



PE INTERNATIONAL
EXPERTS IN SUSTAINABILITY



Product Carbon Footprinting

International Standards

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- 1. Introduction
- 2. Overview of standards
- 3. Conclusions

Introduction



- Standards
- Guidelines
- Protocols
- Specifications
- Regulations

- International
- National

- Governments
- NGOs
- Industry groups



Dimension Life Cycle

Planning Raw materials Production Construction Operation Waste Recycling







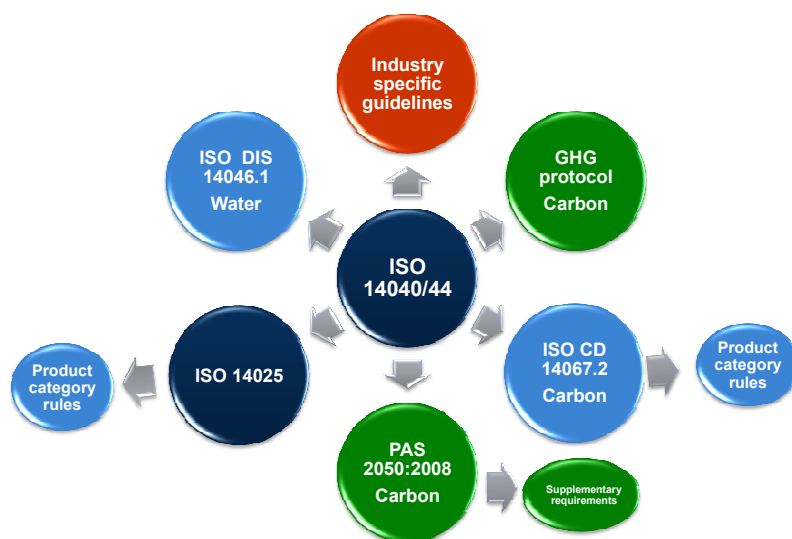
- Internal benchmark
- Development of new products
- Improvement of existing products
- Purchase/investment decisions
- Raw material selection
- Transport decisions
- Contribute to overall sustainability strategy
- Policy development
- Marketing
- Ecolable
- Engagement with suppliers

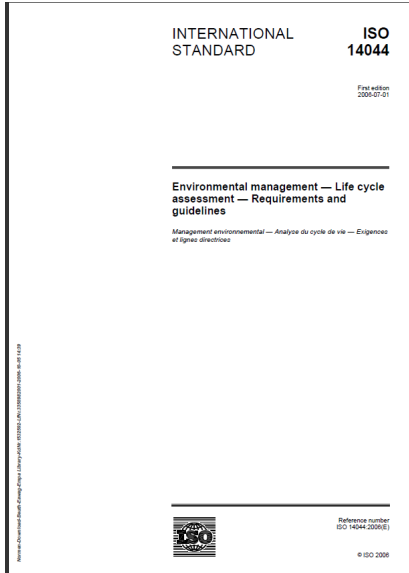
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International standards and guidelines

Overview of standards





- Published in 2006
- (Initial standards published in 1996)

- Framework for LCA
 - Goal and Scope definition
 - Inventory Analysis
 - Impact Assessment
 - Interpretation

- Environmental impacts

PERFECT AVAILABLE SPECIFICATION

PAS 2050:2008

Specification for the assessment of the life cycle greenhouse gas emissions of goods and services

Guide to PAS 2050
How to assess the carbon footprint of goods and services

CARBON TRUST defra BSI

- British Standards Institute
- First published in 2008
- Currently under review
- It is expected that the revised PAS 2050 will be available in July 2011

- Reference to ISO 14040 and 14044

“PAS 2050 builds on existing life cycle assessment methods established through BS EN ISO 14040 and BS EN ISO 14044 by specifying requirements for the assessment of the life cycle GHG emissions of goods and services.”



