



Evolving Sustainable Perspective

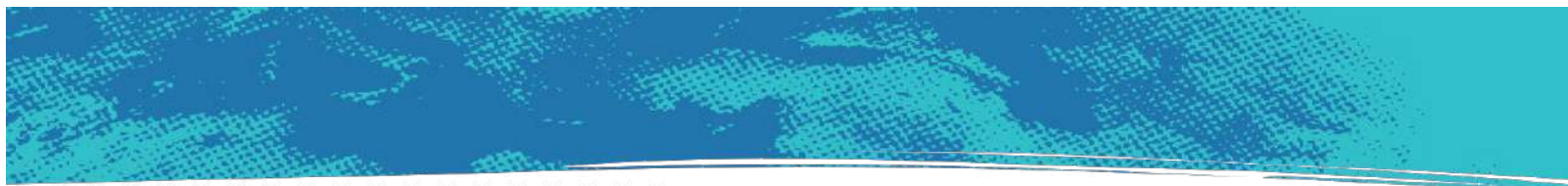
INTERNATIONAL CARBON ACCOUNTING STANDARDS

Carbon Footprint of Product

Daniele Pernigotti

04th october 2022

Prospettive sostenibili in evoluzione

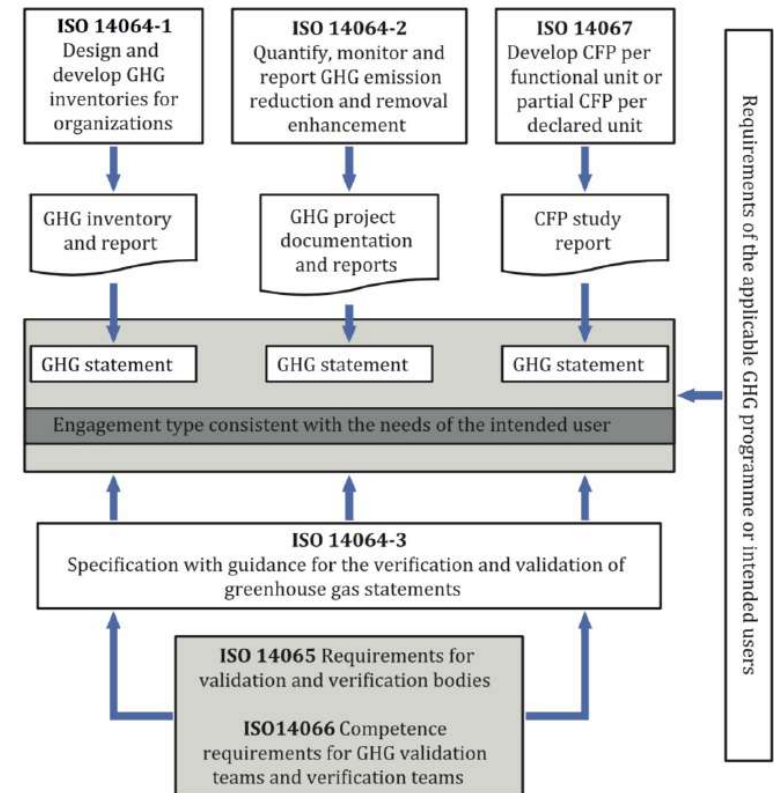


Daniele Pernigotti

- ❖ CEO **Aequilibria**, environmental consultancy and training firm, founded in 2002 and specialized in **carbon management**.
- ❖ Active since about 20 years in the international standardization context, he **coordinated** the development of the **standard on Carbon Footprint of Product** (ISO 14067).
- ❖ Chair of the **Technical Committee** on Climate Change of **CEN** (TC 467).
- ❖ Chair of **ISO/TC 207/SC2** on **conformity assessment** and of an **ISO Working Group** on **Circular Economy**.
- ❖ Since 2006, he personally follows the **UNFCCC negotiations**.
- ❖ He is a **Technical advisor on GHG schemes** for **Accredia**, he was **Lead Assessor** for **Accredia**, as well as for **ANAB** (USA), **ONAC** (Colombia) and was **Technical Expert for RvA** (Netherlands).
- ❖ He can count on a significant experience with consultancy and trainings at international level.

