

Period: Base year: Status: Assurance type: Certification type: Last updated date: 01.07.2020 to 31.06.2021 01.07.2018 to 31.06.2019 Quality\_reviewed\_inventory No assurance Climate Positive 11/10/22



## ekos.co.nz | ekos@ekos.co.nz

Prepared by: Ange

Angelie Cartagena

Reviewed by: May Chang

#### Organisation contact details

Area of business Contact person Contact number Contact email Company website Charitable Anndivya Ram 210392399 anndivya.ram@akina.org.nz https://www.akina.org.nz/

# Table of Contents

1	Summary 1.1 Organisation information	Page 3
2	<ul> <li>Background</li> <li>2.1 Statement of intent</li> <li>2.2 Communication and dissemination</li> </ul>	Page 3
3	<ul> <li>Reporting methodology and compliance standards</li> <li>3.1 Methods &amp; Emissions factor sources</li> <li>3.2 Consolidation approach</li> <li>3.3 Base year recalculation policy</li> <li>3.4 GHG information management and monitoring procedures</li> </ul>	Page 4
4	Reporting boundary	Page 6
5	Reporting Scopes5.1Included/ Excluded categories	Page 7
6	Greenhouse Gas (GHG) emissions profile6.1Emissions Summary6.2Emissions by Activities6.3Scope 1 Emissions by gas type6.4Other emissions	Page 9
7	Data Quality, Uncertainties and Assumptions	Page 14
0		Page 15
9	Emission Reduction Recommendations	Page 16
10	Double counting and pre-offsets	Page 16
0	<ul><li>11.1 Certification type</li><li>11.2 Offset amount</li><li>11.3 Carbon credits</li></ul>	Page 17
12	2 References & Other information 12.1 Standards	Page 18

12.2 Emissions Factors

## 1 Summary

This carbon inventory was prepared for The Ākina Foundation'.

Report period	01.07.2020 to 31.06.2021
Base year	01.07.2018 to 31.06.2019

In subsequent inventories, comparisons will be made to the base year.

### 1.1 Organisation information

Ākina is Aotearoa New Zealand's leading impact consultancy – everything we do is about supporting our clients and partners to improve the wellbeing outcomes they create for people and the planet. We provide a wide range of tailored consultancy and advisory services across a range of areas like measurement and evaluation, investment and procurement. We're experts in supporting our clients to create practices, products and services that create positive impact (wellbeing outcomes). We work with a diverse range of 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 Ākina 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 third 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 (Excel spreadsheet 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. Please refer to the Emissions Factor list within the GHG calculator for reference to specific sources used.

The methodology used is illustrated in figure 1 below:

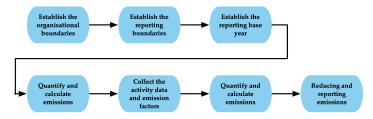


Figure 1:ISO 14064-1 (2018) methodology for measuring a GHG inventory

## 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:

 $\cdot$  Control, whereby all emissions over which the organisation has either financial or operational control are included in the inventory

 $\cdot$  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.

## 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  $\bar{\mathsf{A}}k$  in a Foundation's Organisational Boundary.

Table 1: Business units included/excluded

Legal entities (include subsidiaries)		Included/ excluded	Reason for exclusion
Wellington Office	Wellington	Included	0
Auckland Office	Auckland	Included	0
Christchurch office	Christchurch	Included	0
Remote workers	New Zealand	Included	0

## 5 Reporting Scopes

### 5.1 Included/ Excluded categories

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

- Scope 1 (Category 1) Direct GHG emissions and removals.
- $\cdot$  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 ISO1464-1 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:

