

The UNFCCC Carbon Footprint Calculator



This tutorial and spreadsheet will enable you to calculate and document the emissions and carbon footprint of an organization using recognized GHG accounting standards.



Version Control

Version Control and document history: [Ver. 1 Date: 1st Feb 2022]

2022 – Summary of modifications made: [Version 1 completed. Version No: v.1.]

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Calculating Emissions

In order to effectively calculate emissions we should have knowledge of:

- the GHG accounting standard or protocol with information on the sector, sources, and processes that it covers;
- the approaches needed for determining CO₂e e.g., direct measurement, vehicle mileage, etc.;
- collecting activity data and selecting their appropriate emission factors;
- the likely emissions sources and the scopes they fall under;
- other information such as quality control practices.



Calculations are based on the data available for different business activities. Most actions and decisions a company makes can cause carbon. A more comprehensive and exact data collection will provide a more accurate calculation.

Using the Carbon Calculator Spreadsheet

There are different calculation tools available and you can choose one that best suits your organization. The UNFCCC calculator is based on the GHG emission estimates from the **United Nations Framework Convention on Climate Change**. It is designed to be a simplified calculation tool to help organizations estimate and inventory their annual greenhouse gas (GHG) emissions. The calculator will determine the direct and indirect emissions from all sources at a company when activity data are entered into the various sections of the workbook for one annual period.



Download the UNFCC calculator by clicking here.

https://www.climatechange.org.au/pdf/UNFCC_GHG.xlsx

Once you have downloaded the spreadsheet, you can then open it. The calculator is an Excel workbook separated into the following sections:

These are the UNFCC GHG Conversion Factors for Company Reporting approved by the UK and other governments. These emission factors are suitable for use by organizations of all sizes. The scope of the factors is defined such that it is relevant to emissions reporting.

Each worksheet presents the emission factors for a single type of emissions-releasing activity (for example, using electricity or driving a passenger vehicle).

These activities are categorized into three scopes. Each activity is listed as either: Scope 1, Scope 2 or Scope 3.

- Scope 1 (direct emissions) emissions are those from activities owned or controlled by your organization. Examples of Scope 1 emissions include emissions from combustion in owned or controlled boilers, furnaces and vehicles; and emissions from chemical production in owned or controlled process equipment.
- Scope 2 (energy indirect) emissions are those released into the atmosphere that are associated with your consumption of purchased electricity, heat, steam and cooling. These indirect emissions are a consequence of your organisation's energy use, but occur at sources you do not own or control.
- Scope 3 (other indirect) emissions are a consequence of your actions that occur at sources you do not own or control and are not classed as Scope 2 emissions. Examples of Scope 3 emissions are business travel by means not owned or controlled by your organisation, waste disposal, materials or fuels your organisation purchases. Deciding if emissions from a vehicle, office or factory that you use are Scope 1 or Scope 3 may depend on how you define your operational boundaries. Scope 3 emissions can be from activities that are upstream or downstream of your organisation. More information on Scope 3 and other aspects of reporting can be found in the Greenhouse Gas Protocol Corporate Standard.

The worksheets provide the following information:

- Guidance on calculating emissions from this activity
- An example of how to calculate emissions from this activity
- The emission factors for this activity
- Frequently asked questions
- How do I calculate my GHG emissions for a particular activity?

Navigate to the sheet relating to the activity that you wish to calculate emissions for. Read the guidance and then collect or estimate activity data for your organisation (for example, the amount of electricity used or distance travelled).

To get the amount of CO₂e emissions, we multiply the activity data (such as vehicle usage) by the relevant (emission) conversion factor. This gives an estimate of the GHG emissions for that activity. GHG emissions = activity data x emission conversion factor.

There are seven main GHGs that contribute to climate change, as covered by the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). Different activities emit different gases and you should report on the Kyoto Protocol GHG gases produced by your particular activities.

All conversion factors presented here are in units of 'kilograms of carbon dioxide equivalent of Y per X' (kg CO₂e of Y per X), where Y is the gas emitted and X is the unit activity. CO₂e is the universal unit of measurement to indicate the global warming potential (GWP) of GHGs, expressed in terms of the GWP of one unit of carbon dioxide.