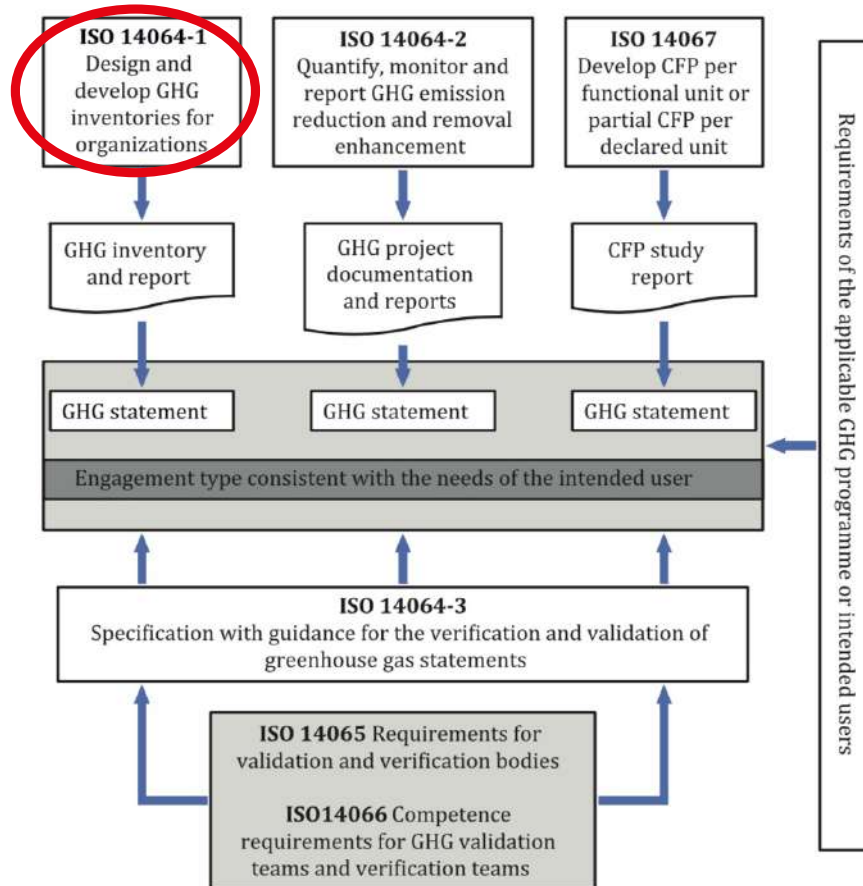
The ISO package for carbon accounting

Currently, there are **several standards on carbon accounting**, but only ISO provides a full package of standards for a consistent **monitoring, reporting, verification** and **accreditation** on GHG.



ISO 14064-1

Specifies principles and requirements to **project, develop, manage and report GHG inventories at organization level.**



