



Carbon Inventory Report:



HealthPost Ltd

Period: 2021 Financial Year

Unverified Inventory



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Contents

1	Summary	3
2	Background	4
2.1	Communication and dissemination	4
2.2.1	Statement of intent	4
2.2	Reporting period and base year	4
2.3	Verification and Compliance with Standard	4
3	Organisational boundary	4
4	Reporting boundary	5
4.1	Emission sources included in measurement but reported within another business activity and scope	6
5	Greenhouse Gas (GHG) Inventory	7
5.1	Methodology	7
5.2	Data Collection	7
5.3	HealthPost Ltd's GHG Profile	8
5.3.1	Emissions breakdown by scope	8
5.3.2	Scope one emissions by gas type	11
5.3.3	Emissions breakdown by activity	11
5.4	Other Emissions	14
5.4.1	Fugitive Emissions (refrigerants)	14
5.4.2	Combustion of Biomass	14
5.4.3	Land Use and Land Use Change	14
5.4.4	Pre-verified data	15
5.5	Uncertainty and Data Quality	15
5.6	Double counting and pre-offsets	16
6	Offsets and Certification	16
7	Carbon Emission Reduction Planning Process	16
8	Glossary	21
	Appendix 1: Emission Factors	22

1 Summary

This carbon inventory was prepared for HealthPost Ltd for the 2021 Financial Year.

Organisation background	Name: HealthPost Ltd Contact person: Mathew Close Contact email: Mathew.Close@healthpost.co.nz Area of business: Retail Trade Full Time Equivalents (FTEs): 71 HealthPost Ltd is an online retailer of natural health and wellbeing products.
2021 Financial Year	01.04.2020 – 31.03.2021
Organisational boundary	This measurement covers the following sites: Main operations: 30 Orion Street Collingwood Auckland Office: Level 1, 81 New North Road, Eden Terrace Auckland 1021
Reporting boundary	Business operations direct and indirect emissions resulting from: <ul style="list-style-type: none">• Direct (scope 1)<ul style="list-style-type: none">○ Stationary Fuels○ Company Vehicles○ Air Conditioning/Refrigerants• Indirect electricity (scope 2)<ul style="list-style-type: none">○ Electricity• Indirect (scope 3)<ul style="list-style-type: none">○ Purchased Goods & Services○ Fuel & Energy Related Emissions○ Upstream Freight○ Business Waste○ Business Travel○ Staff Commuting○ End of Life Disposal
Exclusions:	<ul style="list-style-type: none">• Indirect (scope 3)<ul style="list-style-type: none">○ The following aspects of Purchased Goods & Services:<ul style="list-style-type: none">▪ IT Services & Data Storage▪ Purchased Products▪ Packaging▪ Labels○ The following aspect of End of Life Emissions:<ul style="list-style-type: none">▪ Packaging of products sold.○ Staff Commuting
Emissions	Total emissions: 885.61 tCO ₂ e
Offsets	Total offsets: 886 tCO ₂ e

HealthPost Ltd has elected to offset 100% of these emissions with New Zealand Carbon Units (NZUs) provided by Ekos. Through this measurement and offsetting, HealthPost Ltd has qualified for Zero Carbon Business Operations certification for the 2021 Financial Year and has been issued certificate number 40000553.

2 Background

This report is the second annual greenhouse gas (GHG) emissions inventory, prepared for HealthPost Ltd. It was prepared in accordance with the requirements of ISO 14064-1 (2018) and covers the 01.04.2020 – 31.03.2021 period.

2.1 Communication and dissemination

This inventory was prepared as a management tool for HealthPost Ltd 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 HealthPost Ltd 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 HealthPost Ltd, its shareholders and members. The summary of this inventory will be made available to all stakeholders on request.

2.2.1 Statement of intent

HealthPost Ltd has provided the following statement of intent:

Our business vision is to have a lasting positive impact on the wellbeing of people and planet. One way we seek to deliver on this vision is by achieving Zero Carbon Certification and having a robust emissions reduction plan in place.

2.2 Reporting period and base year

This inventory is for the 2021 Financial Year. The base year for HealthPost Ltd's inventory was the 2020 Financial Year period. Due to material increases in emissions brought about by additional activity inclusions, it has been decided to re-set the base year to the 2021 Financial Year period. This inventory will therefore be compared with the previously completed 2020 Financial Year measurement. Subsequent inventories will be compared with the 2021 Financial Year base year.

2.3 Verification and Compliance with Standard

This inventory is consistent with the International Standards Organisation's process for calculating and reporting GHG emissions 14064-1 (2018). This measurement was externally reviewed by McHugh and Shaw as being consistent with the ISO 14064-1 standard for measurement. Whilst this is the case, it should be noted that this measurement is an unverified inventory and that no verification audit has been conducted of the findings.

3 Organisational boundary

The organisational boundary identifies which facilities or subsidiaries of HealthPost Ltd 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.

For HealthPost Ltd's inventory, the operational control method has been used to consolidate emissions. This means that all emissions over which HealthPost Ltd has operational control have been included in the inventory.

Included within HealthPost Ltd's organisational boundary are therefore all emission sources that occur within HealthPost Ltd's operations at the following sites:

Main operations: 30 Orion Street Collingwood

Auckland Office: Level 1, 81 New North Road, Eden Terrace Auckland 1021

4 Reporting boundary

The reporting boundary identifies which emission sources are included in the carbon inventory and which are excluded. ISO 14064-1(2018) categorises emissions as follows:

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

In compliance with the ISO Standard, HealthPost Ltd has measured all relevant direct and indirect emissions shown below in this GHG inventory.

