SETAC

SWEDISH LIFE CYCLE CENTER

PROGRAMME BOOK

SETAC EUROPE 26TH LCA SYMPOSIUM

21–23 OCTOBER 2024 | GOTHENBURG, SWEDEN

MAKING LCA MEANINGFUL: GOOD DATA, BETTER MODELS, SUSTAINABLE DECISIONS

Contents

Welcome from SETAC

Dear participant,

It's our great pleasure to welcome you to the SETAC Europe 26th LCA Symposium, jointly organised with the Swedish Life Cycle Center in Gothenburg. We are delighted with the collaboration with the Swedish Life Cycle Center and the hospitality of the Chalmers Conference Centre for this year's meeting. For several decades, the SETAC Europe LCA Symposia have provided a platform for the European Life Cycle Community from Academia, Business, Government and NGOs to share their latest research, showcase innovative tools and discuss best practices in life cycle inventory, impact assessment, and management.

This year's theme of the meeting is "Making LCA meaningful: Good Data, Better Models, Sustainable Decisions", highlighting the need for data collection and processing that are fit for purpose and applicable to the real world. We are delighted with the overwhelming interest in this topic and your participation in this event. By sharing the results of your research, and sharing your knowledge and opinions, we can have meaningful discussions and together provide all ingredients to make LCA meaningful.

The Society of Environmental Toxicology and Chemistry (SETAC) is a not-for-profit, professional organisation with a global network of some 15,000 members from academia, business, government and NGOs. Since 1979, the Society has provided a forum where scientists, managers and other professionals exchange information and ideas on the study, analysis and solution of environmental problems, the management and regulation of natural resources, research and development, and environmental education. SETAC's founding principles are multidisciplinary, science-based objectivity and multisector participation. At this meeting as well as at the other SETAC meetings, these principles are leading for drafting the programme and are the basis for constructive exchange of views and initiating collaborations.

We would like to extend our special thanks to the Programme Committee, who compiled an exciting and entertaining programme for this meeting, and a special thank you to the Swedish Life Cycle Center and the Local Organising Committee for making all this happen in the beautiful city of Gothenburg. We wish you a wonderful meeting with good science, good company and plenty of new insights and things to think of when you go home again!

Sabine Apitz
SETAC Europe President

Bart Bosveld
SETAC Europe Executive Director

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ZEEKR Technology Europe

ivl Swedish Environmental Research Institute

NORSUS Norwegian Institute for Sustainability Research

SULCA

Programme Committee

Scientific Committee

- Greg Peters (chair), *Chalmers University of Technology, Sweden*
- Anna Björklund (vice-chair), *KTH - Royal institute of technology, Sweden*
- Anna Wikström, *Swedish Life Cycle Center, Sweden*
- Almudena Hospido, *Universidade de Santiago de Compostela, Spain*
- Eleonore Loiseau, *INRAE, France*
- Francesca Verones, *NTNU, Norway*
- Gulnara Shavalieva, *Chalmers University of Technology, Sweden*
- Hans J Garvens, *Umweltbundesamt, Germany*
- Johanna Berlin, *NILU, Sweden*
- Marco Raugei, *Oxford Brookes U, United Kingdom*
- Maria Rydberg, *Swedish Life Cycle Center, Sweden*
- Matthias Finkbeiner, *TU Berlin, Germany*
- Mikolaj Owsianiak, *DTU, Denmark*
- Niclas Ericsson, *Swedish University of Agricultural Sciences, Sweden*
- Nicole Unger, *Mondi group, Austria*
- Olivier Jolliet, *DTU, Denmark*
- Reinout Heijungs, *Vrije Universiteit, Netherlands*
- Sara Heimersson, *Essity, Sweden*
- Serenella Sala, *JRC - Joint Research Centre, Italy*
- Stefano Zuin, *Electrolux, Italy*
- Stephan Pfister, *ETHZ, Switzerland*
- Tatjana Karpenja, *RISE, Sweden*
- Tomas Rydberg, *IVL, Sweden*
- Upadhyayula Venkata Krishna Kumar, *Scania, Sweden*
- Xingqiang Song, *SWERIM, Sweden*

Local Organising Committee

- Greg Peters, *Swedish Life Cycle Center & Chalmers University of Technology, Sweden*
- Maria Rydberg, *Swedish Life Cycle Center, Sweden*
- Anna Wikström, *Swedish Life Cycle Center, Sweden*
- Anneli Hildenborg, *Chalmers University of Technology, Sweden*
- Yulia Liu, *Swedish Life Cycle Center, Sweden*
- Sophia Kristensson, *Chalmers University of Technology, Sweden*
- Stina Hallman, *Chalmers University of Technology, Sweden*

About the Swedish Life Cycle Center

The **Swedish Life Cycle Center** is a Center of excellence and a collaboration platform for academia, research institutes, industry and government agencies. Founded in 1996 and hosted by Chalmers University of Technology, the Center fosters competence-building and knowledge exchange to promote life cycle action.

By bringing together Swedish life cycle competence and front-running companies, we have developed and adopted life cycle approaches within Swedish society and made important contributions to international initiatives.

Our vision is **"credible and applied life cycle thinking globally"**, and our mission is to work for the integration of the life cycle perspective into processes and decision-making in industry, government policy and other parts of society.

Our partners set the agenda and manage all the activities. Today, the Center consists of a network of some 500 people among the various partners. Our core values are an important key to our successful network: transparency, openness, credibility, science and cross-sectoral solutions.

How we work:

- **Research projects**. We conduct cross-sectoral research projects that build on our scientific foundation and collaborations between partners.
- **Working groups & expert groups**. These groups are invaluable crossroads for interaction between researchers and practitioners. The groups manage discussions on hands-on issues, methodologies, new research questions and joint strategic intelligence. Expert groups are formed for specific tasks or advising support.
- **Communication & network activities**. We organize workshops, seminars, webinars, courses and conferences. Some events are exclusive for partners, and some are open for a public audience.

No matter what activities we perform, our foundation lies in relevant and scientifically based methods, practices, and tools. We support competence and knowledge building, while influencing both national and international initiatives.

Current partners in Swedish Life Cycle Center: Chalmers University of Technology (host of the Center), Asker Healthcare, Essity Hygiene and Health, Electrolux, Höganäs, IVL Swedish Environmental Research Institute, KTH Royal Institute of Technology, Luleå University of Technology, RISE Research Institutes of Sweden, Scania, SKF, Swedish University of Agricultural Sciences, Swedish Environmental Protection Agency, Tetra Pak, Volvo Cars, Volvo Group, ZEEKR.

Welcome from Swedish Life Cycle Center

Dear delegate,

We are very excited to welcome you on behalf of the Swedish Life Cycle Center to the SETAC Europe 26th Life Cycle Assessment Symposium! The theme of the symposium: "Making LCA Meaningful: Good Data, Better Models, Sustainable Decisions", reflects our overall ambition of enhancing life cycle assessment and facilitating change in multiple segments of the global economy, featuring sessions focusing on various industry sectors, as well as cross-cutting methodological questions. The symposium aims to help improve the science of data acquisition regarding products and services, approaches for modelling technical systems that deliver them, methods for assessing impacts on the environment and society, and the integration of LCA in decision-making.

LCA-related work is always connected with a context, and it is worth discussing how LCA can be made more accurate and effective by better reflecting that context. In a time when political forces are attempting to undermine actions necessary for keeping humanity safely within our planetary boundaries, there is value in discussing the potential for LCA to provide critical information and shape sustainable practices. We hope you will see similarities between your work and developments in some of the related areas of the symposium's agenda, and that you will meet potential allies for the kinds of work you want to do in the future.

For the first time since the pandemic, the LCA Symposium is held as an in-person meeting. The substantial number of abstracts submitted to the conference demonstrates the persistent demand for in-person gatherings that enable people to expand their professional networks in ways that online meeting formats struggle to deliver. The growing interest in this symposium series also reflects the expansion of the field internationally, across industry sectors and academic disciplines and within the public policy domain.

Like a Swedish "smörgåsbord", you can look forward to an inspiring buffet of scientific sessions, side events and social gatherings during the days to come. This will include over 24 sessions with more than 160 platform presentations and over 230 posters as well as a range of exhibitions, side events and plenty of time for social interaction.

We would like to thank everyone who has engaged with the planning and preparations for this conference: SETAC Europe staff, the Local Organising Committee, the International Scientific Program Committee, the meeting sponsors and our Swedish Life Cycle Center Partners - you have all made important contributions to the character of this great event.

Gregory Peters, Maria Rydberg and Anna Wikström
Co-chairs of the SETAC Europe 26th LCA Symposium Programme Committee

About SETAC

The **Society of Environmental Toxicology and Chemistry** (SETAC) is a global, not-for-profit professional organisation. With nearly 15,000 members representing more than 3,400 organisations from across 90 countries, SETAC is dedicated to the global advancement of environmental science and management.

"We work to advance science and science-informed decision-making.
We think of ourselves as the global home for environmental professionals."

