

# **User guide**

# Humanitarian Carbon Calculator (HCC)

**Aggregation tool** 

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Tools : Humanitarian Carbon Calculator Aggregation tool

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# Purpose of the document

This guide is here to help humanitarian organizations to do their carbon footprint using:

- The Humanitarian Carbon Calculator (HCC)
- **The Aggregation tool** (to aggregate the results of several HCC tools to get a broader view when the organization have more than 30 entities / delegations / country offices / regional offices)

The Humanitarian Carbon Calculator allows organizations to:

- Collect relevant data for one reporting year (limited to 30 entities / delegations / country offices / regional offices)
- Assess the corresponding GHG emissions
- o Generate graphs and calculate Key Performance Indicators to analyze results

The Aggregation tool allows organizations to:

- Aggregate results of several HCC tools to get a broader view
- When should the aggregation tool be used? When the global footprint of the organization is gathering more than 30 entities / delegations / country offices / regional offices)
- How? by copying and pasting the results of each HCC tool in the Aggregation tool (see <u>Aggregation tool chapter</u> to understand the methodology)

This document synthetizes the structure and the functioning of both Excel tools. It is intended to assist the tools' users and should be read before using the two Excel files.

The tool was developed under Microsoft Excel 2016. It is recommended to use this version or any later version of Microsoft Excel.

# Context of the tool development

The development of the Humanitarian Carbon Calculator tool reflects the collective and urgent need for action to mitigate climate change. It was developed under the auspices of the *Sustainable Supply Chain Alliance programme* and in response to the publication of the adoption by over 300 organizations to date of the Climate and Environment Charter for Humanitarian Organizations.

In 2021, major consultations were held by the Sustainable Supply Chain Alliance to define a carbon accounting methodology for humanitarian organizations, considering the experiences and practices already in place in some humanitarian organizations with carbon accounting. This led to the validation of the GHG protocol as the baseline carbon accounting standard to be applied, agreement on priority levels for each emissions category, and the definition of GHG emission calculation methodologies – all summarized in this document.

The Humanitarian Carbon Calculator and Aggregation tools were then developed and tested in 2022.

The Humanitarian Carbon Calculator enables humanitarian organizations to calculate their carbon footprint and to identify the main sources of carbon emissions, in order to implement the most effective reduction solutions for their organization. The tool covers all 3 emissions scopes, but users can decide which scopes and categories of emissions they want to focus on.

The tool is publicly available for every humanitarian organization that wishes to calculate its carbon footprint.

Link for the Humanitarian Carbon Calculator

Link for the Aggregation tool

(!)

Please use this <u>e-form</u> to give us feedback on the tool and all the materials that have been shared in order to improve it in the future.

# Overview

# Tool structure

The Carbon Accounting tool is divided into thirteen tabs, which are presented below:



# All tabs are detailed in the chapter Data Collection – Manage inventories

# Cell colors key

The workbook cells have been colored to clearly indicate the different functions of cells within the workbooks

Required data Modifiable data Unchanging data



Cells colored in **yellow** must be filled by users (as for red cells which are even more important to the functioning of the tool). Cells colored in **brown** are automatically updated but can be modified manually by users **(only for advanced users)**. Cells colored in **grey** are automatically updated without the need to enter further details.

# Use of the tool

# To start – first steps

# The following process needs to be followed to evaluate GHG emissions generated.

# Step 0: Save a customized version of the tool

When using the tool for the first time, it is advisable to save one or more empty versions of the tool, organized according to the scope of your organization and your accounting boundaries. This will prevent you from having to repeat time-consuming actions in subsequent years.

# How to customize the HCC?

- In each data entry tab, you can choose whether the proposed emission source is applicable to your organization by setting the column M "Applicable?" to Yes or No. By setting the value to No, the row will automatically be greyed out, and you will have to provide any input data on that specific emission source.
- If you are certain that the proposed emission source will never be applicable to your organization, you can delete the row completely.
- It is advisable to keep two rows per sub-category, even if they are greyed out, so that you can easily add new rows to this category if needed later.

The HCC allows organizations to disaggregate carbon accounting results according to parameters of their choice. Entity detail allows each organization to choose to disaggregate results at different levels, whether geographically (e.g. results can be disaggregated by region of operation, or by country office) or by project (e.g. results can be disaggregated by project codes). Care should be taken to ensure that the set of entities selected represents the entire organization.

If your disaggregation parameter has more than 30 possible values (e.g., more than 30 country offices, or more than 30 projects), you will need to use several HCC tools and consolidate the overall results using the Aggregation tool. In this case, consider saving more than one empty version (e.g., save one empty HCC tool by region – Africa, Europe, Americas, Oceania, Asia, Middle East – or by project code number – from project code 1 to 30, 31 to 60, etc.).



# When to save more than one empty version?

- a. Scenario A, saving one empty version: You should save one empty version when the overall carbon footprint of your organization covers 30 or less entities / delegations / country offices / regional offices / projects / etc.
- b. Scenario B, saving more than one empty version: You should save more than one empty version when the overall carbon footprint of your organization includes more than 30 entities / delegations / country offices / regional offices / projects / etc.

# Step 1: General information

This tab provides **instructions** to read and **general information to fill in** about your organization and the chosen disaggregation settings (entities that constitute the organization).

- 1. Fill in the organization name
- 2. Fill in the reporting year
- 3. Fill in the number of entities (e.g. number of projects / missions / regional offices / country offices / delegations)

| GENERAL INFORMATION | In order to present |
|---------------------|---------------------|
| Organisation name   |                     |
| Inventory year      |                     |
| Number of entities  |                     |

- 4. Fill in the chart including:
  - a. \* Entities ID (e.g. (e.g. name of each projects / missions / regional offices / country offices / delegations)
  - b. \* Internal number of FTE (Full time equivalents) for each entity
  - c. External number of FTE for each entity (e.g. volunteers) (if applicable)
  - d. The surface of each entity in m<sup>2</sup> (if applicable)
  - e. \* Global budget / expenditure of each entity
  - f. Number of working days of each entity (if applicable)

|   |           | Entity ID      | Internal FTE | Volunteers<br>(external FTE) | Global budget /<br>Expenditures |
|---|-----------|----------------|--------------|------------------------------|---------------------------------|
| 1 | Entity 1: | Super Site 1   | 10           |                              | 5000                            |
| 2 | Entity 2: | Genial Site 2  | 10           |                              | 5000                            |
| 3 | Entity 3: | Awesome site 3 | 10           |                              | 500                             |

# △ DO NOT ADD OR DELETE ANY COLUMN OR ROW!

- $\triangle$  \*: information must be filled in.
- $\triangle$  Without entity ID, internal FTE number and budget, the tool cannot work well.
- ▲ If the number of entities is to vary (e.g. from 4 entities to 3), do not forget to modify the cell "Number of entities" (e.g. previously written 4 entities change it to 3 entities), and make sure you erased all related information regarding the entity (if you entered information in the tab such as internal FTE, surface, etc.). Otherwise, the tool will not update it. If so, a red cell will appear warning that the content of the line is not correctly deleted.

|   | Number of entities | 3              |              |                              |              |                                 |
|---|--------------------|----------------|--------------|------------------------------|--------------|---------------------------------|
|   |                    | Entity ID      | Internal FTE | Volunteers<br>(external FTE) | Surface (m²) | Global budget /<br>Expenditures |
| 1 | Entity 1:          | Super Site 1   | 10           |                              |              | 5000                            |
| 2 | Entity 2:          | Genial Site 2  | 10           |                              |              | 5000                            |
| 3 | Entity 3:          | Awesome site 3 | 10           |                              |              | 500                             |
|   |                    |                |              |                              |              |                                 |



Once the perimeter is defined (step 1), the tool **automatically** updates each data collection tab (e.g. energy, fugitive emissions, travels...) and **updates the columns** associated with the **classification indicated** in the **general information tab**.

| N      | • 0  | р         | 0            | R        | s             | т              | U            | v      | w    | x         | Y       |
|--------|------|-----------|--------------|----------|---------------|----------------|--------------|--------|------|-----------|---------|
|        |      | Nee       | ed to delete | informat | ion from enti | ty 4 which was | not fully de | eleted |      |           |         |
| Global |      |           |              |          |               |                |              |        |      |           |         |
| Data   | Unit | Certainty | Comment      | Data     | Unit          | Certainty      | Comment      | Data   | Unit | Certainty | Comment |
|        |      |           |              |          |               |                |              |        |      |           |         |
|        |      |           |              |          |               |                |              |        |      |           |         |
|        |      |           |              |          |               |                |              |        |      |           |         |
|        |      |           |              |          |               |                |              |        |      |           |         |

#### <u>Step 3:</u>

1. Navigate through each data collection tab

| Energy | Fugitive  | Purchased | Travels | Capital goods | Distributed | Wastes | Transportation   |
|--------|-----------|-----------|---------|---------------|-------------|--------|------------------|
|        | emissions | goods and |         |               | products    |        | and distribution |

2. Indicate in all tabs, and each row of data, whether your organization is applicable by this emissions source, by selecting either yes or no in column M. By selecting yes, you mean that this data is relevant to your organization.