The included emission sources are shown in Figure 1 below:

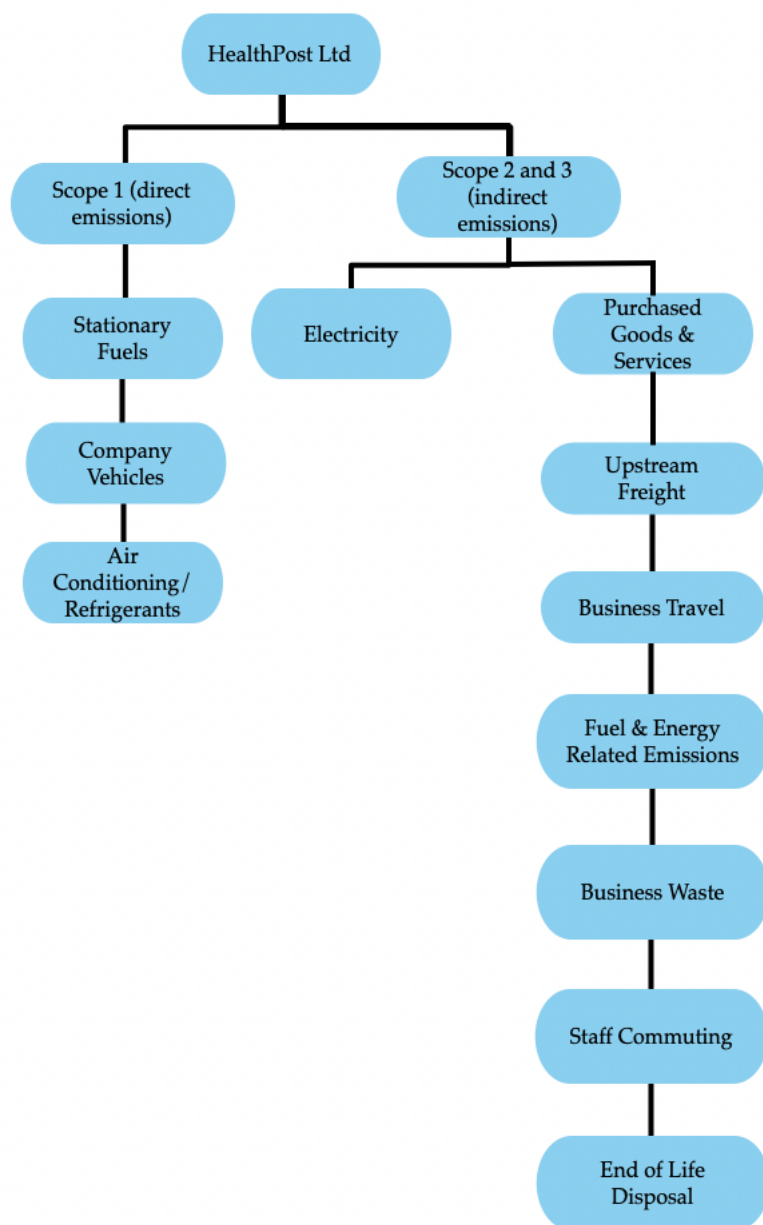


Figure 1: HealthPost Ltd's 2021 Financial Year Emission Sources

4.1 Emission sources included in measurement but reported within another business activity and scope

Upstream Leased Asset emissions were included in the scope 1 and 2 emissions calculations.

Exclusions

The following emission sources have been excluded from the reporting boundary:

- The following aspects of Purchased Goods & Services:
 - IT Services & Data Storage
 - Purchased Products

- Packaging
- Labels
- The following aspects of End of Life Emissions:
 - Packaging of products sold.
- Staff Commuting (including working from home emissions)

The emissions sources above were excluded based on unavailability and unreliability of data.

5 Greenhouse Gas (GHG) Inventory

5.1 Methodology

This GHG inventory was prepared to be consistent with the international Standards for calculating GHG emissions. These Standards are the World Resource Institute's "Greenhouse Gas Protocol, a corporate accounting and reporting standard (GHG protocol) and "ISO 14064-1 (2018) Specification with guidance at the organisation level for quantification and reporting of GHG emissions and removals" (ISO 145064-1 (2018)). In measuring this inventory, the five principles of ISO 14064-1 (2018) were strictly applied.

The methodology used in measuring HealthPost Ltd 's organisational GHG inventory is illustrated in the following diagram:

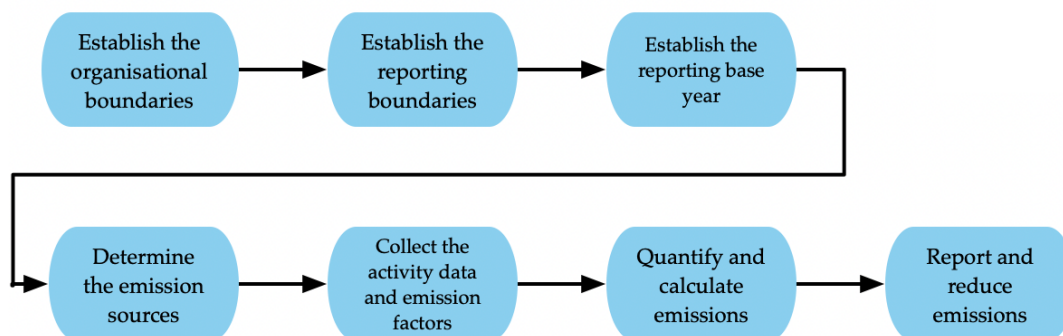


Figure 2: ISO 14064-1 (2018) Methodology for Measuring a GHG Inventory

5.2 Data Collection

Data was collected by HealthPost Ltd 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 an Ekos-developed calculator. The calculation method used to quantify emissions was the activity data multiplied by the appropriate emission factor:

$$\text{Tonnes CO}_2\text{e} = \text{Total GHG activity} \times \text{appropriate emission factor}$$

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, as provided in Appendix 1.

