



# Tourism Carbon Footprint Project

## Summary Report

Prepared for

## NorthlandInc

Growing Northland's Economy  
Kia tupu ai te ōhanga o Te Tai Tokerau

Prepared by

 CarbonTrail

  
DESTINATION  
CAPACITY LTD

This project was made possible by support from

**Northland**  
REGIONAL COUNCIL   
Te Kaunihera ā rohe o Te Taitokerau



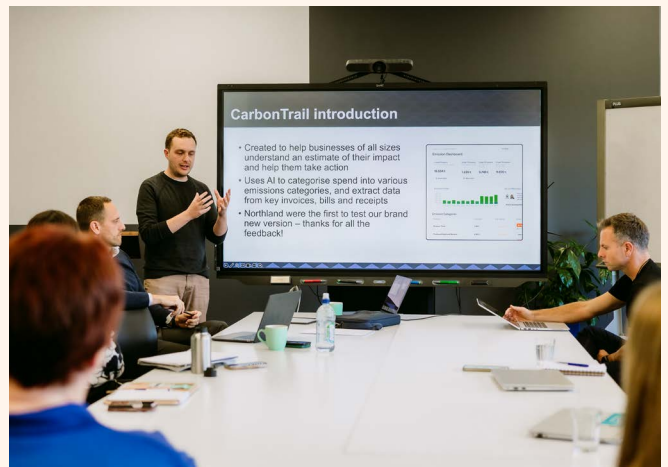
# ABOUT THE PROJECT

**The Tourism Carbon Footprint Project brought together a group of Northland tourism operators to measure their emissions under the Greenhouse Gas Protocol and identify opportunities to reduce them.**

This Northland Inc. initiative, supported by the Northland Regional Council, utilised Carbon Trail's innovative AI-powered software to automatically calculate each business's carbon footprint based on spend with the option of providing more detailed activity data for a more accurate measurement. Activity-based data was calculated in line with the Ministry of Environment (MfE) guidance<sup>1</sup>.

Instead of manually collecting data, the CarbonTrail platform automatically extracted information about electricity use, fuel purchases, waste, and other business expenses from the accounting system to calculate emissions. Each operator received their own detailed carbon footprint report, while Northland Inc. gained regional insights to guide sustainability investments across the sector. It is important to note that this calculation did not include the emissions created by visitors travelling to and from the destination, unless this was paid for by the operators.

Workshops in Whangārei and Paihia helped operators understand their results and identify practical steps to reduce emissions—both individually and collectively.



Above: Carbon Footprints Project Workshops.  
Photo: Northland Inc - Tracey Morris

## Important Notice

These results are presented as UNVERIFIED. They have not been assured externally. The results must be used in line with CarbonTrail's Sponsored Measurement Terms, and general terms and conditions<sup>2</sup>.

