



Carbon Footprint Report for:

Ākina Foundation

Period: 2019-2020 Financial Year

Unverified Inventory



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1 Summary

This carbon footprint inventory was prepared for Ākina Foundation for the 2019 calendar year.

Organisation background	Name: Ākina Foundation Contact person: Penny Down Email: penny.down@akina.org.nz Area of Business: Business Services FTEs: 15.1 Ākina Foundation offers a wide range of tailored impact consulting, social procurement and impact investment advisory. For Ākina, the impact of enterprises, businesses and government can address challenges like poverty, inequality, waste management, biodiversity loss and climate change.
Report period	Financial Year 2019-2020
Organisational Boundary	This measurement covers the following sites: <ul style="list-style-type: none">• Wellington Office: Level 2, 40 Taranaki Street, Te Aro, Wellington, 6011• Auckland Office: 3 Glenside Crescent, Eden Terrace, Auckland 1010• Christchurch Office: 270 St. Asaph Street, Christchurch 18011• Remote Workers
Reporting Boundary	Business Operations Scope 1, 2 and 3 emissions resulting from: <ul style="list-style-type: none">• Purchased energy• Line losses• Waste to Landfill• Flights• Accommodation• Non-company vehicles
Omissions	<ul style="list-style-type: none">• N/A
Emissions	Total emissions = 27.99 tCO ₂ e, excluding radiative forcing
Offsets	Total offsets = 33.58 tCO ₂ e, excluding radiative forcing

Ākina Foundation has elected to offset 120% of these emissions with Verified Emission Reduction Units (VERs) or New Zealand Carbon Units (NZUs) provided by Ekos. Through this measurement and offsetting, Ākina Foundation has qualified for Climate Positive Business Operations certification and has been issued certificate number 400000436.

2 Background

This report is the second annual greenhouse gas (GHG) emissions inventory prepared for Ākina Foundation. It was prepared in accordance with the requirements of ISO 14064-1 (2006) and covers the 2019-2020 financial Year period.

2.1 COMMUNICATION AND DISEMINATION

This inventory was prepared as a management tool for Ākina Foundation, to assist in managing its response to climate change and its reduction of greenhouse gas emissions. It is also a communication

tool that demonstrates to stakeholders that it has identified its emissions profile and is taking the issues of climate change seriously (including the offset of unavoidable emissions).

The users of this report will include but are not limited to the staff, manager and board of Ākina Foundation and its shareholders and members. The summary of this inventory will be made available to all stakeholders on request. A copy of the summary report will also be available from Ekos' website.

2.2 REPORTING PERIOD AND BASE YEAR

This inventory is for the reporting Financial year 2019-2020 period. The 2018-2019 financial year will be the base year for Ākina Foundation, in subsequent inventories and, comparisons will be made in relation to the 2018-2019 base year.

2.3 DATA INCLUDED

Data included in this inventory is all Ākina Foundation's business operations covering Scope 1, 2 and 3 emissions which result from its use of:

- Purchased energy
- Electricity line losses
- Non-company vehicles
- Waste to Landfill
- Flights
- Accommodation

2.4 VERIFICATION AND COMPLIANCE WITH STANDARD

This inventory has been prepared in compliance with the International Standards Organisation's process for calculating and reporting greenhouse gas emissions 14064-1 (2006).

It should be noted, that this measurement is an unverified inventory and no verification audit has been conducted of the findings.

3 Organisational Boundary

The organisational boundary identifies which facilities or subsidiaries of Ākina Foundation are included and which are excluded from the carbon inventory. Emissions of all different parts of the organisation will be consolidated to establish the organisations total emissions. Consolidation will be done using one of the following methods:

- **Control;** all emissions that the organisation has *financial or operational* control are included in the footprint, or the;
- **Equity share;** the organisation only includes the emissions for the portion of the facilities and businesses the organisation owns.

For Ākina Foundation inventory, the **operational control** method has been used as its consolidation method. This means that all emissions over which Ākina Foundation has operational control have been included in the inventory.