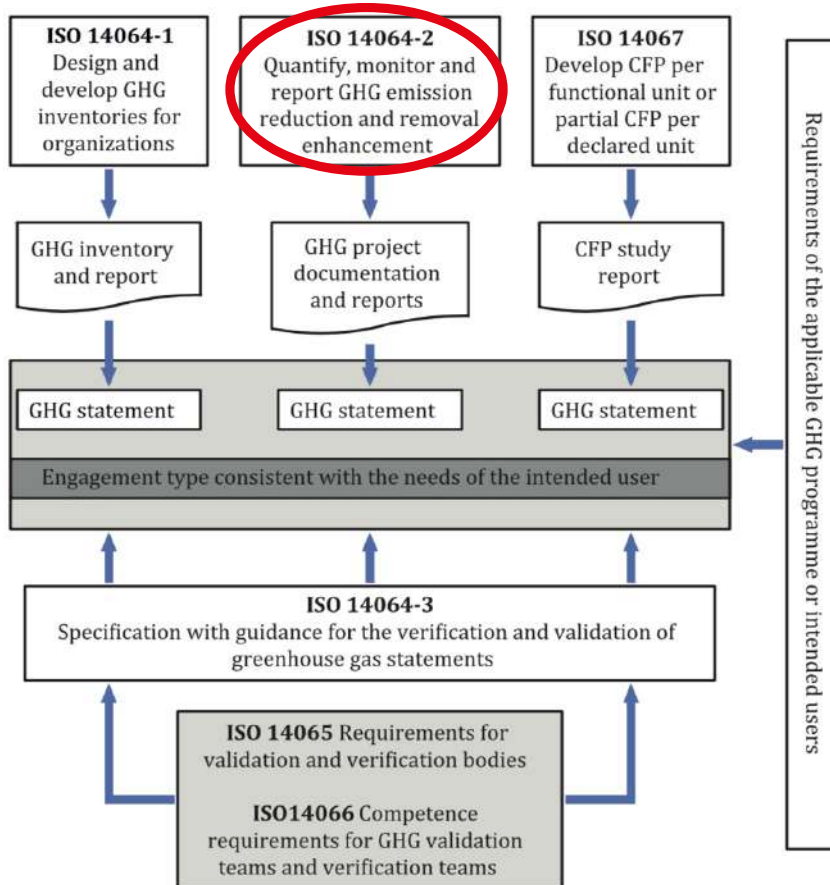
Source: Carbon Footprint; 2011

Total Emissions – t CO ₂ e (ISO 14064-1:2018)	
Category 1	Direct GHG emission and removals
Category 2	Indirect GHG emissions from imported energy
Category 3	Indirect GHG emissions from transportation
Category 4	Ind. GHG emissions from prod. used by organization
Category 5	Ind. GHG Emissions from prod. made by the organization
Category 6	Indirect emissions from other sources

ISO 14064-2



Published standards



ISO 14064-2

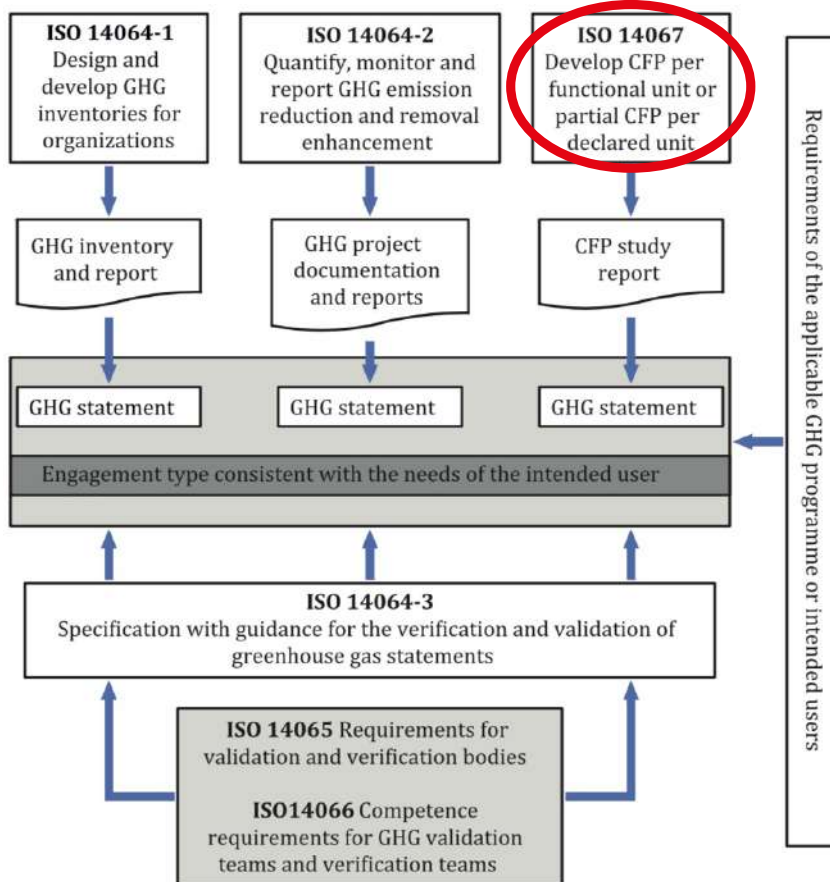
Specifies principles and requirements at the **project level** for the quantification, monitoring and reporting of activities intended to cause GHG **emission reductions or removal enhancements**.



ISO 14067

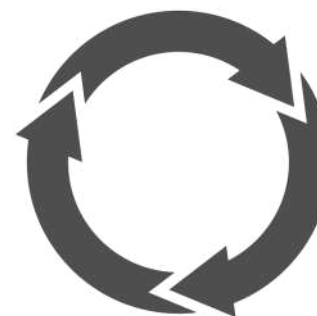


Published standards



ISO 14067

The standard that describes how to **quantify the Carbon Footprint of a product**, considering its **entire life cycle**.