See example

- a. Go within the Energy tab
- b. For the energy consumption of natural gas, fuel, you will be asked to indicate whether it is applicable for your organization or not (Please select within the list Yes or No)

| A          | В                     | C | D     |                   | E | F              | К              | L               | М           | N      | 0       | Р         | Q       |
|------------|-----------------------|---|-------|-------------------|---|----------------|----------------|-----------------|-------------|--------|---------|-----------|---------|
|            |                       |   |       |                   |   |                |                |                 |             |        |         |           |         |
| Energy     |                       |   |       |                   |   |                |                |                 |             | Global |         |           |         |
|            | Category              |   | EF ID | EF name           |   | Emission Facto | r Unit         | Allocation type | Applicable? | Data   | Unit    | Certainty | Comment |
|            |                       |   |       |                   |   |                |                |                 |             |        |         |           |         |
| Priority 1 | Stationary combustion |   |       |                   |   |                |                |                 |             |        |         |           |         |
|            | Stationary combustion | i | 10001 | Natural gas - ICV |   | 0,24           | kgCO2e/kWh ICV | Budget          | Yes         |        | kWh ICV | 25%       | 6       |
|            | Stationary combustion | i | 10002 | Natural gas - SCV |   | 0,21           | kgCO2e/kWh SCV | Budget          | No          |        |         |           |         |
|            | Stationary combustion | i | 10003 | Natural gas - m3  |   | 2,20           | kgCO2e/m3      | Budget          | Yes         |        | m3      | 25%       | 6       |

- 3. Fill in your data in the corresponding boxes (light yellow cells) for each tab (if applicable)
- 4. **Exclude VAT** for all **monetary data (kEUR or kUSD)** such as purchased services, capital goods (in k-EUR), travel (in kEUR), etc... kEUR means thousands of euros.



- a. Scenario A: You only have data at the global level: fill in the data at the global level and the tool will automatically allocate the data to each site according to the default allocation rules defined in column L.
- b. Scenario B: You have data by entities: fill in only the appropriate columns (entity 1, entity 2, entity 3etc.) and leave the global level column blank.
- c. Scenario C: You have the data by entities but some are not concerned, fill in only the appropriate columns (entity 1, entity 3, etc.), put 0 in the entities that are not concerned and do not fill in the global level column.
- d. Scenario D: You have data only for some entities: fill in only those entities for which you have data, leave cells empty for entities with missing information and do not fill in the global level column.

- $\triangle$  Pay attention to the unit requested for each data (for example, in the energy tab, for natural gas, you will have the choice between kWh ICV, kWh SCV or m3).
- - copy an existing row from that sub-category (1)
  - and then insert the copied cells between two rows in that same sub-category (2) (you should not paste a row above the first row in the sub-category, as this will distort the results). This may take some time depending on the power of your computer as it requires it to do a lot of calculations.
  - Finally select the relevant emission factor ID (3) (data will be updated automatically) and fill in the cells.



▲ You can delete one or more rows in a sub-category, but there should always be at least two rows left in each sub-category (even if you display them as not applicable) so that you can add rows in the way explained above.

# ${\ensuremath{\bigtriangleup}}$ DO NOT ADD OR DELETE ANY COLUMNS!

# If you see ######## instead of a number in a cell:

It means that the column is not large enough to display the integer. You should then expand the column.

| Stationary combustion | 10003 Natural gas - m3 | 2,20 kgCO2e/m3 Budget    | Yes | <b>1</b> 3 | 25% |
|-----------------------|------------------------|--------------------------|-----|------------|-----|
| Stationary combustion | 10004 Butane - kg      | 3,52 kgCO2e/kg Budget    | Yes | ### Ig     | 25% |
| Stationary combustion | 10005 Butane - ICV     | 0,27 kgCO2e/kWhIC\Budget | Yes | kWhICV     | 25% |

# 5. Indicate data certainty level for each data

- a. Certainty 25% The data is estimated from public figures or national studies (e.g. the national average of office waste volume per person per year, multiplied it by the total number of employees to get the total waste volume).
- b. Certainty 50% The data is estimated or extrapolated from available data (e.g. data from offices wastes by employee per month, extrapolated for a whole year for the total number of employee).
- c. Certainty 75% The data is derived from reliable assumptions or relevant extrapolations (e.g. data source in kWh from energy receipts for the last 10 months extrapolated for the last 2 months, to give the total energy consumption in kWh over 12 months).

Certainty 100% The data is reliable, accurate without any extrapolation (e.g. data source coming from IT systems, invoices, receipts, accounting, etc.).



Once all the data has been collected, you will find results updated in the "Results" and "Graphs" tabs.

|         |   | Reporting year: 2021<br>Number of entities: 30   | Per interna    |                | 386,87         | tCO2e/FTE       | 1               |  |                |                  |                 |  |
|---------|---|--|----------------|----------------|----------------|-----------------|-----------------|--|----------------|------------------|-----------------|--|
|         |   |  | Per total FTE  |                | 307,07         | ICO2e/FTE       | 1               |  |                |                  |                 |  |
|         |   | Quality score 33%  | Per budge      |                | 0,15           | tCO2elunit      | 1               |  |                |                  |                 |  |
|         |   | Completness score 69%  | Per m          |                | 2 100,14       | tCO2eIm²        | ]               |  |                |                  |                 |  |
|         |   |  |                |                |                |                 | GHG Emiss       | sions (tCO2                            | el             |                  |                 |  |
| Cater   | rgory                                   | Emission categories  | CO2<br>(ICO2e) | CH4<br>(tCO2e) | N2O<br>(tCO2e) | HFCs<br>(tCO2e) | PFCs<br>(tCD2e) | SF6<br>(ICO2e)                         | Other<br>gases | Total<br>(tCO2e) | Uncertaint<br>v | Data<br>certaint                       |
|         |   | Direct emissions from stationary combustion sources  | 0,70           | 0,00           | 0,01           | -               | -               | - 1                                    | -              | 0,71             |                 | 25%                                    |
|         |   | Direct emissions from mobile combustion sources  | 0,15           | -              | -              | -               | -               | -                                      | -              | 0,15             | 10%             | 25%                                    |
| Scope 1 | V/////X3                                | Direct emissions from processes  |                |                |                |                 |                 |  |                |                  |                 | ¥///////////////////////////////////// |
|         | 1.4                                     | Direct fugitive emissions  |                |                |                | -               | -               |  | 41 178,26      | 41 178,26        | 30%             | 25%                                    |
|         |   | Sub-total Scope 1  | 0,85           | 0,00           | 0,01           | -               | -               | -                                      | 41 178,26      | 41 179,13        |                 |  |
|         |   | Indirect emissions from electricity consumption  |                |                |                |                 |                 |  |                | 2,87             | 10%             | 25%                                    |
| Scope 2 | 2.2                                     | Indirect emissions from steam, heat and cooling  |                |                |                |                 |                 |  |                | -                | 0%              | 25%                                    |
|         |   | Sub-total Scope 2  |                |                |                |                 |                 |  |                | 2,87             |                 |  |
|         | 3.1                                     | Purchased Goods and Services / In-kind donations / Cash<br>transfer / Financial Support (upstream emissions) |                |                |                |                 |                 |  |                | 28,31            | 78%             | 25%                                    |
|         | 3.1(bis)                                | In-kind donations / Cash transfer / Financial Support  |                |                |                |                 |                 |  |                | 26,96            |                 |  |
|         |   | Capital Goods  |                |                |                |                 |                 | X///////////////////////////////////// |                | 69 080,80        | 49%             | 25%                                    |
|         | 3.3                                     | Fuel & Energy related to activities Not included in scope 1  |                |                |                |                 |                 |  |                | 0,58             | 9%              | 25%                                    |
|         | 3.4                                     | Upstream transportation and distribution   |                |                |                |                 |                 |  |                | 1,52             | 68%             | 25%                                    |
|         | 3.5                                     | Waste generated in operations  |                |                |                |                 |                 |  |                | 4 106,93         | 39%             | 25%                                    |
|         | 3.6                                     | Business travel / Volunteer travel   |                |                |                |                 |                 | XIIIIII                                |                | 894,52           | 80%             | 25%                                    |
| Scope 3 | 3.7                                     | Employee commuting   |                |                |                |                 |                 |  |                | 113,14           | 80%             | 25%                                    |
| Scope 3 | /////////////////////////////////////// | Upstream leased assets   |                |                |                |                 |                 |  |                |                  |                 |  |
|         | 3.9                                     | Downstream transportation and distribution   |                |                |                |                 |                 |  |                | 1,66             | 66%             | 25%                                    |
|         | 3.10                                    | Processing of distributed products   |                |                |                |                 |                 |  |                | 3,65             | 37%             | 25%                                    |
|         | 3.11                                    | Use of distributed products  |                |                |                |                 |                 |  |                | 4,45             | 80%             | 25%                                    |
|         | 3.12                                    | End-of-life treatment of distributed products  |                |                |                |                 |                 |  |                | 2 190,14         | 34%             | 25%                                    |
|         | 3.13                                    | Downstream leased assets   |                |                |                |                 |                 | VIIIII                                 |                |                  |                 | ¥///////////////////////////////////// |
|         | 3.14                                    | Franchises   |                |                |                |                 |                 |  |                |                  |                 |  |
|         |   | Investments  |                |                | VIIIIII        |                 |                 | X///////////////////////////////////// |                |                  |                 | ¥///////////////////////////////////// |
|         |   | Sub-total Scope 3  |                |                |                |                 |                 |  |                | 76 425,67        |                 |  |
|         |   | Total Scope 1 - 2 - 3  |                |                |                |                 |                 |  |                | 117 607.67       |                 |  |



