

# Carbon Footprint Report 2021

# INHALT

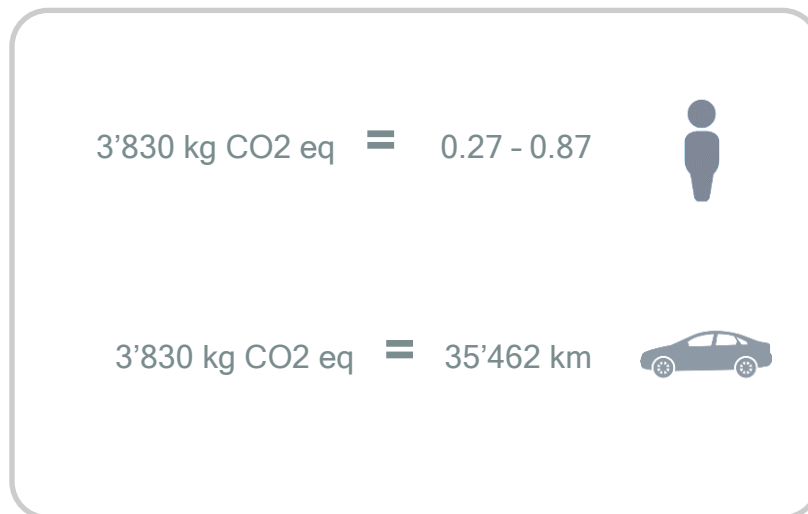
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## OVERVIEW

WaVeritas AG has calculated its corporate carbon footprint (CCF) for the year 2021 in accordance with the guidelines of Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol).

Monitoring and analysing the CCF is an important process for companies to detect and improve processes and define actions to improve the CO<sub>2</sub> balance.

WaVeritas' total annual GHG emissions is estimated to be 3'830 kg CO<sub>2</sub> eq. The largest part of the CO<sub>2</sub> balance is related to the home office activities, electricity consumption and land-based transportation. The total emissions in 2021 equals to a CO<sub>2</sub>-footprint of almost one 1 Swiss person per year or a roughly 35'000 km journey with an average passenger car.



# CARBON OFFSET

WaVeritas offsets its 2021 CO<sub>2</sub>-footprint plus 50% additional by buying carbon offset from the  
**Sierra Leone Safe Water Project**

Certificate of  
 voluntary offset  
 18 Sep 2022  
 WaVeritas AG  
 CO<sub>2</sub> offsetted:  
**4 tCO<sub>2</sub>**



Certificate of  
 voluntary offset  
 18 Sep 2022  
 WaVeritas AG  
 CO<sub>2</sub> offsetted:  
**2 tCO<sub>2</sub>**



## Project description

Kono District is largely rural, with many existing safe water sources having fallen into disrepair due to poor management programmes and high costs. Households either consume dirty water as they lack the means for purification, regularly suffering from water-related illnesses, or purify it on highly inefficient three-stone fires fuelled by firewood releasing GHG emissions.

### Impact

Improved access to safe water is vital for human health, benefits the climate and socio-cultural situation.

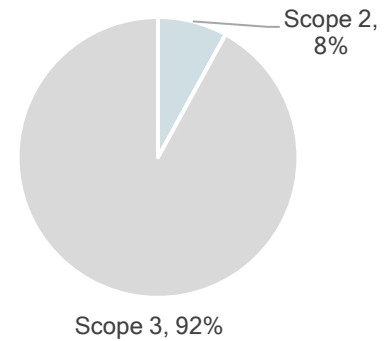


### Certification

Country:	Sierra Leone
Type	Energy Efficiency Domestic
Dev.	Gold Standard
Oversight	SustainCert

## CALCUATION

Most of the occurred emissions of around 4 tons in 2021, arose from home office activities of two FTE's in Vietnam and Switzerland (79%), followed by purchased electricity (8%) and land-based business travel and commuting (6%).



### Emission Inventory WaVeritas AG 2021

	GHG (kg)	%
<b>Total Scope 1</b>	0	0%
Scope 2		
Electricity Switzerland	110	3%
Electricity Switzerland (Heat and steam)	180	5%
<b>Total Scope 2</b>	290	8%
Scope 3		
Transportation (Commuting & Business travel)	240	6%
Material use (purchased goods)	50	1%
Waste Generation	10	0%
Food / Events	200	5%
Home office (2 employees)	3'040	79%
<b>Total scope 3</b>	3'540	92%
<b>Total CO2</b>	<b>3'830</b>	<b>100%</b>

## Further details and background GHG inventory

- The calculation includes voluntary scope 3 emissions.
- The calculation tool and factors are based on the UNFCCC GHG emission Calculator from Mai 2021
- There is a reasonable safety margin in the calculations
- Employees: 2 FTE based in Switzerland and Vietnam
- Premises: 2 office rooms (Switzerland and Liechtenstein)
- Primary energy sources: Office room in Switzerland is heated purely based on renewable energy. Purchased electricity in Switzerland is based primarily on renewable sources (Hydro & Solar - 60%).
- WaVeritas calculates in tons of CO2 equivalents.
- Scope 3 downstream activities are deemed not applicable or particular relevant for the business activities

## METHOD DESCRIPTION

The following sections describe the procedure and underlying principle for calculating a corporate carbon footprint in accordance with the guideline of the GHG Protocol Corporate Accounting and Reporting Standard (GHG Protocol).

