

## Carbon Inventory Report:

## The **Ākina** Foundation

Period:
Base year:
Status:
Assurance type:
Certification type:
Last updated date:

1 Jul 2021 - 30 Jun 2022 1 Jul 2018 - 30 Jun 2019 Quality Reviewed Inventory No Assurance Climate Positive 2023-03-08



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# 1 Summary

This carbon inventory was prepared for The Akina Foundation.

**Report period** 1 Jul 2021 - 30 Jun 2022 **Base year** 1 Jul 2018 - 30 Jun 2019

## 1.1 Organisation Information

Ākina is Aotearoa New Zealand's leading impact consultancy. We provide a wide range of tailored consultancy and advisory services across various areas like measurement and evaluation, investment and procurement. We're experts in supporting our clients to create practices, products and services that make a positive impact (wellbeing outcomes). We work with various clients including social enterprises, government, nonprofits, SMEs and large corporates. We have three offices, with our head office in Wellington and offices in Christchurch and Auckland.

## 2 Background

#### 2.1 Statement of Intent

The climate emergency presents the biggest challenge of our time. At Ākina, creating a positive impact is at the heart of the work we do with our clients and partners – so it's essential that our impact on the environment is positive too. Our vision is of a sustainable, prosperous, inclusive New Zealand and the world, and being climate positive helps us to move towards that. Being climate positive acknowledges the problem's urgency and demonstrates a commitment to being part of the solution.

#### 2.2 Communication and dissemination

This inventory was prepared as a management tool for The Akina Foundation to:

- Assist it in managing its response to climate change and its reduction of GHG emissions.
- Be a communication tool that demonstrates to stakeholders that the organisation has identified its emissions profile,
- Is aware of the significant issues related to climate change and is taking action to mitigate these issues, including offsetting unavoidable emissions.

The users of this report will include, but are not limited to, the staff, manager and Board of The Ākina Foundation, its shareholders and members. The summary of this inventory will be made available to all stakeholders on request.

# 3 Reporting methodology and compliance standards

### 3.1 Methods & Emissions factor sources

This report is the 1st annual greenhouse gas (GHG) emissions inventory that has been prepared by The Ākina Foundation.

It was prepared in accordance with:

- The International Standards Organisation's process for calculating and reporting GHG emissions: ISO 14064-1 (2018).
- World Resource Institute's "Greenhouse gas protocol"

The calculation method used to quantify the GHG emissions was the activity data multiplied by the appropriate emission factor:

Tonnes CO2e = Total GHG activity x appropriate emission factor

Ekos' GHG calculation tool (Online based) was used for the calculation of emissions for this inventory. GHG emission factors were generally sourced from New Zealand's Ministry for the Environment. Where appropriate emission factors were not available, other reliable sources such as international government agencies or published research were used. Full reference sources are listed in the Reference section of this report.

The methodology used is illustrated in figure 1 below:

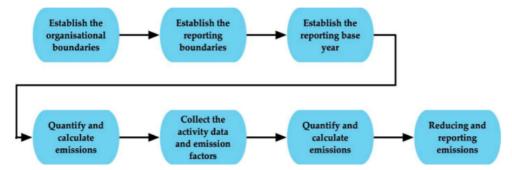


Figure 1: ISO 14064-1 (2018) methodology for measuring a GHG inventory

## 3.2 Consolidation approach

The organisational boundary identifies which facilities or subsidiaries are included or excluded from the carbon inventory. Emissions from all aspects of the organisation are consolidated to determine the total volume. Consolidation is done using one of these methods:

- Control, whereby all emissions over which the organisation has either financial or operational control are included in the inventory
- Equity share, whereby the organisation only includes emissions for the portion of the facilities and business that the organisation owns.

The consolidation method used in this inventory to determine The Ākina Foundation 's emissions is Control - Operational.

## 3.3 Base year recalculation policy

Base year data may need to be revised when material changes occur and have an impact on calculated emissions. When the changes are estimated to represent more than 5% of Scope 1, 2 or 3 emissions, or when there are significant changes to the reporting boundaries or calculation methodology, Ekos' policy is to recalculate base year data with explanation.

## 3.4 GHG information management and monitoring procedures

The organisation is responsible for appropriate document retention, archiving and record keeping for each emissions source. Ekos' annual review requirement is in place to ensure any errors and omissions in the GHG Inventory report is addressed.