# General description of the tabs

All the tabs are constructed as followed:

- **Category:** emissions sub-category allowing to split the main emission category for a better reading of the results and to obtain relevant scopes.
  - Example 1: Stationary combustion: all activity data related to the combustion of fossil fuels in an operated or owned facility/warehouse/office (e.g. natural gas, piped gas, fuel oil, gasoline...).
  - Example 2: Mobile combustion: all activity data related to the fuel combustion in owned or operated mobile sources (vehicles/generators) (e.g. petrol, diesel, LPG, LNG).
  - Example 3: Purchased electricity: all activity data related to purchased electricity per country and subdivided per continent.
- **EF ID:** emission factor identification associated with the right emission factor found in the Emission\_Factors tab (e.g. 1001 is Natural gas Europe kWh ICV).
- $\triangle$  Advanced users may modify this column to further customize their tool. However, it is not advisable to change this data.
  - **EF Name:** name of the emission factor associated with the ID number (e.g. 1001 is Natural gas Europe kWh ICV)
  - Emission factor: total value of the emission factor (e.g. 1001 is Natural gas Europe kWh ICV is 0,244 kgCO2e/ kWh ICV)

If the emission factor associated with the data in question does not exist in the list of factors:

• Option 1: find an emission factor close to your data (e.g. you have an electricity consumption of your field office in Bhutan, which does not have an emission factor yet then select the emission factor for India). You should always take the "worst" assumption emission factor (e.g. you have an electricity consumption of your field office in Bhutan, and you're hesitating between India and China, takes the worst one which is India 1.001kgCO2e/kwh whereas China is only 0.756 kgCO2e/kwh)

Option 2: (**only for advanced users**): add the right emission factor in the emission factors tab, in the right place and by selecting a new ID to call it from your collection tab (see the emission factor chapter to understand how to add an emission factor).

- EF Scope 1, 2 and 3: emission factor broken down by scope (e.g. 1001 is Natural Gas Europe kWh LCl is 0.244 kgCO2e/ kWh LCl in total i.e. Scope 1 for 0.205 tCO2e kgCO2e/ kWh LCl for Scope 1, 0 for Scope 2 and 0.039 kgCO2e/ kWh LCl for Scope 3)
- **Uncertainty**: uncertainty level associated with each emission factors (e.g. 1001 is Natural gas Europe kWh ICV has an uncertainty of 5%)
- Unit: unit associated with the emission factor (e.g. the emission factor 1001 is Natural gas Europe unit is kgCO2e / kWh ICV)

Allocation type: if only global data is available (see how to fill in your data), you can select here an allocation mechanism to distribute the value between your different entities. This mechanism should only be used if you are not able to complete each entity (see scenarios B, C and D on page 4). By default, the selected mechanism generally uses the budget % per site (data recorded in the 'General\_Information' tab), but you also can choose to distribute by office space ('m2'), by number of internal staff ('FTE internal'), by number of external staff ('FTE external'), by all internal + external staff ('FTE total). Depending on the mechanism you select, you will need to ensure that the data for it exists in the General\_Information tab. For advanced users, it is also possible to create your own distribution mechanism by detailing it on line 76 of the General Information tab.

# ¥ How to fill in your data :

- a. Scenario A: You only have data at the global level: fill in the data at the global level and the tool will automatically allocate the data to each site according to the default allocation rules defined in column L.
- b. Scenario B: You have data by entities: fill in only the appropriate columns (entity 1, entity 2, entity 3etc.) and leave the global level column blank.
- c. Scenario C: You have the data by entities but some are not concerned, fill in only the appropriate columns (entity 1, entity 3, etc.), put 0 in the entities that are not concerned and do not fill in the global level column.
- d. Scenario D: You have data only for some entities: fill in only those entities for which you have data, leave cells empty for entities with missing information and do not fill in the global level column.

# ${\rm \ensuremath{\underline{M}}}$ If you are a first-time user, do not edit this column.

- **Applicable?** here, it is necessary to specify whether or not you are concerned by the activity line and therefore by the associated emissions. If not, select "no" and the line will be greyed out.
- **Data:** fill in the relevant data (e.g. Natural gas Europe kWh ICV data 56 means your organization consumed 56 kWh ICV of natural gas during the reporting year).

If the data is already in tCO2e (e.g. Natural gas – Europe ICV is 10tCO2e): Simply enter the quantity using this formula: Data = Data in tCO2e/Emission factor

|                         |                 |            |            |            |                   |                 |             | Entity 1 |         |           |         |
|-------------------------|-----------------|------------|------------|------------|-------------------|-----------------|-------------|----------|---------|-----------|---------|
| EF ID EF name           | Emission Factor | EF Scope 1 | EF Scope 2 | EF Scope 3 | Uncertainty Unit  | Allocation type | Applicable? | Data     | Unit    | Certainty | Comment |
|                         |                 |            |            |            |                   |                 |             |          |         |           |         |
|                         |                 |            |            |            |                   |                 |             |          |         |           |         |
| 10001 Natural gas - ICV | 0,24            | 0,20       | -          | 0,04       | 5% kgCO2e/kWh ICV | Budget          | Yes         | =10/F6   | kWh ICV | 25%       | 6       |

• **Option 1:** Fill in the global activity data (column N) when you do not have the data available for each entity / site / country

| Globa | 1     |           |                | Super S | ite 1 |           |                | Génial Site 2 |      |           |                |  |
|-------|-------|-----------|----------------|---------|-------|-----------|----------------|---------------|------|-----------|----------------|--|
| Data  | Unit  | Certainty | Comment        | Data    | Unit  | Certainty | Comment        | Data          | Unit | Certainty | Comment        |  |
|       |       |           |                |         |       |           |                |               |      |           |                |  |
|       |       |           |                |         |       |           |                |               |      |           |                |  |
|       |       |           |                |         |       |           |                |               |      |           |                |  |
|       | 20 kg | 25        | <mark>%</mark> |         | kg    | 259       | <mark>%</mark> |               | kg   | 259       | <mark>%</mark> |  |

Option 2: Otherwise, fill the data in each entity's / site's / country's columns (do not fill the global data column)

|             | Option 2 |      |           |         |              |       |           |         |               |       |           |         |  |
|-------------|----------|------|-----------|---------|--------------|-------|-----------|---------|---------------|-------|-----------|---------|--|
|             | Global   |      |           |         | Super site 1 |       |           |         | Genial Site 2 |       |           |         |  |
| Applicable? | Data     | Unit | Certainty | Comment | Data         | Unit  | Certainty | Comment | Data          | Unit  | Certainty | Comment |  |
|             |          |      |           |         |              |       |           |         |               |       |           |         |  |
| Yes         |          | k€   | 259       | 6       |              | 56 k€ | 259       | %       |               | 56 k€ | 259       | 6       |  |

Option 3: If an entity (e.g. Super Site 1) is not concerned by an activity data (e.g. you don't have air conditioning for Super Site 1 but you do have it for Genial Site 2), then put 0 for the associated entities (e.g. Put 0 in fugitive emission R401a for Super site 1 and 10 kg of R410a for Genial site 2).