Table 1: Data Sources for HealthPost Ltd's 2021 Financial Year Emissions

Emission Source		Unit	Data Source
Stationary Fuels	Electricity	kWh	Internal records & Invoices
Company Vehicles		\$spend	Financial Records
Air Conditioning/Refrigerants		kg	Internal Records
Electricity		kWh	Supplier Invoices
Purchased Goods & Services	Paper	Reams of Paper	Supplier Data
	Potable Water	GB of storage	Supplier Data
	Significant Suppliers	Scope 1 & 2 emissions data	Supplier Data
Fuel & Energy Related Emissions	Transmission and Distribution Losses	kWh	Supplier Invoices
	Fuel & Energy Related Emissions	Litres of Fuel	Financial Records
	Freight Related Emissions	Tonne km	Internal Reporting
	Air Travel	Passenger km	Financial Records
	Reimbursed Staff Mileage	km	Financial Records
Upstream Freight		Tonne km	Internal Reporting
Business Waste	Landfill Waste	Litres	Waste Contractor
	Wastewater	M ³	Watercare proxy
Business Travel	Taxis	\$spend	Financial Records
	Air Travel	Passenger km	Financial Records
	Accommodation	Person nights	Financial Records
	Staff Mileage	km	Financial Records
End of Life Disposal	Packaging	Tonnes	Internal Consumption Records

5.3 HealthPost Ltd's GHG Profile

HealthPost Ltd total emissions for the 2021 Financial Year were 885.61 tonnes of CO₂e.

5.3.1 Emissions breakdown by scope

Below, Figure 3 and Table 2 shows HealthPost Ltd 's emissions by scope with the majority of emissions coming from scope 3 at 98%, followed by scope 2 at 2% and scope 1 emissions at <1%.

The scope 2 emissions calculation was completed using the location based emissions factor methodology.

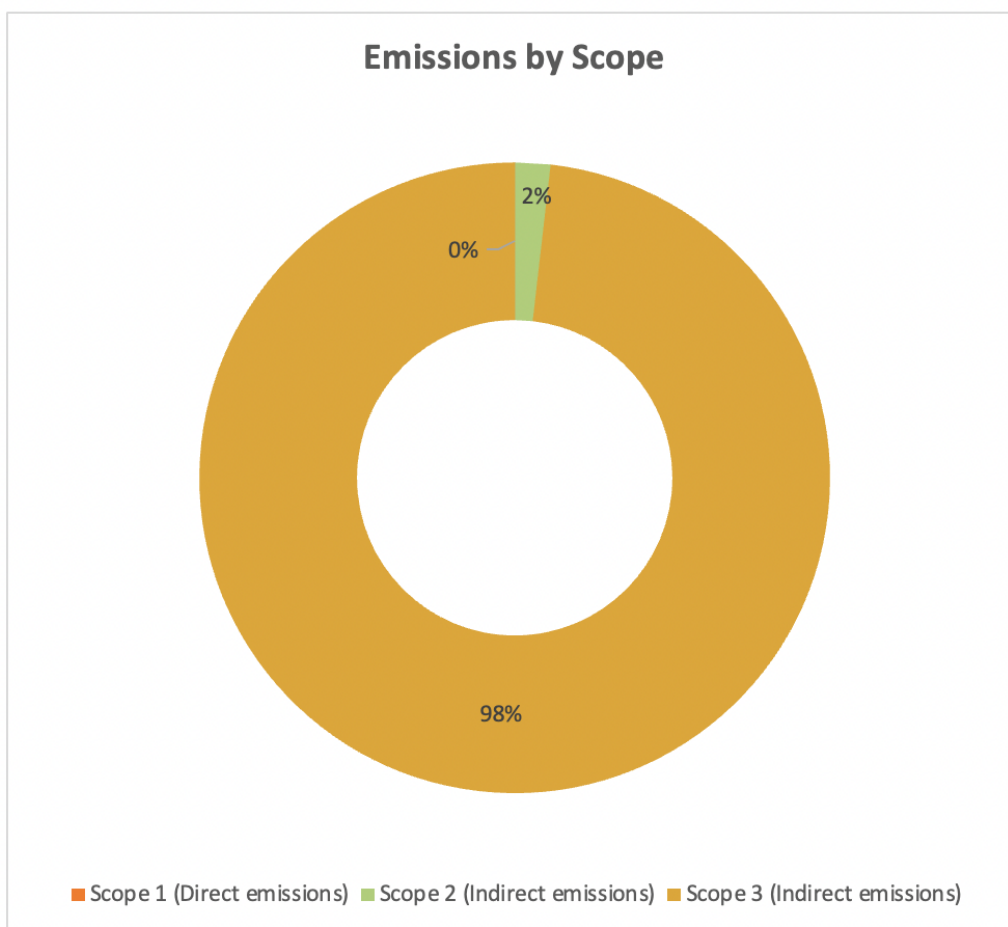


Figure 3: HealthPost Ltd's 2021 Financial Year Emissions by Scope

Table 2: HealthPost Ltd's 2021 Financial Year Emissions by Scope

Scope	Emissions Category	tCO ₂ e
1	(1) DIRECT GHG EMISSIONS	0.17
2	(2) INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY (Location based)	17.92
3	(3) INDIRECT GHG EMISSIONS FROM TRANSPORTATION & DISTRIBUTION	740.59
	(4) INDIRECT GHG EMISSIONS FROM PRODUCTS & SERVICES USED BY THE ORGANISATION	107.37
	(5) INDIRECT GHG EMISSIONS FROM THE USE OF THE ORGANISATION'S PRODUCTS	19.55
	(6) INDIRECT GHG EMISSIONS FROM OTHER SOURCES	NA
Total Gross GHG Emissions		885.61
GHG Removals/ sinks		NA

