



LCA & CARBON FOOTPRINT

CARBON FOOTPRINT (CF)

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CARBON FOOTPRINT (CF)

Carbon footprint consists on **quantifying the total Greenhouse Gases (GHG) emitted by a product, service or a whole organization** (taking into account direct and indirect effects) (e.g. CO₂, methane, HFCs, sulfur hexafluoride, etc.). The determination of the carbon footprint of a product it's a **Life Cycle Assessment (LCA)** study itself, in which it is calculated and considered only one category of environmental impact, global warming, which units are kg of CO₂ equivalent (kgCO₂eq).

Global warming is an environmental impact category that has assumed more importance in recent years. However, it should be taken into account that the environmental performance of a product or an organization is not only limited to their carbon footprint, as there are other potential environmental impacts that have been overlooked in calculating the carbon footprint (e.g. human toxicity, ozone layer destruction, eutrophication, acidification, etc.). It is therefore recommended to add other impact categories to the assessment of the carbon footprint impact, for a more global view.

PUBLICATIONS



[Life-Cycle Analysis and Carbon Footprint: Two ways of measuring the environmental impact of a product¹](#) (Ithobe, 2009)

This publication describes the principles of Life-Cycle Analysis (LCA) and of Carbon Footprint, as applied to measuring and assessing the environmental performance of a product. The points covered for both concepts include their main characteristics, the steps involved in applying them, the relevant regulatory frameworks and a list of tools and databases available on the market for implementing them. *This document is only available in Spanish.*

LEGAL TEXTS

For products:

[PAS 2050:2008. Specification for the assessment of the life cycle greenhouse gas emissions of goods and services²](#)

[Guide to PAS 2050: How to assess the carbon footprint of goods and services²](#)

[ISO/CD 14067³ - Carbon footprint of products](#)

[GHG Protocol⁴ - \(Draft\) Product and Supply Chain Standards](#)

For organizations:

[ISO 14064-1:2006⁵ - Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals](#)

[ISO/WD TR 14069⁶ GHG - Quantification and reporting of GHG emissions for organizations \(Carbonfootprint of organization\) - Guidance for the application of ISO 14064-1](#)

[GHG Protocol⁷ - Corporate Standard](#)

¹ <http://www.ithobe.net/Publicaciones/ficha.aspx?IdMenu=750e07f4-11a4-40da-840c-0590b91bc032&Cod=bc53a7db-3edb-4b96-ac9a-1f163ed0d76b&Tipo>

² <http://www.bsigroup.com/>

³ http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=59521

⁴ <http://www.ghgprotocol.org/>

⁵ http://www.iso.org/iso/catalogue_detail?csnumber=38381

⁶ http://www.iso.org/iso/iso_catalogue/catalogue_tc/catalogue_detail.htm?csnumber=43280

⁷ <http://www.ghgprotocol.org/>



For projects:

[ISO 14064-2:2006⁸](#) - Greenhouse gases - Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements.

[GHG Protocol⁷](#) - Project Protocol

RECOMMENDED LINKS

[IPCC – Intergovernmental Panel on Climate Change⁹](#) - The purpose of the IPCC is to analyze in a comprehensive, objective, open and transparent basis the scientific, technical and socioeconomic relevant information, in order to understand the scientific elements of the risk that the climate change caused by human activities, its potential impacts and adaptation and mitigation options can involve.

⁸ http://www.iso.org/iso/catalogue_detail?csnumber=38382

⁹ <http://www.ipcc.ch/>