Footprinting standards A guide to carbon footprints



A guide to carbon footprints

This guide introduces the basic principles behind carbon footprinting and the benefits to your company of conducting a carbon footprint. As experts in the carbon footprinting field and with experience of working with many of the commonly used standards, EcoAct will help you understand which one is most appropriate for your business.

What is a carbon footprint?

A carbon footprint measures the greenhouse gas (GHG) emissions from all the activities across an organisation or for a specific product or service.

There are two types of carbon footprint:

- Organisational carbon footprint
- Product/service carbon footprint

An organisational carbon footprint measures GHG emissions from all activities across a company. This includes energy used in buildings and industrial processes, company owned vehicles and may measure indirect emissions associated with activities outside an organisation's own operations - the value chain. Value chain analysis looks at every step a business goes through, from raw materials to the eventual end-user.

A product carbon footprint measures the GHG emissions over the life of a product or service. This involves calculating emissions from the extraction of raw materials and manufacturing, through to emissions associated with the use and disposal of a particular product.

Carbon footprints enable you to identify and quantify your key emissions sources. This helps pinpoint the opportunities to reduce carbon emissions within your organisation, allowing you to monitor and manage carbon emissions by setting emissions reduction targets and measuring your progress, one is most appropriate for your business.



There are a number of internationally recognised environmental standards available that will guide companies through the GHG accounting and reporting process.

Following an environmental standard ensures you are using a consistent and robust approach when calculating your carbon emissions. It is important to adopt the most relevant and useful approach for your organisation. Which standard you use depends on the data you have available and the intended use of your results.

Organisational footprinting standards

ISO 14064-1

- ISO 14064 standard was published in 2006 and is part of the ISO series of International Standards for environmental management.
- This international standard provides guidance on the principles and requirements for reporting GHG emissions. It provides additional guidance on verification, required levels of data validation and external reporting frameworks, to ensure consistent external communication.

GHG Protocol Corporate Standard

• The GHG protocol is an emissions accounting tool used by many businesses

and organisations worldwide. The standard was developed to address the need for a consistent approach in corporate carbon accounting and reporting.

 The Corporate Standard categorises GHG emissions into 3 scopes. Scope 1 (Direct emissions that result from activities within your organisation's control), Scope 2 (Indirect emissions from any electricity, heat or stream you purchase and use) and Scope 3 (other indirect emissions from sources outside you direct control).

GHG Protocol Value Chain Standard

- This standard accompanies the GHG Protocol corporate Standard. It provides additional guidance to companies wanting to assess their entire value chain Scope 3 emissions.
- Emissions are grouped into 15 categories of Scope 3 activities, both upstream and downstream.
- Particularly useful for companies that want to report detailed information on their Scope 3 value chain emissions externally. For example, companies reporting to the CDP are required to provided extensive value chain emissions assessments.



Product footprinting standards

PAS 2050

- PAS 2050 was developed by the British Standards Institute in response to a desire for a consistent method for assessing the life cycle GHG emissions associated with products or services.
- The standard is widely recognised, internationally applied and provides a consistent method for assessing product life cycle GHG emissions.
- The standard can be used on a wide range of product and service types including, goods and services, business-to-consumer, manufacturers, retailers and traders.
- PAS 2050 does not set requirements for product carbon footprint external communication.

GHG Protocol Product Lifecycle Accounting and reporting standard

- Launched in October 2011 after a 3 year multi stakeholder development process, this standard builds upon existing ISO environmental guidance and aims to provide a general framework for accounting and reporting product lifecycle GHG emissions.
- Public reporting is required to claim conformance to the standard.

ISO 14067

- The purpose of the standard is to increase the transparency in reporting GHG emissions associated with the entire lifecycle of different products and services.
- ISO 14067 is aligned with previous ISO and PAS 2050 product carbon footprinting standards to increase the comparability of product carbon footprints internationally.
- The standard includes detailed guidance on requirements for public reporting and external communication, as well as additional guidance on verification and assurance of product carbon footprints.



Which Standard is suitable for you?

The table below will help you to decide which footprinting standard is best for your requirements.

	GHG Protocol Corporate Standard	GHG Protocol Value Chain Standard	ISO 14064	DEFRA 2013 Reporting Guidelines	PAS 2050	GHG Product Lifecycle Standard	ISO 14067
Measure Scope 1 & 2 emissions of your organisation	√		V	√			
Comprehensive assessment of value chain emissions		\checkmark					
Complex organisational structure collecting a significant amount of data	V	~					
Straightforward organisational structure			~	~			
Assess the emissions of a product or service					\checkmark	V	V
Externally communicate product/service carbon footprint to interested stakeholder						V	V



Next steps - footprint assessment

Using carbon footprinting standards helps your organisation follow a process when collecting emissions data, ensuring the correct information is collected and reported, allowing you to identify carbon reduction opportunities.

Our team of experts will help you establish an appropriate scope for your footprint (what data sources should be included), collect and process the data, and apply appropriate conversion factors. We believe that to get value from a carbon footprint assessment, you need to use the footprint analysis report as the basis of making changes to your organisation. With this in mind, our reports are designed to help you identify reduction.



Case study - Huel

"In 2019 Huel commissioned EcoAct to develop a carbon footprint of our complete nutrition powdered food. We wanted to complete the footprint so that we could identify the carbon hotspots for the product and implement actions that would result in the greatest reduction in emissions.

We also wanted to be able to use the footprint to talk to our consumers about the impact of food choices for every individual's personal footprint. Drinking Huel or substituting one or two plant based meals a day can greatly reduce the carbon impact of food, and be highly beneficial for your health. We felt that it was really important to be able to show these dual benefits side by side, and to do so in a format that could be quantified.

We needed to work with a company that was able to provide the necessary expertise to complete a footprint compliant with internationally recognised methodology but that was also able to be sympathetic to the challenges posed for data collection for a rapidly growing company that is evolving on a daily basis. EcoAct were definitely up for the challenge, and worked tirelessly to find emissions data for some tricky ingredients, and a direct to consumer business model.

Our completed footprint has allowed us to focus our emission reduction efforts and in year one we are already proposing changes that will reduce our footprint by over 25%. We now also know the trajectory that we need to follow to keep us within a carbon budget that supports keeping global warming to 1.5 degrees."

Jessica Sansom, Head of Sustainability Huel



Your climate experts. Your partners for positive change.

Together with our clients, we act to put climate and nature centre stage to drive sustainable corporate transformation within planetary boundaries.

EcoAct is an international sustainability consultancy and project developer with 18+ years of industry experience and 360+ climate experts globally. Founded in France in 2006, the company now spans three continents with offices in Paris, London, Barcelona, New York, Montreal, Munich, Milan and Kenya.

EcoAct's core purpose is to lead the way in developing sustainable business solutions that deliver true value for both climate and client. Data is the cornerstone of our consulting practice, supported by our dedicated Climate Data Analytics and Research & Innovation teams.

At EcoAct we are driven by a shared purpose to make a difference. To help businesses implement positive change in response to climate and environmental sustainability challenges, whilst also driving commercial performance.

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