Purchased credits/ Pre-offset	NA
Total Net GHG Emissions	885.61
Number of FTE	71
Gross Revenue (\$Mil)	NA
Production (MT)	NA
Emissions intensity	
tCO ₂ e/FTE	12.47
tCO ₂ e/\$Mil Gross Revenue	NA
tCO ₂ e/MT Production	NA
tCO ₂ e/Other xx	NA

Below, Figure 4 and Table 3 also shows the change in emissions between the current measurement period and the 2020 Financial Year with reductions in scopes 1, 2 and 3 emissions. The emissions decreased overall by 15%.

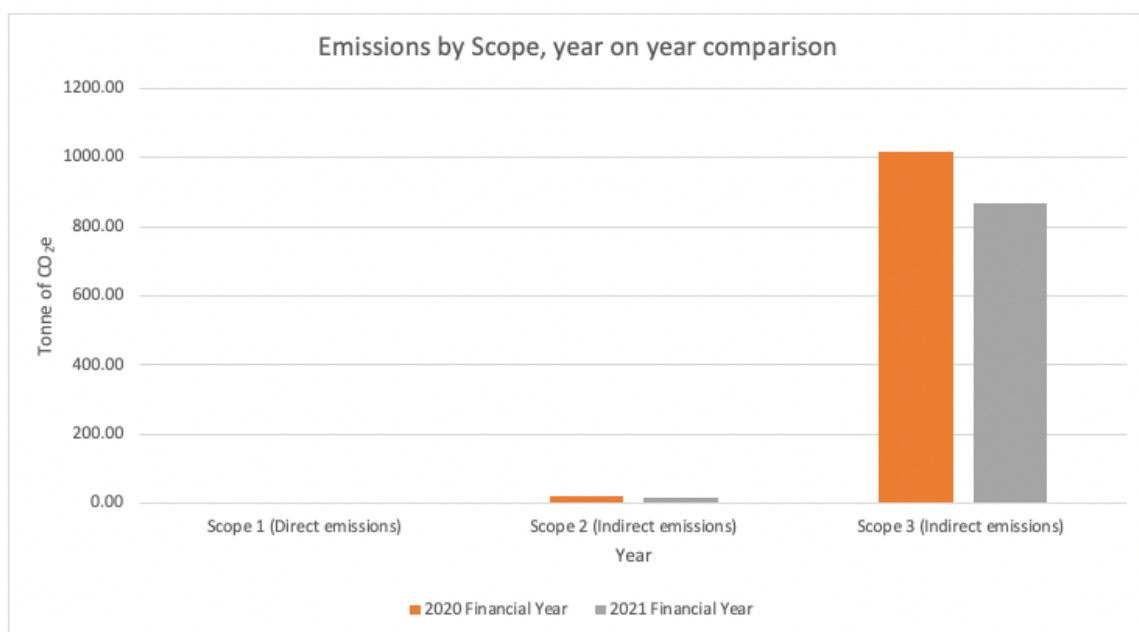


Figure 4: HealthPost Ltd's Emissions by Scope Year on Year Comparison

Table 3: HealthPost Ltd Emissions by Scope Year on Year Comparison

Scope	Tonnes of CO ₂ e	% of total	% change from base year
Scope 1	0.17	<1%	-94%
Scope 2	17.92	2%	-12%
Scope 3	867.52	98%	-15%
Total	885.61		

5.3.2 Scope one emissions by gas type

ISO 14064-1 (2018) requires that scope 1 emissions are reported separately by gas type. Table 3 below shows these separated emissions for each scope 1 emissions source. The vast majority of this is carbon dioxide.

Table 2: HealthPost Ltd's 2021 Financial Year Scope 1 Emissions by Gas Type

Emissions source	Activity	Carbon Dioxide Equivalent Emissions	Carbon Dioxide Emissions	Methane Emissions	Nitros Oxide Emissions	HFC Emissions	PFC Emissions	Sulphur Hexafluoride emissions
Company Vehicles	Petrol Litres	0.17	0.16	0.00	0.01	0.00	0.00	0.00
Total		0.17	0.16	0.00	0.01	0.00	0.00	0.00

5.3.3 Emissions breakdown by activity

Below, Figure 5 shows HealthPost Ltd emissions by activity. The majority of emissions came from Upstream Freight at 82%, Fuel & Energy Related Emissions at 11%, End of Life Emissions at 2.2%, Electricity at 2%, Business Travel at 1.8%, Business Waste at 0.7%, Purchased Goods & Services at 0.4% and Company Vehicles at 0.02%.