The GWPs used in the calculation of CO₂e are based on the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) over a 100-year period (this is a requirement for inventory/national reporting purposes).

As a minimum, for each activity there is a factor that can be used to calculate emissions of all relevant GHGs combined (kg CO₂e per unit activity). Additionally, for many activities, this factor is then split into separate factors for each gas (that is, kg CO₂e of CO₂/CH₄/N₂O per unit activity) which sum to the total

Load the spreadsheet.

Category	Emission source category	t CO2e	
Public Corporate Scope 1 and 2, Value Chain - Scope 3	Scope 1 Direct emissions arising from owned or controlled stationary sources that use fossil fuels and/or emit fugitive emissions	Fuels	-
		Refrigerants	-
	Direct emissions from owned or controlled mobile sources	Passenger vehicles	-
		Delivery vehicles	-
	Scope 2 Location-based emissions from the generation of purchased electricity, heat, steam or cooling	Electricity	-
		Heat and steam	-
		Electricity for Evs	-
		District cooling	-
	Scope 3 Fuel- and energy-related activities	All other fuel- and energy related activities	-
		Transmission and distribution losses	-
Waste generated in operations		Waste water	-
		Waste	-
Purchased goods	Water supplied	-	
	Material use	-	

- Click on Totals tab. This is where you see the results.

Data collected by the organization for each emission source can be entered into each worksheet.

Your organisation

Please enter the data of your organisation in the white fields.

Name of the organisation	
Country of the organisation	
City of the organisation	
Period of the report	
Number of employees	

Public Corporate Scope 1 and 2, Value Chain - Scope 3

- Click on the Your Organization tab and fill in your details

This includes your organization's name and location.

Scope 1 Direct Emissions

These occur from sources that are owned or controlled by the organization. Examples include boilers used to heat buildings, refrigerant leakage from air conditioners, or travel in a fleet vehicle. Scope 1 sources may also include leased vehicles or equipment for which the organization pays the fuel bills or can access the fuel use data.

Fuel and Refrigerants

Most businesses will not use these two tabs.

If you are running electric air-conditioning, then the emissions are accounted for through your electricity account. These combustion emission sources are called stationary sources. They combust fuel, such as a natural gas hot water heater for an office building or an oil burning boiler. Emissions result from the actual combustion of the fuels to produce useful products, like heat and hot water. Emissions from refrigeration and AC devices in facilities or vehicles are caused by the leakage of chemicals with global warming impact during use, maintenance, and/or disposal of the device. For example, a small office building may have one rooftop air conditioning unit while a grocery store chain may have several rooftop air conditioning units per store as well as a multitude of other refrigeration equipment.

If you use gas to heat your premises you should be able to get the amount of gas in MMBtu units from your bill, otherwise you can use other unit. To account for these sources, collect information about the type of fuel used and the quantity of fuel combusted at each facility. Sources of data can vary, but the data are often provided by the utility company that supplies the fuel to the organization. A monthly natural gas bill, for example, can be used to provide information regarding how much natural gas was purchased for the previous billing cycle.

Refrigerant and others
From leakage from air-conditioning and refrigeration units or the release to the atmosphere of other gases that have global warming potential.

Please enter the amount for each applicable refrigerant

Emission	Unit	Factor	Amount (kg)	kg CO2e
Carbon dioxide	kg	1		-
Methane	kg	25		-
Nitrous oxide	kg	298		-
HFC-23	kg	14,800		-
HFC-32	kg	675		-
HFC-41	kg	92		-
HFC-125	kg	3,500		-
HFC-134	kg	1,100		-
HFC-134a	kg	1,430		-
HFC-143	kg	353		-
HFC-143a	kg	4,470		-
HFC-152a	kg	124		-
HFC-227ea	kg	3,200		-
HFC-236fa	kg	9,800		-
HFC-245fa	kg	1,430		-
HFC-43-8mixe	kg	1,640		-

Total | Your organization | Electricity, Heat & Cooling | Fuels | Refrigerants | Owned vehicles | Flight and Accommodation | Business Travel

Owned Vehicles

Mobile sources, like organization-owned cars and heavy-duty vehicles, generate emissions by burning fuel. The fuel usage for any vehicle that is included within the organization's selected boundary approach should be reported in this section as direct emissions.