### Reporting Standard

The Greenhouse Gas Protocol Initiative is a multi-stakeholder partnership of businesses, NGOs, the World Resources Institute and the World Business Council for Sustainable Development launched in 1998.

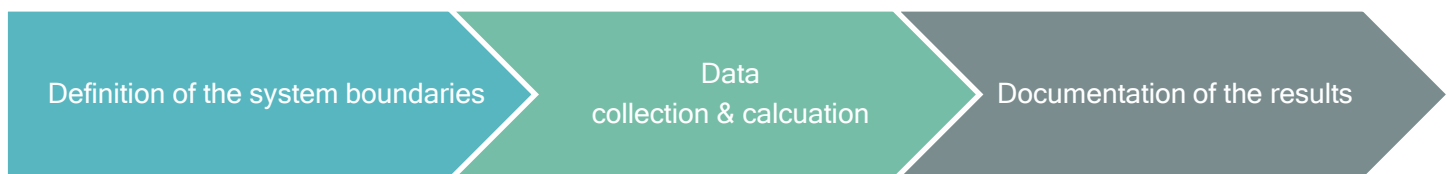
The full standard is accessible through this link: [GHG Reporting Standard](#).

At the core of the standard are the following 5 Principles:

- |               |  |
|---------------|--|
| Relevance:    | Ensure the GHG inventory appropriately reflects the GHG emissions of the company and serves the decision-making needs of users - both internal and external to the company   |
| Completeness: | Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions.  |
| Consistency:  | Use consistent methodologies to allow for meaningful comparisons of emissions over time.   |
| Transparency  | Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used. Transparently document any changes to the data, inventory boundary, methods, or any other |

Accuracy	Ensure that the quantification of GHG emissions is systematically neither over nor under actual emissions, as far as can be judged, and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable assurance as to the integrity of the reported information
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## Process Steps



### 1. Definition of system boundaries

The organizational boundaries define the corporate structure including business units, capital and time period in which the carbon footprint occur. Operational boundaries define the scope of direct and indirect emissions for operations that fall within the organizational boundaries. The GHG Protocol differentiates between three categories (scope) to delimit different emission sources:

#### Scope 1

Direct GHG emissions occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled boilers, furnaces, vehicles, etc.; emissions from chemical production in owned or controlled process equipment.

#### Scope 2

Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated.

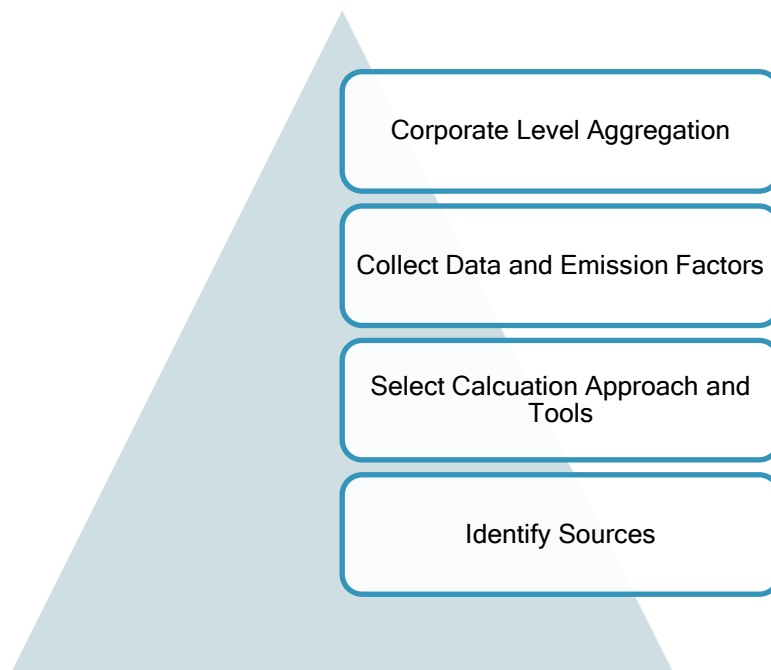


### Scope 3

Scope 3 is an optional reporting category that allows for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company. Some examples of scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services.

## 2. Data collection and calculation

The data collection and calculation process is based on four sub-steps:



### Identify Sources

Every business has processes, products or services that generate direct and/or indirect emissions from stationary/mobile combustion, processes or releases (intentional or unintentional fugitives). These sources should can be assigned to Scope 1 & 2 and voluntarily scope 3.

### Select Calculation Approach and Tools

One can use a direct measurement approach to monitor direct emissions or a mass balance/stoichiometric basis to a facility or process. Another common way is to use

documented emissions factors. There are different tools available including tools offered by the GHG protocol.

### **Data collection and aggregation on company level**

To report the total emissions, companies need to gather and summarize data from all business units. A careful planning is paramount to avoid overburden and risk of errors.

## **3. Reporting and documentation**

With regards to documentation, the fundamental reporting principles of accuracy and transparency are important factors. Data sources, methodologies and calculations are stored and kept for future reference.