Our Goals

- Promote research, education and training in the environmental sciences
- Promote the systematic application of all relevant scientific disciplines to the evaluation of chemical hazards
- Participate in the scientific interpretation of issues concerned with hazard assessment and risk analysis
- Support the development of ecologically acceptable practices and principles
- Provide a forum (meetings and publications) for communication among professionals in government, business, academia and other segments of society involved in the use, protection and management of our environment

Our Activities

- Conduct meetings with study and workshop sessions, platform and poster presentations, and achievement and merit awards
- Publish peer-reviewed scientific journals, *Environmental Toxicology and Chemistry (ET&C)* and *Integrated Environmental Assessment and Management (IEAM)*, as well as electronic newsletters and special technical publications
- Provide funds for education and training through the SETAC grants programme
- Organise and sponsor chapters and branches to provide a forum for the presentation of scientific data and for the interchange and study of information about local and regional concerns
- Provide advice and counsel to technical and nontechnical persons through a number of standing and ad hoc committees

Learn more at **setac.org** or contact us at **setac@setac.org.**

SETAC Global Partners

Thank you to the SETAC Global Partners for helping ensure our goal of Environmental Quality Through Science®.

Interested in becoming a SETAC Partner? Visit **setac.org/partners** for more information or contact Barbara Koelman at barbara.koelman@setac.org.

About Gothenburg

Gothenburg, Sweden's second-biggest city, and often considered the heart of Scandinavia, is home to Michelin-starred restaurants, diverse cultural scenes, sustainable living, and beautiful nature.

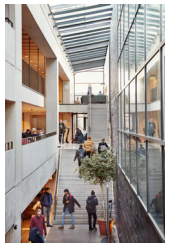
Rated #1 on the GDS Index in 2016, 2017, 2018, 2019, 2021 and 2022 and #1 in past ICCA Scandinavia Sustainability Index editions, Gothenburg is a world-leading destination for sustainable meetings and events and named the World's Best Sustainable City Stay in 2021 by Lonely Planet.

From its status as a global leader in sustainability to a fascinating history of trade and innovation, there's a lot to discover about Gothenburg. Read more about what Gothenburg has to offer on the visitsweden.com website.

About the Venue

The conference will take place at Chalmers Conference Centre, Gothenburg. The conference centre offers some of Gothenburg´s most modern conference venues with a central location just a few minutes away from the Avenue and Götaplatsen, close to the city centre and easily accessible by trams and buses (10 minutes from Gothenburg central station).

Chalmers Conference Centre
Chalmersplatsen 1,
412 58 Göteborg,
Sweden



Badges

Badges must be worn at all times to gain access to the session rooms and the exhibition, poster and catering area's of the symposium.

Wifi Information

Attendees wishing to use wifi can get the code and username at the information desk.

Emergencies and First Aid

If you need medical attention, ask any of the local volunteers. For emergencies, call 112.

SETAC Policies

SETAC provides open, safe forums for the purpose of exchanging ideas and information on the study, analysis and solution of environmental problems, the management and regulation of natural resources, promotion of scientific research and the development of strong environmental education. Attendees of SETAC meetings are expected to adhere to all SETAC policies, including SETAC Participant Policies. Learn more at **www.setac.org/learn-about-setac/policies.html**.

Conduct

Participants in SETAC activities are expected to adhere to the highest standards of integrity and professionalism and comply with the SETAC Code of Conduct. Attendees are reminded to observe SETAC's principles and values and to maintain an atmosphere of civil and constructive scientific exchange.

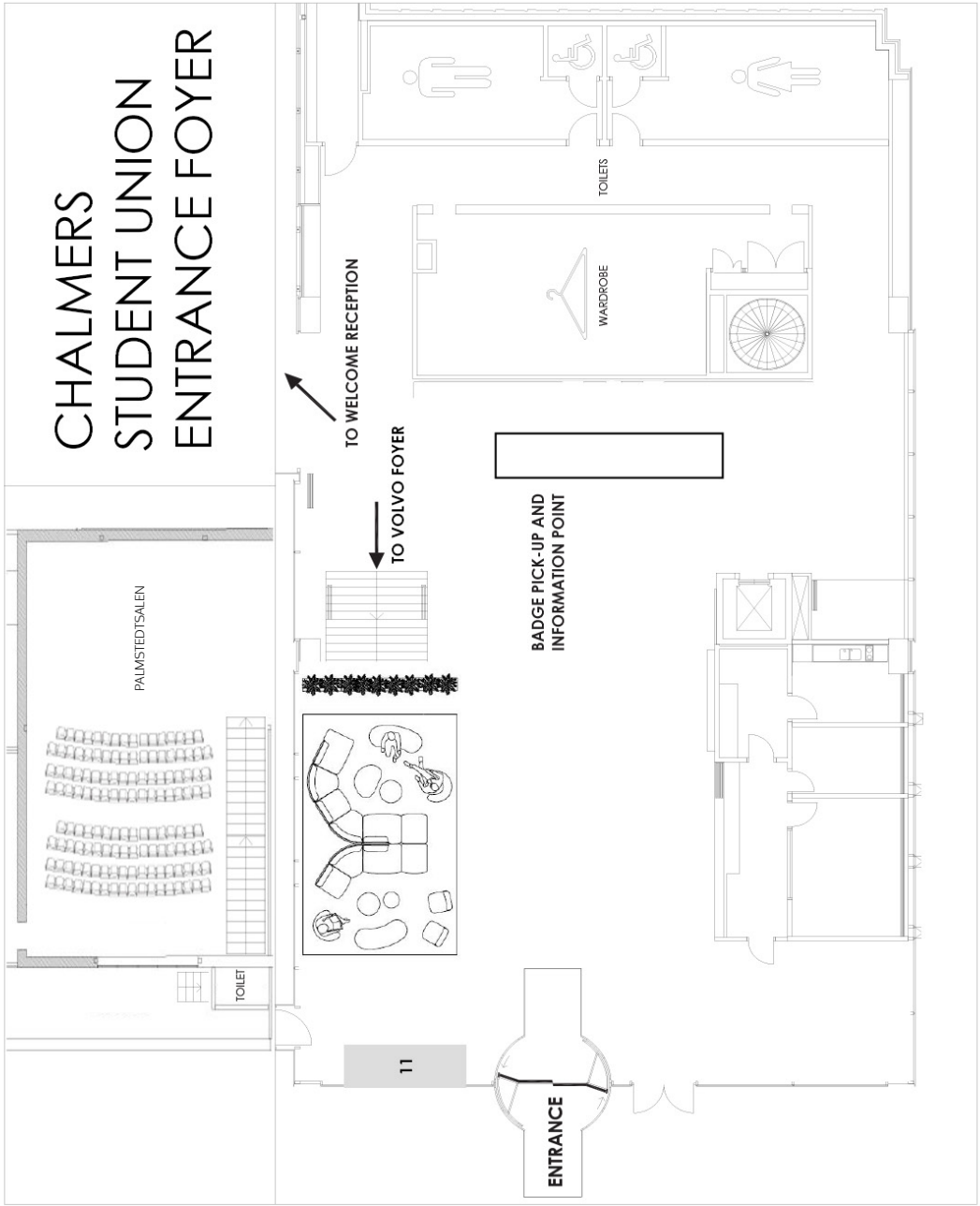
Scientific Programme Updates

This book reflects the status of the programme on 27 September, which was the print deadline. For the most up-to-date information, please visit the online meeting platform (as presentations might have been withdrawn, replaced or restructured in the meantime).