Vehicle 1	Vehicle 2	Vehicle 3	Fuel	Year	Vehicle Year	Vehicle Use	Mileage (km)	Mg CO2e
Passenger vehicle	Small car	Small car	Plug-in Hybrid Electric Vehicle	2015	0.100	-	-	-
Passenger vehicle	Small car	Small car	Battery Electric Vehicle	2015	-	-	-	-
Passenger vehicle	Small car	Medium car	Plug-in Hybrid Electric Vehicle	2015	0.100	-	-	-
Passenger vehicle	Small car	Medium car	Battery Electric Vehicle	2015	-	-	-	-
Passenger vehicle	Small car	Large car	Plug-in Hybrid Electric Vehicle	2015	0.075	-	-	-
Passenger vehicle	Small car	Large car	Battery Electric Vehicle	2015	-	-	-	-
Passenger vehicle	Small car	Large car	Plug-in Hybrid Electric Vehicle	2015	0.075	-	-	-
Passenger vehicle	Small car	Large car	Battery Electric Vehicle	2015	-	-	-	-
Passenger vehicle	Small car	Small car	Other	2015	0.100	-	-	-
Passenger vehicle	Small car	Small car	Hybrid	2015	0.100	-	-	-
Passenger vehicle	Small car	Small car	Light-duty	2015	0.100	-	-	-
Passenger vehicle	Small car	Medium car	Other	2015	0.100	-	-	-
Passenger vehicle	Small car	Medium car	Hybrid	2015	0.100	-	-	-
Passenger vehicle	Small car	Medium car	Light-duty	2015	0.100	-	-	-
Passenger vehicle	Small car	Medium car	Other	2015	0.100	-	-	-
Passenger vehicle	Small car	Medium car	Hybrid	2015	0.100	-	-	-
Passenger vehicle	Small car	Medium car	Light-duty	2015	0.100	-	-	-
Passenger vehicle	Small car	Large car	Other	2015	0.075	-	-	-
Passenger vehicle	Small car	Large car	Hybrid	2015	0.075	-	-	-
Passenger vehicle	Small car	Large car	Light-duty	2015	0.075	-	-	-
Passenger vehicle	Small car	Large car	Other	2015	0.075	-	-	-

❖ Click on the Owned Vehicles tab.

Determine the types of vehicles, types and amount of fuel, and the distance driven for each vehicle or vehicle type. Data sources vary, but fuel usage is often determined from fuel receipts or purchase records, and mileage can be determined from vehicle records.

Enter the data into the appropriate cell. The distance must be in kilometers. To convert from miles to kilometers, simply multiply the number of miles by 1.609. The CO₂e emissions are calculated and summarized in the Totals tab.

Scope 2 Emissions

The Calculator section on scope 2 emissions has two types:

- purchases of electricity; and
- purchases of steam.

A location-based method considers average emission factors for the electricity grids that provide electricity. The market based method is more accurate as it considers contractual arrangements under which the organization procures power from specific sources, such as renewable energy.

Market-based emission factors can be entered based on the organization's contractual arrangements and on the availability of factors. The energy supplier will provide you with the exact amount of CO₂e emitted from electricity and steam that you have purchased.

Purchases of Electricity, Heat and Cooling

GHGs are emitted when fossil fuels are combusted to generate electricity. Companies account for their responsibility for these emissions by reporting them as scope 2 emissions.

Electricity and Heat and Cooling. Market based emissions from the generation of purchased electricity.
Heat and Steam Emissions within organizations that purchase heat or steam.
District Cooling Air Conditioning from centralized energy plant.
These emissions may be a mix of renewable and fossil fuels electricity generation. The custom emission factor and CO ₂ e should be indicated by the supplier on the utility bill. Type these directly into the Totals tab

- **Click on the Electricity, Heat and Cooling tab.**

Electricity tariffs now often have a mixture renewable and fossil fuel generation. Many electricity bills will show the amount of CO₂e that you have consumed, in which case you can type in the amount in the Total tab. So if you apply a fossil fuel emission factor the entire KWh amount that you purchased your emission calculations will be too high. You must get the accurate data from your electricity supplier.