## 3.5 Changes to methodology

In comparison to the base year, the following additional activities for the FY22 report have been included: Staff Commuting, Purchased Goods & Services and Working from Home.

# 4 Reporting boundary

The below diagram describes the organisational boundary and outlines the business units that are included and excluded in this inventory.

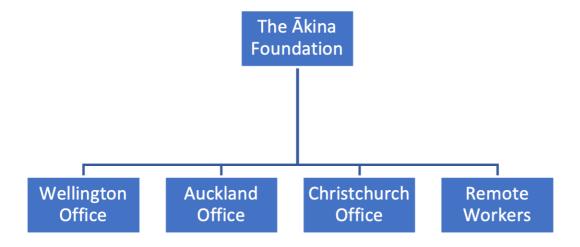


Figure 2: The Ākina Foundation 's Organisational Boundary.

Table 1: Business units included/excluded

Legal entities (Include any subsidaries)	Business unit / Location	Included / excluded	Reason for exclusion
Wellington Office	Wellington	Included	
Auckland Office	Auckland	Included	
Christchurch Office	Christchurch	Included	
Remote staff	New Zealand	Included	

# **5 Reporting Scopes**

## 5.1 Include/ Excluded Categories

ISO 14064-1(2018) categorises emissions as follows:

- Scope 1 (Category 1) Direct GHG emissions and removals.
- Scope 2 (Category 2) Indirect GHG emissions from imported energy, heat or steam generated elsewhere.
- Scope 3 (Category 3) Indirect GHG emissions from transportation.
- Scope 3 (Category 4) Indirect GHG emissions from products used by organization.
- Scope 3 (Category 5) Indirect GHG emissions associated with the use of products from the organization.
- Scope 3 (Category 6) Indirect GHG emissions from other sources.

In compliance with the ISO Standard, the organisation has included all relevant direct and indirect emissions in this GHG inventory.

\*As per ISO14064-1 clause 5.2.3, Ekos shall define its own pre-determined criteria for significance. The following qualitative criteria for Non-mandatory status have been considered;

- 1. Source data likely to be difficult/expensive to obtain and
- 2. The accuracy of the quantified emissions likely to be poor due to nature of the emissions factor or
- 3. The large amount of assumptions likely to result in unreliable emissions total.

The included/excluded emissions sources are shown in the following table:

## Table 2: emissions categories included and justification if excluded

ISO & GHG Protocol Categories	Evample of Emissions Sources		Include/ Exclude	Exclusion Criteria	Notes
Category 1) Direct GHG	emissions and removals; (GHG Protocol scope 1)				
Stationary Combustion	Coal, diesel and gas use for heating, generation of energy etc	Mandatory	Not Applicable	None	
Mobile Combustion	Fuel use for company owned vehicles, forklift/mowers or if you lease vehicles but have operational control.	Mandatory	Not Applicable	None	
Chemical & Industrial Processes	Use of CO2 or nitrous oxide in bottling, packaging, beer taps etc	Mandatory	Not Applicable	None	
Fugitive Emissions	Top up of refrigerant gases when maintaining any fridges, freezers or Air-conditioning units	Mandatory	Not Applicable	None	
Land Use & Land Use Changes	Fertiliser use and animals (ruminants) on land.	Mandatory	Not Applicable	None	
Category 2) Indirect GH	G emissions from imported energy; (GHG Protocol scope 2)				
Purchased Electricity	Electricity use in all facilities	Mandatory	Include	None	Electricity for all offices and shared spaces.
Category 3) indirect GH0	G emissions from transportation (GHG Protocol scope 3)				
Inward Freight	Upstream transport and distribution of goods	Mandatory	Not Applicable	None	
Business Travel	Business travel (flights, accommodation etc)	Mandatory	Include	None	Air travel, accommodation, rental cars, taxi and staff working from home.
Staff Commuting Employee commuting, including emissions related to the transportation of employees from their homes to their workplaces		Non- mandatory	Include	None	Staff commute data from staff survey.
Downstream Transport & Distribution of Goods	Downstream transport and distribution for goods, freight services that happen throughout the supply chain but not paid for by the organization	Non- mandatory	Not Applicable	None	
Work From Home	Staff working from home	Non- mandatory	Include	None	Including working from home due to lockdowns.

