

INTRODUCTION TO LCA MODELLING ON FOOD SUPPLY CHAIN

Hosted by: Department of Biotechnology and Food Science, Faculty of Natural Sciences, Norwegian University of Science and Technology (NTNU), Trondheim, Norway

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This time, a Journey into Sustainable Food Supply Chains was made in Trondheim, Norway, where a group of eager learners recently embarked on a transformative three-day seminar journey, “Introduction to LCA Modelling on Food Supply Chain.” The aim of the seminar was to unravel the mysteries of Life Cycle Assessment (LCA) and learn how to apply it to the world of food supply chains.

The first day of the seminar began with Prof. Francesco Romagnoli introducing the concept of Life Cycle Thinking. These questions, such as “What is LCA?”, and “How do ISO Standards 14044-2006 shape our understanding of it?”, were answered within a lecture that covered LCA topics from different perspectives with case studies and real-world examples. The participants were actively engaged in discussions. As the day ended, the take-home message was clear: sustainability in food supply chains starts with a holistic understanding and life cycle thinking.

With theoretical knowledge firmly in place, the participants returned for day two of the seminar, where Dr. Maksims Feofilovs guided them through the world of openLCA software, a free available tool for LCA. This part of the seminar provided an insightful introduction to the possibilities offered by LCA tools, databases and impact assessment methods, followed by practical exercises. These hands-on experiences allowed students to grasp the power of openLCA in modelling sustainable food supply chains.

The final day was dedicated to students putting their newly acquired skills to the test. Students worked in groups to create their own openLCA models for the practical coursework assignments. As discussions flowed, students openly shared their challenges and problem-solving strategies. Prof. Romagnoli and Dr. Feofilovs offered valuable insights and feedback, transforming this day into a vibrant exchange of ideas and experiences.

The seminar equipped participants with essential knowledge and fostered a sense of community among learners and instructors alike. This seminar offered a journey towards a sustainable future where participants, armed with LCA modelling skills, could make a real impact. The story of this seminar is a testament to the power of knowledge, collaboration, and the unwavering commitment to a more sustainable world.

Beyond the confines of the seminar, Prof. Francesco Romagnoli and Dr. Maksims Feofilovs, extended their engagement with NTNU. They had the opportunity to present the achievements and capabilities of Riga Technical University Institute of Energy Systems and Environment (RTU IESE) to NTNU staff. This presentation illuminated the rich landscape of research and innovation at RTU IESE, sparking discussions on potential collaboration pathways. The meeting not only fostered an exchange of ideas but also forged new connections that have the potential to enhance research and education in the field of sustainable technologies.

Prof. Francesco Romagnoli and Dr. Maksims Feofilovs