Included within Ākina Foundation organisational boundary, therefore, are all emission sources that occur within the Ākina Foundation offices in Wellington, Auckland and Christchurch as well as remote workers.

4 Reporting Boundary

The reporting boundary identifies which emissions sources are included in the carbon inventory and which are excluded. ISO 14064-1 (2006) categorises emissions as follows:

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

In compliance with the international standard, Ākina Foundation Scope 1 and 2 emissions have all accounted for in this inventory. With regard to Scope 3 emissions, the international standards recommend that these be included if:

- They are believed to be large relative to the organisation's Scope 1 and 2 emissions.
- They contribute to the organisation's GHG risk exposure.
- They are deemed critical by key stakeholders (e.g. customers).
- There are potential GHG reductions for these emissions that can be undertaken or influenced by the company.

Selected Scope 3 emissions have been included in this inventory. Ekos’ 2006 quality system requires the inclusion of significant Scope 3 emissions from the following activities: T&D losses; non-company vehicles; waste; water; accommodation; flights; freight.

Inclusions

Figure 1 below identifies the emission sources that have been included within this inventory.

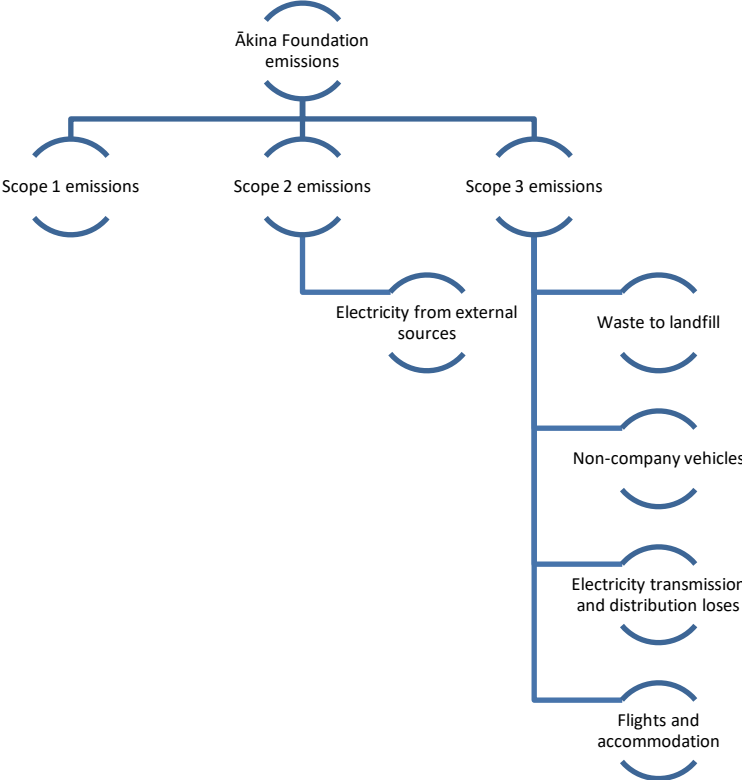


FIGURE 1: ĀKINA FOUNDATION’S EMISSIONS SOURCES

Exclusions

There were no exclusions for this measurement.

5 Greenhouse gas Inventory

5.1 METHODOLOGY

This GHG inventory was prepared in compliance with the international standards for calculating greenhouse gas emissions from the World Resources Institute’s *“Greenhouse gas protocol, a corporate accounting and reporting standard”* (GHG protocol) and *“ISO 14064-1 (2006) Specification with guidance at the organisation level for quantification and reporting of GHG emissions and removals”* (ISO 14064-1). In measuring this inventory, the five principles of ISO 14064-1 2006 were strictly adhered to.