Emissions category & Ekos position* Include/ Exclude		Reason for Exclusion			
Category 1) Direct GHG	emissions and remove	als; (GHG Protocol sc	ope 1)		
Stationery combustion	Mandatory	Not_applicable	NA		
Mobile combustion	Mandatory	Not_applicable	NA		
Chemical and industrial processes	Mandatory	Not_applicable	NA		
Fugitive emissions	Mandatory	Not_applicable	NA		
Land use and Land Use changes	Mandatory	Not_applicable	NA		
Category 2) Indirect GH	G emissions from impo	orted energy; (GHG	NA		
Purchased electricity	Mandatory	Include	NA		
Category 3) indirect GHC	G emissions from trans	portation (GHG Proto	NA		
Upstream transport and distribution of goods	Mandatory	Not_applicable	NA		
Business travel	Mandatory	Include	NA		
Employee commuting	Mandatory	Include	NA		
Downstream transport and distribution of goods	Non-mandatory	Not_applicable	NA		
Category 4) Indirect GH	G emissions from proc	lucts used by organiz	ation; (GHG Protocol	scope 3)	
Waste generated in operations	Mandatory	Include	NA		
Fuel and energy related activities (T & D Losses)	Mandatory	Include	NA		
Fuel and energy related activities (WTT emissions for fuel)	Mandatory	Include	NA		
Emissions from purchased goods	Non-mandatory	Include	NA		
Emissions from the use of services	Non-mandatory	Not_applicable	NA		
Capital goods	Non-mandatory	Not_applicable	NA		
Upstream leased assets	Non-mandatory	Include	NA		
Category 5) Indirect GH	G emissions associate	d with the use of pro	ducts from the organi	ization; (GHG Protoco	Scope 3)
Downstream leased assets	Mandatory	Not_applicable	NA		
Processing of the sold product	Non-mandatory	Not_applicable	NA		
Use stage of the product	Non-mandatory	Not_applicable	NA		
End of life stage of the product	Non-mandatory	Not_applicable	NA		
Franchises	Non-mandatory	Not_applicable	NA		
Investments	Non-mandatory	Not_applicable	NA		
Category 6) Indirect GH	G emissions from othe	r sources (GHG Proto	NA		
List any other relevant sources	0	0	NA		

Table 2: Emissions categories included and justification if excluded

## 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 Ekos-developed calculator.

## 6.1 Emissions Summary

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

Scope Emissions Category		tCO2e
1	(1) DIRECT GHG EMISSIONS	0.00
2 (2) INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY		8.55
	(3) INDIRECT GHG EMISSIONS FROM TRANSPORTATION & DISTRIBUTION	26.24
	(4) INDIRECT GHG EMISSIONS FROM PRODUCTS & SERVICES USED BY THE ORGANISATION	7.52
3	(5) INDIRECT GHG EMISSIONS FROM THE USE OF THE ORGANISATION'S PRODUCTS	0.00
	(6) INDIRECT GHG EMISSIONS FROM OTHER SOURCES	0.00
Total Gross GHG Emission	ns	42.32
GHG Removals/ sinks		0.00
Purchased credits/ Pre-of	0.00	
Total Net GHG Emissions		42.32
Number of FTE	13.10	
Gross Revenue (\$Mil)		0.00
Production (MT)		0.00
Other xx		0.00
Emissions intensity		
tCO2e/FTE	3.23	
tCO2e/\$Mil Gross Revenu		
tCO2e/MT Production		
tCO2e/Other xx		

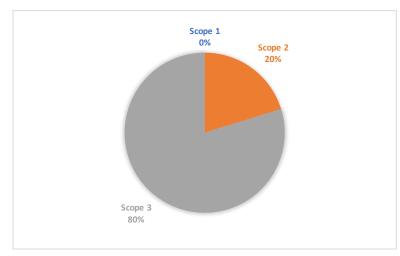


Figure 3: Emissions by Scopes

## 6.2 Emissions by Activities

Table 4: GHG emissions by Scope and Activity groups

GHG scope	Factor Groups	Sum of tCO2e	% of Inventory
2	Electricity	8.55	20.2%
3	Air travel	21.76	51.4%
	WTT emissions	5.51	13.0%
	Travel car	2.49	5.9%
	Landfill & Wastewater	1.28	3.0%
	Other transport	1.05	2.5%
	Accommodation	0.83	2.0%
	T&D Losses	0.73	1.7%
	Electricity	0.11	0.3%
	Data Storage	0.00	0.0%
Grand Total		42.32	100.0%