Collect electricity purchase information in units of kWh. It may be for each facility in the company. organization's best data source is typically its electricity bill or invoice. Data on any contractual arrangements, such as utility green power products, should also be collected. This should include the units (e.g., kWh), as well as the relevant emission factors. These purchases should be separately accounted for using the appropriate market-based emissions factor. See help sheet in the Calculator for how to enter these data.

Similar to electricity production, GHGs are emitted when fossil fuels are combusted to generate steam or heat. If the reporting organization purchases steam or heat, the emissions are accounted for as scope 2 emissions. Determine the amount of steam purchased, the types of fuel that the steam supplier uses to generate the steam, and either the emission factors provided by the steam supplier or the boiler efficiency.

Scope 3 Indirect Sources

Scope 3 indirect emissions are a consequence of the activities of an organization but are not owned or controlled by the organization sources, such as employee commuting and transporting products to market using contract carriers.

Some companies don't report scope 3 emission sources but estimating these emissions provides a more complete picture of the organization's climate change impact and offers the organization more opportunities to reduce emissions.

Scope 3 emissions most commonly reported are:

- employee business travel;
- employee commuting;
- waste; and
- product transport.

Employee Business Travel

Employee business travel emissions differ from the required mobile source emission reporting in that they account for employee business travel in vehicles not owned or leased by the organization, such as taxis, trains, commercial airplanes, and personal vehicles used for sales.

Business travel: land and sea. Enter the total distance. For passenger bus costs, use 1/2 of passenger * bus

Vehicle	Type	Fuel	Unit	Factor	Total distance	kg CO2e
Cars (by cost)	Small car	Hybrid Electric vehicle	liters	0.08		
Cars (by cost)	Medium car	Hybrid Electric vehicle	liters	0.08		
Cars (by cost)	Large car	Hybrid Electric vehicle	liters	0.08		
Cars (by cost)	Passenger car	Hybrid Electric vehicle	liters	0.08		
Cars (by cost)	Small car	Diesel	liters	0.08		
Cars (by cost)	Medium car	Diesel	liters	0.08		
Cars (by cost)	Large car	Diesel	liters	0.08		
Cars (by cost)	Passenger car	Diesel	liters	0.08		
Cars (by cost)	Small car	Gasoline	liters	0.08		
Cars (by cost)	Medium car	Gasoline	liters	0.08		
Cars (by cost)	Large car	Gasoline	liters	0.08		
Cars (by cost)	Passenger car	Gasoline	liters	0.08		
Cars (by cost)	Small car	Electric	kWh	0.00		
Cars (by cost)	Medium car	Electric	kWh	0.00		
Cars (by cost)	Large car	Electric	kWh	0.00		
Cars (by cost)	Passenger car	Electric	kWh	0.00		
Cars (by cost)	Small car	Hybrid	liters	0.02		
Cars (by cost)	Medium car	Hybrid	liters	0.02		
Cars (by cost)	Large car	Hybrid	liters	0.02		
Cars (by cost)	Passenger car	Hybrid	liters	0.02		
Cars (by cost)	Small car	Gas	liters	0.02		
Cars (by cost)	Medium car	Gas	liters	0.02		
Cars (by cost)	Large car	Gas	liters	0.02		
Cars (by cost)	Passenger car	Gas	liters	0.02		
Cars (by cost)	Small car	Other	liters	0.02		

❖ Click on the Business Travel tab

Input the information about the employees’ business travel methods. For travelers that use a personal vehicle, choose the vehicle type from the Calculator, and collect data for the vehicle miles during the reporting period. For rail, bus, and air travel, the mode of travel should be selected from the Calculator options and an estimate of the passenger mileage data provided for each.

Enter the data into the appropriate orange colored boxes (Tables 1-3) of the Calculator section titled Business Travel. Once the data are entered into the Calculator, the CO2e emissions are calculated and summarized in the green colored box.