The methodology used in measuring your organisational footprint is shown in Figure 2 below:

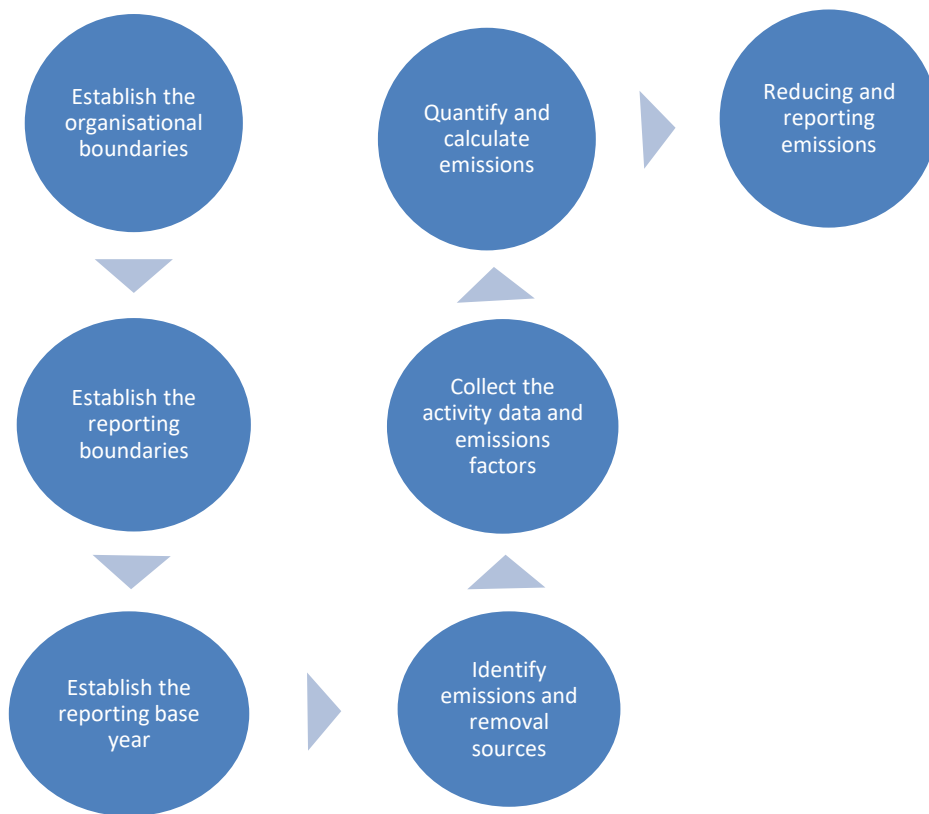


FIGURE 2: ISO 14064-1 METHODOLOGY FOR MEASURING A CARBON FOOTPRINT INVENTORY

5.2 DATA COLLECTION

Data was collected by Ākina Foundation staff with guidance, where required, from Ekos. Table 1 below, provides an overview of where data was collected for each emissions source. All emissions were calculated using an Ekos developed calculator. The calculation method that has been used for quantifying Ākina Foundation greenhouse gas emissions inventory was the emissions source activity data multiplied by the emissions factor as shown in the formula below:

$$\text{Tonnes CO}_2\text{e} = \sum \text{ghg activity} \times \text{EF}$$

Where \sum GHG activity = the sum of greenhouse gas activity, multiplied by EF which = the emissions factor for the greenhouse gas activity. For example, 3000 kilowatt hours (KWH) of electricity (the greenhouse gas activity) is multiplied by 0.000097 (the emissions factor, tonne of CO₂e per kwh of electricity) = 0.293 tonnes of CO₂e.

Activity data for Ākina Foundation was obtained from a range of sources, which are outlined in Table 1 below.

Greenhouse gas emissions factors were generally sourced from New Zealand’s Ministry for the Environment. Where emissions factors were not available from this source, other reliable sources

such as international government agencies or published research were used. A full list of the emissions factors used is shown Appendix 1.

