

Training Course

Sustainability and Life Cycle Modelling Workshop

11 - 15 Nov 2024

Berlin & online

Training Chair



Prof. Dr. Gesa Beck
ABCircular GmbH





Training Course

Sustainability and Life Cycle Modelling Workshop

📅 11 Nov 09:00 - 15 Nov 2024 15:30

📍 Berlin & online

The aim of the training is to provide the participants with the necessary knowledge and skills to perform sustainability studies: environmental, economic and social impacts assessment. Additionally, it introduces eco-design, chemical risk assessment and EU Safe and Sustainable by Design (SSbD). An overview of sustainability reporting and corporate sustainability due diligence directive is also provided. The course is divided into 4 modules.

Module 1 focuses on conducting a **Life Cycle Assessment (LCA)** in accordance with the methods and policies defined by the International Standards Organization (ISO 14040). This methodology provides useful information on a product's life cycle impact on the environment, hence strategic to making decisions about design, policy, acquisition and corporate strategy. From this training, technical know-how, based on research and knowledge is provided in this quick-evolving area of circularity is provided.

Module 2 addresses **economic aspects using material flow cost accounting (MFCA)** based on ISO 14051, to evaluate the economic feasibility of processes and products. This is important in making techno-economic sustainable decisions applicable to industrial processes and productions. Potentially,

MFCA is helpful in considering optimising resource efficiency.

Module 3 considers **social life cycle assessment in accordance with the ISO 14040 and SDGs**. This training will provide an overview of how material sourcing, production process, use and end-of-life impacts different stakeholders, for example, local communities, workers and consumers. To understand these principles, different tools and requirements as well as different case studies will be given. Social considerations, together with environmental and economic aspects provide a holistic and deeper understanding, thus impacting the decision-making processes.

Module 4 focuses on **eco-design, chemical risk assessment (CRA) and EU Safe and Sustainable by Design (SSbD)**. A short overview of a chemical risk assessment will be given, followed by use cases and practical CRA exercises of different industrial processes. The module ends with an introduction to sustainability reporting and the European corporate sustainability due diligence directive, which differs significantly from the German Supply Chain Duty of Care Act.

Training Chair



Prof. Dr. Gesa Beck
ABCircular GmbH

Lecturer



Maja Jelic (M.Sc.)
ABCircular GmbH



Khadija Sarquah (M.Sc.)
ABCircular GmbH



Marta Revello (M.Eng.)
ABCircular GmbH

Target group

This training is intended for:

- Researchers
- Product designers
- Environmental practitioners
- Environmental consultants
- Research engineers
- Manufacturers
- Businesses in the circular economy

Goals

The training aims to provide the participants necessary knowledge and skills to life cycle and sustainability modelling; quantifying economic, social and environmental impacts.

Also, exploring approaches of eco-design, chemical risk assessment, EU SSbD, corporate sustainability due diligence directive (CSDDD) and sustainability reporting.

Organizational matters

Participants are asked to bring laptops for the practical exercises. During the hands-on sessions, you will be supported and assisted by a team of experts. Registered participants will receive a link to all the necessary tools in advance.

Online participation will be offered via our online platform. You can log in via the "Access to the event" button, which you will find at the top right of this page on the day of the event.

You can create a new password on the login page using the "Forgot password" function. To do so, please use the email address you provided when registering for this event. Prior registration for the event is required to log in to the platform.

To familiarize yourself with the event platform, you can watch our [explanatory video](#):

<https://www.youtube.com/watch?v=iH9MOjblvc>

The on Site participation will take place in Berlin.

Overview

11 Nov 2024

- 09:00 Welcome: Introduction to courses and presentation of facilitators
- 10:30 Introduction lecture: Life Cycle Assessment
- 11:30 Introduction of Case Study and Tool
- 12:00 Inventory Analysis
- 14:30 Case Study Modelling
- 16:30 Questions and Exercises
- 17:00 End of the day

12 Nov 2024

- 09:00 Case Study Modelling
- 11:15 Case Study Results and Discussions
- 14:30 MFCA Introduction Lecture
- 15:30 Introduction of Case Study and Tool
- 17:00 End of the day

13 Nov 2024

- 09:00 Case Study Assessment
- 11:30 Case Study Assessment
- 14:30 Case Study Results and Discussions
- 16:00 Follow-up and Discussions
- 17:00 End of the day

14 Nov 2024

- 09:00 Introduction Lecture; Principles and Methods
- 10:00 Tools, Data Acquisition and Requirements
- 11:15 Introduction of Case Study / Case Study Assessment
- 14:30 Eco-Design
- 15:30 EU Safe and Sustainable by Design (SSbD) Framework
- 16:00 Chemical Risk Assessment (CRA)
- 17:00 End of the day

15 Nov 2024

- 09:00 Continue Case study Chemical Risk Assessment
- 11:00 Sustainability Reporting / Corporate Sustainability Due Diligence Directive (CSDDD)
- 14:00 General questions, discussions and follow-ups
- 15:30 End of the Event