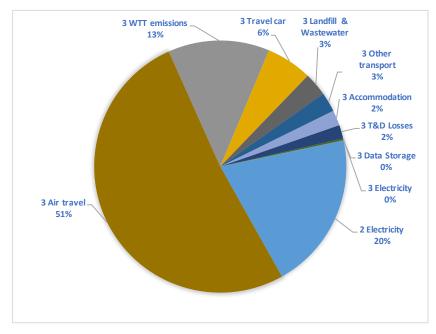


Figure 4: Emissions by Activity Groups

Table 5: GHG emissions sources ranked by largest to smallest

Row Labels	GHG tCO2e	% of inventory
Domestic air travel	21.76	51.4%
Electricity (purchased)	8.55	20.2%
Total WTT emissions	5.51	13.0%
Staff commute - Petrol	1.93	4.6%
Waste to landfill	1.28	3.0%
Accommodation <nz></nz>	0.83	2.0%
Electricity T&D loss	0.73	1.7%
Taxi	0.66	1.5%
Reimbursed mileage (petr	0.48	1.1%
Ferry travel	0.33	0.8%
Staff working from home (	0.11	0.3%
Staff commute - Diesel	0.07	0.2%
Bustravel	0.04	0.1%
Train travel	0.03	0.1%
Other - Giga Bytes used	0.00	0.0%
Grand Total	42.32	100.0%

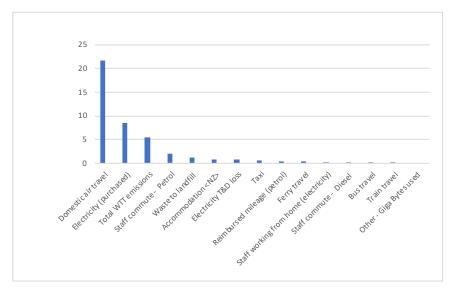


Figure 5: Emissions by Activities

## 6.3 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  $CO_2$ ,  $CH_4$  and  $N_2O$  is shown in Table 6 below. Breakdown by HFCs, PFCs and  $SF_6$  will be shown in Table 6.1, if applicable. If none displayed it is not applicable or none occurred.

able 6: Direct emissions breakdown by gas types						
GHG scope	(Multiple Items)					
Gas Types	tCO2e	tCO2	tCH4	tN2O		
Grand Total						

### 6.4 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.

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

No known combustion of biomass occurued from the operatio 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.

## 7 Data Quality, Uncertainties and Assumptions

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.

Activity data was obtained from a range of sources, which are outlined in the table below.

Emissions source	Scope	Unit	Data source	Data quality	Any assumptions made
Electricity (purchased)	2	КШН	Invoices	Good	0
Electricity T&D loss	3	КШН	Invoices	Good	Assume national default rate
Electricity (purchased)	2	КШН	Invoices	Good	0
Electricity T&D loss	3	КШН	Invoices	Good	Assume national default rate
Electricity (purchased)	2	КШН	Invoices	Good	0
Electricity T&D loss	3	КШН	Invoices	Good	Assume national default rate
Domestic air travel	3	PKM	Travel agent	Good	0
Taxi	3	\$	Xero	Good	0
Accommodation <nz></nz>	3	Person nights	Xero	Good	0
Reimbursed staff mileage (Default petrol)	3	КM	Xero mileage	Good	0
Staff commute - Petrol mileage	3	КМ	Staffrecords	Medium	0
Staff commute - Diesel mileage	3	КМ	Staffrecords	Medium	0
Staff working from home (electricity)	3	Employee per day	Staffrecords	Medium	0
Train travel	3	KM	Staffrecords	Medium	0
Bustravel	3	KM	Staffrecords	Medium	0
Ferry travel	3	KM	Staffrecords	Medium	0
Waste to landfill (without gas recovery)	3	KG	Landlord	Medium	0
Other - Giga Bytes used	3	GB	Internal records	Good	0

Table 7: Activity data collection - quality and source

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.

## 8 Emission Performance against previous years

This is the base year inventory therefore no comparison can be made.