TABLE 1: DETAILS OF DATA SOURCES FOR ĀKINA FOUNDATION EMISSIONS

Emissions Source	Unit	Data Source
Electricity	Kwh	Landlords & community managers
Electricity line losses and natural gas line losses	Kwh	Landlords & community managers
Waste to Landfill	Kg	Landlords & community managers
Non-company cars		
Staff Mileage	Kms	Expense claims
Taxis	\$	
Rental cars	Kms	
Flights	Pax*kms	Travel agent & travel card report
Accommodation	Rooms*nights	Expense claims

5.3 ĀKINA FOUNDATION GREENHOUSE GAS PROFILE

Total emissions for Ākina Foundation for the 2019-2020 financial year period were 27.99 tonnes of CO₂e, excluding radiative forcing.

5.3.1 Emissions by Scope

As shown in Figure 3 and Table 2 the majority of Ākina Foundation emissions are Scope 3 at 96%, with Scope 2 emissions comprising 4% and no Scope 1 emissions. The majority of Ākina Foundation emissions came from flights and non-company vehicles.

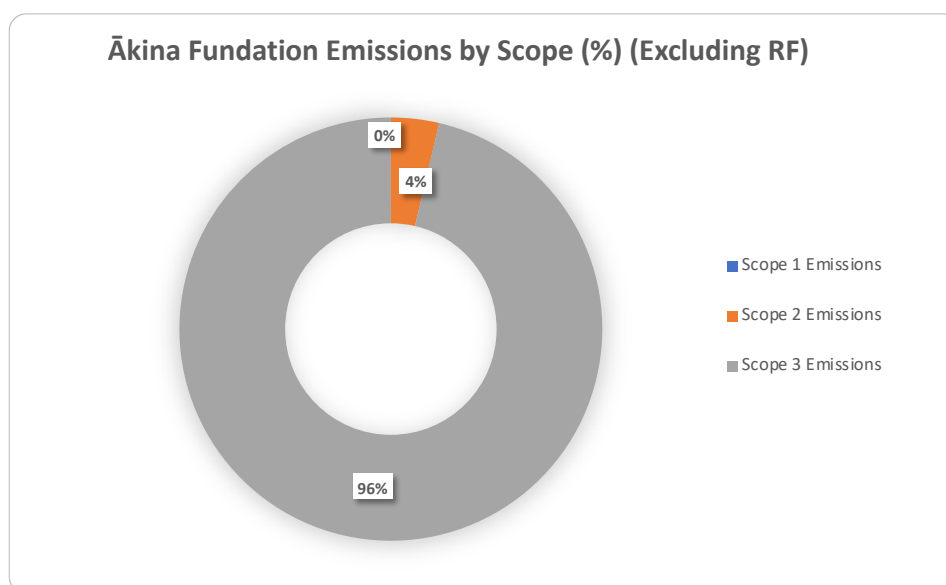


FIGURE 3: ĀKINA FOUNDATION EMISSIONS BY SCOPE (EXCLUDING RADIATIVE FORCING)

TABLE 2: ĀKINA FOUNDATION EMISSIONS BY SCOPE (EXCLUDING RADIATIVE FORCING)

Scope Category	Emissions (Tonnes of CO ₂ e)	% of total emissions
Scope 1	0	0%
Scope 2	1.03	4%
Scope 3	26.96	96%
Total	27.99	

Table 3 shows Ākina Foundation scope 2 emissions by activity, all of which are from imported electricity.

TABLE 3: ĀKINA FOUNDATION SCOPE 2 EMISSIONS BY ACTIVITY

Scope Category	Activity	tCO ₂ e
Scope 2	Electricity	1.03
	Total	1.03

Figure 4 and

Table 4 show Ākina Foundation Scope 3 emissions by activity, the majority of which is from flights with 83%, followed by non-company vehicles at 13% and waste to landfill with 3% of emissions.