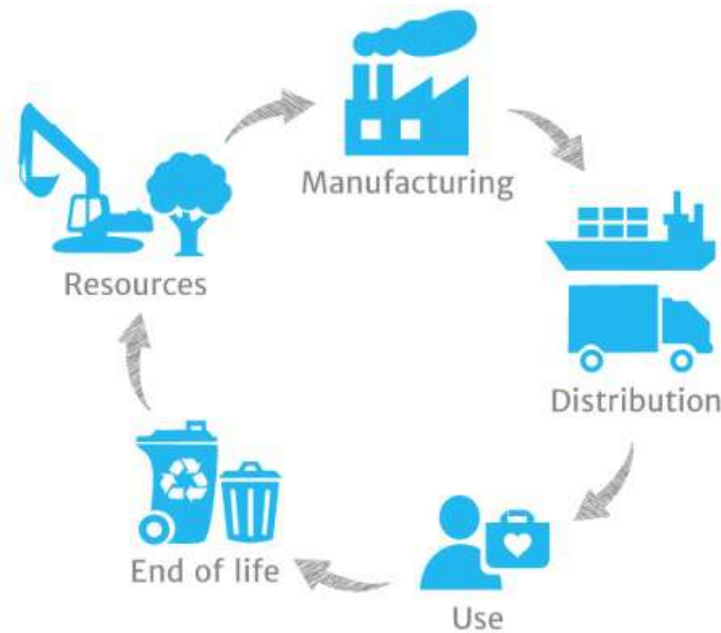
Carbon footprint of a product (CFP)

*Sum of **greenhouse gas emissions and greenhouse gas removals** in a **product system**, expressed as **CO₂ equivalents** and based on a **life cycle assessment** using the single **impact category of climate change**.*

