



Carbon Footprint Report for:
Ākina Foundation
Period: 2019 Financial Year



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1. Summary

This report is a carbon footprint measurement report of greenhouse gas emissions and offsetting prepared for (Ākina Foundation) with the following boundaries:

Organisation details Name: Ākina Foundation
Contact person: Penny Down
Email: penny.down@akina.org.nz
Area of Business: Wellington, Auckland and Christchurch
FTEs: 16.3

Report period (July 2018 – June 2019)

Organisational Boundary This measurement covers the following sites:
Wellington: 2 addresses in the financial year were used in the year: 7 Dixon Street, Level 1, Te Aro and Level 2, 40 Taranaki Street, Te Aro
Auckland: 112/23 Edwin Street, Mount Eden
Christchurch: C-Lab, 270 St Asaph Street
Remote workers in various locations

Operational Boundary Business Operations Scope 1, 2 and 3 emissions resulting from:

- Purchased electricity
- Line losses
- Driving (non-company cars)
- Flying
- Waste to Landfill
- Accommodation

Omissions None

Emissions Total emissions = 69.79 tCO₂e

Offsets Total offsets = 83.75 tCO₂e



The Ākina Foundation has elected to offset 120% of these emissions with Verified Emission Reduction units provided by Ekos. Through this measurement and offsetting Ākina Foundation has qualified for Climate Positive Business Operations certification.

2. Methodology

This report was prepared with activity data provided by the Ākina Foundation and compiled and calculated by Ekos.

The International Standards Organisation (ISO) 14064-1 sets out two methods for measuring greenhouse gas emissions:

- I. Direct measurement
- II. Use of an emission factor multiplied by activity data.

This report is based on method II.

Emission factors have been sourced from the New Zealand Ministry for the Environment 2019 Guidance for Voluntary Greenhouse Gas Reporting and the UK's Department of Environment, Food and Rural Affairs (DEFRA 2018).

3. Emissions by Scope

Table 1. Emissions by Scope

Scope 1 Emissions	0.00
Scope 2 Emissions	1.56
Scope 3 Emissions	68.23
Total	69.79

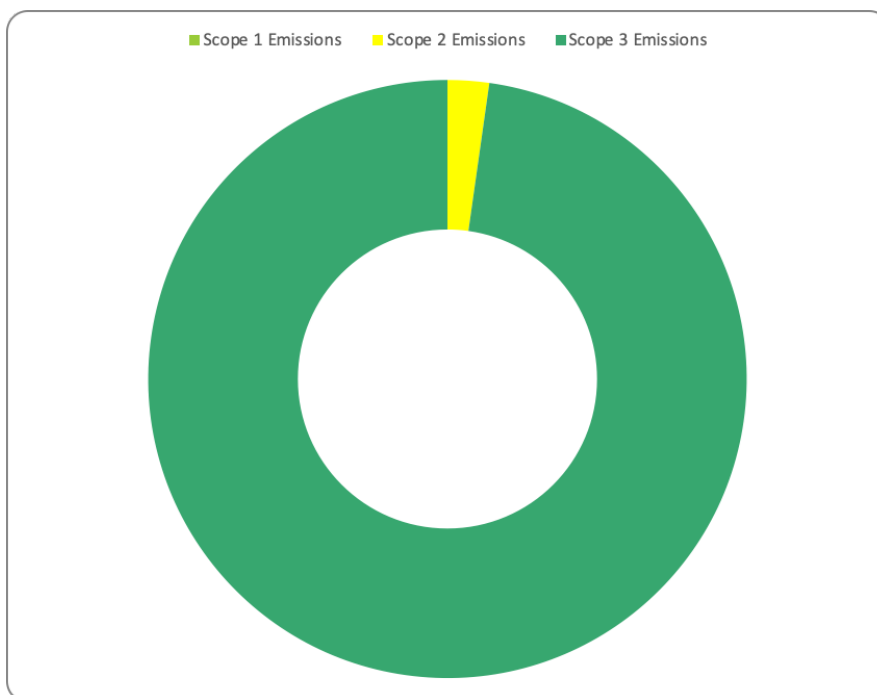


Figure 1. Emissions by Scope

4. Emissions by Activity

Table 2. Emissions by Activity

	Activity	tCO2e
Scope 1	Fuels	0.00
	Air Con/Refrigerants	0.00
	Agriculture	0.00
	Company Vehicles	0.00
Scope 2	Electricity	1.56
Scope 3	Lines Losses	0.12
	Non-Company Vehicles	1.95
	Waste	1.06
	Accommodation	3.65
	Freight	0.00
	Flights	61.45
Total		69.79
	FTEs	16.3
	Footprint per FTE	4.28