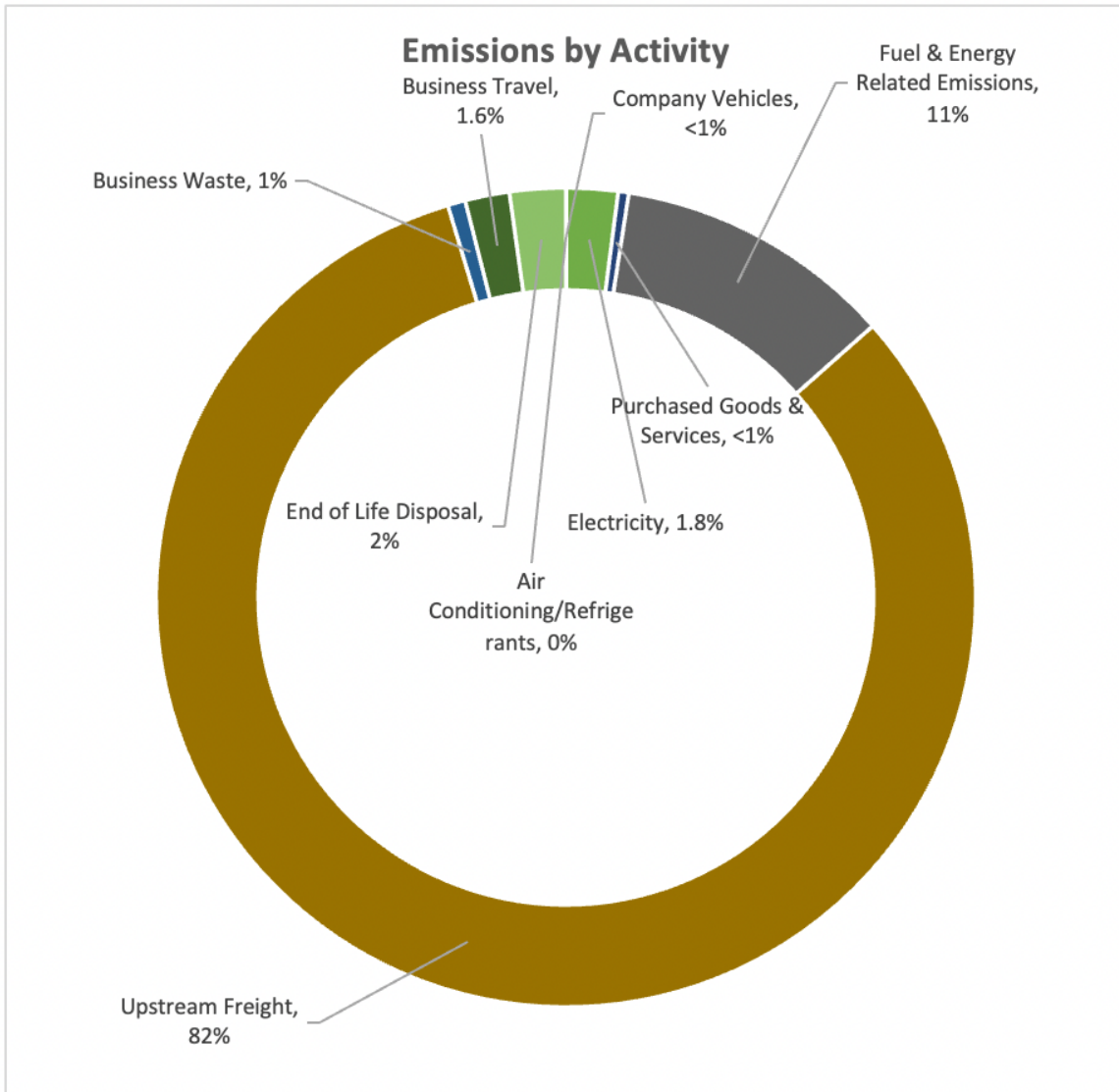


Figure 5: HealthPost Ltd's 2021 Financial Year Emissions By Activity

Below, Figure 6 and Table 4 show the change in emissions between the current measurement and the previous year measurement. When the 2021 Financial Year measurement is compared with the previously completed 2020 Financial Year period there is a reduction of 94% in Company Vehicle emissions, 12% in Electricity emissions, 54% in Business Travel emissions and 26% in Upstream Freight emissions. Increases of 6233% in Fuel & Energy Related emissions and 293% in Business Waste emissions are also evident. Overall, a 15% decrease in emissions is evident with a 16% increase in emissions per Full Time Equivalent (FTE).¹

Please note, the significant increase in Fuel & Energy Related emissions is largely caused by the addition of Well to Tank Emissions in the 2021 Financial Year measurement. The increase in Business Waste emissions is likely due to increased data quality within the 2022 Financial Year measurement.

¹ This emissions comparison compares the 2020 and 2021 Financial Year emissions results inclusive of Radiative forcing. The 2020 Financial Year emissions inventory report reports emissions totals excluding radiative forcing.