## Table 2: emissions categories included and justification if excluded continued.

ISO & GHG Protocol Categories	Example of Emissions Sources	Ekos' Position	Include/ Exclude	Exclusion Criteria	Notes				
Category 4) Indirect GHG emissions from products used by organization; (GHG Protocol scope 3)									
Waste Generated in Operations	Waste generated in operations (solid waste to landfill and wastewater to water treatment plants)	Mandatory	Include	None					
Fuel and Energy related Activities (T&D Losses)	Fuel and energy related activities (T&D losses for electricity & natural gas)	Mandatory	Include	None					
Fuel and Energy related Activities (WTT Emissions for Fuel)	Coal, diesel and gas use for heating, generation of energy etc	Mandatory	Include	None					
Emissions From Purchased Goods	Emissions from purchased goods, i.e. contract growers or processing to your key production	Non- mandatory	TBC	TBC					
Emissions from the Use of Services	Emissions from the use of services (i.e. IT servers, consulting, cleaning, maintenance, bank)	Non- mandatory	Include	None	Reams of paper purchased.				
Capital Goods	Capital goods	Non- mandatory	TBC	TBC					
Upstream Leased Assets	Upstream leased assets (leased vehicles - fuel use should be reported under scope 1, leased office space - the electricity use is passed on by the landlord to the company, therefore should be included in scope 2.)	Non- mandatory	Not Applicable	None					
Category 5) Indirect GHG	emissions associated with the use of products from the organization; (GHG Pro	otocol Scope 3	3)						
Downstream Leased Assets	Downstream leased assets (If you own a rental car or camper van company, you should include the customer's fuel use of the vehicles. If you own warehouses and office buildings, you should include all scope 1& 2 emissions of lease's use of the asset)	Mandatory	Not Applicable	None					
Processing of the Sold Product	Emissions from the Processing of the sold product	Non- mandatory	Not Applicable	None					
Use Stage of the Product	Emissions from the use stage of the product	Non- mandatory	Not Applicable	None					
End of Life Stage of the Product	Emissions from end of life stage of the product	Non- mandatory	Not Applicable	None					
Franchises	Franchises (To be considered only if already included under the consolidation approach. Scope 1 and 2 of each franchisee requires collection)	Non- mandatory	Not Applicable	None					
Investments	Investments (Mandatory for financial industries such as Banks and Investment Fund organisations., Non-mandatory for other sectors)	Non- mandatory	Not Applicable	None					
Category 6: Indirect GHG	emissions from other sources								
Any other relevant emissions	Any relevant emissions which do not fall within the other categories	Non- mandatory	Not Applicable	None					

# 6 Greenhouse Gas (GHG) emissions profile

Data was collected by The Ākina Foundation 's staff with guidance where required from Ekos. The table below provides an overview of the data collected for each emission source. All emissions were calculated using Ekosdeveloped calculator.

## **6.1 Emissions Summary**

Table 3: Emissions Summary by GHG Scopes and ISO Categories.

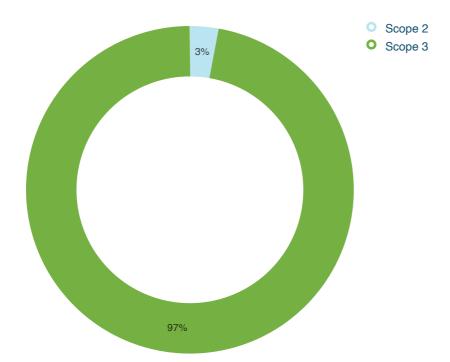
Scope	Emissions Category	tCO <sub>2</sub> e (location-based)
1	(1) Direct GHG Emissions	0.00
2	(2) Indirect GHG Emissions From Imported Energy	0.67
3	(3) Indirect GHG Emissions From Transportation & Distribution	20.56
3	(4) Indirect GHG Emissions From Products & Services Used By The Organisation	2.13
3	(5) Indirect GHG Emissions From The Use Of The Organisation's Products	0.00
3	(6) Indirect GHG Emissions From Other Sources	0.00
Total Gr	oss GHG Emissions	23.36
GHG Re	movals/ Sinks	NR

Electricity emissions are usually calculated and reported using the location-based methodology, which is the average generation emissions for the region or the national grid. The standard requires the electricity to be also reported using the market-based methodology where this is relevant or available, this is commonly known as "dual reporting". In this report, if market-based factor is available and used in the inventory, dual reporting will occur in Table 3 of the report. Thereafter, the emissions will be represented in only the method that is most relevant.