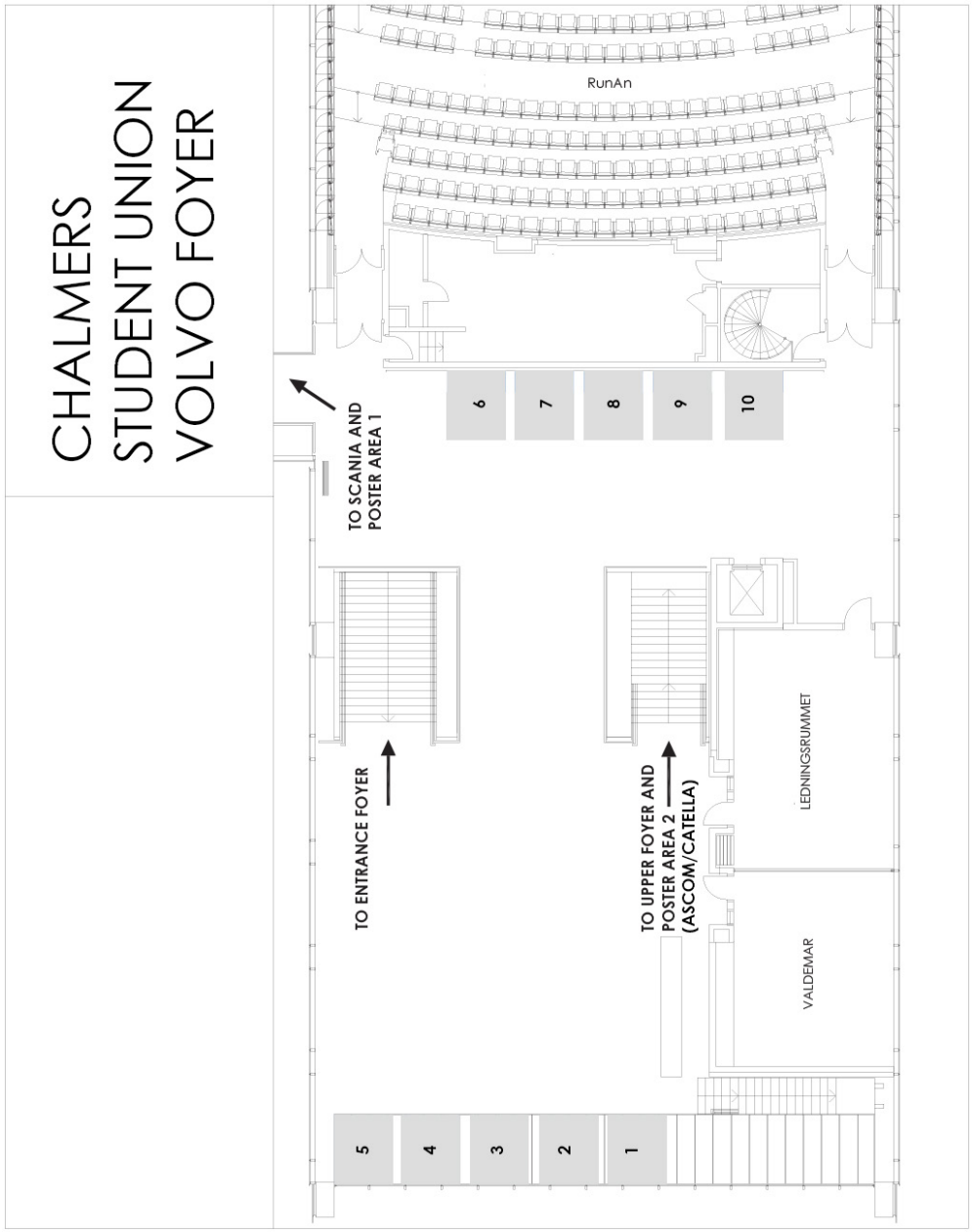
Exhibitors

Booth Nr.	Exhibitor
1	Scania
2	SKF
3	Ecoinvent
4	Essity Hygiene and Health AB
5	COWI
6	EPD International AB
7	Semantum/SULCA
8	Siemens/SiGreen
9	IVL Swedish Environmental Research Institute
10	FSLCI
11	Environmental Systems Analysis/Chalmers University of Technology

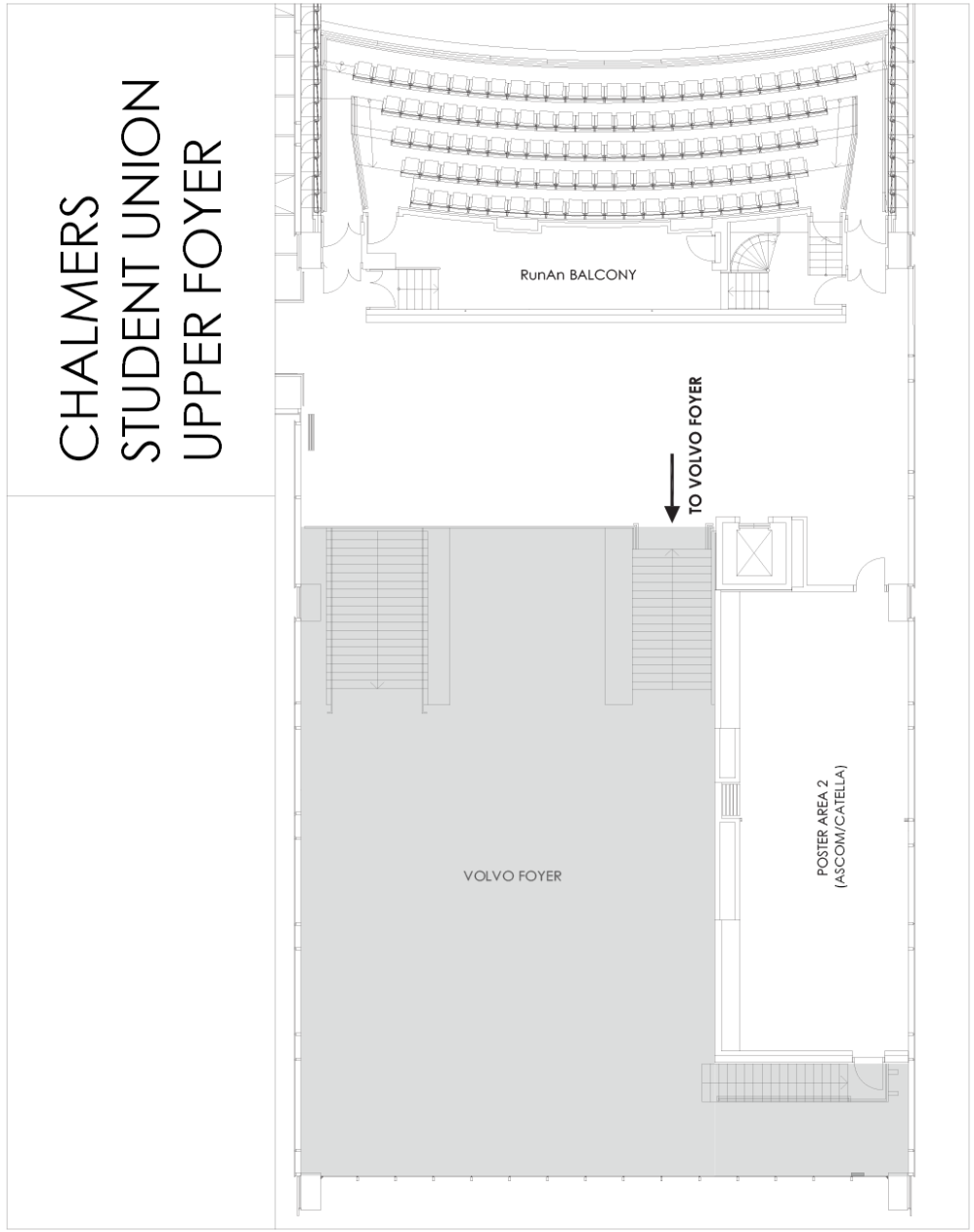
Floor Plan | Ground Floor



Floor Plan | First Floor



Floor Plan | Second Floor



Monday, 21 October

08:00–9:30	**BADGE PICKUP & POSTER SET UP**	Entrance Foyer
09:15–10:15	**OPENING CEREMONY AND KEYNOTE SPEAKER** (Broadcast in Palmstedtsalen)	RunAn
10:15–10:40	**COFFEE BREAK**	Volvo Foyer
10:40–12:10	**PARALLEL PRESENTATION SESSIONS**	
12:10–13:25	**LUNCH BREAK AND POSTER SESSIONS** (Note that there are two poster areas)	Volvo Foyer (lunch) Poster & exhibition area (posters)
13:25–14:55	**PARALLEL PRESENTATION SESSIONS**	
14:55–15:55	**COFFEE BREAK AND POSTER SESSIONS** (Note that there are two poster areas)	Volvo Foyer Poster & exhibition area (posters)
15:55–17:25	**PARALLEL PRESENTATION SESSIONS**	
17:25–18:30	**POSTER SOCIAL** (Note that there are two poster areas)	Volvo Foyer Poster & exhibition area (posters)
17:30–19:00	**SIDE EVENTS**	
18:30–20:30	**WELCOME RECEPTION** Hosted by City of Gothenburg	Venue

Keynote Speaker

Policy-Driven LCA in the Age of the Triple Planetary Crisis

Björn Spak

Swedish Environmental Protection Agency

Björn Spak is an advisor at the Swedish Environmental Protection Agency with responsibilities in life cycle-related issues, in particular the EU Environmental Footprint and the development of associated legislation such as the Battery regulation and the Ecodesign regulation. He serves as the Swedish national representative in the EU Commission expert group (TAB) for the Environmental Footprint. Spak holds an MSc in biopharmaceutical science and prior to joining the EPA, he gained extensive experience as an LCA practitioner in industrial and research environments, conducting LCAs for product development and communication purposes.

His presentation will reflect on the extensive efforts made by academia and industry to develop, refine and standardise LCA methods. They have largely focused on voluntary implementation, while the integration of LCA in mandatory policy has only recently experienced a boom. As LCA is integrated into Swedish national and European legislation there is a new sense of urgency and a need to shift focus in method development. The scientific community needs to reassess how to best come to terms with different methodological perspectives to be able to influence policy under development while decision-makers need to reassess how to best support and utilize the scientific community.

Welcome Reception

Hosted by the City of Gothenburg

18:30 CEST | Conference venue

Join the welcome reception, have some drinks, network your way through the crowd and enjoy a toast to a great beginning of the conference! The official programme will begin at 19:15 CEST after the side events have concluded.

The Welcome Reception is a pre-registered event (check for left over tickets at the info desk).

Monday Side Events

Climate Call: Game-Based Research Communication That Engages Everybody

Klimatkoll Guldheden AB

17:30—19:00 CEST | Ledningsrummet

Play Climate Call - a scientific card game session on how our day-to-day activities affect the climate and/or try our Climate Quiz, revealing common misconceptions and highlighting positive trends.