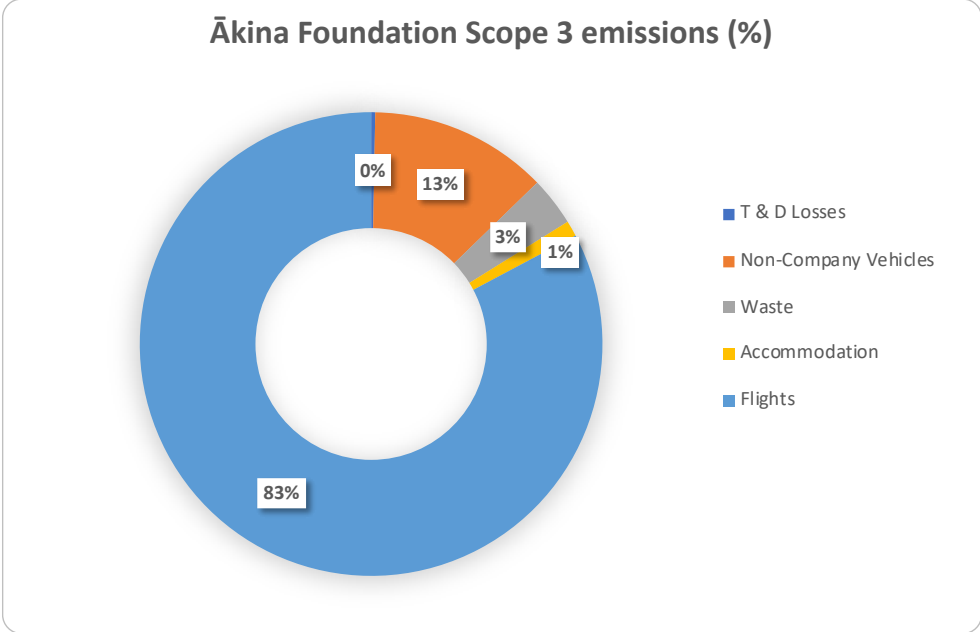


FIGURE 4: ĀKINA FOUNDATION SCOPE 3 EMISSIONS BY ACTIVITY (%)

TABLE 4: ĀKINA FOUNDATION SCOPE 3 EMISSIONS BY ACTIVITY

Scope Category	Activity	tCO ₂ e	% of emissions
Scope 3	T & D Losses	0.08	0%
	Non-Company Vehicles	3.36	13%
	Waste	0.92	3%
	Accommodation	0.30	1%
	Flights	22.31	83%
	Total		26.96

5.3.2 Emissions by Activity

Figure 5 and Table 5 show Ākina Foundation greenhouse emissions by activity, with the majority of emissions from flight with 80% and non-company vehicles with 12%.

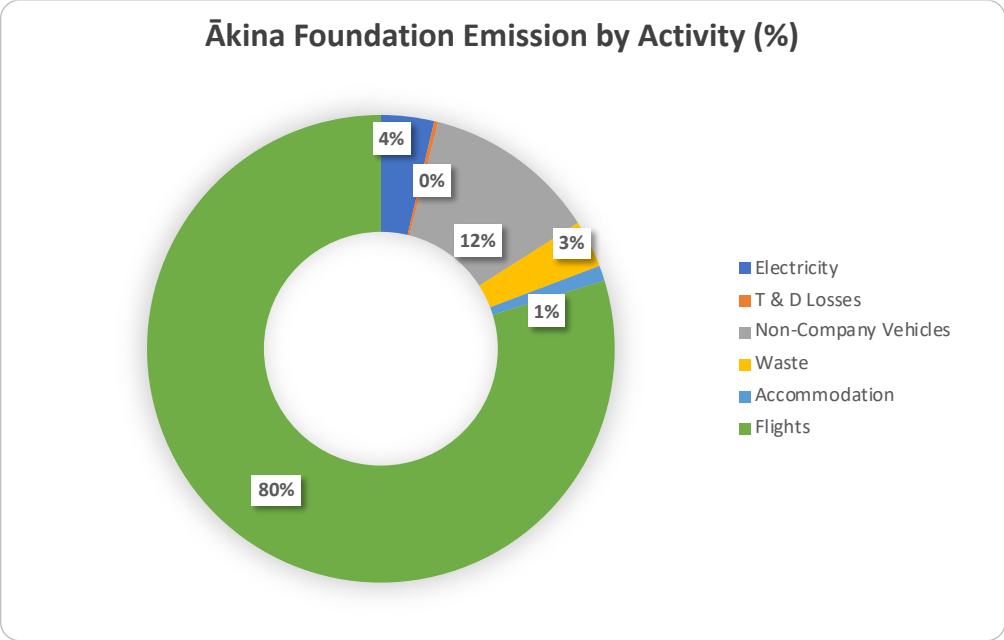


FIGURE 5: ĀKINA FOUNDATION EMISSIONS BY ACTIVITY (%)

