Workshop Facilitator

Dr. Damjan Krajnc
MIITR

Dr. Damjan Krajnc holds a PhD in Chemical Engineering and has extensive experience in life cycle assessment, carbon footprinting, eco-design, sustainability indicators, and the practical transfer of sustainability methods into industry, training, and applied projects.

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About ECOThink

ECOThink is an innovative project that integrates design for sustainability and life cycle assessment (LCA) into vocational education and training (VET). Our mission is to equip future professionals with practical skills to calculate and interpret environmental footprints, focusing on sustainable practices in companies.

Our Focus Topics:

Design for Sustainability
Learn to use environmentally friendly materials, optimize processes, and extend product life

Life Cycle Analysis
Master tools like OpenLCA and Sustainable Process Index (SPI) for environmental impact assessment

Practical Skills
Develop hands-on expertise in managing input data and interpreting LCA results

Project Partners

ACEEU, Germany
Levilo, Austria
MIITR, Slovenia

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ECOThink

Workshop

Estimating a Product's Carbon Footprint with OpenLCA

Professional Training

www.ecothink-hub.eu

Learning Outcomes

- Define the purpose, functional unit, and system boundaries of a product carbon footprint study
- Collect and organise the primary and secondary data needed for a robust assessment
- Build a basic product model in OpenLCA and select suitable background data
- Use additional sources responsibly when direct data are missing and document assumptions clearly
- Interpret results, identify hotspots, and communicate findings in a practical way

Join us!

Target Group

- Sustainability, quality, and environmental managers in companies
- Product developers, engineers, and process improvement teams
- Consultants and professionals working with carbon footprinting or eco-design
- Small and medium-sized enterprises starting with product carbon footprint assessment

Topics and Tools

- Goal and scope definition for product carbon footprint studies
- OpenLCA workflow: product system setup, modelling logic, and results view
- Use of supplementary sources: supplier data, environmental product declarations, literature, and emission factors
- Data quality checks, allocation choices, cut-off rules, and handling of assumptions
- Interpretation of results, hotspot analysis, and product improvement options

Workshop Overview

This training presents a practical approach to estimating a product's carbon footprint, from defining the goal and scope to interpreting results. Participants will learn how to structure product data, build a model in OpenLCA, and complement missing information with reliable sources such as supplier-specific data, environmental product declarations, literature, and recognised emission factor databases. The training emphasises transparent assumptions, sound data quality, and clear documentation so that results are credible, reproducible, and useful for eco-design, communication, and product improvement.