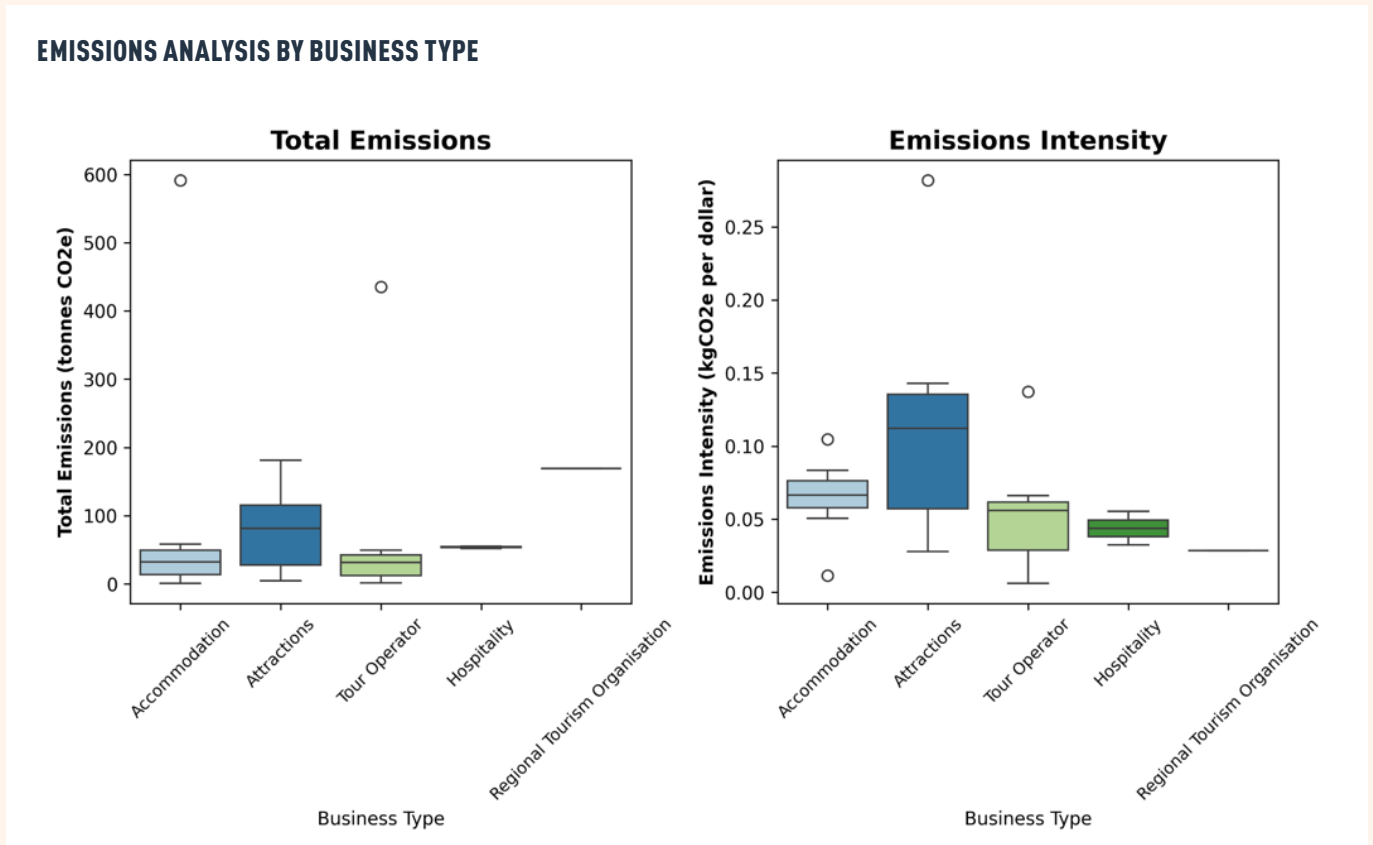
1. Ministry of Environment (MfE) guidance - <https://environment.govt.nz/publications/measuring-emissions-guide-2025/>

2. <https://carbontrail.co/legal/terms-and-conditions>

# KEY RESULTS

**24 TOURISM BUSINESSES** completed the measurement process, representing accommodation providers, tour operators, attractions, and hospitality businesses across Northland. Northland Inc was also part of the cohort, gaining insights into their own emissions profile. Figure 1 shows the variations in the total emissions per business as well as the emissions intensity. Intensity is a measure of carbon efficiency per dollar of revenue that can help businesses to reduce carbon emissions relative to total revenue.