Table 4 shows the emissions intensity, if emissions intensity metrics were provided.

Table 4: Emissions Intensity Summary

<b>Emission Intensity Metrics</b>	Input	tCO <sub>2</sub> e Intensity Metric (location-based)
Number of FTE	11.75	1.99
Gross Revenue (\$Mil)	0.00	0.00
Production (MT)	0.00	0.00



Note: labels for less than 2% are not displayed.

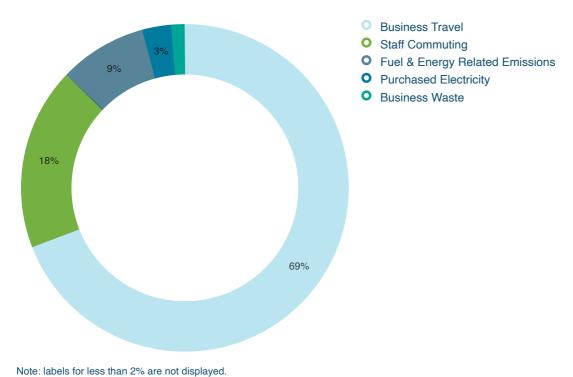
Figure 3: Emissions by Scopes

## **6.2 Emissions by Activities**

Table 4 and Figure 4 below shows the emissions by Activity groups and the % it represents.

Table 4: GHG emissions by Scope and Activity groups (location-based)

GHG scope	Factor Groups	Sum of tCO <sub>2</sub> e	% of Inventory
2	Purchased Electricity	0.67	2.85%
3	Business Travel	16.15	69.13%
3	Staff Commuting	4.21	18.02%
3	Fuel & Energy Related Emissions	2.03	8.69%
3	Business Waste	0.31	1.32%
<b>Grand Total</b>		23.36	100.00%



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Figure 4: Emissions by Activity Groups

Table 5 and Figure 5 below identifies the organisation's top emissions sources by ranking the largest to the smallest.

Table 5: GHG emissions sources ranked by largest to smallest (location-based)

Emission Sources	GHG tCO <sub>2</sub> e	% of Inventory
Domestic Air Travel - New Zealand Domestic Economy Class	15.07	64.51%
Well to tank emissions	2.31	9.91%
Staff Commuting - Petrol	1.64	7.02%
Staff Working From Home	0.82	3.53%
Electricity - New Zealand (Unit 1)	0.67	2.85%
Staff Commuting - Bus	0.47	2.01%
Staff Commuting - Petrol Hybrid	0.46	1.98%
Business Accommodation - New Zealand	0.42	1.81%
Staff Commuting - Diesel	0.34	1.47%
Business Travel - Taxi	0.34	1.44%
Waste & Wastewater General Waste to Landfill - With Gas Recovery (Unit 1)	0.31	1.32%
Staff commute - ferry travel	0.18	0.77%
Staff Commuting - Rail	0.15	0.62%
Business Travel - Petrol	0.08	0.33%
Electricity T&D Losses	0.06	0.26%
Staff commute - ferry travel WTT	0.04	0.17%
Grand Total	23.36	100.00%

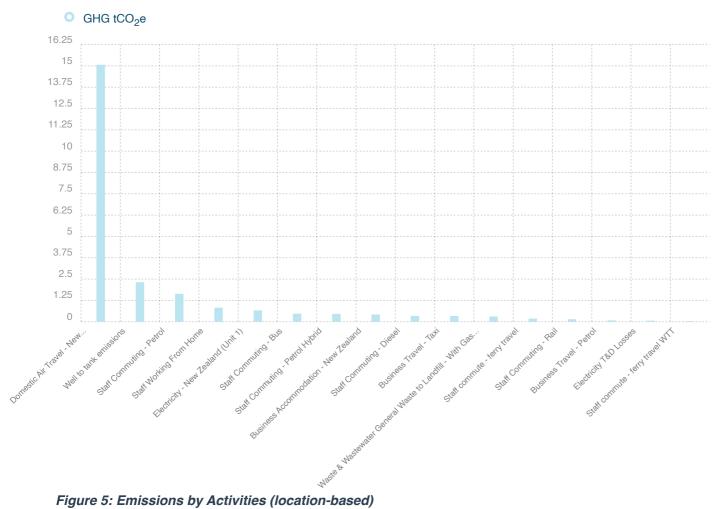


Figure 5: Emissions by Activities (location-based)

# 7 Data Quality, Uncertainties and Assumptions

Activity data was obtained from a range of sources, and the data quality are ranked and outlined in Table 6 below.