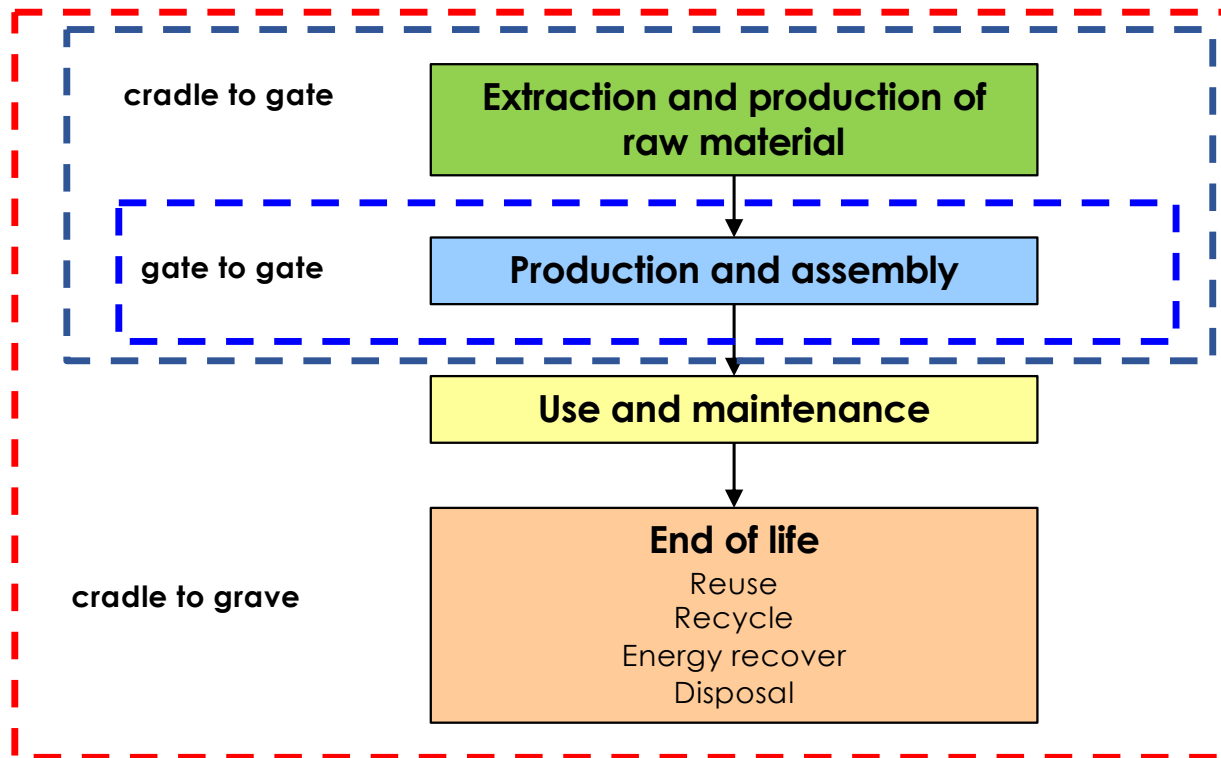


Life cycle perspective

The **quantification** of a CFP takes in consideration **the entire life cycle of a product**, including acquisition of raw material, design, production, transportation/delivery, use and the end-of-life treatment.



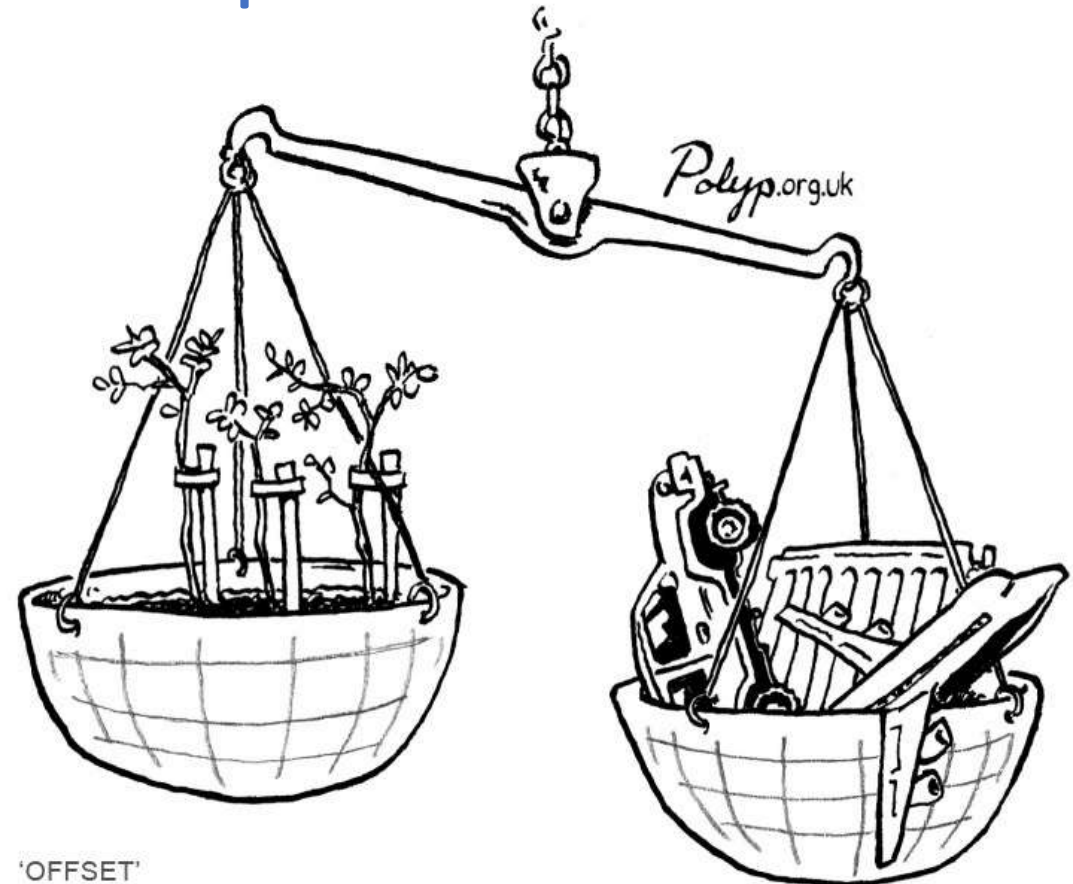
CFP and partial CFP



Requirements for the quantification of the **partial carbon footprint of a product (*partial CFP*)** are also provided.

Offsetting is not part of CFP

The offsetting is **outside**
the scope of ISO 14067.



Product category

Different products require **different approaches** for the quantification of the **CFP**.