**Figure 1: Total emissions and emissions intensity by business category**



**TOTAL COHORT EMISSIONS:**  
**2,126 TONNES** OF CO2E

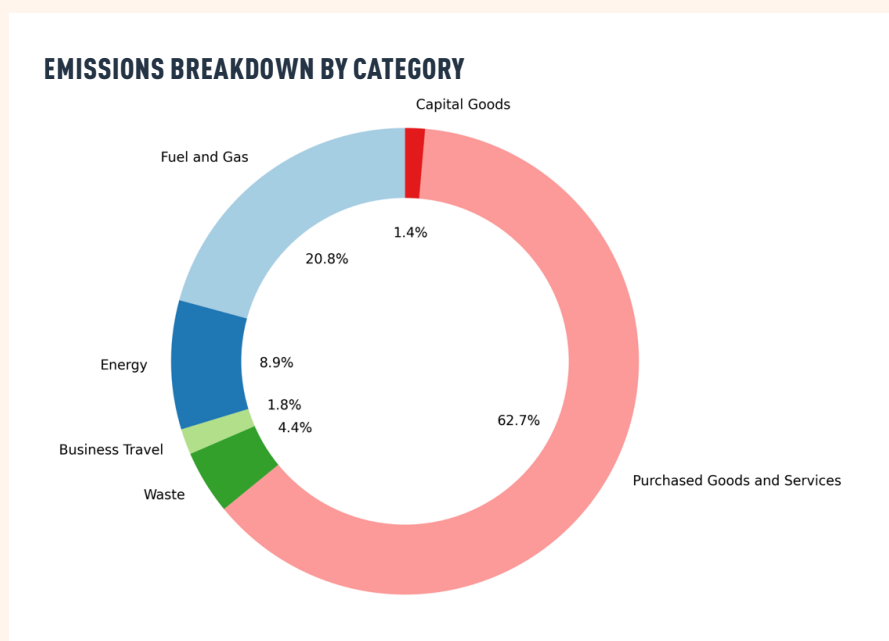
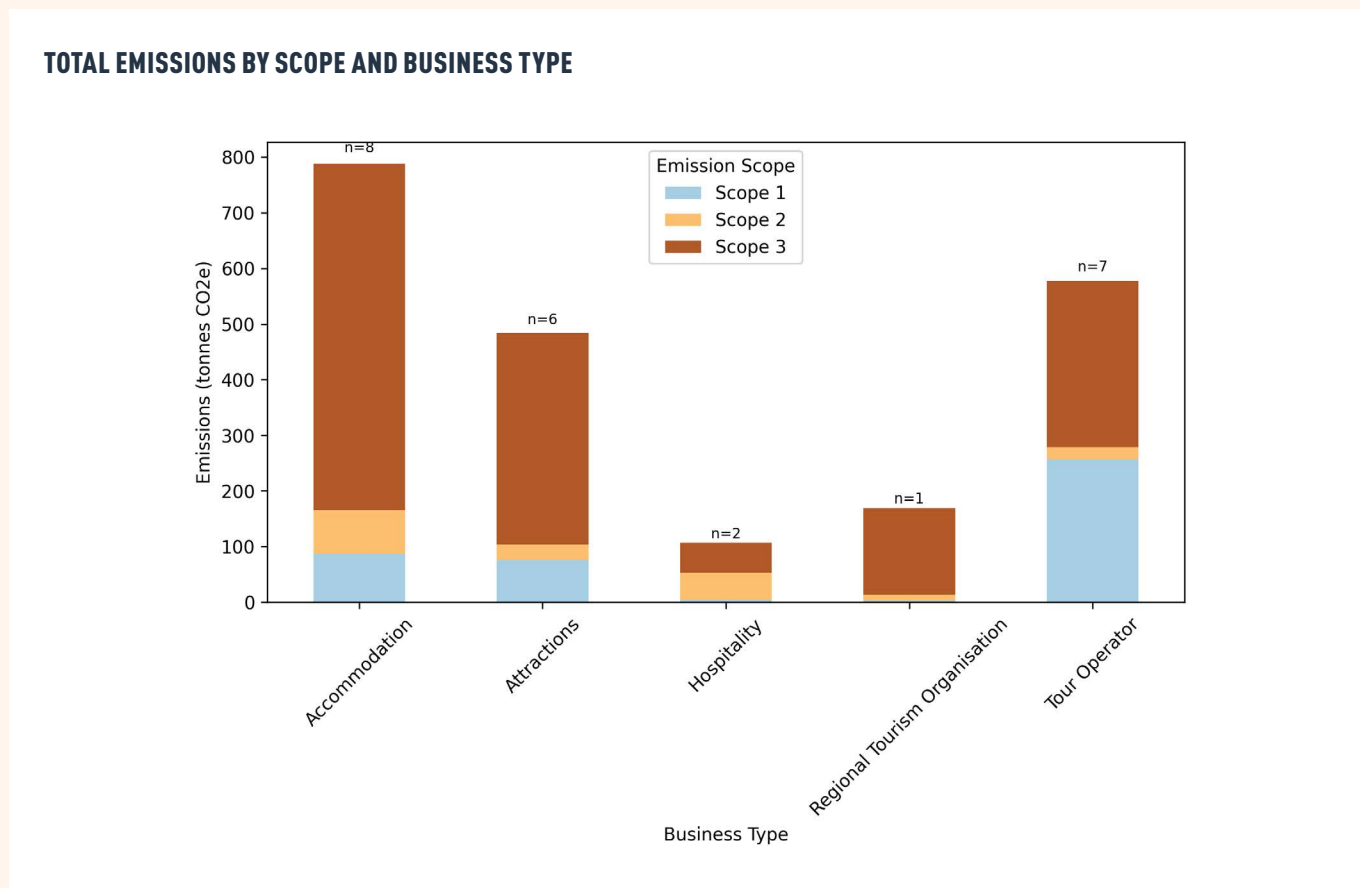


**AVERAGE EMISSIONS INTENSITY:**  
**.07 KGS** OF CO2E  
**PER DOLLAR OF REVENUE**



Due to the small sample, the varied data quality, and the very different business models across the tourism sector, the average emissions intensity does not imply a benchmark for other businesses in the sector. It does provide a rough indication of the current carbon efficiency and if applied to the total 2025 visitor spend in Northland of 1.2 billion NZD<sup>3</sup> would estimate the operational carbon emissions associated to the sector at 84,000 tonnes of CO<sub>2</sub>e.

**Figure 2: Emissions by scope and spend category**



The analysis revealed that most emissions for all business types were classified as Scope 3 emissions, which was supported by the more granular spend category assessment where Purchased Goods & Services made up 62.7% of emissions across the cohort. This is typical for most carbon footprints due to businesses relying on products and services from others to operate.