Scaling up LCA-Backed Eco-Design in an Evolving Regulatory Landscape

Holis

17:30—19:00 CEST | Scania

LCAs have been on the rise for the past years and upcoming regulations will drastically increase the demand for such studies. We propose a brief review of the current context which will help us understand why new LCA tools are needed and how they can help to democratize LCA whether it be for industrial players or academics. After this short presentation, participants will take part in a collaborative Ecodesign workshop using Holis Studio. This workshop will be an opportunity to discover a new LCA & ecodesign tool as well as to discuss current barriers to scaling ecodesign with the LCA community.

Launch of GLAM: Global Guidance for Life Cycle Impact Assessment Indicators and Methods

Technical University of Denmark

17:30—19:00 CEST | Palmstedtsalen

The Life Cycle Initiative started GLAM in 2013, in collaboration with the University of Michigan, the Norwegian University of Science and Technology (NTNU), and Denmark's Technical University (DTU), to enhance global consensus on environmental life cycle impact assessment indicators. The project aims to generate tangible and practical recommendations for different environmental indicators and characterization factors used in Life Cycle Impact Assessments (LCIA). This session will launch the final version of GLAM including a presentation of the method, GLAM method and its updated characterization factors, followed by an interactive discussion.

SETAC Europe Awards

The Society of Environmental Toxicology and Chemistry (SETAC) Europe strives to honor and recognise outstanding contributions of individuals or groups of individuals to environmental science, and to the Society.

Learn more and consider applying for a SETAC Europe Award by January.

Noack Laboratorien Outstanding Science Career Award

Recognizes contributions to environmental toxicology and chemistry over a prolonged period of time.

Rifcon Early Career Scientist Award

Awards an original piece of scientific research, policy or other professional achievement undertaken by an early career scientist.

Young Scientist Life Cycle Assessment Award

For exceptional achievements by a young scientist in the field of life cycle assessment.

Return to Science Grant

Award to stimulate scientists who have experienced a temporary professional break due to childcare e.g., maternity, paternity, adoption, etc.

Monday Platform Presentations Block 1

	10:45	11:00	11:15
RunAn	**1.01 - Advances in Prospective Life Cycle Assessment** | Rickard Arvidsson, Heather Logan,		
	1.01.A.T-01 Modelling Dynamics in Prospective Life Cycle Assessment Towards Climate Neutrality | **Ladislaus Lang-Quantzendorff**, Joanneum Research, Institute for Climate, Energy Systems and Society, Austria	**1.01.A.T-02** Addressing Parameter Uncertainty in Prospective Inventory Modeling | **Stefany Villacis**, German Aerospace Center (DLR), Germany	**1.01.A.T-03** Uncertainty Characterisation in Prospective LCA: Reliability of Pedigree Matrix Approach to Characterise Foreground Inputs' Uncertainty – A Case Study for Emerging Photovoltaics | **Lu Wang**, Paris School of Mines (PSL) / TotalEnergies / IPVF, France
Scania	**3.05 - Holistic Life Cycle Sustainability Assessment** | Sahar Nava, Alexander Koch and		
	3.05.T-01 Holistic and Integrated Life Cycle Sustainability Assessment: Background, Methods and Results from Two Case Studies | **Walther Zeug**, Helmholtz-Centre for Environmental Research (UFZ), Germany	**3.05.T-02** Life Cycle Sustainability Assessment based Strategy for Safe and Sustainable by Design Advanced Materials | **Arianna Livieri**, University Ca' Foscari of Venice, IT	**3.05.T-03** A Holistic Sustainable-by-Design Approach Applied to a Novel Solid Oxide Electrolysis Cell Stack | **Khaled El Jardali**, IMDEA Energy, Spain
Palmstedtsalen	**2.01 - Advances in Life Cycle Impact Assessment** | Mikolaj Owsianiak and Anna Björklund		
	2.01.A.T-01 Characterize Chemical Toxicity for Life Cycle Assessment Using Machine Learning Models Based on Environmental Footprint | **Tianran Ding**, LIST, Luxembourg	**2.01.A.T-02** Development of a Life Cycle Impact Assessment for Zoonotic Disease Spillover Risk in Animal Agriculture | **John Hader**, Swiss Federal Laboratories for Materials Science and Technology (EMPA), Switzerland	**2.01.A.T-03** LCA Modelling of the Environmental Impacts of River Sand and Aggregates Mining | **Quentin Niel**, ParisTech School of Bridges, France
Ledningsrummet	**4.04 - LCA of Digitalization, ICT and AI** | Anna Furberg, Birgit Brunklaus, Kari-Anne Lyng and		
	4.04.T-01 Applying LCA on Artificial Intelligence (AI) Systems - Status Quo, Challenges, and Opportunities | **Lina Plataniti**, Norwegian Institute for Sustainability Research (NORSUS), Norway	**4.04.T-02** Environmental Effects of AI-Enhanced Textile Sorting | **Diego Peñaloza**, Research Institutes of Sweden RISE, Sweden	**4.04.T-03** Life Cycle Assessment of Internet Use: Framework, Methodological Challenges and Practical Lessons | **Robert Istrate**, Leiden University, Netherlands

	11:30	11:45	12:00
RunAn	and Hans Garvens		
	1.01.A.T-04 Emerging Technologies in European Research: Enhancing Sustainable Engineering Practices & Data Collection for Life Cycle Assessments – A Case Study | **Sarah-Jane Baur**, Fraunhofer Institute for Reliability and Microintegration (IZM), Germany	**1.01.A.T-05** Systematic Technology Selection and Data Inventory in Lab-scale LCA: The Case of Perovskite Light-emitting Diodes | **John Laurence Esguerra**, Linköping University, Sweden	Poster spotlights: 12:00 **1.01.P-Mo001** 12:05 **1.01.P-Mo010**
Scania	Updhyayula Venkata Krishna Kumar		
	3.05.T-04 Integrating Safety and Sustainability for the Assessment of Bio-Based Solutions for Art Restoration: The GREENART Approach | **Martina Menegaldo**, Ca' Foscari University of Venice, Italy	**3.05.T-05** Integrating Life Cycle Assessment with Life Cycle Cost Analysis for Automotive Polymer Injection Mould Production: A Parallel Approach | **Ana Soares**, PIEP - Centre for Innovation in Polymer Engineering, Portugal	Poster spotlights: 12:00 **3.05.P-Mo033** 12:05 **3.05.P-Mo034**
Palmstedtsalen	**2.01 - Advances in Life Cycle Impact Assessment** | Mikolaj Owsianiak and Anna Björklund		
	2.01.A.T-04 Ionizing Radiation Potential in Life Cycle Impact Assessment Through the Lens of Radiological Protection | **Bryanna Wattier**, Clemson University, United States	**2.01.A.T-05** Identification of Dissipative Forms of Carbon in End-of-life Plastics | **Thulangi Gayathma Balasuriya**, Technical University of Denmark (DTU), Denmark	Poster spotlights: 12:00 **2.01.P-Mo029** 12:05 **2.01.P-Mo030**
Ledningsrummet	Reinout Heijungs		
	4.04.T-04 Carbon Emission Factors for Electronics Production Using a Supply Chain Approach | **Nina Lövehagen**, Ericsson AB, Sweden	**4.04.T-05** Investigating Contradictory Results for the Future Direct Climate Impact of the Global Information and Communication Technology Sector | **Anna Furberg**, KTH Royal Institute of Technology, Sweden	Poster spotlights: 12:00 **4.04.P-Mo042** 12:05 **4.04.P-Mo045**

Monday Platform Presentations Block 2

	13:30	13:45	14:00
RunAn	**1.01 - Advances in Prospective Life Cycle Assessment** | Rickard Arvidsson, Heather Logan,		
	1.01.B.T-06 Prospective LCA of three German Transformation Scenarios Achieving Climate Neutrality by 2050 | **Daniel Münter**, ifeu - Institut für Energie- und Umweltforschung Heidelberg, Germany	**1.01.B.T-07** Will the Environmental Impacts of Green Hydrogen be a Matter of Choice? – A Prospective Life Cycle Assessment of a Large-Scale Proton Exchange Membrane Water Electrolysis Plant | **Janis Gerhardt-Mörsdorf**, Clausthal University of Technology, Germany	**1.01.B.T-08** Prospective Life Cycle Assessment of Hydrogen Production with Next-Generation Low-Iridium PEM Electrolysers | **Andrea Cadavid Isaza**, Technical University of Munich (TUM), Germany
Scania	**1.06 - Approaches and Case Studies in Scaling Up LCA** | Ellen Meijer and Sara Heimersson		
	1.06.A.T-01 AstraZeneca's Approach to the EcoDesign and Environmental Impact Quantification of Medicines | **Chloe Smithers**, AstraZeneca, United Kingdom	**1.06.A.T-02** Semi-Automatic Tool for Large-scale Production of Environmental Product Declarations | **Maresa Bussa**, ESU-services GmbH, Switzerland	**1.06.A.T-03** Enhancing Efficiency in Environmental Product Declarations Generation through Automation and Database(s) Integration | **Aleksandar Lozanovski**, Siemens AG, Germany
Palmstedtsalen	**2.01 - Advances in Life Cycle Impact Assessment** | Mikolaj Owsianiak and Anna Björklund		
	2.01.B.T-06 Absolute Sustainability of Mineral Resource Use: A Way Forward | **Katarzyna Dudka**, Technical University of Denmark (DTU), Denmark	**2.01.B.T-07** Will the Environmental Impacts of Green Hydrogen be a Matter of Choice? – A Prospective Life Cycle Assessment of a Large-Scale Proton Exchange Membrane Water Electrolysis Plant | **Janis Gerhardt-Mörsdorf**, Clausthal University of Technology, Germany	**2.01.B.T-08** Investigating Key Methodological Aspects in Absolute Environmental Sustainability Assessment | **Andrea Paulillo**, University College London, United Kingdom
Ledningsrummet	**4.09 - LCA Advances for Water Engineering Towards Circular Economy** | Pinaki Dasgupta		
	4.09.T-01 Life Cycle Assessment of Innovations in Water Treatment for PFAS Removal: What Do We Know? | **Sabrina Altmeyer Mendes**, Chalmers University of Technology, Sweden	**4.09.T-02** Environmental Impact of Integrating Decentralised Urine Treatment in the Urban Wastewater Management System: A Comparative Life Cycle Assessment | **Hanson Appiah-Twum**, University of Antwerp, Belgium	**4.09.T-03** Assessing Sewage Sludge Treatment from a Life Cycle Perspective – Critical Gaps in the Impact Assessment of Per- and Polyfluoroalkyl Substances | **Mafalda Silva**, NORSUS AS, Norway