TABLE 5: ĀKINA FOUNDATION EMISSIONS BY ACTIVITY

Scope of emissions	Activity	tCO ₂ e	% of total emissions
Scope 1	Stationary Fuels	0.00	0%
	Air Con/Refrigerants	0.00	0%
	Agriculture	0.00	0%
	Company Vehicles	0.00	0%
Scope 2	Electricity	1.03	4%
Scope 3	T & D Losses	0.08	0%
	Non-Company Vehicles	3.36	12%
	Waste	0.92	3%
	Accommodation	0.30	1%
	Flights	22.31	83%
Total		27.99	

5.4 COMPARISON WITH BASE YEAR

Table 6 Shows Ākina Foundation carbon footprint by scope and activity for periods 2018-2019 vs 2019-2020. Scope 2 electricity have reduced by 34% and scope 3 flights, accommodation and waste have reduced by 64%, 92% and 13% respectively during financial year 2020 when compared to financial year 2019. Congratulations on this great achievement and keep up the targeted reductions!

TABLE 6: ĀKINA FOUNDATION CARBON FOOTPRINT BY SCOPE AND ACTIVITY (EXCLUDING RF)

		tCO2e	tCO2e	%
	Activity	2018-2019	2019-2020	Change
Scope 1	Fuels	0.00	0.00	0%
	Company Vehicles	0.00	0.00	0%
Scope 2	Electricity	1.56	1.03	34%
Scope 3	T & D Losses	0.12	0.08	34%
	Non-Company Vehicles	1.95	3.36	-72%
	Waste	1.06	0.92	13%
	Accommodation	3.65	0.30	92%
	Flights	61.45	22.31	64%
Total		69.79	27.99	60%
FTEs		16	15	7%
Footprint per FTE		4.28	1.85	57%

Figure 6 and Figure 7 show Ākina Foundation emission by scope and activity. Scope 3 non-company vehicles show an increase of 72%. This is likely due to COVID-19 isolation requirements during the 2019-2020 financial year.