3. <https://regions.infometrics.co.nz/northland-region/tourism/expenditureby-category>

# DIFFERENT BUSINESS MODELS, DIFFERENT FOOTPRINTS

The project revealed that each business has its own operational 'fingerprint' but that there are some trends in how business type shapes carbon footprint:

- **Accommodation providers** have higher electricity use from operating 24/7 guest facilities
- **Tour operators** have higher fuel consumption from moving visitors by boat or vehicle
- **All operators** share high emissions from purchased goods and services

A larger sample in future studies would help to refine the profiles per business category for deeper insights.

## KEY SUPPLIERS ACROSS THE REGION

Analysis of the top 15 suppliers across the data set revealed that they contributed 40.4% of emissions in the total data set. Eight energy suppliers and two waste management companies together represented one third of the total emissions from the 24 businesses.

This concentration means that working together to engage a small number of suppliers could create substantial emissions reductions across multiple businesses simultaneously.

# FROM MEASUREMENT TO ACTION

## INDIVIDUAL OPERATOR ACTIONS

### MEASUREMENT & DATA

- Measure carbon emissions - for those who haven't yet
- Refine data with activity data for more accurate results
- Repeat measurement to identify trends

Good data is the key for creating change, and participants appreciated the process.

### ENERGY & EFFICIENCY

- Switch to renewable energy providers
- Install LED lighting and improve insulation
- Consider solar panels
- Explore electric or hybrid vehicles for transport operations

### SMARTER PURCHASING

- Conduct a supplier review and draft a procurement policy
- Choose suppliers with strong environmental practices
- Source locally where possible to reduce transport emissions
- Eliminate single-use items (e.g., replace paper towels with hand dryers)

### ENGAGE YOUR TEAM

- Form a "green team" to champion sustainability
- Track waste, electricity, and water use to identify savings
- Share your sustainability story with guests



## PARTNERSHIP ACTIONS

### COLLECTIVE ENERGY INITIATIVES

- Coordinate regional solar installations to reduce per-business costs
- Negotiate bulk renewable energy purchasing agreements
- Access shared sustainability loan programs through banking partners

### SUPPLY CHAIN COLLABORATION

- Work with key suppliers to reduce packaging and waste
- Create vendor education programs on carbon efficiency
- Develop incentives for suppliers who meet sustainability criteria

### KNOWLEDGE SHARING

- Establish a regional sustainability network for operators to share learnings
- Run workshops on specific themes (renewable energy, waste reduction, sustainable procurement)
- Promote Northland's sustainability leadership through the Regional Tourism Organisation

**“IT’S GREAT TO NOW HAVE A STARTING POINT. IT WOULD BE INTERESTING TO TRACK OVER THE YEARS.”**

- TOUR OPERATOR PARTICIPANT

## REGIONAL ACTIONS

### Strategic supplier engagement.

The finding that 40.4% of supplier emissions come from just eight energy providers creates a clear opportunity: Northland Inc. can support negotiations with these key suppliers to unlock regional solutions like preferential renewable energy rates or sustainability programs that benefit multiple operators at once.

### INFRASTRUCTURE & SYSTEMS

- Review and expand electric vehicle charging networks
- Improve public transport connections to tourist destinations, especially during the high season
- Standardise recycling requirements across councils

### MARKET POSITIONING

- Develop a regional sustainability narrative based on verified data
- Position Northland as a responsible tourism destination
- Integrate sustainability into destination marketing

### ONGOING SUPPORT

- Continue annual carbon measurements to track progress and identify trends
- Expand the program to more operators (targeting 50+ total)
- Provide technical support for implementing reduction initiatives

# THE BOTTOM LINE

This project has established the baseline and identified the pathway forward. With 62.7% of emissions coming from purchased goods and services, and energy suppliers representing the single largest intervention point, the opportunities for meaningful reduction are clear.

The concentration of emissions among relatively few suppliers means collective action can achieve what individual operators cannot accomplish alone. By working together on energy procurement, supplier engagement, and shared infrastructure, Northland's tourism sector can make substantial progress toward sustainability while building a competitive advantage in the growing market for responsible tourism.

## NEXT STEPS

Operators should begin implementing energy and procurement improvements, while Northland Inc. initiates strategic conversations with key suppliers and expands the program to additional businesses across the region.



# NorthlandInc

Growing Northland's Economy

Kia tupu ai te ōhanga o Te Tai Tokerau

**Phone:** +64 9 438 5110

**Email:** [tourism@northlandnz.com](mailto:tourism@northlandnz.com)

[northlandnz.com/tourism-carbon-footprint-project](http://northlandnz.com/tourism-carbon-footprint-project)