonnes of CO₂ from the atmosphere by age 50 years, we will need to plant 470 native trees and shrubs.

2020 – To remove 58 tonnes of CO₂ from the atmosphere by age 50 years, we will need to plant 262 native trees and shrubs.

9. OFFSETTING OUR CARBON

The goal is for Trips & Tramps to offset our emissions with a local planting scheme to protect and expand the native forest and waterways. Unfortunately, at this stage there is no such local scheme available. Since 2020 with the covid shock and economic fallout, we have been unable to make any major advancements on this goal.

Trips & Tramps did donate 100 plants in August 2020 to the Fiordland Trails Trust to support the Lake 2 Lake Trail. The planting was to meet their wetland compliance order. The planting covered a spoil heap plus the area where dead gorse and broom has been cleared. The native species were sourced from Home Creek Nursery as recommended by Ecologist Simon Beale. Establishment will be monitored over time to ensure at least a 70% strike rate.

10. DISCUSSION

Trips & Tramps has always taken a leading role in environmentally sustainable practices, however when we signed up to the New Zealand Tourism Sustainability Commitment developed by Tourism Industry Aotearoa (TIA) in 2018, it was identified we had no goals around our carbon emissions, in fact we had very little knowledge around this area at all.

This report is the first step in our carbon journey by providing a base measurement. We now have 3 years' data available to us, so we are aware of our footprint. Verification of our data and signing up for an audited scheme will be considered in the future.

The last year saw a substantial decrease in our footprint (approx. 55% since 2018). This can mostly be attributed to the change in business post Covid, and there is a direct co-relation to our reduction in financial turnover. As our business evolves with the necessary changes in the marketplace, we have identified we rely more on external operators to assist with the transport of our guests (e.g., helicopter and water taxis on the guided walks). Hence more work needs to be done to help bring these calculators into our measurements. This will require working with the sub-contractors and favouring those with an awareness of their carbon footprint and a willingness to offset this.

Throughout our carbon journey we plan to share our knowledge. We also hope to motivate other businesses, particularly our contractors to begin their journey. In March 2021 Kate spoke at a local event to the Te Anau community about our companies journey so far. For the full article see <https://www.stuff.co.nz/environment/climate-news/124552545/dreaming-of-a-carbonfree-community-in-fiordland>. It was good to see the number of people who attended, however very few businesses did so we have a long way to go.

Despite all the challenges Trips & Tramps is committed to the carbon journey, and we hope to put more resources into this project in the future.

11. REFERENCES

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

World Resources Institute and World Business Council for Sustainable Development. 2004. The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised). Geneva: WBCSD.