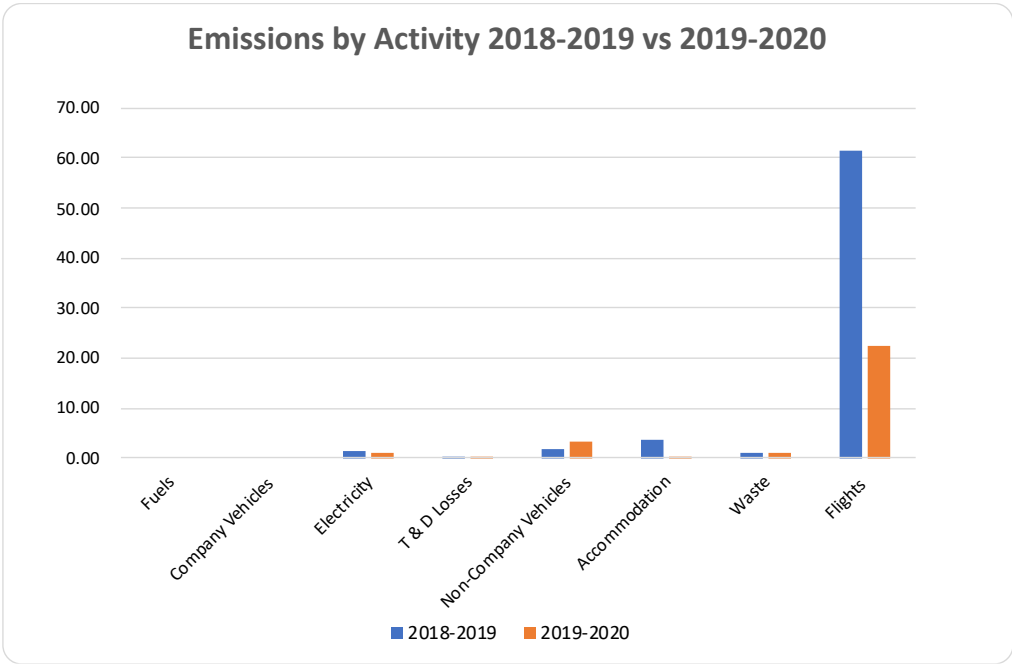


FIGURE 6: ĀKINA FOUNDATION EMISSIONS BY ACTIVITY YEAR ON YEAR

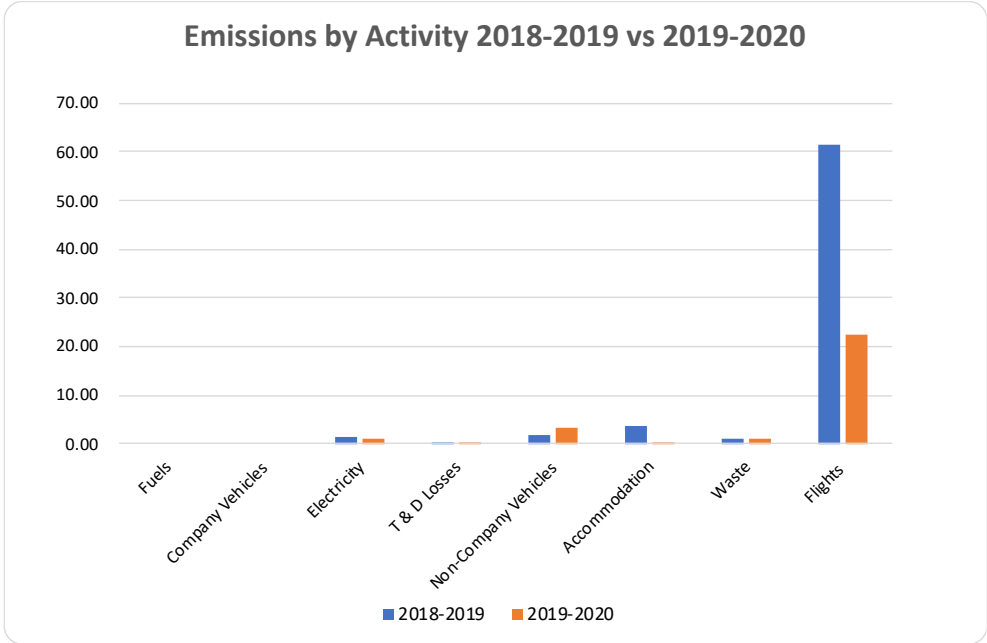


FIGURE 7: ĀKINA FOUNDATION EMISSIONS BY SCOPE YEAR ON YEAR

Overall, Ākina Foundation had a significant decrease of emissions when comparing the 2020 financial year measurement with the 2019 financial year measurement. It is important to note, however, that Ākina Foundation’s emissions hotspot is scope 3 flights, even though 2020 measurement emissions are considerably lower than the 2019 measurement.

5.5 UNCERTAINTY AND DATA QUALITY

To ensure that a comprehensive footprint measurement is completed, it is appropriate to estimate activities should accurate data not be available. Such estimates must be based on scientifically derived estimation to ensure accuracy. In the case of the Ākina Foundation footprint, there are four areas of uncertainty which are as follows:

- Waste, this was obtained from landlords and community managers and is a rough estimate, with some data being the same as FY 18/19. As such, there is some uncertainty in the waste measurement, but it is based on an accurate estimate of the space used by Ākina Foundation in a shared office space.
- Electricity, the data was provided by landlords and community managers, it is a rough estimate since it is a shared office space and part of the staff worked from home for some months. The data will not reflect the exact reality of where everyone was working from but, emissions for each staff member was always measured.
- Accommodation, a dollar amount was obtained from card transaction and expense claims, an estimate for the minimum price per night in hotels was used.
- Non-company vehicles, the data available was in dollar amounts, an estimate for kms travelled and the price per litre of petrol was used. As such, there is some uncertainty on the measurement.