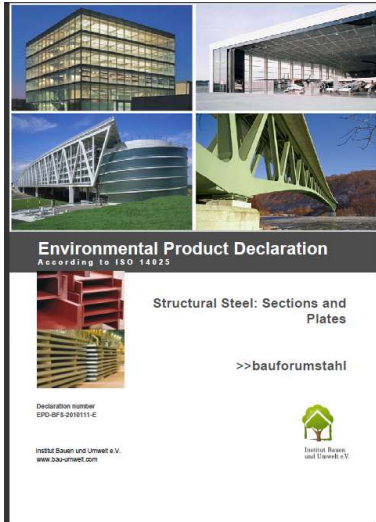
- The Product Standard will be published in September 2011
- Road tested in over 70 companies
- Reference to ISO 14040 and 14044

“The Product Standard builds on the framework and requirements established in the ISO LCA standards (14040:2006, Life Cycle Assessment: Principles and Framework and 14044:2006, Life Cycle Assessment: Requirements and Guidelines), with the intent of providing additional prescriptiveness and guidance to facilitate the consistent quantification and public reporting of product life cycle GHG inventories.”
(Draft)

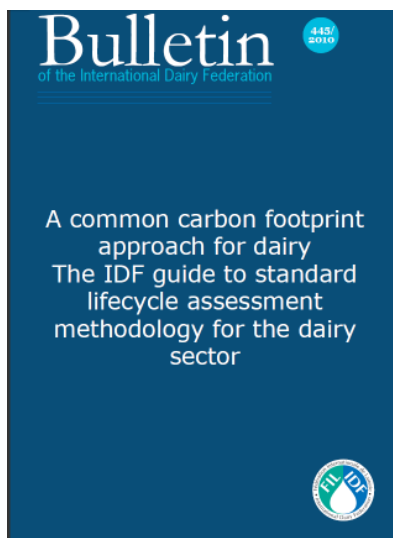


- ISO CD 14067.2
- Committee Draft 2
- Expected to be released late 2012
- Reference to ISO 14040 and 14044

“This International Standard specifies principles and requirements for studies to quantify and communicate the carbon footprint of a product (CFP), based on existing life cycle assessment (ISO 14040 series) and environmental labels and declaration (ISO 14020 series) standards.”



- **ISO 14025 Environmental labels and declarations -- Type III environmental declarations -- Principles and procedures**
- Type III environmental declarations present quantified environmental information on the life cycle of a product to enable comparisons between products fulfilling the same function. Such declarations ... **are based on independently verified life cycle assessment (LCA) data, life cycle inventory analysis (LCI) data or information modules in accordance with the ISO 14040 series of standards** and, where relevant, additional environmental information.
- Product category rules for product groups



- Bulletin of the International Dairy Federation 445/2010
- Guideline prepared at request of 56 IDF member countries
- Sector specific guidance
- “Calculation of the carbon footprint of a product using LCA methodology should be based on the ISO 14000 series, specifically ISO 14040, ISO 14044, and in future ISO 14067; the recommendations of PAS 2050 should also be taken into account where advised in this document.”
- IDF closely liaised with WBCSG (GHG protocol)

- Goal and scope definition to transparently state what has been done
- All carbon emissions are included
- Full life cycle: Cradle to grave
- Differences:
 - PAS has 100 timeframe
 - PAS prioritises economic allocation
 - PAS and GHG protocol cover quantification
 - ISO 14067 will cover quantification and communication
 - PAS explicitly states comparison of products as one application
 - ISO 14040/44 have extra requirements, if used for comparison

- ISO 14040/44 provides methodological framework
- GHG protocol, PAS 2050 and ISO 14067 (in future) establish additional principles and techniques that
 - address essential aspects of GHG assessment, including:
 - scope of greenhouse gases to be included;
 - treatment of emissions from land use change, soil carbon change, and biogenic and fossil carbon sources;
 - treatment of the impact of carbon storage in products, and offsetting;
 - requirements for the treatment of GHG emissions arising from specific processes, e.g. green electricity;
 - data requirements and accounting for emissions from renewable energy generation;

General Comparison: PAS 2050 vs. ISO 14044

Do we need to compare?

Comparison ISO 14040/44 vs. PAS 2050 is only partly possible:

- ISO 14044 is far more comprehensive.
- Parts of ISO 14044 (mainly the parts “Goal and Scope definition” and Life Cycle Inventory Analysis”) deliver the framework for PAS 2050.
- Other parts of ISO 14044 are not included in PAS 2050, e.g. Interpretation and Reporting
- PAS 2050 is focused on a specific impact of products or services, ISO 14040/44 is aimed for comprehensive assessment

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Conclusions

What standard to choose?

Do you want to

- ... Get started understanding your Carbon Footprint?
- ... Use results for internal work only?
- ... Communicate results to third parties?

Horses for courses...





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