# Option 3

|                      | Global |      |           |         | Super Si | te 1 |           |         | Génial : | Site 2 |           |         |
|----------------------|--------|------|-----------|---------|----------|------|-----------|---------|----------|--------|-----------|---------|
| EF name              | Data   | Unit | Certainty | Comment | Data     | Unit | Certainty | Comment | Data     | Unit   | Certainty | Comment |
|                      |        |      |           |         |          |      |           |         |          |        |           |         |
| Refrigerants - R410a |        | kg   | 25%       |         |          | 0 kg | 25%       | 6       |          | 10 kg  | 25%       | 6       |

- Unit: the unit required for each activity data (e.g. Natural gas Europe kWh ICV data unit is kWh ICV)
- **Certainty:** the quality required for each data (e.g. Natural gas Europe kWh ICV quality is 100% because you are certain of the data source, and it is the exact consumption)
- **Comment:** if you need to add any additional comments for the data

|             | Global    | $\neg$                                  | Super site 1 |                   | Genial Site 2 |                   |  |
|-------------|-----------|---|--------------|-------------------|---------------|-------------------|--|
| Applicable? | Data Unit | Certainty Comment                       | Data Unit    | Certainty Comment | Data Unit     | Certainty Comment |  |
|             |           | • · · · · · · · · · · · · · · · · · · · |              |                   |               |                   |  |
|             |           |   |              |                   |               |                   |  |
|             |           | •                                       |              |                   |               |                   |  |
| Yes         | k€        | 25%                                     | 56 k€        | 25%               | 56 k€         | 25%               |  |
|             |           | $\sim$                                  |              |                   |               |                   |  |

- Entity 1 to N: From column R, you will be required to enter the activity data by entities (your own classification)
- **Results:** shows the total emissions in tCO2e and then the detailed vision of your emissions between Scope 1,2 and 3
- **Data certainty:** shows the certainty level of each data (it is automatically calculated)
- ▲ Do not modify this column (it is automatically calculated)
  - Completeness score: shows the completeness score of each data (it is automatically calculated)
- ${\rm \Delta}$   $\,$  Do not modify this column (it is automatically calculated)
  - **Uncertainty results:** it is the GHG results that considers the data certainty and the uncertainty level of the associated emission factors (it is automatically calculated).
- △ Do not modify this column (it is automatically calculated)

| EH      | EI    | EJ      | EK      | EL      | EM        | EN          | EO          |
|---------|-------|---------|---------|---------|-----------|-------------|-------------|
|         |       |         |         |         |           |             |             |
| Results |       |         |         |         |           |             |             |
|         | Total | Scope 1 | Scope 2 | Scope 3 | Certainty | Completness | Uncertainty |
|         |       |         |         |         |           |             |             |
|         | -     | -       | -       | -       |           | 0%          | -           |
|         | -     | -       | -       | -       |           | 0%          | -           |
|         | -     | -       | -       | -       |           |             | -           |
|         | -     | -       | -       | -       |           | 0%          | -           |
|         | -     | -       | -       | -       |           | 0%          | -           |

<u>Note:</u> For the energy tab only, the uncertainties results are calculated for Scope 1 and 2 (Uncertainty Sc1/2) and scope 3 (Uncertainty Sc3).

| EH      | El    | EJ      | EK      | EL      | EM             | EN          | EO                | EP              | E |
|---------|-------|---------|---------|---------|----------------|-------------|-------------------|-----------------|---|
|         |       |         |         |         |                |             |                   |                 |   |
| Results |       |         |         |         |                |             |                   |                 |   |
|         | Total | Scope 1 | Scope 2 | Scope 3 | Data certainty | Completness | Uncertainty Sc1/2 | Uncertainty Sc3 |   |
|         |       |         |         |         |                |             |                   |                 |   |
|         | -     | -       | -       | -       |                | 0%          | , -               | -               |   |
|         | -     | -       | -       | -       |                | 0%          |                   | -               |   |

 $<sup>\</sup>triangle$  Do not modify / erase / add any column!

Data collection – Manage inventories

# Energy tab Energy (Priority level 1)

In this tab, you will be asked to fill in all data related to your organization stationary and mobile combustion, as well as the electricity consumption.

The tab is constructed as followed:

- Category: indicates the sub category of your emission
  - Stationary combustion: all activity data related to the combustion of fossil fuels at an operated or owned facility / warehouse / office (e.g. natural gas, piped gas, fuel oil, petrol)
  - Mobile combustion: all activity data related to the fuel combustion in owned or operated mobile sources (vehicles/generators) (e.g. petrol, diesel, LPG, LNG)
  - Purchased electricity: all activity data related to the purchased of electricity per country and subdivided per continent (e.g. Africa, Asia and Middle East, Europe, North America, Oceania, South America)
- All other columns are explained in the chapter General description of the tab
- **Detailed result per gases:** the detailed result per gases is available from columns ER to EX (CO2, CH4, N2O, HFCs, PFCs, SF6, Other gases)

 Fugitive

 Engitive emissions tab
 emissions

 (Priority level 1)

In this tab, you will be asked to fill in all data related to your organization refrigeration and air conditioning systems, fire suppression systems, and the purchase and release of industrial gases

The tab is constructed as followed:

- Category: indicates the sub category of your emission
  - Fugitive emissions: all activity data related to a type of refrigerants used for air conditioning systems or fire suppression systems (e.g. NF3 or R401a)
- All other columns are explained in the chapter General description of the tab
- **Detailed result per gases:**\_the detailed result per gases is available from columns ER to EX (CO2, CH4, N2O, HFCs, PFCs, SF6, Other gases)

# Purchased goods and services

#### Goods and services tab

In this tab, you will be asked to fill in all data related to your organization purchased goods (either for humanitarian purpose or its own), purchased services, cash assistance, financial support, and in-kind donation

The tab is constructed as followed:

- Category: indicates the sub category of your emission
  - Financial support: all activity data related to financial transfers made to another nonprofit organization, including humanitarian, but also national organizations, authorities (e.g. hospitals, others nonprofit organizations) (Priority level 1/2)
  - In kind donations: all activity data related to in-kind donations received by your organization, including goods (first and second hand) such as clothes, services, time, and expertise (e.g. services, textile, others). In a nutshell, it is all goods and/ or services that was not purchased by the organization but goods that was received to be distributed (Priority level 2/3)
  - Cash assistance: all activity data related to cash transfers (conditional or unconditional) to beneficiaries (per country) (e.g. cash assistance given to beneficiaries in Abidjan, Algeria, or Caracas) (Priority level 1/2)

# **Tips:** when to split a financial assistance to another organization between "financial support" and "cash assistance?

- Example 1: You have supported a French organization for 10 k€, in which you know that 20% will be spent for overheads and 80% will be cash assistance. Then you can split the support with 2 k€ that goes as financial support under the "Activity for voluntary organizations" and 8k€ that goes as cash assistance under "Cash assistance France"
- Example 2: You have supported an organization for 10k€, in which you know that 20% will be spent overheads and 80% will be spent for construction purpose. Then you can split the support with 2 k€ that goes as financial support under the "Activity for voluntary organizations" and 8k€ that goes as financial support under "Construction".
- Humanitarian products: all activity data related to the purchase of goods to be distributed to beneficiaries, and divided between health & care (medical, household and textile supplies), raw materials & machinery (construction or other raw material supplies such as plastic), and food, crop & breeding (food and agricultural supplies such as fertilizers) (Priority level 1)
- Purchased services: all activity data related to the purchase of services (in k-euros excluding VAT) (Priority level 1)
- $\triangle$  Do not forget to apply:
  - Conversion rate: to convert your monetary expenses in €, you should first use the right conversion rate from your currency to €. Make sure you use the right year conversion rate, update them accordingly to your reporting year.
  - PPP: Purchasing power parities (PPPs) are currency conversion rates that equalize the purchasing power of different currencies by eliminating differences in price levels between countries.

Purchasing power parity (PPP) is a money conversion rate used to express the purchasing powers of different currencies in common units. This rate expresses the ratio between the quantity of monetary units required in different countries to purchase the same "basket" of goods and services. The basket of goods and services for which prices are determined is a sample of all those that make up final expenditure, namely household and government final consumption, capital formation and net exports. This indicator is measured in national currency units per US dollar. This conversion rate maybe different from the "exchange rate", as the exchange rate of one currency in relation to another reflects their reciprocal values on the international financial markets and not their intrinsic values to a consumer.