	14:15	14:30	14:45
RunAn	and Hans Garvens		
	1.01.B.T-09 Prospecting for a Biobased Alternative – Climate Assessment of an Industrial Surfactant | **Greg Peters**, Chalmers University of Technology, Sweden	**1.01.B.T-10** Ex-ante Life Cycle Assessment of Bauxite Residue Vitrification Technology | **Maria Georgiades**, Imperial College London, United Kingdom	Poster spotlights: 14:45 **1.01.P-Mo011** 14:50 **1.01.P-Mo012**
Scania	**1.06 - Approaches and Case Studies in Scaling Up LCA** | Ellen Meijer and Sara Heimersson		
	1.06.A.T-04 Integrating Systematic Product Group Information with Singular Bills-of-Material for Efficient Life Cycle Assessment Scale-up | **Thomas Betten**, Fraunhofer Institue for Building Physics IBP, Germany	**1.06.A.T-05** Learnings from 15 Years of Using Life Cycle Assessment to Assess Absorbent Hygiene Product Portfolios Over Time | **Sandra Franz**, Essity Hygiene and Health AB, Sweden	Poster spotlights: 14:45 **1.06.P-Mo018** 14:50 **1.06.P-Mo019**
Palmstedtsalen	**2.01 - Advances in Life Cycle Impact Assessment** | Mikolaj Owsianiak and Anna Björklund		
	2.01.B.T-09 Regionalized Impact Calculation in openLCA: Case Study from the Flexby Project Preliminary Life Cycle Assessment | **Sarah Serafini**, Greendelta, Germany	**2.01.B.T-10** Local Impact Assessment and Valuation of Tunicate Farming | **Lars Gunnar Furelid Tellnes**, Østfold University College, Norway	Poster spotlights: 14:45 **2.01.P-Mo031** 14:50 **2.01.P-Mo032**
Ledningsrummet	and Almudena Hospido		
	4.09.T-04 Sustainability Assessment of Sediment Dredging, Possibilities and Challenges | **Mehrdad Ghorbani Mooselu**, NORSUS, Norway	Poster spotlights: 14:30 **4.09.P-Mo062** 14:35 **4.09.P-Mo063** 14:40 **4.09.P-Mo064**	Discussion

Monday Platform Presentations Block 3

	16:00	16:15	16:30
RunAn	**1.01 - Advances in Prospective Life Cycle Assessment** | Rickard Arvidsson, Heather Logan,		
	1.01.C.T-11 Quality Before Quantity? Considering Material Properties in Prospective Modelling of Recycling | **Frida Hermansson**, Swedish Environmental Research Institute (IVL), Sweden	**1.01.C.T-12** Discovering the Sustainability Conditions for Future Agrivoltaic Deployment via Parameterized LCA | **Pierre Jouannais**, Mines Paris, France	**1.01.C.T-13** How Do Future Scenarios Impact Environmental Outcomes? Prospective Life Cycle Assessment Of Passenger Cars | **Joris Simaitis**, University of Bath, United Kingdom
Scania	**1.06 - Approaches and Case Studies in Scaling Up LCA** | Ellen Meijer and Sara Heimersson		
	1.06.B.T-06 Considering Stakeholder Perspectives for Increased Usability of Life Cycle Assessment Software Tools by User Story Mapping | **Johanna Holsten**, Technische Universität Braunschweig, Germany	**1.06.B.T-07** Whole Life Carbon Assessment of Buildings at Urban Scale | **Tove Malmqvist**, KTH Royal Institute of Technology, Sweden	Poster spotlights: 16:30 **1.06.P-Mo016** 16:35 **TBD** 16:40 **TBD**
Palmstedtsalen	**4.08 - Modelling of Waste Management** | Tomas Ekvall and Almudena Hospido		
	4.08.T-01 Life Cycle Assessment Allocations for Circular Economy in Construction Sector: Methodological Discussion | **Axelle Robert**, Lab'URBA, Ville de Paris, France	**4.08.T-02** An Overall System Perspective on Food (Processing) Residues in Life Cycle Inventories | **Niels Jungbluth**, ESU-services Ltd., Switzerland	**4.08.T-03** Comparison of Different End-of-Life Modelling Approaches for an Environmental Life Cycle Assessment of Agrivoltaic Systems in Austria | **Theresa Krexner**, BOKU University, Austria
Ledningsrummet	**4.06 - An Era of Change in Sustainable Textiles: Robust Data-Driven Life Cycle**		
	4.06.T-01 Life Cycle Sustainability Assessment (LCSA) of Jeans Stone Washing: Pumice Stone vs Reusable Plastic Stone | **Federico Busio**, Luxembourg Institute of Science and Technology (LIST), Luxembourg	**4.06.T-02** Integration of the Circular Footprint Formula with the Material Circularity Indicator to Measure the Textile Circularity | **Laura Morvidoni**, Polytechnic University of Torino, Italy	**4.06.T-03** An Evaluation of Textile Waste Utilization Methods Using the Safe and Sustainable by Design Framework | **Diego Peñaloza**, Research Institutes of Sweden RISE, Sweden

	16:45	17:00	17:15
RunAn	and Hans Garvens		
	1.01.C.T-14 Prospective Life Cycle Assessment of The Emerging Technology in Circular Economy Context | **Haodong Lin**, University College London (UCL), United Kingdom	**1.01.C.T-15** Sustainable Aviation Fuel from Kraft Lignin – Life Cycle Assessment in Early Stage Research and Development | **Julia Weyand**, German Aerospace Center (DLR), Germany	Poster spotlights: 17:15 **1.01.P-Mo013** 17:20 **1.01.P-Mo014**
Scania	**1.06 - Approaches and Case Studies in Scaling Up LCA** | Ellen Meijer and Sara Heimersson		
	1.06.B.T-09 Innovating Life Cycle Assessment with Artificial Intelligence: A Generative Pre-trained Transformer Exploration | **Kira Fischer**, Fraunhofer Institue for Surface Engineering and Thin Films (IST), Germany	**1.06.B.T-10** Enabling the Mapping of Chemical Substances to Life Cycle Inventory Datasets | **Rudri Mankad**, PRé Sustainability, Netherlands	Poster spotlights: 17:15 **1.06.P-Mo020** 17:20 **1.06.P-Mo021**
Palmstedtsalen	**4.08 - Modelling of Waste Management** | Tomas Ekvall and Almudena Hospido		
	4.08.T-04 Allocation of Emissions from Waste Incineration with Energy Recovery in Life Cycle Assessments of the Built Environment | **Jan Sandstad Næss**, Norwegian University of Science and Technology (NTNU), Norway	Poster spotlights: 17:00 **4.08.P-Mo057** 17:05 **4.08.P-Mo058** 17:10 **Q&A**	Poster spotlights: 17:15 **4.08.P-Mo059** 17:20 **4.08.P-Mo060**
Ledningsrummet	**Assessment** | Niğmet Uzal and Greg Peters		
	4.06.T-04 Environmental Viability of Recycling Flame Retardant Cotton Workwear | **Kiia Silvennoinen**, Finnish Environment Institute, Finland	**4.06.T-05** Lighten the Load – Reducing the Carbon Footprint of Safety Boots | **Chibuikem Nwagwu**, SINTEF Manufacturing AS Norway	Poster spotlights: 17:15 **4.06.P-Mo046** 17:20 **4.06.P-Mo049**

Poster Schedule

Setup	08:00-09:30
Poster exhibition	09:00-18:30
Poster social	17:25-18:30
Take down	18:30-19:00

Poster Areas

Poster Area 1: NCC Square
Poster Area 2: Ascom and Catella

Poster Sessions

1.01 - Advances in Prospective Life Cycle Assessment | Rickard Arvidsson, Heather Logan, Hans Garvens