Table 8: Comaprison against base year

Activities	2018-2019 tCO2e	2020-2021 †CO2e	% Change against base year
Domestic air travel	61.45	21.76	-65%
Electricity (purchased)	1.56	8.55	448%
Total WTT emissions	0	5.51	0%
Staff commute - Petrol	0	1.93	0%
Waste to landfill	1.06	1.28	21%
Accommodation <nz></nz>	3.65	0.83	-77%
Electricity T&D loss	0.12	0.73	511%
Taxi	1.04	0.66	-37%
Reimbursed mileage	0.91	0.48	-47%
Ferry travel	0	0.33	0%
Staff working from home (	0	0.11	0%
Staff commute - Diesel	0	0.07	0%
Bustravel	0	0.04	0%
Train travel	0	0.03	0%
Other - Giga Bytes used	0	0.00	0%
Grand Total	69.79	42.32	-39%

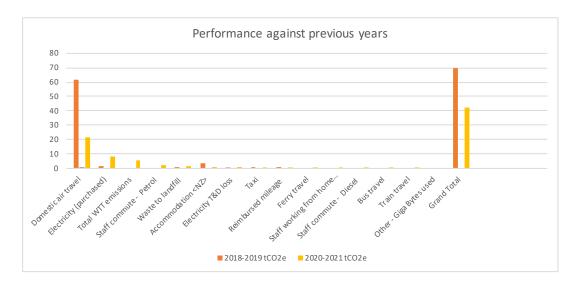


Figure 6: Emissions compared with previous years

## 9 Emission Reduction Recommendations

Ekos recommends the organisation review following actions to reduce its operational carbon emissions. These recommendations are based on emission hotspots; which are the highest emission sources, therefore providing the greatest opportunity to reduce emissions.

The recommended reductions are:

#### Domestic air travel

Covid-19 resulted in a reduction in flight emissions but as organisation return to ussual operations, we should expect to see an increase in air travel emissions. Policy changes such as "economy class travel and air travel only when essential" can help reduce flight emissions.

#### Electricity (purchased)

Have an energy auditor or electrician to do a complete sweep of your workplace. They will be able to advise on suitable replacements and the cost paybacks. Infrastructure upgrades such as halogen/sodium/mercury bulbs all have LED equivalents that will save close to 40% of the electricity. Implement a policy where any new appliance purchases (e.g. office refrigerators or heatpumps) will be blue star energy rated. Blue star energy rated appliances will cost more at the beginning, but pay back over time

#### **Total WTT emissions**

Reducing emissions from air travel, electricity and transport will help reduce Well to Tank emissions.

## 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.

Double counting of reduction or carbon credits did not occur in this inventory Double counting of emissions within the organisation's footprint did not occur in this inventory. There were no known pre-offset relevant for this inventory.

There were no instances of double counting in this inventory.

## 11 Offsets and Certification

## 11.1 Certification type

The Ākina Foundation has chosen to apply for Climate Positive 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 (mandatory) emissions.

## 11.2 Offset amount

Table 9: Offset calculation

Total Gross GHG Emissions				Total GHG amount to offset
42.32	0.00	0.00	0.00	42.32

Offset Total	# Credits
Zero Carbon Option (100%)	43
Climate Positive Option (120%)	51

The Ākina Foundation has measured all required emissions, and after accounting for removals/sinks, preoffsets and allowable exclusion of offsets, the total amount of emissions remain to be cancelled is 43 tCO2e. As The Ākina Foundation is cancelling 120% of the emissions, 51 tonnes of carbon credits will be cancelled on The Ākina Foundation's behalf, on the relevant registry.

## 11.3 Carbon credits

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

VERs - Rarakau and VERs Babatana mixed basket.

Offsets have been sourced from Verified Emission Reduction Units (VERs) produced in the Rarakau Rainforest Conservation Project in Southland, New Zealand. These offsets are retired in the Markit Environmental registry.

Offsets have been sourced from Verified Emission Reduction Units (VERs) produced in the Babatana Project, in the Pacific Islands. These offsets are retired in the Markit Environmental registry.

## 12 References & Other information

#### 12.1 Standards

International Organization for Standardization, 2006. ISO14064-1:20018. 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 Emissions Factors

MfE - 2020 Emission Factors Workbook and 2020 Emission Factors Flat File DBEIS - UK Government GHG Conversion Factors for Company Reporting Radiative Forcing - Aviation GHG emission calculations take into account the greenhouse gases 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

Well to Tank factors were sourced from DBEIS and is automatically applied to relevant activity data.

All NZ electricity factor are location based unless otherwise stated.