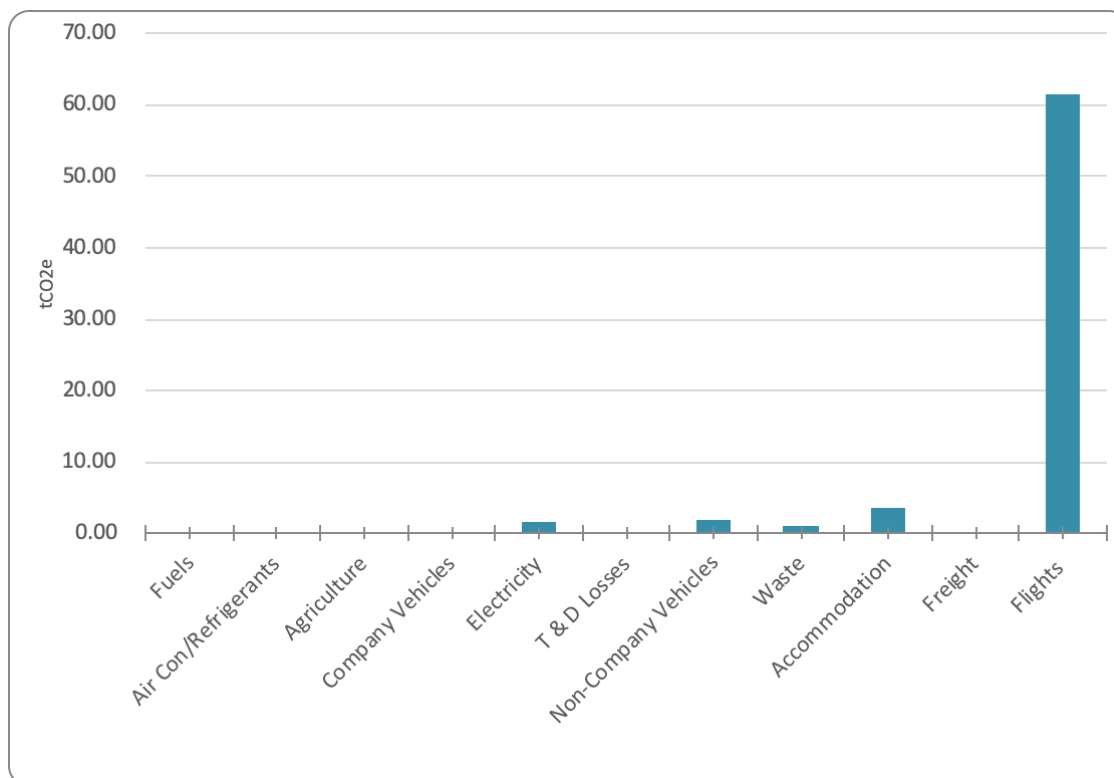


Figure 2. Emissions by Activity

5. Omissions

There were no organisational or activity omissions.

6. Uncertainty

The Ekos *De minimis* rule is to apply a conservative 2% of the client's total footprint to activities relevant to the client, but where there is insufficient data to make a calculation or an evidence-based estimate. The *De minimis* rule is only applied to those activities that Ekos is able to determine will be less than 1% of the client's total footprint.

The Ekos *de minimis* rule was applied to anything in the Ākina Foundation's carbon footprint remote office workers in various locations.



7. Offsets and Certification

To qualify for Climate Positive Certification with Ekos an organisation must measure and offset 120% of Scope 1 (fuels, air conditioning) Scope 2, (purchased electricity), and Scope 3 (line losses, driving, flying and waste to landfill) activity emissions.