Program

11 Nov 2024

🕒 09:00 📖 Lecture

Welcome: Introduction to courses and presentation of facilitators



Prof. Dr. Gesa Beck
ABCircular GmbH

🕒 10:30 📖 Lecture

Introduction lecture: Life Cycle Assessment



Khadija Sarquah
ABCircular GmbH

🕒 11:15 🍵 Break

Coffee break

🕒 11:30 📖 Lecture

Introduction of Case Study and Tool



Khadija Sarquah
ABCircular GmbH

🕒 12:00 📖 Lecture

Inventory Analysis



Khadija Sarquah
ABCircular GmbH

🕒 13:00 🍵 Break

Lunch break

🕒 14:30 📖 Lecture

Case Study Modelling



Khadija Sarquah
ABCircular GmbH

🕒 16:30 📖 Exercises

Questions and Exercises

🕒 17:00 ☆ Supporting program

End of the day

12 Nov 2024

🕒 09:00 📖 Lecture

Case Study Modelling



Khadija Sarquah
ABCircular GmbH

🕒 11:00 🍵 Break

Coffee break

🕒 11:15 🗨️ Discussion

Case Study Results and Discussions



Khadija Sarquah
ABCircular GmbH

🕒 13:00 🍵 Break

Lunch break

🕒 14:30 📖 Lecture

MFCA Introduction Lecture



Prof. Dr. Gesa Beck
ABCircular GmbH



Marta Revello
ABCircular GmbH

🕒 15:30 📖 Lecture

Introduction of Case Study and Tool



Marta Revello
ABCircular GmbH

🕒 17:00 ☆ Supporting program

End of the day

13 Nov 2024

🕒 09:00 📖 Lecture

Case Study Assessment



Khadija Sarquah
ABCircular GmbH

🕒 11:15 🍵 Break

Coffee break

🕒 11:30 📖 Lecture

Case Study Assessment



Marta Revello
ABCircular GmbH

🕒 13:00 🍵 Break

Lunch break

🕒 14:30 🗨️ Discussion

Case Study Results and Discussions

🕒 16:00 🗨️ Discussion

Follow-up and Discussions

🕒 17:00 ☆ Supporting program

End of the day

14 Nov 2024

🕒 09:00 📖 Lecture

Introduction Lecture; Principles and Methods



Maja Jelic
ABCircular GmbH

🕒 10:00 📖 Lecture

Tools, Data Acquisition and Requirements



Maja Jelic
ABCircular GmbH

🕒 11:00 🍵 Break

Coffee break

🕒 11:15 📖 Lecture

Introduction of Case Study / Case Study Assessment



Maja Jelic
ABCircular GmbH

🕒 13:00 🍵 Break

Lunch break

🕒 14:30 📖 Lecture

Eco-Design



Prof. Dr. Gesa Beck
ABCircular GmbH

🕒 15:15 🍵 Break

Coffee break

🕒 15:30 📖 Lecture

EU Safe and Sustainable by Design (SSbD)
Framework



Prof. Dr. Gesa Beck
ABCircular GmbH



Maja Jelic
ABCircular GmbH

🕒 16:00 📖 Lecture

Chemical Risk Assessment (CRA)



Maja Jelic
ABCircular GmbH

🕒 17:00 ☆ Supporting program

End of the day

15 Nov 2024

🕒 09:00 📖 Lecture

Continue Case study Chemical Risk Assessment



Maja Jelic
ABCircular GmbH

🕒 10:45 🍵 Break

Coffee break

🕒 11:00 📖 Lecture

Sustainability Reporting / Corporate Sustainability
Due Diligence Directive (CSDDD)



Prof. Dr. Gesa Beck
ABCircular GmbH



Julia Gebefügi
ABCircular GmbH

🕒 12:30 🍵 Break

Lunch break

🕒 14:00 🗨️ Discussion

General questions, discussions and follow-ups

🕒 15:30 ☆ Supporting program

End of the Event



Prof. Dr. Gesa Beck
ABCircular GmbH



Prof. Dr. Gesa Beck

ABCircular GmbH

Gesa Beck is the managing director and founder of ABCircular GmbH. She is a professor of environmental process engineering and has more than 25 years of experience in recycling technologies, sustainability assessments, green chemistry and renewable energies.

She was Head of the Fraunhofer Application Center "Resource Efficiency" and is currently Head of the Institute for Applied Resource Strategies and Vice President for Sustainable Development at SRH Berlin.

She was/is a reviewer for the EU, DFG, DBU and Volkswagen Foundation, for several international journals, guest editor at Elsevier and MDPI and member of scientific committees of international conferences (e.g. EUROMAT 2023). In addition, she has been project leader of more than 50 research and development projects.



Maja Jelic (M.Sc.)

ABCircular GmbH

Maja Jelic (M.Sc.) is the Head of Research and Development at ABCircular GmbH. She has experience in the social assessment of processes and life cycles of products, especially in occupational safety (e.g. chemical risk assessment) as well as in chemical process design and material characterization. She teaches and researches in environmental processes and sustainability topics.



Marta Revello (M.Eng.)

ABCircular GmbH

Marta Revello (M.Eng.) is a research and development engineer and an expert in electrochemical recycling processes. She teaches and conducts research in the field of lithium-ion battery recycling.



Khadija Sarquah (M.Sc.)

ABCircular GmbH

Khadija Sarquah (M.Sc.) is an expert in life cycle assessment. She teaches and researches in the areas of sustainability assessment, renewable energy, rural energy access, waste recycling and material characterization.

Book participation

on site

DGM-Members € 1,875.00
incl. VAT

Regular participation € 1,950.00
incl. VAT

online

DGM-Members € 1,325.00
incl. VAT

Regular participation € 1,400.00
incl. VAT

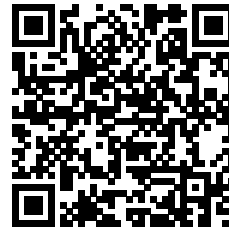
Contact person

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🌐 <https://dgm.de/en/events/training-courses/sustainability-and-life-cycle-modelling>



Venue

ABCircular GmbH

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12489 Berlin