Conversion rate – PPP rates (PPA in French) – OCDE Data (oecd.org)

- Purchased goods: all activity data related to the purchased of goods for your organization (e.g. office supplies, mail, printing, plastic, and paper) (Priority level 1)
- All other columns are explained in the chapter General description of the tab

# Travels tab

In this tab, you will be asked to fill in all data related to your organization business travels and employee / volunteers travels

The tab is constructed as followed:

Travels

- **Category:** indicates the sub category of your emission
  - Business travels: all activity data related to the transportation of employees for businessrelated activities during the reporting year (in vehicles not owned or operated by the reporting organization) (Priority level 1)
  - Employee commuting: all activity data related to the transportation of employees between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting organization) (Priority level 1)
  - Volunteer commuting: all activity data related to the transportation of volunteers between their homes and their worksites during the reporting year (in vehicles not owned or operated by the reporting organization) (Priority level 2)
- All other columns are explained in the chapter General description of the tab

# Capital goods tab (Priority level 1)

In this tab, you will be asked to fill in all data related to your organization capital goods acquired, rented or leased ONLY if acquired, rented or leased during the reporting year (e.g. new buildings, IT equipment, machines leased or acquired within the reporting year)

The tab is constructed as followed:

- **Category:** indicates the sub category of your emission
  - Building: all activity data related to the leasing or acquisition of new buildings within the reporting year
  - IT equipment: all activity data related to the leasing or acquisition of new IT equipment (e.g. laptop, screen, printer, etc.) within the reporting year
  - Vehicle: all activity data related to the leasing or acquisition of new vehicles within the reporting year
  - Furniture: all activity data related to the leasing or acquisition of new furniture within the reporting year
- All other columns are explained in the chapter General description of the tab

Distributed

**Distributed products tab** 

products (Priority level 3)

In this tab, you will be asked to fill in all data related to the end-of-life, processing and use of distributed products

- **Category:** indicates the sub category of your emission
  - End-of-life: all activity data related to the end-of-life of the distributed products and associated with a waste treatment (e.g. plastic – recycled means the product which is mainly composed of plastic will be recycled)
  - Processing of sold products: all activity data related to the processing of intermediate products (e.g. your organization is buying rice from a supplier, and the rice needs to be transformed in canned food before distribution by a manufacturer. Then, the energy used by the manufacturer to transform the rice should be included in this sub-category)
  - ONLY FOR ADVANCED USERS: if needed, please add the appropriate electricity emission factor, and be careful to consider the total emission in scope 3 (instead of scope 2 and 3)
  - Use of distributed products: all activity data related to the direct and indirect use phase of emissions of distributed products (e.g. fuel, charcoal or energy needed during the use phase of a product)
- All other columns are explained in the chapter General description of the tab

# Waste tab

Wastes

(Priority level 3)

In this tab, you will be asked to fill in all data related to the wastes from operations

- Category: indicates the sub category of your emission
  - Wastes: all activity data related to the disposal and treatment of waste (hazardous and nonhazardous) generated by your organization (e.g. plastic or paper wastes from offices)
- All other columns are explained in the chapter General description of the tab

# Transportation and distribution

# Transportation and distribution tab (Priority level 1)

In this tab, you will be asked to fill in all data related to the inbound transportation (from suppliers to your organization), internal transportation (freight in between your organization) and outbound transportation (from your organization to your beneficiaries)

- **Category:** indicates the sub category of your emission
  - Upstream transportation: all activity data related to the freight of products between a company's tier 1 suppliers and your own operations (e.g. from your supplier's tiers 1 to your international or national warehouses / offices / others)
  - Downstream transportation: all activity data related to the freight of products between the reporting company's operations and the beneficiaries (e.g. from your international or national warehouses / offices / others to your beneficiaries)
- All other columns are explained in the chapter <u>General description of the tab</u>

# Results

# Results

This tab aggregates all results seen at the level of each data per tab at a global level and as described on your own classification (per entities / delegations / sites / countries / missions / projects)

The first results chart shows the carbon footprint of your organization at a global level, and according to the GHG classification



The second result chart shows the carbon footprint of you organization from your classification list and according to the GHG classification

| Cate    | rgory    | Emission categories   | Super Site 1 | Génial Site 2 |
|---------|----------|---|--------------|---------------|
|         |          | Direct emissions from stationary combustion sources         | 0,02         | 0,02          |
|         |          | Direct emissions from mobile combustion sources             | -            | -             |
| Scope 1 |          | Direct emissions from processes                             |              |               |
|         |          | Direct fugitive emissions                                   | 12 073,21    | 1077,97       |
|         |          | Sub-total Scope 1   | 12 073,23    | 1 077,98      |
|         | 2.1      | Indirect emissions from electricity consumption             | 0,90         | 1,94          |
| Scope 2 |          | Indirect emissions from steam, heat and cooling             | -            | -             |
|         |          | Sub-total Scope 2   | 0,90         | 1,94          |
|         | 3.1      | Purchased Goods and Services / In-kind donations / Cash     |              |               |
|         |          | transfer / Financial Support (upstream emissions)           | 8,35         | 4,29          |
|         | 3.1(bis) | In-kind donations / Cash transfer / Financial Support       | 7,95         | 3,36          |
|         | 3.2      | Capital Goods   | 20 253,55    | 1 926,82      |
|         | 3.3      | Fuel & Energy related to activities Not included in scope 1 | 0,13         | 0,29          |
|         |          | Upstream transportation and distribution                    | 0,45         | 0,04          |
|         |          | Waste generated in operations                               | 1 204,12     | 108,51        |
|         | 3.6      | Business travel / Volunteer travel                          | 262,27       | 23,42         |
| Scope 3 | 3.7      | Employee commuting  | 33,16        | 2,98          |
| acope a | 3.8      | Upstream leased assets                                      |              |               |
|         | 3.9      | Downstream transportation and distribution                  | 0,48         | 0,14          |
|         |          | Processing of distributed products                          | 1,07         | 0,24          |
|         | 3.11     | Use of distributed products                                 | 1,32         | 1,04          |
|         |          | End-of-life treatment of distributed products               | 642,18       | 60,45         |
|         | 3.13     | Downstream leased assets                                    |              |               |
|         | 3.14     | Franchises  |              |               |
|         | 3.15     | Investments   |              |               |
|         |          | Sub-total Scope 3   | 22 407,08    | 2 128,21      |
|         |          | Total   | 34 481,21    | 3 208,13      |

# The graphs are visible within the graph tabs (a bar chart and a pie chart)

Graph







# Quality and completeness scores

The quality and completeness scores will be assigned according to specific rules. The idea is to understand your results and compare them with a degree of quality and completeness of your reporting, and to improve the score within the year with more accurate data and more emissions category to be filled in.

**The global quality score** is based on the quality score of each category of your carbon footprint, which are calculated as followed:

# o The quality score of each sub-category formula is

Quality score = uncertainty level (tCO2e) / the total emission (tCO2e) of each category

*Uncertainty level (tCO2e)* is the GHG methodology calculation computing the data certainty and the uncertainty of the emission factor (see definition under)

Total emissions (tCO2e) are the emission associated with each data

- The data certainty (from 25% to 100%), based on the data quality level you have assigned for each data, and by applying a weighted average to get a global quality percentage
  - Quality 25% The data is estimated from public numbers or national studies (e.g. you used the national average of office waste volume per person per year and multiplied it by the total number of employees to get the total volume of wastes)
  - Quality 50% The data is estimated or extrapolated from other available data (e.g. you measured an estimated data from offices wastes by employee and extrapolated for a whole year for the total number of employee)
  - Quality 75% The data is from reliable hypothesis or relevant extrapolations (e.g. data source in kWh from your energy receipts for the last 10 months so you need to extrapolate the last 2 months, so you can have the total 12 months energy consumption in kWh)
  - Quality 100% The data is reliable and precise (e.g. data source coming from IT systems, invoices, receipts, accounting, etc. and not extrapolated)
- The uncertainty of the emission factor, assigned for each emission factor, and by applying a weighted average to get a global uncertainty percentage

**The global completeness score** is based on the completeness of each category your carbon footprint, and the calculation follows five different scenarios:

- Scenario 1: you are not concerned with the data => your completeness score is inexistent since no data is expected here.
- Scenario 2: you are concerned with the data => you have global data => your completeness score is 100%
- Scenario 3: you are concerned with the data => you have data for all the entities/sites/missions
   => your completeness score is 100%
- Scenario 4: you are concerned with the data => you have partial data per entities/sites/missions
   => your completeness score is prorated using the allocation criteria (e.g. you have 3 sites, and you have the data for only 2 of them regarding the commuting of employees. Let say site 1 represents
   90% of FTE, site 2 is 3% of your FTE and site 3 is only 10%, then your completeness score will consider that 93% of information have been filled out so your score will be 93%)
- Scenario 5: you are concerned with the data => you have no data at all => your completeness score is 0%

# Advance features

**Emission factors** 

Emissions factors

This tab shows all emissions factors that are used within the tool to calculate the carbon footprint

Please use this <u>e-form</u> to compile new emission factors that the different organizations collect from well-recognized databases, suppliers or Life-Cycle Analysis for certain products/services commonly used in the humanitarian sector.