Flight and Accommodation

Flights					Hotel				
Individuals flying for work purposes					Emissions associated with overnight hotel stays for work purposes				
Please use the RAD Calculator and add the information below. In case you have many flights, send an email to climatecentral@nasa.gov for help in support					Please choose the country and number of nights per occupied room				
Origin (city or state)	Destination (city or state)	Class	Length (hrs / miles)	kg CO2e	Country	Number of occupied rooms	Number of nights per room	Factor	kg CO2e
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

❖ Click on the Flight and Accommodation tab

Here you fill out your flight details and then click on the link that takes you to the ICAO website. Here you will get accurate emissions for the flights. The hotel section allows you to account for emissions in occupied rooms.

Employee Commuting

Employee commuting emissions differ from the required mobile source emission reporting in that they account for employee travel to and from work in vehicles not owned or leased by the organization, including personal vehicles, buses, and trains.

Please enter the total distance (for passenger bus units, use # of passengers * km)

Vehicle	Type	Fuel	Units	Factor	Total distance	kg CO2e
Car (15 seats)	Small car	Behind Electric Vehicle	km	0.08		
Car (15 seats)	Medium car	Behind Electric Vehicle	km	0.05		
Car (15 seats)	Large car	Behind Electric Vehicle	km	0.08		
Car (15 seats)	Small car	Behind Electric Vehicle	km	0.08		
Car (15 seats)	Small car	Gas	km			
Car (15 seats)	Medium car	Gas	km	0.08		
Car (15 seats)	Large car	Gas	km	0.08		
Car (15 seats)	Small car	Gas	km	0.08		
Car (15 seats)	Small car	Diesel	km	0.08		
Car (15 seats)	Large car	Diesel	km	0.08		
Car (15 seats)	Small car	Diesel	km	0.08		
Car (15 seats)	Medium car	Diesel	km	0.08		
Car (15 seats)	Large car	Diesel	km	0.08		
Car (15 seats)	Small car	Hybrid	km	0.08		
Car (15 seats)	Medium car	Hybrid	km	0.08		
Car (15 seats)	Large car	Hybrid	km	0.08		
Car (15 seats)	Small car	Gas	km			
Car (15 seats)	Medium car	Gas	km	0.08		
Car (15 seats)	Large car	Gas	km	0.08		

Home | Home operations | Fuel | Airports | Owned vehicles | Business travel | Flight and Accommodation | **Employee commuting** | Total

❖ [Click on the Employees Commuting tab](#)

Collect information about each employee’s commuting method. For commuters that use a personal vehicle, the appropriate vehicle type should be selected from the Calculator and data collected for the vehicle miles during the reporting period. For rail, bus, and air travel, the mode of transport should be selected from the Calculator options and an estimate of the passenger mileage data provided for each.

Water

The accounts for the emissions from supply of water and return through the sewerage network.

Water supply
Water delivered through the mains supply network.

Please enter the amount

Type	Unit	Factors	Amount	kg CO2e
Water Supply	cubic metres	0.14900		-

Water treatment
Water returned into the sewage system through mains drains

Please enter the amount

Type	Unit	Factors	Amount	kg CO2e
Water Treatment	cubic metres	0.27200		-

Home | Totals | Your organisation | Fuel | Refrigerants | Owned vehicles | Business travel | Flight and Accommodation

❖ Click on the Water tab

Freighting Goods

Emissions from product transport include product and material shipments by vehicles not owned or leased by the organization. For example, the organization could hire another company to transport product from the manufacturing location to distribution centers or final markets. (Note: if an organization owns or leases the trucks or other transport vehicles, these would be part of its scope 1 mobile source emissions.) Another example of product transport is paying a courier to transport documents from one office to another.

Freighting goods
Shipment of goods over land, by sea or by air through a third-party company.