Table 6: Activity data collection - quality and source

Emissions source	Scope	Unit	Data source	Data quality	Any assumptions made
Electricity - Electricity Consumption	2	KWH	Flick Electricity & Pulse Energy invoices	Good	
Waste & Wastewater - Landfill Waste	3	KG	Landlord data	Medium	
Domestic NZ Business Flights	3	PKM	Air travel invoices	Good	
Business Accommodation	3	Person nights	Xero	Good	
Business Travel Vehicle Mileage	3	KM	Staff expense claims	Medium	Assume all vehicles are petrol.
Business Travel Taxi Money	3	\$	Supplier invoices	Good	
Staff Vehicle Mileage	3	KM	Staff survey	Low	Assumption based on days the staff were not at the office or shared space.
Staff Working from Home	3	DAYS	Staff surveys	Low	Data included days worked from home due to lockdowns.
Staff Commute Public Transport	3	KM	Staff survey	Low	
Staff commute - ferry travel	3	-	Staff survey	Low	Assumes survey results are representative of actual commuting behaviour
Staff commute - ferry travel WTT	3	-	Staff survey	Low	Assumes survey results are representative of actual commuting behaviour

The client source data is rated on a scale of Good, Medium, Low to Poor. The rating is given based on assessing the data source against our Data quality matrix. The classification is based on determining two criteria of uncertainties; Data completeness and Data accuracy. The higher the level of uncertainty due assumptions in the calculation or lack of data for the period, then the lower the quality of the data.

Where accurate data is not available, it is appropriate to estimate to ensure that a comprehensive inventory measurement is completed. Estimates must be carried out on a scientifically derived basis to ensure accuracy.

It is recommended that the organisation works to improve the data collections processes for any items listed above as having low data quality or high assumptions. This will increase the quality of the carbon inventory report in the future. These improvements should start as soon as possible/or as appropriate.

## 7.1 Scope 1 Emissions by gas type

ISO 14064-1 requires Direct emissions to be reported separately, showing emissions contribution by the 6 Kyoto GHG gas types. The breakdown by CO2, CH4 and N2O is shown in Table 7 below. Breakdown by HFCs, PFCs and SF6 will be shown in Table 7a, if applicable. If none displayed it is not applicable or none occurred.

Table 7: Direct emissions breakdown by gas types



<b>Emission Sources</b>	tCO <sub>2</sub> e	tCO2	tCH4	tN2O
<b>Grand Total</b>	0.00	0.00	0.00	0.00

## 7.2 Other emissions

### **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.

There are no operations that use PFC, NF3 or SF6.

#### **Combustion of Biomass - (e.g wood pallets)**

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

#### 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.

#### **Pre-verified data**

No pre-verified data is included within the inventory.

# 8 Emission Performance against previous years

Table 8 and figure 6 below shows emissions comparison against base year and previous year, if applicable.

Table 8: Comparison against base year

Activities	Base year tCO <sub>2</sub> e (location-based)	Previous year tCO <sub>2</sub> e (location-based)	Current year tCO <sub>2</sub> e (location-based)	% Change against base year	% Change against previous year
Business Travel	68.45	29.56	16.15	-76.41%	-45.37%
Staff Commuting	-	2.09	4.21	-	101.60%
Fuel & Energy Related Emissions	0.12	6.00	2.03	1,591.31%	-66.19%
Purchased Electricity	1.56	9.03	0.67	-57.35%	-92.63%
Business Waste	1.06	1.29	0.31	-70.99%	-76.15%
Purchased Goods	-	0.00	-	-	-
Grand Total	71.19	47.97	23.36	-67.19%	-51.31%