#### The tab is constructed as followed:

# Columns A to Y

- ID: the ID number of the emission factor. The first digit reflects the order of the category (e.g. 1 for energy, 2 for fugitive emission, 3 goods and services, etc.) / the second digit reflects the sub category (e.g. 0 for combustible, 1 for electricity) / from the third digit to the last one, its reflects the order within the list (e.g. Hospital equipment (diagnostic imaging, compounding equipment) for in kind donations is 31012 3 for goods and services category, 1 for in-kind donation sub category and then 012 because it is the twelve emission factor from the in-kind donation of the category)
- △ If you need to add a new emission factor, follow the ID methodology. If the ID number already exists the cell will turn red so change it, otherwise it means the ID is correct
- **The category:** the emission factor category according to the GHG Protocol (e.g. energy, goods, and services, etc.)
- **The name:** the name given to the emission factor (e.g. maintenance for all maintenance services)
- **The unit:** the unit for the emission factor, which determine the unit required for the data (e.g. Petrol is kgCO2e / liter meaning the data needs to be fill in liter of petrol consumed for the reporting year)
- Source: the databased where the emission factor is coming from. All emissions factors come from international and recognized database (e.g. Base Carbone ADEME, Ecoinvent, Conversion factor 2019 BEIS)
- Year: the last knowing year when the emission factor was updated (e.g. Butane Base Carbone ADEME 2017 Europe means that the ADEME database last update on butane emission factor was 2017 and remains the same number as of today)
- Location: the location from which the emission factor was calculated (e.g. Butane Base Carbone – ADEME – 2017 – Europe means that the ADEME calculate the emission factor based on European countries)
- Uncertainty: the uncertainty associated with each emission factor (e.g. Butane Base Carbone ADEME – 2017 – Europe – 5% means that the emission factor has a 5% uncertainty). To get an uncertainty percentage of the emission factor, either it is given by the database when it is a generic EF, or ask the EF provider for the uncertainty level
- EF: the total amount of the emission factor (e.g. Butane Base Carbone ADEME 2017 Europe 5% 3.52062 kgCO2e/liter means that for one liter of Butane, the associated emission is 3,52062 kgCO2e
- ⚠ This EF column is the total of scope 1, 2 and 3 columns (columns K, S and T)

- Scope 1: the scope 1 amount of the emission factor, and breakdown by different gas equivalents such as CO2, CH4, HFCs, PFCs, SF6, other gases (e.g. Butane 3.52062 kgCO2e/liter total emissions with 3,01562 kgCO2e/liter for scope 1 and divided between 2.98 for CO2, 0.00 for CH4, 0.03 for N2O and 0 for HFCs, PFCs and other gases)
- △ The scope 1 total should be equivalent to the sum of the gases (columns L to R), if not the cell will appear in red
- Scope 2: the scope 2 amount of the emission factor (e.g. Butane 3.52062 kgCO2e/liter total emissions with 0 kgCO2e/liter for scope 2)
- Scope 3: the scope 3 amount of the emission factor, and breakdown between the upstream, production, transport, and end-of-life parts (e.g. Butane 3.52062 kgCO2e/liter total emissions with 0.505 kgCO2e/liter for scope 3 related to the upstream and losses part of the combustion)
- The scope 3 total should be equivalent to the sum of the upstream, production, transport, and end-of-life part of your emission factor
- **Source EF name:** the original name of the emission factor (e.g. For the EF call "Light car" in the capital goods, the original source name is Véhicules Fabrication (unit weight is 2 tons) meaning that the EF of vehicles 5500 kgCO2e/kg was multiplied with an average weight of 2 tons (approximation) for light cars which equals to 11 743 kgCO2e/units)
- **Organization name:** each organization will have to put its name under this column, so when the EF are updated, the organization that added the EF can be traced
- Assumption for scope 3 EF and Assumption for scope 3 unit: when an organization needs to create its own EF (e.g. you need to add the EF for a SUV Toyota Car) and use assumptions, it can enter the assumption used for the EF and the unit used (e.g. the Toyota car EF was calculated based on the generic EF of ADEME for cars 5 500 kgCO2e/unit and multiplied by an average weight of 2 215 kg for a SUV car => 12 182 kgCO2e/unit as Scope 3 emission factor)

| ID  | Category                   | Ŧ | Sub category | - |
|-----|----------------------------|---|--------------|---|
|     | Energy                     |   |              |   |
|     | Fugitive Emissions         |   |              |   |
| 1   | Goods & Services           |   |              |   |
| 5   | Travels                    |   |              |   |
| 5   | <b>Distributed Product</b> | s |              |   |
| 1   | Capital Goods              |   |              |   |
| 1   | Waste                      |   |              |   |
| i 🗌 | Transportation             |   |              |   |

• Comment: if you need to add any additional comments for the data

# Line 3 to N:

The list is constructed as followed for the categories and sub-categories, and the emission factor are classified by name from A to Z (**ID first two digits**)

- 1) Energy category (1)
  - a. Combustible (10)
  - b. Electricity (11)
- 2) Fugitive emissions (2)
  - a. Refrigerants (20)

- 3) Goods and services (3)
  - a. Financial support (30)
  - b. In-kind donations (31)
  - c. Services (32)
  - d. Hotel and restaurants (33)
  - e. Cash assistance (34)
  - f. Purchased goods (35)
  - g. Humanitarian products (36)
- 4) Travels (4)
  - a. Air transport (40)
  - b. Road transport (41)
  - c. Rail transport (42)
  - d. Maritime transport (43)
- 5) Distributed products (5)
  - a. Use of distributed products (50)
  - b. Processing of distributed products (51)
  - c. End-of-life of distributed products (52)
- 6) Capital goods (6)
  - a. IT Equipment (60)
  - b. Vehicles (61)
  - c. Furnitures and machines (62)
  - d. Buildings (63)
- 7) Wastes (7)
  - a. Non-hazardous wastes (70)
  - b. Hazardous wastes (71)
- 8) Transportation (8)
  - a. Road freight (80)
  - b. Train freight (81)
  - c. Air freight (82)
  - d. Sea freight (83)
- ▲ If you need to add a new emission factor, just copy past the line above or below, and fill in all the required information (ID number, name, unit, year, source, location) within the right category

| Databased used | Relevant scopes  | Key notes   |
|----------------|------------------|---|
| ADEME          | Scope 1, 2 and 3 | French base open source; partially updated annually;<br>Contains numerous average-based emission factors                              |
| IEA            | Scope 2          | Electricity and electricity & heating emission factors across all geographies.  |
| DEFRA          | Scope 1 and 3    | Open source; Updated annually; Contains numerous average-based emission factors   |
| Ecoinvent      | Scope 1, 2 and 3 | Paying access; Updated annually; Contains numerous<br>emission factors for all countries and made from Life<br>Cycle Analysis purpose |
| CEDA           | Scope 1, 2 and 3 | Paying access; Updated annually; Contains monetary emission factors, US based   |
| Quantis        | Scope 3          | Paying access; Updated annually; Contains numerous<br>emission factors for all countries and made from Life<br>Cycle Analysis purpose |
| GLEC           | Scope 1 and 3    | Open-source access, Contains emission factors for transportation and refrigerant (Supply Chain and Logistic)                          |

# Allocation type

In the "General Information" tab, you will find an allocation chart. This chart will allow the tool to split your emissions between the different entities/sites/missions when you have only global data. It will help you to distribute emissions between entities.

