Product Carbon Footprint and Life Cycle Assessment Training

carbonminds

Content

Overview

The online training teachesthe fundamentals of PCF calculations (Product Carbon Footprints) and LCAs (Life Cycle Assessment) according to the ISO Standards 14040, 14044 and 14067. The training course is primarily focusing on companies in the chemical and plastics industry who have little to no experience in these environmental topics and want to understand the basic questions of "why, how and what" in relation to environmental assessments of their products. Furthermore, the workshop covers simple interactive case studies and exercises so the participants can apply their knowledge in the real-world corporate environment after the completion of the training.

The participants learn the following topics:

Why is it important to calculate PCFs and conducts LCAs?

How can PCFs and LCAs become useful for your business?

What is needed to calculate PCFs, including basic knowledge about ISO 14067?

Application of the knowledge in real-world, simplified, case-studies.

Your benefits after completing the workshop

UNDERSTAND THE BUSINESS VALUES BEHIND PCFs AND LCAs

UNDERSTAND THE BASIC REQUIREMENTS FOR PCF CALCULATIONS

APPLY THE BASIC REQUIREMENTS OF PCF CALCULATIONS IN A SIMPLIFIED REAL-WORLD CASE STUDY

OPPORTUNITY TO CONTEXTUALIZE YOUR COMPANY-SPECIFIC SITUATION IN A 1-ON-1 MEETING AND DISCUSS NEXT STEPS FOR PCF CALCULATIONS

GUIDANCE ON THE NEXT STEPS TO SUPPORT YOUR ORGANIZATION IN PCF CALCULATIONS

VALUABLE PEER-TO-PEER EXCHANGE

WORKSHOP CERTIFICATE

Profile of participants

This workshop is relevant for you if you are working in the chemical or plastics industry as a professional who plays an integral role in understanding, implementing, and making decisions related to PCFs and LCAs of your products.

The following areas of activity are considered particularly relevant:
- Sustainability
- Purchasing
- Supply Chain Management
- Research & Development (R&D)
- Innovation

Furthermore, professionals from the following departments can be considered as relevant, if they aim to get a deeper understanding of environmental assessments:
- Marketing
- Information Technology (IT)
- Production
- Sales and Management

Workshop content

LEARNING OBJECTIVES

The participants will be enabled to[1]

- → Understand and internalize the business values behind PCFs and LCA.
- → Understand and internalize the basic requirements for LCA PCF calculations according to ISO 14040/14044/14067.
  - – Goals and Scope definition
  - – Life cycle inventory
  - – Life cycle impact assessment – focus on product carbon footprints.
  - – Interpretation of results
- → Design and perform a simple LCA/PCF study, including and evaluating the validity of specific steps, the quality and reliability.
- → Understand and internalize the next steps to implement PCF calculations within your company.

[1]This corresponds to: Viere et al (2020). Teaching life cycle assessment in higher education. Available under: https://link.springer.com/content/pdf/10.1007/s11367-020-01844-3.pdf

In-Person Training

Organization

What?

- **Workshop:** 16-hours in-person workshop
- **Contextualization:** 60-minute virtual meeting with consultant / trainer during weeks after the workshop
- **Language:** English (discussion can be in German if desired by all participants). *Slides and Materials will be in English.*
- **Price:** 2160 € for regular participants, 1080 € for academic participants

Where?

Rotonda Business Club
Salierring 32, 50677 Cologne

Visit our website for detailed information on dates and pricing.

Learn more

TIME	DAY 1	DAY 2	DAY 3
Morning		LCI & LCIA & Interpretation	Case Study
09 am to 12 pm		*Recap*: What have we done so far Life cycle inventory → Data collection → Data needs and quality → Primary data → Supplier data – Secondary data – Software tool overview → Excursus: cm.chemicals data	*Recap*: What have we done so far Theory of mathematical structure of LCA Conducting an industry related LCA case study: Example studies: Recycling, Food, Petrol, Transport, Energy Summary and defining the next steps for contextualization, i.e., 60-minutes virtual meetings after course.
12pm to 1pm	**Arrival and get together** We invite you to finger food, drinks and an exchange about PCFs and LCA	Lunch break	Optional lunch *(Preregistration needed)*
Afternoon	Introduction & Goal and Scope	LCI & LCIA & Interpretation	
01 pm to 05 pm	Introduction – Why and how? → Business values, application areas and use-cases → Relevance of trust, transparency, and consistency Goal & Scope definition → Goal Definition → Functional/Declared unit → System boundaries → Important nomenclature → Short summary	→ Allocation → Waste and recycling outlook → Life cycle impact assessment → Global warming potentials or what the PCF is all about → Interpretation and reporting – Interpreting PCF results – Reporting requirements for PCFs (ISO 14067) → Compliance with other Together for Sustainability standards	Departure
Optional: Visit a typical German brewery in Cologne	We invite you to a local brewery in Cologne. *Preregistration needed.*		

Online Training

Organization

What?

- **Workshop:** 14-hours online training
- **Contextualization:** 60-minute individual virtual meeting with consultant / trainer during weeks after the workshop
- **Language:** English (discussion can be in German if desired by all participants). *Slides and Materials will be in English.*
- **Price:** 2160 € for regular participants, 1080 € for academic participants

Where?

Online

Visit our website for detailed information on dates and pricing.

Learn more

TIME	DAY 1	DAY 2	DAY 3
Morning from	Introduction & Goal	Modelling Assumptions & Impact Assessment	Conduct an LCA
10 am to 12 pm CE(S)T	**Introduction – Why and how?** → Get-to know each other → Business values, application areas and use-cases → Relevance of trust, transparency and consistency **Phase 1a: Goal definition** → What makes LCA comparable? → Define the goal of an LCA study	**Phase 2: Life Cycle Inventory (LCI) model (continued)** → Perform allocation for multifunctional processes *Short break* **Phase 3: Life Cycle Impact Assessment** → Describe the concept of an environmental impact category → Classify LCI results	**Modelling of LCA** → Understand the mathematical structure of an LCA → Exemplary case study
LUNCH BREAK			
Afternoon from	Scope Definition & Data collection	Interpretation & Reporting	Conduct an LCA
1 pm to 4 pm CE(S)T	**Phase 1b: Scope definition** → Define the functional unit of an LCA study (Exercise → Define system boundaries → Life Cycle Stages → Cut-off criteria Short break **Phase 2: Life Cycle Inventory (LCI) model** → Develop a process flow sheet → Collect primary production data → Select suitable background data from LCI databases	**Phase 3: Life Cycle Impact Assessment (continued)** → Characterize LCI results Short break **Phase 4:Interpretation** → Recognize significant environmental impacts along a product's life cycle → Identify methods to evaluate LCA results → Understand the structure of an LCA report	**Conducting an industry related LCA case study:** Example studies: → Recycling → Food → Petrol → Transport → Energy **Summary and next steps for contextualization, i.e., 60-minutes virtual meetings after course** the defined goals and scope

If you want to learn more about the Product Carbon Footprint and Life Cycle Assessment Online Training, please get in contact with

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GLOBAL ACCOUNT MANAGER

Contact us

Stay updated

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