To increase the quality of the carbon inventory over time, Ākina Foundation should plan to improve their data collection processes for these areas. These improvements should start during the current calendar year (2020).

It should be noted that the ISO standard for carbon footprint measurement has been revised. The new version was released in 2018. This Ākina Foundation inventory is based on the requirements of ISO 14064-1 2006. The next inventory will need to be completed to the revised standard. Further advice can be obtained from the staff at Ekos as needed.

6 Offsets and Certification

To qualify for Climate Positive Certification with Ekos an organisation must measure its business operations footprint and offset 120% of its Scope 1, Scope 2, and Scope 3 emissions.

Ākina Foundation has measured all required activity emissions, totalling 27.99 tonnes of CO₂e, excluding radiative forcing.

Ākina Foundation has offset 33.58 tonnes of CO₂e (120% of its emissions, excluding radiative forcing). As such Ākina Foundation has qualified for Climate Positive Business Operations certification for the 2019-2020 financial year period.

Offsets in the form of Verified Emission Reduction Units (VERs) or New Zealand Carbon Units (NZUs) are sourced from the Ekos carbon credit supply chain, and these offsets are retired on the Markit Environmental Registry (if VERs) or the New Zealand Carbon Registry (if NZUs).

7 Emission Reduction Recommendations

The next step in the process of carbon management is to implement emissions reduction projects based on your organisation's emissions hotspots. Emissions hotspots are those activities that are emitting the highest level of greenhouse gases. Thus, reducing these emissions will have the biggest impact on Ākina Foundation's total footprint.

The emissions profile hotspot for Ākina Foundation is its Scope 3 flight emissions. This is followed by non-company vehicles emissions and waste emissions.

Ākina Foundation emissions hotspots are as follows:

- Flights (83%)
- Non-company vehicles (13%)
- Waste (3%)

To reduce flights emissions, Ekos recommends:

- Covid-19 resulted in a reduction in flight emissions. To ensure this continues, Ākina Foundation could provide staff with upgrades to tele-conferencing platforms, to help avoid flight emissions in the future. Flying only when necessary and restricting flights to economy class (while keeping the staff informed on why economy class option has been introduced and what it achieves), can also help to reduce emissions.

To reduce waste emissions, Ekos recommends the following:

- Using recycling bins in offices to reduce office waste emissions if this is not already occurring.

To reduce non-company vehicle emissions, Ekos recommends:

- A reduction in flights will result in less emissions from the use of taxis/Uber as methods of transport. Implementing a low-carbon work culture by informing staff of taxi companies that are zero carbon or using public transport and, inviting staff that lives in the same area to travel to work together can be another good option to reduce emissions.

8 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.

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. A full list of the emission factors used in this report are shown in Table 7 below.

TABLE 7: EMISSION FACTOR SOURCES FOR CARBON INVENTORY

Emission source	Emission Factor	Notes
Electricity		
Electricity	0.000098 tCO ₂ e/kWh	
Electricity Transmission and Distribution	0.0000007 tCO ₂ e/kWh	
Non-Company Vehicles		
Taxi	0.000075 tCO ₂ e/\$	
Rental Car	0.00021 tCO ₂ e/km	
Mileage	0.00027 tCO ₂ e/km	
Waste to Landfill		
Office Waste (without gas recovery)	0.00184 tCO ₂ e/kg	Conversion from kgs to L divides by 7.6923
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	
NZ International >3,700km Economy	0.000086 tCO ₂ e/km	
Accommodation		
Hotel stays	0.01230tCO ₂ e/room per night	In New Zealand