The allocation criterions possible are:

- The budget
- The m<sup>2</sup>
- The internal FTE
- The external FTE (volunteers)
- The total FTE
- △ ONLY FOR ADVANCED USERS: the tool will allow you to create a specific allocation criterion in the line "other" (e.g. € distributed) if all the criteria above are not relevant.

|      | ALLOCATIONS In order to present the results by entity, ratios are used in order to prorate the results obtained globally. The ratios used are detailed in the table below: |              |               |     |     |    |    |    |    |    |   |
|------|--|--------------|---------------|-----|-----|----|----|----|----|----|---|
|      |  | 1            | 2             | 3   | 4   | 5  | 6  | 7  | 8  | 9  | 1 |
|      | Ratios   | Super Site 1 | Génial Site 2 | 3   | 4   | 5  | 6  | 7  | 8  | 9  | 1 |
| 100% | m²   | 0%           | 100%          | 0%  | 0%  | 0% | 0% | 0% | 0% | 0% |   |
| 100% | Budget   | 30%          | 69%           | 0%  | 0%  | 0% | 0% | 0% | 0% | 0% |   |
| 100% | FTE internal   | 18%          | 18%           | 15% | 18% | 1% | 3% | 2% | 2% | 2% |   |
| 100% | FTE external   | 71%          | 29%           | 0%  | 0%  | 0% | 0% | 0% | 0% | 0% |   |
| 100% | FTE total  | 29%          | 21%           | 12% | 15% | 1% | 2% | 1% | 1% | 1% |   |
| 100% | Other  |              |               |     |     |    |    |    |    |    |   |

For each category, an allocation criteria per default have been assigned.

▲ The **« budget » criteria** were selected **by default** for most of the categories, and more specifically, for the energy and fugitive emission categories. But the m<sup>2</sup> is the most relevant criteria to allocate emission for both (due to the difficulty for organizations to get m<sup>2</sup> data). If possible, change the allocation criteria to m<sup>2</sup> for both categories.

This **chart explains** which **allocation criterions** have been **selected by default** and which ones are **preferable** for **each sub-category**.

|                         | By default   | Best allocation criteria |
|-------------------------|--------------|--------------------------|
| Stationary combustion   | Budget       | m²                       |
| Mobile combustion       | Budget       | m²                       |
| Purchased electricity   | Budget       | m²                       |
| Steam, heat, cooling    | Budget       | m²                       |
| Fugitive emissions      | Budget       | m²                       |
| Business travels        | FTE internal | FTE internal             |
| Employee commuting      | FTE internal | FTE internal             |
| Volunteers              | FTE external | FTE external             |
| Financial support       | Budget       | Budget                   |
| In-kind donations       | Budget       | Budget                   |
| Cash assistance         | Budget       | Budget                   |
| Humanitarian products   | Budget       | Budget                   |
| Purchased services      | Budget       | Budget                   |
| Hotel                   | Budget       | Budget                   |
| Purchased goods         | Budget       | Budget                   |
| Buildings               | Budget       | Budget                   |
| Vehicles                | Budget       | Budget                   |
| Furniture and machinery | Budget       | Budget                   |
| IT equipment            | Budget       | Budget                   |

| Use of distributed products         | Budget    | Budget    |
|-------------------------------------|-----------|-----------|
| Processing of distributed products  | Budget    | Budget    |
| End of life of distributed products | Budget    | Budget    |
| Hazardous waste                     | FTE total | FTE total |
| Non-hazardous waste                 | FTE total | FTE total |
| Upstream                            | Budget    | Budget    |
| Downstream                          | Budget    | Budget    |

Inflation rate

In the "General Information" tab, you will find an inflation table (starting from 2018 until 2046).

#### Why and when using inflation rate and what results does it affects?

Following the GHG Protocol Methodology Standard, inflation rate is recommended for monetary data only (k-EUR) when "where applicable, inflation data to convert market values between the year of the EEIO emissions factors and the year of the activity data" GHG Protocol Standard, Scope 3

In other worlds, adding inflation rates are highly recommended when the reporting year (e.g. if the organization's footprint reporting year is 2021) is different from the emission factors year (e.g. Furniture and other manufactured goods – k-EUR – Base Carbone ADEME – year 2018).

Regarding the emission factors data that are available within the tool, the last year update was 2018, 2019 and 2020, for monetary units.

If the organization's reporting year is different from 2018, 2019 and 2020 years, then inflation rates to be found are world average cumulative inflation rates between the organization reporting year and the emission factor reporting year (e.g. cumulative inflation rates from 2018 until 2021 if the reporting year is 2021)

| Monetary emission<br>factor year (k-EUR) | Data source        | Inflation rate   |
|--|--------------------|--|
| 2018                                     | Base Carbone ADEME | World average cumulative inflation rate from 2018 until reporting year |
| 2020                                     | Quantis Database   | World average cumulative inflation rate from 2020 until reporting year |
| 2021                                     | CEDA               | World average cumulative inflation rate from 2021 until reporting year |

#### What kind of inflation rate are we talking about?

The inflation rate is the world average inflation rate (average, CPI, in %) that can be found on the World bank data (<u>https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG</u>).

Note: the inflation rate indicate in the webpage is the world average annual inflation rate (e.g. from 2020 and 2021, the annual inflation rate was 3.4%).

#### How to fill in inflation rates within the tool?

Enter the cumulative inflation rate that you have calculated (see how to calculate cumulative inflation rate) from 2018 until reporting year.

Note: that inflation rate 2018 mean the inflation rate from 2018 until reporting year.

E.g. If reporting year is 2021, the inflation rates are the following

| INFLATION RATE |        | Compared with cu | urrent year, for mo | netary emission fa | ictors. Please enter | r a DECIMAL NUN | 1BER (e.g. 0.10 for | 10% inflation): |
|----------------|--------|------------------|---------------------|--------------------|----------------------|-----------------|---------------------|-----------------|
|                | 2018   | 2019             | 2020                | 2021               | 2022                 | 2023            | 2024                | 2025            |
| Inflation rate | 0.1034 | 0.0772           | 0.0541              | 0,034              |                      |                 |                     |                 |
|                |        |                  |                     |                    |                      |                 |                     |                 |
|                |        |                  |                     |                    |                      |                 |                     |                 |
|                |        |                  |                     |                    |                      |                 |                     |                 |

# How to calculate the cumulative inflation rate:

Step 1: Go to <a href="https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG">https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG</a> webpage

Step 2: Upload the Excel data excel sheet



#### Step 3: Go to the "Data" sheet, erase all year from 1960 to 2018, and select the "Word average"

| A                          | В                    | С                             | D                      | E           | F           | G           | н           |
|----------------------------|----------------------|-------------------------------|------------------------|-------------|-------------|-------------|-------------|
| 1 Data Source              | World Development In | dicators                      |                        |             |             |             |             |
| 2 Last Updated Date        | 16/0                 | 09/2022                       |                        |             |             |             |             |
| 3                          |                      |                               |                        |             |             |             |             |
| 4 Country Name             | Country Code         | Indicator Name                | Indicator Code         | 2018        | 2019        | 2020        | 2021        |
| 260 British Virgin Islands | VGB                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG |             |             |             |             |
| 261 Virgin Islands (U.S.)  | VIR                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG |             |             |             |             |
| 262 Vietnam                | VNM                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG | 3,5         | 2,8         | 3,2         | 1,8         |
| 263 Vanuatu                | VUT                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG | 2,3         | 2,8         | 5,3         | 2,3         |
| 264 World                  | WLD                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG | 2,4         | 2,2         | 1,9         | 3,4         |
| 265 Samoa                  | WSM                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG | 4,2         | 1,0         | -1,6        | 3,1         |
| 266 Kosovo                 | XKX                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG | 1,1         | 2,7         | 0,2         | 3,4         |
| 267 Yemen, Rep.            | YEM                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG |             |             |             |             |
| 268 South Africa           | ZAF                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG | 4,517165228 | 4,12024587  | 3,210035975 | 4,611672178 |
| 269 Zambia                 | ZMB                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG | 7,494571927 | 9,150316443 | 15,73258514 | 22,02123429 |
| 270 Zimbabwe               | ZWE                  | Inflation, consumer prices (a | nnual % FP.CPI.TOTL.ZG | 10,61886587 | 255,3049908 | 557,2018174 | 98,54610509 |
| 271                        |                      |                               |                        |             |             |             |             |

