

Measuring your Carbon Footprint



Do it yourself:

If your company is small and centralized, it is fairly easy to estimate your carbon footprint. Use our Excel worksheet to provide data about your company's operations. You decided what information you want to include—vehicle fuel, staff air travel, electricity, etc. From this we will be able to calculate the estimated emissions generated from your company's activities. If you feel this is your company then contact us and we can start the process of calculating your emissions.

Let us do it for you:

If you have large offices or have permanent camps and lodges, we advise an audit in order to accurately assess your GHG emissions. We will tailor each audit according to your company's needs. For details of how this is done, please read on.

What is a Greenhouse gas Audit?

Carbon Tanzania believes that purchasing carbon offsets is only one of many steps that should be taken when reducing a company's carbon footprint. Therefore, Carbon Tanzania offers consultation in conducting a GHG audit, a service designed to;

Help companies quantify their GHG emissions.

Create effective reduction strategies to lower the emissions.

Offset the unavoidable emissions through our **carbon offset** projects.

A Greenhouse Gas (GHG) audit measures and quantifies the amount of GHG emissions associated with certain activities. An audit can quantify emissions at varying scales—from global or country emissions to institutional and even personal emissions. Conducting a GHG audit is a critical step in developing plans to reduce emissions, because in order to target specific areas of concern they must be identified first. Furthermore, inventories help measure progress by evaluating if goals are being reached.

A Comprehensive GHG Audit for your company will:

- 1) As best as possible, accurately measure GHG emissions associated with company operations
 - 2) Create a baseline from which targets can be generated and future progress can be measured
 - 3) Identify energy efficiency measures and potential streamlined operations opportunities that will help reduce GHG emissions while cutting costs.
 - 4) Gain positive public recognition for commitment to environmental stewardship
 - 5) Demonstrate commitment to corporate social responsibility
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What will Carbon Tanzania do:

I. Identify GHG emissions sources: Using the Greenhouse Gas Protocol accounting standards established by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), the most widely used international accounting tool for quantifying and measuring GHG emissions

Scope 1 Emissions:

All direct emissions that are owned or controlled by your company, e.g:

- a) Stationary sources: Boilers, furnaces, generators, lamps, cooking devices, etc.
- b) Non-stationary sources: company owned cars, vans, buses, planes, etc.
- c) Fugitive Emissions: refrigeration chemicals, air conditioning units, fertilizer application

Scope 2 Emissions:

All indirect emissions associated with purchased electricity/heat or steam that is generated off-site and not owned by the company, but that company uses.

- a) Purchased Electricity

Scope 3 Emissions:

All indirect emissions that are a consequence of company's activities, but are not owned or controlled by the company.

- a) Staff Travel: air, bus, taxi, car rental, etc.
- b) Staff Commuting
- c) Outside deliveries: food, products, etc.
- d) Waste Disposal

Following WRI's and WBCSD's Greenhouse Gas Protocol, reporting data from scope 1 and 2 are mandatory, and reporting data from scope 3 is highly recommended. Carbon Tanzania would aim to report all three scopes.



II. Collect activity data: After defining the boundaries for the audit (i.e. what activities will be included in the audit), specific data pertaining to each activity must be obtained.

Base Year: 2009 will be the default base year selected for this audit. Future audits will measure and analyze their results based on 2009 as the base year inventory. However, if a company has the data (account records, etc.) to allow for an emissions audit from previous years, it would help put emissions in better context.

Data Collection: Data collection will vary based on two significant factors:

- 1) Identified Boundaries
- 2) Company Structure: who/where can most information be obtained

The amount of time spent on data collection can vary greatly depending on the organizational structure of the company. This will have to be determined case by case.

III. Calculations:

Once all available data is collected, Carbon Tanzania will apply the appropriate calculations to determine generated GHG emissions with company's activities. If extrapolations or approximations are necessary, the report will identify all areas where data isn't wholly accurate.

Default emission factors, largely identical to those used by the Intergovernmental Panel on Climate Change (IPCC), will be applied. However, whenever possible or if necessary, customized emission values will be used. All calculations will be transparent and emission co-efficient or tools used will be cited and provided to the company.

IV. Reporting:

Carbon Tanzania will present inventory findings in a report that provides methodology overview, audit findings, audit collection process and recommendations for emission reduction strategies. *All unavoidable emissions can be offset by supporting Carbon Tanzania's carbon offset projects.*

V. Pricing:

The amount of time required for data collection is unique to every institution and will have to be determined case by case. Carbon Tanzania charges \$150 per day for consulting fees, excluding related costs, such as travel and accommodation expenses.

For more information or queries please feel free to contact us.

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