1.01.P-Mo001 Prospective LCA Applied to Emerging Production Process of a Novel Protein from Woody by-Products: a Tentative Analysis | **Clara Valente**, Norwegian Institute for Sustainability Research (NORSUS), Norway

1.01.P-Mo002 Prospective Life Cycle Assessment of Platform Chemicals Produced via a Biotechnological Pathway using Carbon Capture and Utilization as Feedstock | **Vineet Shah**, Hochschule Hannover, IfBB, Germany

1.01.P-Mo003 Prospective Life Cycle Assessment of Bio-Based Polymer Intermediate Products – Identifying Potential Benefits and Challenges | **Helena Monteiro**, ISQ, Portugal

1.01.P-Mo004 Controlled Environment Agriculture in Prospective Energy Scenarios | **Shiwei Ng**, TUM CREATE Ltd, Singapore

1.01.P-Mo005 Prospective and Life Cycle Assessment in Sustainable Building Practices: The Role of Sustainable Materials | **Dante Maria Gandola**, University for Foreigners of Perugia, Italy

1.01.P-Mo006 Life Cycle Assessment for Eco-design of Bioactive Chemicals from Biorefinery Side-streams | **Ellen Soldal**, NORSUS, Norway

1.01.P-Mo007 Are Climate Neutrality Potential and Circularity Potential New Impact Categories in LCA? - A Case Study on Trucks Trucksk | **Gerfried Jungmeier**, JOANNEUM RESEARCH, Austria

1.01.P-Mo008 Prospective Life Cycle Assessment of Solvolysis Recycled Carbon Fibres and their Potential Application in the Transport and Building Sector | **Jens Bachmann**, German Aerospace Center (DLR) - Institute of Lightweight Systems, Germany

1.01.P-Mo010 Prospective Life Cycle Assessment of Wind Power Production: What Role Could Wood Play in the Future? | **Lea Braud**, KTH Royal Institute of Technology, Sweden

1.01.P-Mo011 Bottom-Up Scenarios for Critical Raw Materials Supply Linked to Prospective Life Cycle Assessment | **Robert Istrate**, Leiden University, Netherlands

1.01.P-Mo012 How to Engage Stakeholders in Scenario Development for Prospective LCA? | **Brais Vázquez Vázquez**, Universidade de Santiago de Compostela, Spain

1.01.P-Mo013 Analysis of the Philosophical Foundation of Foresight and its Implications for Prospective Life Cycle Assessment | **Anne van den Oever**, Vrije Universiteit Brussel (VUB), Belgium

1.01.P-Mo014 Evaluating Emissions from Polymer-based Solar Photovoltaic Modules in its Pilot and Early Industrial Phase | **Prapti Maharjan**, Eindhoven University of Technology, Netherlands

Monday Poster Presentations

1.06 - Approaches and Case Studies in Scaling Up LCA | Ellen Meijer and Sara Heimersson

1.06.P-Mo015 ALIGNED D1.2: A Scientific Framework For The Life Cycle Assessment Of Bio-based Products | **Massimo Pizzol**, Aalborg University, Denmark

1.06.P-Mo016 Adaptation of Background LCA Databases for Carbon Accounting | **Carl Vadenbo**, ecoinvent association, Switzerland

1.06.P-Mo017 Testing SSbD Tools for Chemical Substitution: A Walk in the PARC | **Tomas Rydberg**, IVL Swedish Environmental Research Institute, Sweden

1.06.P-Mo018 Development of an Eco-Design Tool for Life Cycle Footprinting for the Pharmaceutical Sector | **Peter Shonfield**, Environmental Resources Management, United Kingdom

1.06.P-Mo019 How to Scale up Life Cycle Assessment for Industrial Applications – An Electrolux Group Case Study | **Stefano Zuin**, Electrolux Italia SpA, Italy

1.06.P-Mo020 Site-Specific Life Cycle Inventories of Offshore Wind Farms Computed With Limited and Flexible Input Data for Multiple User Profiles | **Joanna Schlesinger**, MINES Paris - PSL, France

1.06.P-Mo021 Hybrid Real Time LCA for Performance Monitoring in Mineral Extraction and Processing Facilities | **Pavel Stránský**, SINTEF Helgeland AS, Norway

2.01 - Advances in Life Cycle Impact Assessment | Mikolaj Owsianiak and Anna Björklund

2.01.P-Mo022 Climate Tipping Impacts of Short-Lived Forcers | **Mikolaj Owsianiak**, Technical University of Denmark,

2.01.P-Mo023 Evaluating Economic Sustainability in the Emerging Bio-Economy: Monetary Valuation of Environmental Impacts for Informed Decision-Making | **Julieta Díez-Hernández**, University of Burgos, Spain

2.01.P-Mo024 Attributional and Consequential Life Cycle Assessment for a Green Industrial IT | **Neuman Elouariaghli**, University of Strasbourg, France

2.01.P-Mo025 Multi-Objective Optimization of Environmental Impacts of Bio-Based Industry Production Processes: A Case Study | **Alejandro Álvarez**, Contactica, Spain

2.01.P-Mo026 Life Cycle Assessment of Wood-based Hydrophobic Coating Materials | **Pooja Yadav**, Natural Resources Institute Finland (Luke), 00790, Helsinki, Finland., Finland

2.01.P-Mo027 Integrating Bim and LCA for Sustainable High-Speed Rail Infrastructure: A Framework for Early Design Stage Environmental Assessment | **asmaa benzidane**, ParisTech School of Bridges, France

2.01.P-Mo028 Optimizing Decision-Making for Heating System Retrofit in Residential Buildings through the Application LCSA | **Nao Shibata**, University of Reading, United Kingdom

2.01.P-Mo029 Environmental Payback of Concrete Due to Carbonation Over Centuries | **Thomas Elliot**, Aalborg University, Denmark

2.01.P-Mo030 How to Address User-Behavior Uncertainty in the Life Cycle of Novel Systems? A Probabilistic Approach | **Carla Rodrigues**, University of Coimbra, Portugal

2.01.P-Mo031 Towards More Accurate Life Cycle Assessment Result Using Nigeria Ecological Scarcity Method | **Mohammed Isah**, Tohoku University, Japan

2.01.P-Mo032 Footprint Cohesion and Prevalence of Environmental Impact Categories in Blue Mussel Aquaculture Life Cycle Assessments | **Andreas Langdal**, UiT The Arctic University of Norway, Norway

3.05 - Holistic Life Cycle Sustainability Assessment | Sahar Nava, Alexander Koch and Upadhyayula Venkata Krishna Kumar

3.05.P-Mo033 Life Cycle Assessment of Alternative Tree Systems | **Elsa Webb**, Cranfield University, United Kingdom

3.05.P-Mo034 Methodological and Reporting Gaps in Life Cycle Sustainability Assessment: A Systematic Literature Review | **Pantelis Manakas**, National Technical University of Athens, Greece

3.05.P-Mo035 Connecting "Safe and Just Operating Space" with Life Cycle Sustainability Assessments of Energy Technologies: A Case Study on Wind Power Production in Sweden | **Tania Bethoon**, KTH Royal Institute of Technology, Sweden

3.05.P-Mo036 Analyst | Multi-Actor Approach Roadmap for Implementing an Integrated Holistic Impact Assessment to Accelerate Safe and Sustainable Design (SSbD) Acceptance in the Plastic Value Chain | **Catarina Basto-Silva**, PIEP – Innovation Centre in Polymer Engineering, Portugal

3.05.P-Mo037 Life Cycle Sustainability Assessment of Laminated Strand Lumber in the Spanish Woodworking Sector: Integrating Economic, Environmental, and Social Dimensions | **Sara Lago-Olveira**, Contactica SL, Spain

3.05.P-Mo038 Approaching Holism – Aligning Environmental LCA and Social LCA in the Context of Circular Plastic Packaging Value Chains | **Alex Newman**, The University of Sheffield, United Kingdom

3.05.P-Mo039 Model-based Life Cycle Sustainability Assessment (LCSA) for Plastics and Recycled Content | **Jonas Hoffmann**, GreenDelta GmbH, Germany

3.05.P-Mo040 Environmental and Economic Impacts In the Poultry Chain After Innovative Microbial Application | **Usman Ghani**, Natural Resources Institute Finland (Luke), Finland

4.04 - LCA of Digitalization, ICT and AI | Anna Furberg, Birgit Brunklaus, Kari-Anne Lyng and Reinout Heijungs

4.04.P-Mo042 Digitalisation in the Health Service Sector – The Case of Home Monitoring using IoT and LCA | **Birgit Brunklaus**, RISE Research Institute of Sweden, Sweden

4.04.P-Mo043 Life Cycle Inventory of Information and Communications Technology Equipment Applied in Precision Agriculture | **Federico Busio**, Luxembourg Institute of Science and Technology (LIST), Luxembourg

4.04.P-Mo044 LCA of Digital Solutions for Municipal Services - The Case of three Waste Collection Systems | **Birgit Brunklaus**, RISE Research Institute of Sweden, Sweden

4.04.P-Mo045 Life Cycle Assessment Of Printed Electronics - A Case Study Of Three Pilot Applications | **Lotta Hepo-oja**, VTT, Finland