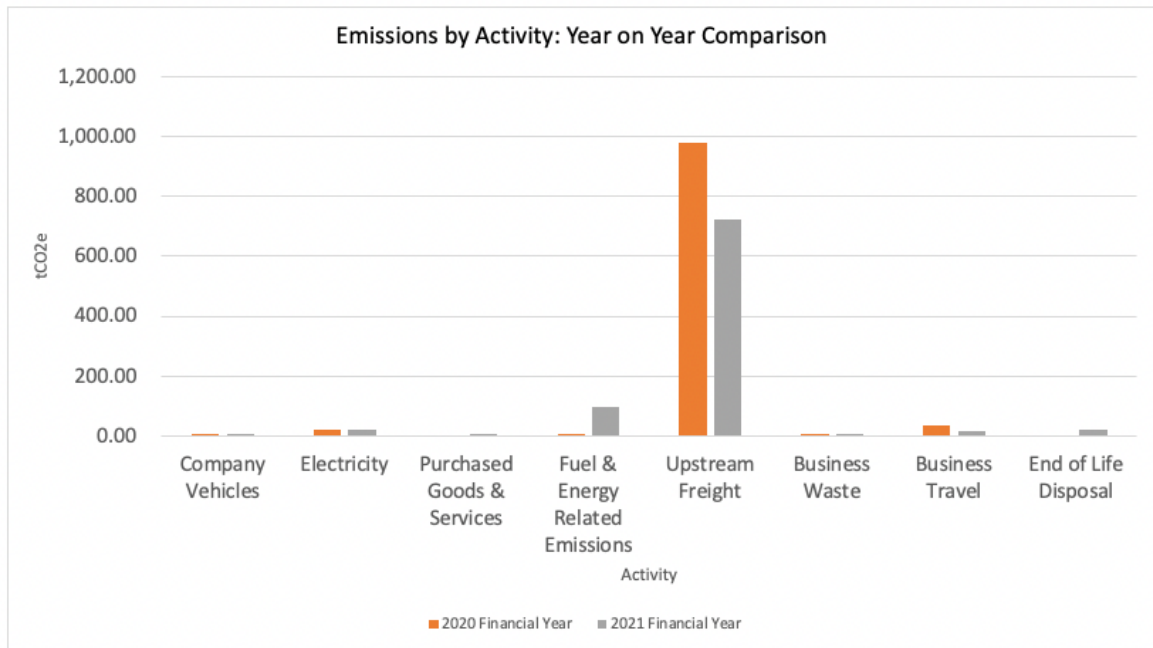


Figure 6: HealthPost Ltd's Emissions By Activity Year on Year Comparison

Table 3: HealthPost Ltd's Emissions By Activity Year on Year Comparison

Scope of emissions	Activity	tCO2e	% of total emissions	% change from previous year
Scope 1	Stationary Fuel	NA	NA	NA
	Company Vehicles	0.17	0.02%	-94%
	Industrial Processes	NA	NA	NA
	Air Conditioning/Refrigerants	0.00	0%	0%
	Agriculture	NA	0%	NA
Scope 2	Electricity	17.92	1.8%	-12%
	Purchased Goods & Services	3.68	0.4%	NA
	Capital Expenditure	NA	NA	NA
Scope 3	Fuel & Energy Related Emissions	113.96	11%	+6233%
	Upstream Freight	725.09	82%	-26%
	Business Waste	6.17	0.6%	+293%
	Business Travel	15.51	1.8%	-54%
	Upstream Leased Assets	0.00	0%	0%

Processing of Sold Goods	NA	NA	NA
Use of Sold Goods	NA	NA	NA
End of Life Treatment of Sold Goods	19.55	2.2%	NA
Downstream Leased Assets	NA	NA	NA
Franchises	NA	NA	NA
Investments	NA	NA	NA
Total	885.61		-15%
FTEs	71		+2%
Emissions Intensity per FTE	12.47		-16%

Below, Table 5 show the changes in freight volume by mode. When the 2021 Financial Year freight volumes are compared with the 2020 Financial Year freight volumes, a 48% reduction in international air freight tonne kilometres (t.kms), 17% reduction in domestic air freight t.kms and a 3% increase in van freight t.kms and 795% in truck freight t.kms is evident. The increase in the van and truck t.km totals is due to improved inward freight data completeness. These reductions in air freight t.kms help explain the significant reduction in Upstream Freight emissions.

Table 4: 2020 and 2021 Financial Year Freight Volume Comparisons

HealthPost Ltd's Freight Summary Comparison, Year on Year:			
	2020 Financial Year	2021 Financial Year	% Change
Total international air freight t.kms	300,974.6015	156,910.49	-48%
Total domestic air freight t.kms	111,295.505	92,910.95	-17%
Total van freight t.kms	73,332.43012	75,765.97	+3%
Total truck freight t.kms	25,074.23417	224,395.01	+795%

5.4 Other Emissions

5.4.1 Fugitive Emissions (refrigerants)

Fugitive emissions were not applicable to this measurement period.

5.4.2 Combustion of Biomass

No combustion of biomass occurred during the measurement period.

5.4.3 Land Use and Land Use Change

No Land Use and Land Use Change occurred during the measurement period.

5.4.4 Pre-verified data

No pre-verified data was used in this emissions inventory.

5.5 Uncertainty and Data Quality

Where accurate data is not available, it is appropriate in some situations to estimate activity data to ensure that a comprehensive carbon measurement and inventory is completed. Estimates must be carried out on a scientifically-derived basis. For HealthPost Ltd's GHG inventory, there are the following areas of uncertainty:

- **Company Vehicles**
 - Accurate fuel consumption by volume or mileage travelled data was unavailable. Ekos was provided with the total \$ spent on fuel during the measurement period. This \$ spend was converted into volume of fuel purchased by dividing the total spend by the average fuel price/litre.
 - Ekos recommends implementing the use of a company fuel card.
- **Upstream Freight**
 - Originally there was 21,826 items of international outgoing freight. Ekos used a pivot table to compile this into ~5000 different cities around the world (to reduce the number of distance calculations required). These were then calculated using Ekos' distance calculator tool (both for air freight and road freight). However, the tool had an issue with ~1500 of the ~5000 items. These remaining 1500 cities were then grouped into another pivot table to provide total weight shipped to countries which reduced it down to ~30 locations. Ekos calculated the air freight to the capital city of each country and added a 50km van delivery distance to be over conservative. The total weight of the 1500 items that were reduced to 30 locations was 2.3 tonnes. This was roughly 10% of the total outgoing international freight (21.17 tonne).
- **Wastewater**
 - Accurate Wastewater production data was unavailable. Due to this unavailability of true and accurate data Watercare's proxy that 95% of Potable Water becomes Wastewater was applied.
 - Ekos recommends the installation of a Wastewater meter to improve the accuracy of this aspect of the measurement.
- **Staff Commuting**
 - As Staff Commuting data was not recording throughout the measurement period significant assumptions would have been needed to include this activity within the 2021 Financial Year measurement. These assumptions would have given rise to significant uncertainty in the resulting emissions calculations. Due to this, Staff Commuting was excluded from the 2021 Financial Year measurement. Efforts will be made by HealthPost Ltd to include this business activity in future measurements.
- **End of Life Emissions**
 - The total weight of the packaging materials consumed by HealthPost Ltd during the measurement period were included in measurement. The appropriate Department for Business Energy & Industrial Strategy (DBEIS) emissions factor was then applied to the different packaging materials. The packaging of products sold was not included in the calculation due to high