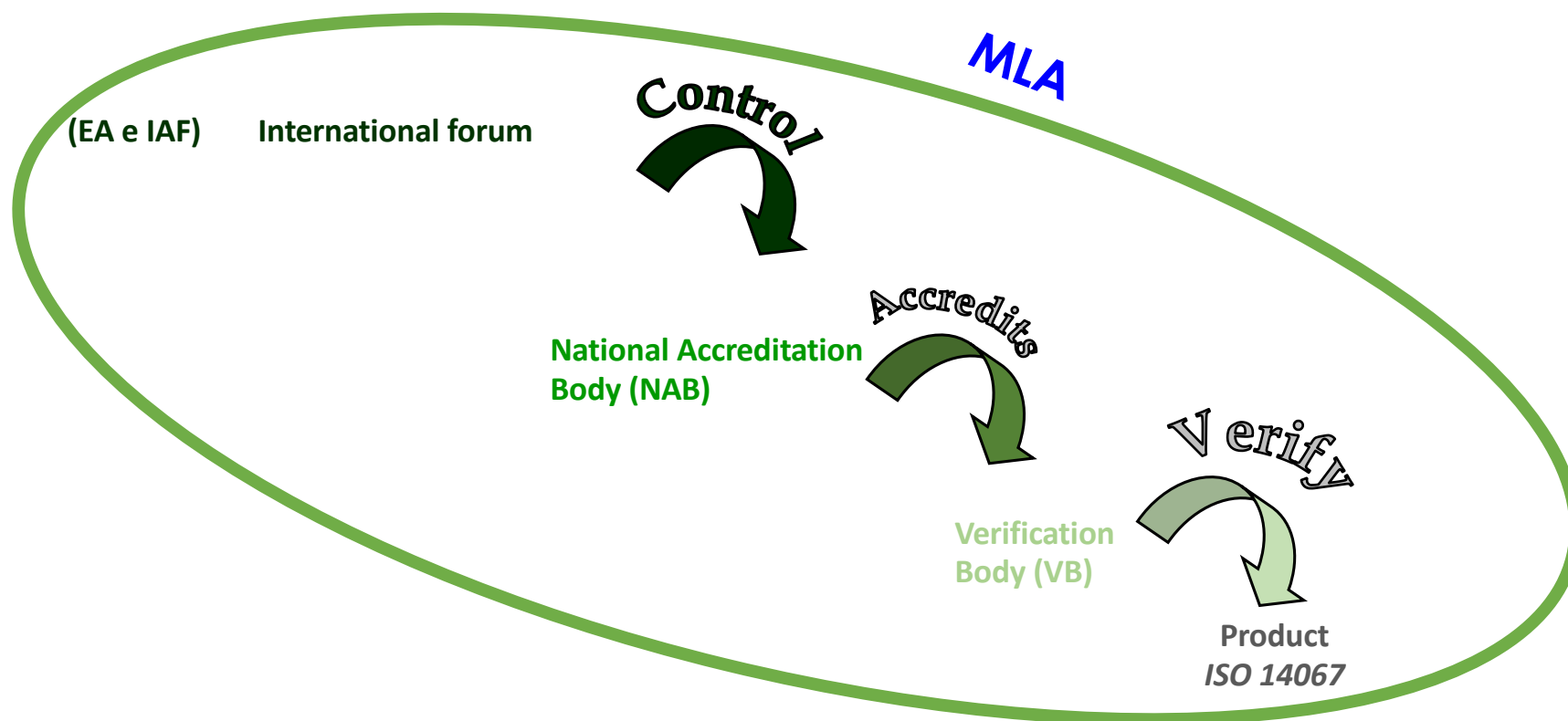


Product category rules (PCR)

*Set of specific rules, requirements and guidelines for developing **Type III** environmental declarations and **footprint** communications for one or more product categories.*



A common approach for verification and accreditation



ISO 14026

Guidelines for footprint communications

ISO 14026 requires the implementation of a **programme to manage the communication.**



Carbon Footprint International Alliance

The **MoU** was recently **extended** to include two other major international Programmes, creating a **strong foundation** to pave the way for a possible path to the MRA.

The new Group of **5 signatories** consists of:

- **Carbon Footprint Italy – CFI (Italy)**
- **The Climate Registry – TCR (California - USA)**
- **Toitu Envirocare (New Zeland)**
- **Programa País de Carbono Neutralidad - PPCN (Costa Rica)**
- **Thai Carbon Labelling Programme (Thailand)**



The signing took place at the COP26 in Glasgow on November 5th, 2021.

THANK YOU FOR YOUR ATTENTION!

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