4.06 - An Era of Change in Sustainable Textiles: Robust Data-Driven Life Cycle Assessment | Niğmet Uzal and Greg Peters

4.06.P-Mo046 Life Cycle Assessment of Chemical Recycling of Mixed Synthetic Textiles – A Grave-to-Gate analysis | **Alina Ridderstad**, Chalmers University of Technology, Sweden

4.06.P-Mo047 Environmental Impacts of the Clothing Use Phase: Influence of the Washing Efficiency | **Tian Xia**, University of Lille - ENSAIT, France

4.06.P-Mo048 Optimisation of a Textile Washing Process Based on Life Cycle Sustainability Assessment Results | **Maura Camerin**, Luxembourg Institute of Science and Technology (LIST), Luxembourg

4.06.P-Mo049 The Influence of Recycling Disruptors in Textile Recycling | **Valentina Rossi**, Technical University of Denmark, Denmark

Monday Poster Presentations

4.06.P-Mo050 Lighten the Load – Reducing the Carbon Footprint of Safety Boots | **Chibuikem Nwagwu**, SINTEF Manufacturing AS, Norway

4.08 - Modelling of Waste Management | Tomas Ekvall and Almudena Hospido

4.08.P-Mo051 Evaluating Allocation Approaches in Comparative LCA for Reusing Building Elements | **Ahmad Al-Najjar**, KTH Royal Institute of Technology, Sweden

4.08.P-Mo052 How are Methodological Choices Affecting the Results of Life Cycle Assessment Studies on Polyethylene Terephthalate Recycling? | **Maria Ciotti**, Chalmers University of Technology, Sweden

4.08.P-Mo053 Life Cycle Assessment of Precise Sorting and Recycling of Lightweight Packaging | **Leon Deterding**, Institute for Industrial Ecology, Germany

4.08.P-Mo054 A Circular Economy Approach in Concrete Production: LCA of a Dry Washing Process | **Anne Rønning**, NORSUS, Norway

4.08.P-Mo055 A Life Cycle Analysis Model for the Circularity of Permanent Magnet Synchronous Motor Manual Disassembly | **Megan Clement**, University of Warwick, United Kingdom

4.08.P-Mo056 Comparative Life Cycle Assessment of Environmental Impacts for Wastewater Treatment Plants and Constructed Wetlands | **Seonghyeok Cho**, Changwon National University, South Korea

4.08.P-Mo057 Municipal Solid Waste Regionalization in Europe | **Avraam Symeonidis**, ecoinvent, Switzerland

4.08.P-Mo058 Increasing Transparency: EcoProfiles for Plastic Recyclates | **Jonas Hoffmann**, GreenDelta GmbH, Germany

4.08.P-Mo059 An LCA Framework for the Circular Economy: Accounting for Quality Changes Across Multiple Lifecycles | **Jooyoung Park**, Seoul National University, Korea, Republic of

4.08.P-Mo060 What Can We Learn From Past Life Cycle Assessments of Biosolids Processing Systems? | **Jingwen Luo**, University of New South Wales (UNSW), Australia

4.09 - LCA Advances for Water Engineering Towards Circular Economy | Pinaki Dasgupta and Almudena Hospido

4.09.P-Mo061 LCA of Nutrients and Carbon Circulation From Connecting Aquaculture and Agriculture With Biochar From Forestry | **Marta Behjat**, Chalmers University of Technology, Sweden

4.09.P-Mo062 Evaluating the Water Use Impact in the EU's Renewable Hydrogen Supply Chain: A Life Cycle Assessment | **Marco Serafini**, European Commission - Joint Research Centre (JRC), Netherlands

4.09.P-Mo063 Life cycle assessment of an in-situ treatment of an open municipal drain in Delhi- environmental aspects and impacts | **Pinaki Dasgupta**, Indian Institute of Technology Delhi, India

4.09.P-Mo064 Environmental Impacts of Biochar Filters for Onsite Wastewater Treatment | **Lisa Zakrisson**, Swedish University of Agricultural Sciences (SLU), Sweden

Notes

SETAC EUROPE 35TH ANNUAL MEETING

11–15 May 2025 | Vienna, Austria | vienna.setac.org

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Tuesday, 22 October

08:00–09:30	**POSTER SET UP AND BADGE PICKUP**	Entrance Foyer
08:45–10:15	**PARALLEL PRESENTATION SESSIONS**	
10:15–10:40	**COFFEE BREAK**	Volvo Foyer
10:40–12:10	**PRESENTATION SESSIONS**	
12:10–13:25	**LUNCH BREAK AND POSTER SESSIONS** (Note that there are two poster areas)	Volvo Foyer Poster & exhibition area (posters)
13:25–14:55	**PRESENTATION SESSIONS**	
14:55–15:55	**COFFEE BREAK AND POSTER SESSIONS** (note that there are two poster areas)	Volvo Foyer Poster & exhibition area (posters)
15:55–17:20	**KEYNOTE SPEAKERS** (Broadcast in Palmstedtsalen)	RunAn
17:20–18:30	**POSTER SOCIAL** (Note that there are two poster areas)	Volvo Foyer Poster & exhibition area (posters)
17:30–19:00	**SIDE EVENTS**	
19:30–01:00	**CONFERENCE DINNER**	Elite Park Avenue

Keynote Speaker

Latest Developments in the Product Environmental Footprint and Green Claims

Mauro Cordella

European Commission

Dr Mauro Cordella works as a policy officer on Environmental Footprint methods and Green Claims at the Circular Economy and Sustainable Production unit of the European Commission's Directorate-General for the Environment. In 2010, Mauro achieved a doctoral degree in chemical, environmental and safety engineering from the University of Bologna, doing research on the sustainability assessment of bio-energy systems. During his 18+ years of professional work at the European Commission, in academia and the private sector, he has gained extensive experience in LCA (e.g. for foods, biofuels, ICT products, textiles, buildings), chemical risk assessment, ecodesign, labelling and sustainable production and consumption, circular and bio-economy, and related EU policies.

To tackle the triple planetary crisis the European Green Deal reiterated the need for more sustainable production and consumption patterns where understanding the environmental impacts of products and organisations over the life-cycle is paramount. This keynote will focus on Environmental Footprint (EF) methods, which have become key tools within the EU sustainability policy landscape and are increasingly applied in mandatory policies tackling sustainability of materials and products, but also improving consumer information. A key Directorate-General for Environment objective is to ensure that EF methods respond to these emerging policy needs and are fit to effectively support businesses in their sustainability transition.

Conference Dinner

19:30 CEST | Elite Park Avenue

Join us for a delightful evening during the Conference Dinner at the Elite Park Avenue! Starting with a mingle over delicious canapés, followed by a two-course sit-down dinner and entertainment, this is a perfect opportunity to network, connect and unwind.

The Conference Dinner is a pre-registered event (check for left over tickets at the info desk).

Keynote Speaker

The Power of Life Cycle Perspective to Drive Sustainability Targets and Innovations

Susan Iliefski-Janols

Essity

Susan Iliefski-Janols, Vice President for Sustainability Products & Services, is responsible for sustainability for brands, products, services and innovations globally for Essity Hygiene and Health categories. She has a Master of Science in Mechanical engineering together with experience from the chemical, mechanical, forest, packaging, hygiene and health industries, providing a good background to understand the full value chain for products and services. Her sustainability work is focused on improving human well-being with improved climate and circularity performance to also contribute to healthy ecosystems.

Her leadership has been in research, innovations and sustainability within SCA and Essity. External engagement is a driving force for her and some examples of this include her representation of Essity in the Ellen MacArthur Foundation, contributing to its New Plastics Economy Initiative and other circular economy initiatives. She is also active in the nonwoven trade association Edana to support sustainability and a circular economy, and is the Chair the national competence center Swedish Life Cycle Center where the life cycle perspective is essential.

Society and businesses require the delivery of good products and services from responsible value chains. This means value chains that drive climate and circularity improvements and contribute to healthy ecosystems. Developing them means that you need social and environmental measurement techniques such as LCA to support and track sustainability targets and innovations and to drive improvements from a company level all the way out to customers and consumers. To make it meaningful, it is essential that you adapt your life cycle perspective to many different stakeholders. Iliefski-Janols will present a perspective on how to do this based on various practical examples.

Climate Call: Game-Based Research Communication That Engages Everybody

Klimatkoll Guldheden AB

17:30—19:00 CEST | Ledningsrummet

Play Climate Call - a scientific card game session on how our day-to-day activities affect the climate and/or try our Climate Quiz, revealing common misconceptions and highlighting positive trends.

Swedish Life Cycle Center Introduction Session

Swedish Life Cycle Center

17:30—19:00 CEST | Palmstedtsalen

Get to know the Swedish Life Cycle Center during this informative side event. In this session, you can expect:

- Introduction to Swedish Life Cycle Center. Learn about our mission, vision, and the role we play in advancing the life cycle filed.
- Our ways of work. Uncover the strategies and methodologies we use to bridge research, industry, and policy to create lasting impact.
- Showcasing current projects. Get an update on our ongoing initiatives and learn how you can get engaged.
- Benefits of partnership. Hear firsthand from our existing partners and understand the advantages of joining the center.