number of different products sold and uncertainty regarding the specific packaging used for the different products.

- HealthPost Ltd should be commended for its engagement with the end of life supply chain of its product line. Ekos recommends further engagement in this space to further improve the data set which in turn will broaden the breadth of the End of Life Emissions calculation.

These improvements should start as soon as possible.

5.6 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 occurred within scope 3 Purchased Goods and Services and Upstream Freight in this inventory.

There were no known pre-offset relevant for this inventory.

6 Offsets and Certification

To qualify for Zero Carbon Business Operations certification with Ekos, an organisation must measure its business operations (carbon footprint) and offset 100% of direct and indirect emissions.

HealthPost Ltd has measured all required activity emissions, totalling 885.61 tonnes of CO₂e.

HealthPost Ltd has offset 100% of these emissions, totalling 886 tonnes of CO₂e.

HealthPost Ltd has qualified for Zero Carbon Business Operations Certification for the 2021 Financial Year.

The offsets purchased and retired for this certification are New Zealand Carbon Units (NZUs) produced in the Kern Creek Forest Conservation Project in Maruia, New Zealand. These offsets are retired in the New Zealand Carbon Register.

7 Carbon Emission Reduction Planning Process

As part of the programme rules for Ekos' carbon measurement programme, it is recommended that HealthPost Ltd develop a Carbon Emissions Reduction Plan. This

Carbon Emissions Reduction Plan will be recorded in the emissions reduction tool provided by Ekos.

Since the previous measurement, HealthPost Ltd has taken the following steps to reduce carbon emissions:

HealthPost Ltd has been increasing the use of virtual meeting platforms and reducing business travel. HealthPost Ltd has set-up all departments (excluding Warehouse) with the technology and equipment to effectively work from home or remotely with ease. This has meant the requirement for additional remote working during the pandemic has been seamless.

HealthPost Ltd has been engaging with their main freight service supplier regarding the development of a 'green' freight option. This concept would remove air freight from the supply chain and only use road and sea freight. Unfortunately, progress on this initiative has stalled due to the impacts of Covid-19.

HealthPost Ltd has engaged with Businesses for Climate Action regarding the development of lower emissions freight supply chains and is committed to continue working in this space.

HealthPost Ltd has also been engaging with their main freight supplier regarding the electrification of domestic van freight within their supply chain (specifically from Golden Bay – Nelson). Unfortunately, progress on this initiative has stalled due to the impacts of Covid-19.

HealthPost Ltd has been scoping the upgrade of the air ventilation system in the Golden Bay facility. Further analysis needs to be done to assess if the new system will be more energy efficient, therefore, resulting in scope 2 emissions reductions. Work is continuing in this space.

HealthPost Ltd is continually in discussions with suppliers about eco-packaging and there have been some positive shifts in this area, which ultimately benefit end of life treatment of sold products. Eco-packaging is a key component of the HealthPost Mindful Brand values and they expect these discussions to continue strongly moving forward.

Through improving data quality HealthPost Ltd are actively encouraging their brand partners /suppliers to measure their carbon footprints and influencing positive change in their industry and supply chain. HealthPost Ltd also provide incentives to its suppliers to offset unavoidable emissions and go Zero Carbon or similar by highlighting these brands on its website (Mindful brands and Shop by Values initiatives) and in their marketing content.

Deciding on what further reductions should occur and when offsetting should start can be difficult. Ekos recommended undertaking a four-step process to develop a carbon reduction plan. The four steps are as follows:

1. Rank emissions activities by contribution. For HealthPost Ltd's, the emission sources in order of highest to lowest emissions are shown in Table 5 below.

Table 5: HealthPost Ltd's Emissions Sources from Highest to Lowest Emissions

<i>Activity</i>	<i>tCO2e</i>	<i>Change in position from previous year (%)</i>
<i>Upstream Freight</i>	725.09	+34%
<i>Fuel & Energy Related Emissions</i>	97.53	+6233%
<i>End of Life Emissions</i>	19.55	NA
<i>Electricity</i>	17.92	-12%

<i>Business Travel</i>	15.51	-20%
<i>Business Waste</i>	6.17	+293%
<i>Purchased Goods & Services</i>	3.68	NA
<i>Company Vehicles</i>	0.17	-94%

2. Identify actions that can be taken to reduce emissions. Ekos has made the following recommendations for actions to reduce emissions in the top three emissions sources:

- **Upstream Freight**

To reduce Scope 3 Upstream Freight emissions Ekos recommends the following;

- HealthPost Ltd engage with its Outward Freight provider regarding the providers response to climate change and their emissions reduction efforts. Whilst HealthPost Ltd has very little direct control over the reduction of this scope 3 emission it still has an important role in influencing behaviour change within their supply chain.
- HealthPost Ltd should review the efficiency of the packaging materials and methods used by HealthPost Ltd with a focus on reducing the weight of each shipment as much as possible.
- HealthPost Ltd could research appropriate Outward Freight providers with a strong fleet transition plan.
- HealthPost Ltd could develop an 'economy' freight option, where customers could select a slower more carbon efficient delivery option that includes minimal to no air freight.

