



ILCA
International
Life Cycle
Academy



DCEA

THE DANISH CENTRE FOR
ENVIRONMENTAL ASSESSMENT

Program for PhD course: *Advanced LCA - Consequential and IO-based Life Cycle Assessment* (5 ECTS)

2023 edition, Aalborg University.

Organised by the Danish Centre for Environmental Assessment ([DCEA](#)) in collaboration with the International Life Cycle Academy ([ILCA](#))

Lecturers:

Professor Jannick Schmidt (JS) AAU & 2.-0 LCA

Professor Massimo Pizzol (MP) AAU

Postdoc Agneta Ghose (AG) AAU

Associate Professor Søren Løkke (SL) AAU

Monday, May 15th, 2023, 08:30 – 16:00 (Full day) room 3.429, Rendsburggade 14, 9000 Aalborg

Module 1, physical on-site

08:30-09:00 Welcome, coffee and meeting the participants

09:00-10:00 Portfolio Group Exercise: Apply the comparability algorithm to document the functional unit for your study report. Revise foreground system if needed (MP, SL, JS)

10:00 – 10:15 Break

10:15 – 11:00 Lecture: Ascribing land use changes to its drivers, conceptual framework for the modelling of indirect land use changes in life cycle inventory (JS)

11:00 – 12:00 Portfolio Group Exercise: Applying the co-product substitution algorithm (MP, SL; JS)

12:00 – 13:00 Lunch

13:00 – 14:00 Portfolio Group Exercise: Finalising the case study inventory and documentation (MP, JS, SL)

14:00 – 14:15 Break with group picture

14:15 – 15:00 Portfolio Group Exercise: Communication issues and strategy (MP, JS, SL)

15:00 – 16:00 Discussion section: Strengths and weaknesses, challenges, and opportunities of consequential LCA? Communicating consequential models

Tuesday, May 16th, 2023, 09:00 – 16:00 (Full day) room 3.429, Rendsburggade 14, 9000 Aalborg

Module 2, physical on-site

09:00 – 10:30 Portfolio Group exercise: A reproducible and working version of the case study in Brightway2 (MP, AG)

10:30 – 11:00 Discussion: Making reproducible LCA studies

11:00 – 11:15 Break

11:15 – 11:45 Lecture: Advanced LCA simulations in Brightway2 (Pierre Jouannais)

11:45 – 12:30 Lunch

12:30 – 14:00 Portfolio Group exercise: Comparative uncertainty analysis on the case study (MP, AG)

14:00 – 14:15 Break

14:15 – 16:00 Portfolio Group exercise: Sensitivity analysis on the case studies (MP, AG)

Wednesday, May 17th, 2023, 08:00 – 15:00 (Full day) room 3.429, Rendsburggade 14, 9000 Aalborg

Module 3, physical on-site

08:00 – 10:30 Portfolio Group Exercise: Working with Hybrid datasets (JS, AG)

10:30 – 10:45 Break

10:45 – 11:45 Lecture: Application examples: economy wide level (from municipal to global), product focus, corporate focus, and project/programme/plan/policy focus (JS)

11:45 – 12:30 Lunch

12:30 – 13:45 Portfolio Group Exercise - continued: Working with Hybrid datasets (JS, AG)

13:45 – 14:30 Discussion: Addressing open issues and remaining questions

14:30 – 15:00 Closing: Wrap-up and feedback on the course (JS, BW, SL, AG)