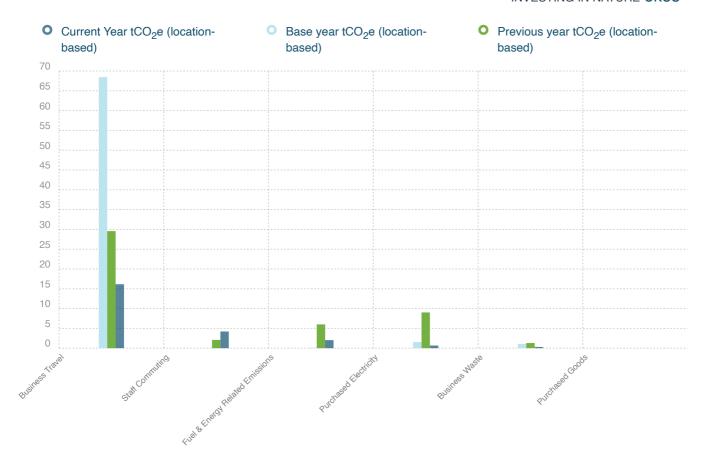


Figure 6: Emissions compared with previous years

## 9 Emission Reduction Recommendations

Please refer to a separate, detailed reduction plan prepared by the organisation which documents the targets, responsibilities, actions and top level management commitment.

# 10 Double counting and pre-offsets

Double counting can sometimes occur when emissions have been included and potentially offset in the GHG emissions inventories of two different organisations, e.g. a company and one of its suppliers/contractors. This is particularly relevant to indirect (Scope 2 and 3) emissions sources.

There may also be instances where an organisation uses the product or service of another company who has already measured and offset their product/service.

The programme recognises organisation, product or services which has been identified by the programme as having completed measurement and offset their emissions and in this case, the double counted emissions will be reported but does not require offset.

There were no known instances of double counting of emissions within this inventory. There were no known instances of recognised offset deductions relevant for this inventory.

# 11 Offsets and Certification

## 11.1 Certification Type

The Ākina Foundation has chosen to apply for Climate Positive Certification.

## 11.2 Offset amount

## Table 9: Offset calculation (location-based)

Total Gross GHG Emissions	Offset requirement		Purchased credits/ Pre- offset	Net offset requirement	Total Credits to offset
23.36	Climate Positive Option (120%)	28.03	0.00	28.03	29.00

## 11.3 Carbon credits

The Ākina Foundation has elected to cancel the following carbon credits:

Offset Type	Description	# Units Cancelled
NZUs - Uruwhenua	Offsets have been sourced in the form of Permanent New Zealand Restorative Forest Units (NZUs) produced in the Kānuka Hill Native Regeneration Project in Mohua Golden Bay, Aotearoa New Zealand and verified to the New Zealand Emissions Trading Register. These offsets are retired in the New Zealand Carbon Emissions Trading Register.	14.00
VERs - Babatana	Offsets have been sourced in the form of Verified Emission Reduction Units (VERs) produced in the Babatana Rainforest Conservation Project, in the Solomon Islands. These offsets are certified to the Plan Vivo Standard and retired in the Markit Environmental registry.	15.00

## 12 References & Other information

### 12.1 Standards

International Organization for Standardization, 2006. ISO14064-1:2018. Greenhouse gases – Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas GHG emissions and removals. ISO: Geneva, Switzerland.

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.

#### 12.2 Emission Factors

MfE - 2022 Emission Factors Workbook and 2022 Emission Factors Flat File

DBEIS - 2022 UK Government GHG Conversion Factors for Company Reporting

Radiative Forcing - Aviation GHG emission calculations take into account the greenhouse gases covered by the UNFCCC Paris Agreement relevant to aviation (carbon dioxide, methane and nitrous oxide). There are also additional global warming impacts of aviation emissions called "radiative forcing" (RF). These include water vapour, NOx, and contrails. Some voluntary carbon offset suppliers make inclusion of RF mandatory and others exclude it. This is because of the scientific uncertainties associated with the methodology for accurately calculating radiative forcing.

Following the MFE methodology, Ekos uses a radiative forcing multiplier of 1.9 for all flight related activity

Uplift factor - does not apply to domestic air travel. However, it has been applied to international air travel. (section 7.5.4 and 7.5.5 of the MfE Emissions detailed Guide 2022).

Well to Tank factors were sourced from DBEIS and is automatically applied to relevant activity data. WTT Business travel EF is 'with RF'.

All NZ electricity factor are location-based unless otherwise stated.