#### Step 4: Calculate the cumulative inflation rate

| From year to year | Cumulative inflation rate                                      |
|-------------------|--|
| From 2018 – 2021  | 2018:2021 inflation rates (1.024*1.022*1.019*1.034)-1 = 10,34% |
| From 2019 – 2021  | 2019:2021 inflation rates (1.022*1,019*1,034)-1 = 7,72%        |
| From 2020 – 2021  | 2020:2021 inflation rates (1.019*1.034)-1= 5.41%               |
| From 2021         | 2021 inflation rates is 3.42%                                  |

|    | А                 | В                            | С                                    | D                         | E         | F         | G         | н         | 1     |
|----|-------------------|------------------------------|--------------------------------------|---------------------------|-----------|-----------|-----------|-----------|-------|
| 1  | Data Source       | World Development Indicators | 5                                    |                           |           |           |           |           |       |
| 2  | Last Updated Date | 16/09/2022                   |                                      |                           |           |           |           |           |       |
| 3  |                   |                              |                                      |                           |           |           |           |           |       |
| 4  | Country Name      | Country Code                 | Indicator Name                       | Indicator Code            | 2017      | 2018      | 2019      | 2020      | 2021  |
| 5  | World             | WLD                          | Inflation, consumer prices (annual % | FP.CPI.TOTL.ZG            | 2,2       | 2,4       | 2,2       | 1,9       | 3,4   |
| 6  |                   |                              |                                      |                           |           |           |           |           |       |
| 7  |                   |                              |                                      |                           |           |           |           |           |       |
| 8  |                   |                              |                                      |                           | 2017-2021 | 2018-2021 | 2019-2021 | 2020-2021 | 2021  |
| 9  |                   |                              |                                      | Cumulative inflation rate | 12,76%    | 10,34%    | 7,72%     | 5,41%     | 3,42% |
| 10 |                   |                              |                                      |                           |           |           |           |           |       |
| 11 |                   |                              |                                      |                           |           |           |           |           |       |
| 12 |                   |                              |                                      |                           |           |           |           |           |       |

# Aggregation tool

# Link for the aggregation tool:

The **aggregation tool** allows organizations to aggregate results of several HCC tools to get a broader view in an automatic way. It should be used when the global footprint of the organization is gathering more than 30 entities/delegations/country offices/regional offices.

# How to use the aggregation tool?

# Step 1: Open the aggregation tool

• Open the aggregation tool, and go to the "Results" tab

| Enregistrement auton  | natique 💌 💿  | <b>闘 り</b> 、 (* | v <b>v</b>      | HCC   | Aggregation                            | tool A <sup>Q</sup> • De  | ernière |
|---|--|-----------------|-----------------|---|--|---|---------|
|   |  |                 | EEE             | ≡ <b>≡</b> •  | Révision<br>Sensibilité<br>Sensibilité | Affichage<br>Standard<br>Constant<br>Standard<br>Standard<br>Nombre | ~       |
| F4 - i  | × ~  | fx              |                 |   |  |   |         |
| Α   | В  | c               | D               | E   | F                                      | G   | н       |
| 1 GL<br>2<br>3<br>4<br>5<br>6<br>7<br>8   | OBAL RESU  |                 | Number of a     | entities:   | 0%                                     |   |         |
| 9   |  |                 |                 |   |  |   |         |
| 10  | Catergo  | ry Emiss        | ion categories  | 5   |  |   |         |
| 12  |  | 1.1 Direct      | t emissions fro | om stationary c   | ombustion                              | sources   |         |
| 13  |  |                 |                 | Formules Données Révision<br>$ \begin{array}{c} \hline \hline$ | irces                                  |   |         |
| A Second S   | Accueil       Insertion       Mise en page       Formules       Données       Révision         Accueil       Insertion       Mise en page       Formules       Données       Révision         Calibri       11       A' A'       =       =       =       #       #         G       I       S       -       Image: Calibri Image: Ca |                 |                 |   |  |   |         |
| 15  | _  | 1.4 Direct      | t fugitive emis | sions   |  |   |         |
| 16  |  | 2.1 India       | at an incide of |   |  | Sub-to  | otal Sc |
| A CONTRACTOR OF | Scone 2  |                 |                 |   |  |   | ation   |
| 19  | scope r  | 2.2             | et ennissions i | rom steam, ne   |  | Sub-to  | _       |
| 20  |  | 3.1 Purch       | ased Goods a    | nd Services / In  | -kind donat                            |   |         |
| Results   | Tool1 To   |                 |                 |   |  |   |         |

• Fill in the reporting year of your carbon footprint (row 4, column F)



• Change the name of each aggregated entities as needed in the result tab, under the "Results by Super entity" (e.g. Europe/Asia/etc.) (row 44 columns I to O)

| Cate    | rgory | Emission categories   | Europe | Asia | Tool3 | Tool4 | Tool5 | Tool6 | Tool7 |
|---------|-------|---|--------|------|-------|-------|-------|-------|-------|
|         | 1.1   | Direct emissions from stationary combustion sources             |        |      | -     | -     | -     | -     | -     |
|         | 1.2   | Direct emissions from mobile combustion sources                 | -      | -    | -     | -     | -     | -     | -     |
| Scope 1 | 13    | Direct emissions from processes                                 |        |      |       |       |       |       |       |
|         | 1.4   | Direct fugitive emissions                                       | -      | -    | -     | -     | -     | -     | -     |
|         |       | Sub-total Scope 1   | -      | -    | -     | -     | -     | -     | -     |
|         | 2.1   | Indirect emissions from electricity consumption                 |        |      |       |       |       |       |       |
| Scope 2 | 2.2   | Indirect emissions from steam, heat and cooling consumption     | -      | -    | -     | -     | -     | -     | -     |
|         |       | Sub-total Scope 2   | -      |      |       |       |       |       | -     |
|         |       | Purchased Goods and Services / In-kind donations / Cash         |        |      |       |       |       |       |       |
|         |       | transfer / Financial Support (upstream emissions)               | -      | -    | -     | -     | -     | -     | -     |
|         |       | In-kind donations / Cash transfer / Financial Support           | -      | -    | -     | -     | -     | -     |       |
|         |       | Capital Goods   | -      | -    | -     | -     | -     | -     | -     |
|         |       | Fuel & Energy related to activities Not included in scope 1 & 2 | -      | -    | -     | -     | -     | -     | -     |
|         |       | Upstream transportation and distribution                        | -      | -    | -     | -     | -     | -     | -     |
|         |       | Waste generated in operations                                   | -      | -    | -     | -     | -     | -     | -     |
|         |       | Business travel / Volunteer travel                              | -      | -    | -     | -     | -     | -     | -     |
| Scope 3 |       | Employee commuting  | -      | -    | -     | -     | -     | -     | -     |
|         |       | Upstream leased assets  |        |      |       |       |       |       |       |
|         | 3.9   | Downstream transportation and distribution                      | -      | -    | -     | -     | -     | -     | -     |
|         |       |   |        |      |       |       |       |       |       |

# Step 2: Enter data for each Humanitarian Carbon Calculators

Make sure that all your HCC tools are completed and that the results are exhaustive. To see how using the tool report to the chapter <u>Use of the tool</u>.

For example, if your organization has offices in 60 countries, you can save two versions of the HCC tool, one that could be saved for 30 entities in Europe and one that could be saved for the other 30 in Asia. It is also possible to have 3 tools with 20 countries in each to gather the super entities that you would prefer.

# Step 3: Once you have entered data for all HCC tools, see results

Once you have entered all data and associated it with the right emission factor for all categories, go to the result tab to see the result of each carbon footprint.

# Step 4: Copy the tools' results tabs

• Go to the left corner of the result tabs and copy the whole page (You can also type the commands Ctrl A then Ctrl C)



#### Step 5: Paste the results tab into the aggregation tool

- Go to the "Tool 1" sheet
- Select the "A1" cell and then paste the results tab into the tool 1 tab (Ctrl V)

# Step 6: Repeat steps 3 and 4 for each HCC tool that was completed

- Repeat the copy methodology for each HCC tools results
- Paste each tab into "Tool 2" tab, "Tool 3" tab and so on.

#### Step 7: See the aggregated results into "Results" Sheet

The tool will automatically aggregate all tools' results tabs that have been previously paste.

As a bonus, if your organization would like to have aggregated indicators (KPIs), please fill in *(optional but recommended*):

- The total Internal FTE (excluding volunteers which are external FTE) for the global organization
- The total FTE for the global organization
- The total budget for the global organization
- The total surface for the global organization

| GLOBAL RESULTS (tCO2e) |                    |                                       |                    |  |
|------------------------|--------------------|---------------------------------------|--------------------|--|
| Reporting year:        | Indicato           | ors                                   | Global information |  |
| Number of entities: 0  | Per internal FTE   | tCO2e/FTE                             | Total internal FTE |  |
|                        | Per total FTE      | tCO2e/FTE                             | Total FTE          |  |
| Quality score 0%       | Per budget         | tCO2e/unit                            | Total budget       |  |
| Completness score 0%   | Per m <sup>2</sup> | tCO2e/m²                              | Total surface      |  |
|                        |                    | • • • • • • • • • • • • • • • • • • • |                    |  |