- **Fuel & Energy Related Emissions**

- This category relates to the well to tank emissions associated with the production of electricity and the consumption of fossil fuels. Reducing the following business activity emissions will also result in a reduction in Fuel & Energy Related Emissions;
 - Upstream Freight
 - Business Travel
 - Electricity
 - Company Vehicles

- **End of Life Emissions**

- It should be noted this is a difficult area for HealthPost Ltd to achieve emissions reductions due to its lack of direct control exercised over this activity. Whilst



this is the case, Ekos encourages HealthPost Ltd to continue engaging with the suppliers from whom they purchase goods on the importance of using sustainable packaging options. Ekos encourages HealthPost Ltd to consider the carbon intensity of packing types within its supply chain as well as low waste/recyclable packaging.



- **Electricity**

- Ekos encourages HealthPost Ltd to focus on staff behaviour change surrounding electricity consumption. Education should be focussed on the turning off of lights when a room is not in use and the shutting down of devices at the end of the day (saving ~10% of energy use). Whilst such behaviour change will result in small reductions overall, every aspect of reduction counts when setting lofty reduction goals. These reduction efforts also come at a low cost and help to build a low-carbon work-place culture.
- Ekos also recommends adding energy efficiency considerations within infrastructure procurement policies to ensure energy efficient models are prioritised. This can apply to the procurement of new goods or for the replacement of current models when they reach end of life.
- Ekos also recommends exploring the opportunity to expand the current onsite solar system to reduce the need to purchase from the grid.

The aim of this process is to identify the “low hanging fruit” or lowest cost actions, such as changing policies or processes and undertaking these first. Actions slightly higher up “the tree” will require some expense, such as replacing lightbulbs for more efficient LEDs. So, these should be carried out once the low-cost actions are exhausted. The next actions are those that cost slightly more but are still relatively low cost so can be carried out once categories 1 and 2 have been completed. Finally come the very expensive actions, such as building energy efficient buildings. For these actions, it may be more effective and affordable for the HealthPost Ltd to purchase restorative forest carbon credits than to undertake these projects. This process is shown in Table 6.

Table 6: The “Abatement Tree” Ranking Categories

Abatement ranking	Action	Examples from the recommended actions
1. Cost negative and easy wins.	 Highest priority actions. Do these first.	The establishment of an ‘only fly when essential’ policy. Improving energy consumption behaviour within the organisation.
2. Cost positive but still easy wins.	 Second highest priority. Do these second.	Giving material consideration to energy efficiency within procurement considerations. Conduct an energy audit to highlight efficiency improvements.

<p>3. Cost positive harder wins but below the carbon price.</p>	<p> Third highest priority. Do these after 1 & 2 above.</p>	<p>Replacing hybrid vehicles with electric models. Creation and implementation of an 'economy' freight option.</p>
<p>4. Cost positive and above the carbon price.</p>	<p> For these, action is cost prohibitive, or the technology not available. Offsetting is a cheaper and immediate solution, allowing you to do something now, and to internalise the cost of carbon in your business.</p>	<p>Installation of solar PV panels. This has been identified by HealthPost Ltd as a priority as they have direct control over this emissions source.</p>

3. Implement the reduction plan and repeat. Now the plan is implemented and a budget set to pay for the actions. If not done last year, consider committing dedicated staff time to the project and establish an implementation group to monitor progress. Finally, the process starts again by measuring next year and adding a new actions to the plan as implementation continues.

8 Glossary

De minimis

Certain activities contribute less than 1 percent of the total of CO₂e emissions. These may be excluded from the GHG inventory, provided that the total of excluded emissions does not exceed a materiality threshold of 5 percent. That is, the total of all excluded emission sources should not exceed 5 percent of the total inventory.

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)
- Sulphur hexafluoride (SF₆)

GHG Scopes:

- Scope 1: Direct emissions from sources owned or controlled by reporting entity. For example diesel generator, coal heating, own vehicle fleet, agriculture
- Scope 2: Indirect emissions generated by purchased energy. For example, electricity, gas.
- Scope 3: Indirect emissions that are a consequence of activities undertaken by the reporting organisation or related individual, but not directly controlled by the organisation. For example, flights, freight, non-company vehicles, waste, electricity line distribution and transmission losses.

Appendix 1: Emission Factors

Ekos uses emission factors provided by the New Zealand Ministry for the Environment (MfE) publication *Measuring Emissions: A Guide for Organisations 2019*. Ekos emission factors for air travel include Radiative Forcing, which helps organisations account for the wider climate effects of aviation, including water vapour and indirect GHGs. This is an area of active research, which seeks to express the relationship between emissions and climate warming effects of aviation.

Ekos uses a multiplier of 1.9 to account for radiative forcing effects in line with the Ministry for the Environment publication *Measuring Emissions: A Guide for Organisations 2019*.

Where emission sources are not covered by the MfE publication, Ekos identifies suitable factors for use have been sourced from the Department for Environment and Rural Affairs (DEFRA), UK Government document *Factors for Greenhouse Gas Reporting 2018*, the Motu institute and Aslan, J. Mayers, K. Koomey, J. France, C. 2017. *Electricity Intensity of Internet Data Transmissions, Untangling the Estimates*. *Journal of Industrial Ecology*, Volume 22, number 4.