Vehicle	Type	Fuel	Unit	Factors	Distance (km)	kg CO2e
Van	Class 1 (up to 3,500 tonnes)	Diesel	tonne.km	0.81		-
Van	Class 1 (up to 3,500 tonnes)	Petrol	tonne.km	1.07		-
Van	Class 1 (up to 3,500 tonnes)	Gas	tonne.km	-		-
Van	Class 1 (up to 3,500 tonnes)	LPG	tonne.km	-		-
Van	Class 1 (up to 3,500 tonnes)	Unknown	tonne.km	-		-
Van	Class 1 (up to 3,500 tonnes)	Plug-in Hybrid Electric Vehicle	tonne.km	-		-
Van	Class 1 (up to 3,500 tonnes)	Battery Electric Vehicle	tonne.km	0.19		-
Van	Class 0 (0.200 to 3.5 tonnes)	Diesel	tonne.km	0.68		-
Van	Class 0 (0.200 to 3.5 tonnes)	Petrol	tonne.km	0.72		-
Van	Class 0 (0.200 to 3.5 tonnes)	Gas	tonne.km	-		-
Van	Class 0 (0.200 to 3.5 tonnes)	LPG	tonne.km	-		-
Van	Class 0 (0.200 to 3.5 tonnes)	Unknown	tonne.km	-		-
Van	Class 0 (0.200 to 3.5 tonnes)	Plug-in Hybrid Electric Vehicle	tonne.km	-		-
Van	Class 0 (0.200 to 3.5 tonnes)	Battery Electric Vehicle	tonne.km	0.25		-
Van	Class 0 (0.200 to 3.5 tonnes)	Diesel	tonne.km	0.59		-
Van	Class 0 (0.200 to 3.5 tonnes)	Petrol	tonne.km	0.78		-
Van	Class 0 (0.200 to 3.5 tonnes)	Gas	tonne.km	-		-
Van	Class 0 (0.200 to 3.5 tonnes)	LPG	tonne.km	-		-
Van	Class 0 (0.200 to 3.5 tonnes)	Unknown	tonne.km	-		-

Home | Your organisation | Fuel | Refrigerants | Owned vehicles | Business travel | Flight and Accommodation | Employees commuting | Food | Home Office | Home

❖ Click on the Freighting Goods tab

Collect information about shipment methods (eg. vans, HGV, rail). For road shipments, the user may enter data based on vehicle mileage or ton-miles of product transported. Select the type of vehicle and enter the total distance for that vehicle type.

The distance must be in kilometers. To convert from miles to kilometers, simply multiply the number of miles by 1.609. Once the data are entered into the Calculator, the CO2e emissions are calculated and summarized in the Totals tab.

Waste Disposal

Scope 3 emissions from waste include the disposal and treatment of waste generated. These emission factors align with the requirements of the GHG Protocol Scope 3 Standard.

Waste type	Unit	Factor	Amount	kg CO2e
Paper	tonnes	1.14		
Plastic	tonnes	1.14		
Metal	tonnes	1.14		
Glass	tonnes	1.14		
Textiles	tonnes	1.14		
Food waste	tonnes	1.14		
Hazardous waste	tonnes	1.14		
Other	tonnes	1.14		
Landfill	tonnes	1.14		

❖ [Click on the Waste Disposal tab](#)

The emission factors do not include any avoided emissions impact from any of the disposal methods. All the factors presented include transportation emissions, which are optional in the Scope 3 Calculation Guidance, with an assumed average distance traveled to the processing facility. AR4 GWPs are used to convert all waste emission factors into CO2e.

Collect information on the amount of weight disposed at your facilities, by the type of waste (plastics, paper, etc.) and disposal method (recycling, incineration, etc.). After the data have been collected, enter the data into the appropriate cell. Once the data is entered into the Calculator, the CO2e emissions are calculated and summarized in the Totals tab.

Material Use

This accounts for emissions from extracting, primary processing, manufacturing and transporting materials to your site.