Ākina Foundation has measured all required activity emissions, totalling 69.79 tCO₂e

Ākina Foundation has offset 83.75 tCO₂e (120%)

Ākina Foundation qualifies for Climate Positive – Business Operations, 2019 certification.

Offsets are sourced from Verified Emission Reduction Units (VERS) produced in either the Drawa Rainforest Conservation Project in Fiji, or in the Rarakau Rainforest Carbon Project in Southland, New Zealand. These offsets are retired on the Markit Environmental Registry

8. Emission Reduction Recommendations

The emissions profile hotspot for Ākina Foundation certificate number 40000346 is its Scope 3, flight emissions.

To reduce flight emissions Ekos recommends:

- Carefully considers the need for travel before it is undertaken.
- Considers if an alternative is possible to travel, such as the use of video conferencing.
- Offset flights for those that cannot be avoided.



9. Glossary

De minimis

Certain activities may contribute such a small portion of the total CO₂e emissions that they make up less than 1 per cent. These may be excluded from the footprint measurement, provided that the total of excluded emissions does not exceed the materiality threshold 5 per cent: meaning the total of all emission sources excluded as *de minimis* must not exceed 5 per cent of the total footprint. To ensure assertions of carbon neutrality are upheld, Ekos applies a conservativeness factor of 1% for every activity deemed *de minimis* for the purposes of offsetting.

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) and sulphur hexafluoride (SF₆).

The GHG scopes referred to are:

- Scope 1 - direct emissions from sources owned or controlled by you (e.g. diesel generator, coal heating, own vehicle fleet, agriculture)
- Scope 2 - indirect emissions generated by purchased energy (e.g. electricity, gas)
- Scope 3 - indirect emissions that are a consequence of the operations of an organisation or individual but are not directly owned or controlled by the organisation or individual (e.g. flights, freight, non-company vehicles, waste, accommodation, electricity line losses).

Radiative forcing (RF) - Radiative forcing helps organisations account for the wider climate effects of aviation, including water vapour and indirect GHGs. This is an area of active research, aiming to express the relationship between emissions and the climate warming effects of aviation, which is yet to be agreed. For this reason, Ekos makes accounting for RF optional for our clients.

A multiplier of 1.9 is used to account for Radiative forcing in accordance with the Ministry for Environment *Measuring Emissions: A Guide for Organisations 2019*.



Appendix 1: Emission Factors

Ekos uses emission factors provided by the New Zealand Ministry for the Environment (MfE) *Measuring Emissions: A Guide for Organisations 2019*.

Where emission sources are not covered by the MfE emission factors, Department for Environment and Rural Affairs (DEFRA) UK Government conversion Factors for Greenhouse Gas Reporting 2018.

Emission source	Emission Factor	Notes
Electricity		
Electricity	0.000098 tCO ₂ e/kWh	
Electricity Transmission and Distribution	0.0000007 tCO ₂ e/kWh	
Fuels		
Non-Company Vehicles		
Diesel	0.00269tCO ₂ e/L	Transport
Petrol	0.00245tCO ₂ e/L	Transport
Taxi	0.000075/\$ 0.000224/km	
Rental Car	0.00021/km	
Mileage	0.00027/km	
Waste to Landfill		
General waste (without gas recovery)	0.00117 tCO ₂ e/kg	Conversion from kgs to L divides by 7.6923
General waste (with gas recovery)	0.00024 tCO ₂ e/kg	
Office Waste (without gas recovery)	0.00184 tCO ₂ e/kg	
Office Waste (with gas recovery)	0.00038 tCO ₂ e/kg	
Flights		
NZ Domestic	0.000130 tCO ₂ e/km	If Radiative Forcing is included a multiplier of 1.9 is applied, as recommended by MfE.
NZ International <3,700km		
Economy	0.000084 tCO ₂ e/km	
Business	0.000127 tCO ₂ e/km	
NZ International >3,700km		
Economy	0.000086 tCO ₂ e/km	
Premium	0.000138 tCO ₂ e/km	
Business	0.000138 tCO ₂ e/km	
First	0.000344 tCO ₂ e/km	
Accommodation		
Hotel stays	0.01230tCO ₂ e/room per night	In New Zealand

