

Für Mensch und Umwelt

Umwelt 
Bundesamt

Carbon Footprint and Climate Neutrality

General Approach and Possibilities of Integration into a
multi-criteria Ecolabel

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Background Studie for Integration of Carbon Footprint and Climate Neutrality into a multi-criteria Ecolabel



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- **How to determine the carbon footprint?**
(standards, use cases, rules, data, communication)
- **How to state carbon neutrality?**
(standards, use cases, rules, climate protection projects, communication)
- **How to integrate into a multi-criteria ecolabel?**
(aims, conditions, communication, dos and don'ts)

→ Today we are only taking about the carbon footprint and possibilities of intergration into a type 1 ecolabel, not about carbon neutrality.

Motivation for the study.

First aim of the ecolabelled product is to have a lower environmental impact / carbon footprint than an average product.



Greenhouse Gase Emissions

- Avoid
 - Reduce
 - (Compensate)
- In many cases no detailed calculations are necessary.

But expectations from consumers and procurers:

- To know the exact carbon footprint of (every) ecolabelled product.
- To quantify the environmental benefit of (every) ecolabelled product.

→ No sensitivity to the problems of methodology and data which are related to it. „Prefer bad data than no data.“

Standards and data



Standards

- ISO 14067 carbon footprint of products
- Greenhouse Gas Protocol for Products
- ISO 14026 for communication rules
- Product category rules, e.g. in Europe for Batterie Passport, Product Environmental Footprint or CBAM

Data

- From free or commercially available data bases
- Primary data
- Secondary data from scientific studies
- CO2-Calculator are helpful but quality often unknown

→ All lot of detailed data and reference data are not available.

Use cases of carbon footprint calculation



- **A company wants to know the carbon footprint of its own products and optimise the products.**

Supply chains of the company could be investigated, primary data could be made available, „big points“ could be identified and changed.

- **An ecolabel operator wants to conduct a background study for setting criteria.**

Supply chains of all companies or production routes should be known. More data necessary, probably less access to primary data. Criteria for big points hopefully could be identified.

- **A licence holder of an ecolabelled product should determine or communicate the carbon footprint of the product or fulfill a benchmark.**

Use case of comparative LCA and has to fulfill much more preconditions:

- Product category rules need to exist.
- The licence holder needs access to primary /good quality data for hotspots.
- For benchmarks a good knowledge of the market necessary.

Different Approaches for requirements related to the Product Carbon Footprint in the Blue Angel

Anforderungen zur Reduktion des PCF und deren derzeitige Umsetzung in den Vergabekriterien der Umweltzeichen des Blauen Engel (schematisch)

Mögliche Anforderungen



„Klassisch“-produktbezogene Anforderungen

- Energieeffizienz bei Nutzung
- Fluorierte THG und andere THG (Methan, Ruß) fehlen hier
- CO₂-arme Nutzenergie
- CO₂-leichte Materialien
- Verlängerte Nutzungsdauer

Umsetzung im Status Quo



Breit etabliert,
gut umsetzbar

„Klassisch“-prozessbezogene Anforderungen

- Energieeffiziente Produktion
- Einsatz CO₂-armer Prozessenergie
- CO₂-Optimierte Transporte



Vielfach etabliert,
umsetzbar

„Explizite“ PCF bezogene Anforderungen

- PCF Ermittlungs-Pflicht
- PCF Ausweis-Pflicht
- PCF Höchstwert



„Pilothaft“ angewendet,
Umsetzbarkeit in der Erprobung

THG-Neutralitäts-Anforderungen

- THG-Neutralstellung von (Rest-)Emissionen



„Pilothaft“ angewendet,
Umsetzbarkeit in der Erprobung

Quelle: eigene Darstellung (Ökopool)

Discussion points with Environmental Label Jury regarding criteria for Canteens and Catering.



- **Calculation and communication of the Carbon Footprint of the Meals**
 - use of calculators for CO₂e is necessary
 - the quality of the recommend calculators has to be approved
 - only calculation of the yearly average CO₂e-Emissions per meal
 - no communication of Carbon Footprints of single meals

- **Compensation of CO₂e-Emissions**
 - rejected because not considered as usefull criteria
 - general requirements for the quality criteria of emission reduction credits for the Blue Angel are definded

Thank you for your attention!

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Section III 1.3 Ecodesign, Environmental Labelling, Environmentally Friendly Procurement

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