Material use
All materials consumed in the reporting period.
The emissions cover the extraction, primary processing, manufacturing and transporting materials to the point of sale.
Please enter the amounts in tonnes for each of the material applicable to your organisation

Activity	Waste type	Unit	Factors	Amount (tonnes)	kg CO2e
Construction	Aggregates	tonnes	7.78		-
Construction	Average construction	tonnes	79.87		-
Construction	Asbestos	tonnes	27.00		-
Construction	Refract	tonnes	59.32		-
Construction	Bricks	tonnes	243.78		-
Construction	Concrete	tonnes	131.76		-
Construction	Insulation	tonnes	1,893.76		-
Construction	Metals	tonnes	0.975,842		-
Construction	Mineral oil	tonnes	4,402.00		-
Construction	Plasterboard	tonnes	1,00.08		-
Construction	Tones	tonnes	8,886.57		-
Construction	Wood	tonnes	332.85		-
Other	Other	tonnes	1,483.77		-
Other	Clothing	tonnes	23,230.00		-
Other	Food and drink	tonnes	3,761.40		-

❖ Click on the Material Use tab

Purchased Offsets

Offsets are project-based direct emission reductions and/or removals that occur outside the organizational boundary of the reporting organization.

Purchased Offsets
Enter quantity of offsets purchased for each offset project in terms of CO₂e equivalent for the inventory reporting

Table 1: Total Amount of Purchased Offsets		
ID	Project Description	Offsets Purchased (Metric Tons CO ₂ e)
Total CO ₂ e Equivalent Emission Reductions (metric tons) - Offsets		0.0

Offsets must be quantified using an approved methodology. Offsets can be purchased from the Climate Change Institute at the right market price to offset emissions from scope 1, scope 2, and scope 3 emission sources. *Renewable energy certificates are not project offsets and do not convey a direct emissions reduction to their owner.* RECs are measured in MWh units, whereas project offsets are measured in tons of direct emission reductions. You purchase a quantity of offsets purchased in metric tons CO₂e for each offset project.

The rest of the tabs on the spreadsheet contain reference data and disclaimer.

Totals

Once you have finished collecting and entering the data you should check your figures, particularly to ensure that the units of measurement that you chose are correct for the applied emission factor.

GHG emissions report			
Organisator	0	Period:	0
Category	Emission source category		t CO2e
Scope 1	Direct emissions arising from owned or controlled stationary sources that use fossil fuels and/or emit fugitive emissions	Fuels	-
		Refrigerants	-
		Passenger vehicles	-
Scope 2	Direct emissions from owned or controlled mobile sources	Delivery vehicles	-
		Electricity	-
Scope 3	Location-based emissions from the generation of purchased electricity, heat, steam or cooling	Heat and steam	-
		Electricity for Evs	-
		District cooling	-
	Fuel- and energy-related activities	All other fuel- and energy related	-
		Transmission and distribution losses	-
	Waste generated in operations	Waste water	-
		Waste	-
	Purchased goods	Water supplied	-
		Material use	-
	Business travel	All transportation by air	-
	Emissions arising from hotel	-	
	All transportation by sea	-	
	All transportation by land, public	-	
Upstream transportation and distribution	Freighting goods	-	
Employee commuting		-	
Food		-	
Home office		-	
Total Emissions			-
Totals			Your organisation Fuels Refrigerants

❖ Click on the Totals tab to see your results

Keep copies of your files including the excel spreadsheet file, a copy of the corporate protocol and any emails or notes of meetings relating to your GHG survey and accounting methods.

GHG Emission Statement

You can fill out the rest of the details for your organization's GHG statement.

GHG Statement			
0	0		
Have any facilities, operations and/or emission sources been excluded from this inventory? If yes, please specify:			
ORGANIZATIONAL BOUNDARIES			
Which consolidation approach was chosen:			
Equity Share			
Financial Control			
Operational Control			
METHODOLOGIES AND EMISSION FACTORS			
Methodologies used to calculate or measure emissions:	UNFCCC Emission Factors		
ORGANIZATIONAL BOUNDARIES			
List of all legal entities or facilities over which reporting company has equity share, financial	% equity share (p. 30)	Does grouping	Does grouping
If the reporting company's parent company does			
Totals			Your organisation GHG Statement Fuels Refrigerants Owned vehicles Bus

❖ Click on the GHG Statement tab

This will display total emission data for each scope. Fill out relevant details about your company such as whether using financial or operation control.

By estimating your organization's carbon footprint you have taken most important step towards carbon neutrality. This gives you the data required to effectively conduct an ongoing an emission reduction program. It also allows you to know how many tonnes of carbon offsets are required for your organization to become climate neutral and gain registration through the Climate Change Institute.