Blueprint for the Global Nomenclature Governance System

Brazilian Institute of Information in Science and Technology

17:30—19:00 CEST | Scania

The Design of a Blueprint for the Global Nomenclature Governance System project aims to bring the international community a step closer to addressing LCA data interoperability challenges. This project is conducted by IBICT (Brazilian Institute of Information in Science and Technology) in partnership with GLAD (Global LCA Data Access Network).

Tuesday Platform Presentations Block 1

Tuesday Platform Presentations Block 1

	08:50	09:05	09:20
RunAn	**3.02 - LCA and Sustainable Consumption** | Göran Finnveden, Stefano Zuin and Anna Wikström		
	3.02.A.T-01 Towards an Environmentally Sustainable Economy within Planetary Boundaries - A UK Case Study | **Qiang Yang**, University College London, United Kingdom	**3.02.A.T-02** A Framework to Estimate Consumption-based Life-Cycle Environmental Impacts of Regions and Cities | **Joana Bastos**, European Commission, Joint Research Centre (JRC), Italy	**3.02.A.T-03** Climate and Health Impacts of 1.5°C Lifestyle Changes | **Stephanie Cap**, Leiden University, Netherlands
Scania	**3.03 - Qualitative Life Cycle Studies Exploring the Practical Meaning of Life Cycle Studies** | ...		
	3.03.A.T-01 LCAs role in Defining the Sustainability of Aluminium | **Andreas Brekke**, Norwegian Institute for Sustainability Research (NORSUS), Norway	**3.03.A.T-02** Use of LCA and LCT Within Technology Development of Carbon Capture, Utilisation and Storage | **Evelina Nyqvist**, Chalmers University of Technology, Sweden	**3.03.A.T-03** Practices, Politics, Expectations, and Implications of Environmental Footprinting Initiatives for Food | **Michael Martin**, IVL Swedish Environmental Research Institute and KTH Royal Institute of Technology, Sweden
Palmstedtsalen	**4.07 - Better Data and Modelling for Sustainable Transport** | Selma Brynolf, Rei Palm		
	4.07.A.T-01 Accuracy and Sector Consistency in Automotive LCAs: A Balancing Act | **David Algesten**, Scania Technical Centre, Sweden	**4.07.A.T-02** Life Cycle Assessment of Bidirectional Charging Equipment for Vehicles Able to Provide Grid Services | **Pedro Anchustegui Balner**, Chalmers University of Technology, Sweden	**4.07.A.T-03** Assessing the Evolution of Environmental Impacts in Vehicle Gliders | **Felipe Bitencourt de Oliveira**, Chalmers University of Technology, Sweden
Ledningsrummet	**2.04 - Social Life Cycle Assessment: Priorization, Disaggregation and Contextualization...**		
	2.04.T-01 Assessing Social Aspects of Biobased Value Chains | **Nirvana Angela Marting Vidaurre**, Luxembourg Institute of Science and Technology (LIST), Luxembourg	**2.04.T-02** Identifying the Focus in Social Life Cycle Assessment – A Comparison of Different Prioritization Approaches of Social Impact Categories | **Daniela Groiss-Fuertner**, Wood K plus - Kompetenzzentrum Holz GmbH, Austria	**2.04.T-03** Mapping the Terrain: Guiding Methodical Decisions in Social Life Cycle Assessment | **Martina Zimek**, Department of Environmental Systems Sciences, University of Graz, Austria

	09:35	09:50	10:05
RunAn	**3.02 - LCA and Sustainable Consumption** | Göran Finnveden, Stefano Zuin and Anna Wikström		
	3.02.A.T-04 High Carbon Footprints and the Road to Sustainable Consumption: A Luxembourg Case Study | **Thomas Gibon**, Luxembourg Institute of Science and Technology (LIST), Luxembourg	**3.02.A.T-05** Cleanliness is Relative, Laundering Absolute – How to Facilitate Assessments of the Rebound Effect Using LCA | **Erik Klint**, Chalmers University of Technology, Sweden	Poster spotlights: 10:05 **3.02.P-Tu045** 10:10 **3.02.P-Tu046**
Scania	Henrikke Baumann, Michael Martin and Hans Garvens		
	3.03.A.T-04 Towards a More Effective use of LCA in Industry: a Qualitative Case Study of a Building Product Development Project | **Sjouke Beemsterboer**, Chalmers University of Technology, Sweden	**3.03.A.T-05** TBD	Poster spotlights: 10:05 **TBD** 10:10 **3.03.P-Tu051**
Palmstedtsalen	and Johanna Berlin		
	4.07.A.T-04 Addressing Logistics Optimisation in Life Cycle Assessment | **Simon Alexander Saxegård**, Norwegian Institute for Sustainability Research, Norway	**4.07.A.T-05** Next Level Lightweight Production: Environmental assessment of lightweight components and alternative drive technologies in the commercial vehicle sector | **Eva Sophie Jurgeleit**, University of Applied Science Bonn-Rhein-Sieg, Germany	Poster spotlights: 10:05 **4.07.P-Tu071** 10:10 **4.07.P-Tu072**
Ledningsrummet	**of Subcategories and Impacts** | Claudia Mair-Bauernfeind and Martina Zimek		
	2.04.T-04 Social Life Cycle Assessment of an Emerging Technology: A Case study on Circular Flexible Plastic Packaging | **Anna-Sophie Haslinger**, Ghent University, Belgium	**2.04.T-05** Social LCA of Recycled Textile Fibres: The Case of New Cotton | **Diego Penaloza**, Research Institutes of Sweden RISE, Sweden	Poster spotlights: 10:05 **2.04.P-Tu027** 10:10 **2.04.P-Tu028**

Tuesday Platform Presentations Block 2

	10:45	11:00	11:15
RunAn	**3.02 - LCA and Sustainable Consumption** | Göran Finnveden, Stefano Zuin and Anna Wikström		
	3.02.B.T-06 Salvation by Substitution? Case Textile Markets | **Elias Hurmekoski**, University of Helsinki, Finland	**3.02.B.T-07** Sharing the Carbon Budget Among Human Activities Based on Consumption Patterns of Exemplary Countries | **Teddy Serrano**, Technical University of Denmark (DTU), Denmark	**3.02.B.T-08** Responsibility of Consumption for the Aquatic Species Loss Through Induced Water Consumption in Global Supply Chains – Case of Japan | **Masaharu Motoshita**, National Institute of Advanced Industrial Science and Technology, Japan
Scania	**3.03 - Qualitative Life Cycle Studies Exploring the Practical Meaning of Life Cycle Studies** | ...		
	3.03.B.T-06 TBD	**3.03.B.T-07** Life Cycle Thinking to Reduce Bread Waste | **Aina Stensgård**, NORSUS - Norwegian institute for sustainability research, Norway	**3.03.B.T-08** Combining Social Sciences and Life Cycle Assessment - Outlook on Finnish Battery Material Value Chain | **Anni Orola**, LUT University, Finland
Palmstedtsalen	**4.07 - Better Data and Modelling for Sustainable Transport** | Selma Brynolf, Rei Palm and Johanna Berlin		
	4.07.B.T-06 Using Hydrogen in Long-Haul Heavy-Duty Trucks: A Life Cycle Assessment Approach | **Jorge Enrique Velandia Vargas**, Chalmers, Sweden	**4.07.B.T-07** EU Shipping Fleet Decarbonization: Well-to-wake Assessment Model | **Fayas Malik Kanchiralla**, Chalmers, Sweden	**4.07.B.T-08** Life Cycle Inventories for Aviation: Background Data, Shortcomings, and Improvements | **Joana Albano**, German Aerospace Center (DLR), Germany
Ledningsrummet	**1.02 - Collecting Internal and Collaborative Data for LCA – Securing Availability and Quality** | ...		
	1.02.T-01 Evaluation of Input Data Quality in Standardized LCA for System Improvements in Continuous Manufacturing Systems | **Christina Lee**, Chalmers University of Technology, Sweden	**1.02.T-02** Leveraging on Digital Data Platform for Data Collection to Underpin Meaningful LCA | **Emanuel Lourenço**, INEGI - Instituto de Ciência e Inovação em Engenharia Mecânica e Engenharia Industrial, Portugal	**1.02.T-03** Towards a Better Approximation of Feed in Environmental Footprint Tools | **Veerle Van linden**, Flanders Research Institute for Agriculture, Fisheries and Food (ILVO), Belgium

	11:30	11:45	12:00
RunAn	**3.02 - LCA and Sustainable Consumption** | Göran Finnveden, Stefano Zuin and Anna Wikström		
	3.02.B.T-09 The Route to Paris in the Swedish Backcountry: Development and Application of a Life Cycle Assessment Method to Assess Sufficiency Measures | **Hampus André**, KTH Royal Institute of Technology, Sweden	**3.02.B.T-10** The Environmental Impacts of Current Belgian Diets | **Claire Dénos**, Ghent University, Belgium	Poster spotlights: 12:00 **3.02.P-Tu047** 12:05 **3.02.P-Tu048**
Scania	Henrikke Baumann, Michael Martin and Hans Garvens		
	3.03.B.T-09 Towards Meaningful Sustainability Assessment: Combining Life Cycle Assessment and Actor-Network Theory for Circular Economy in the Healthcare Sector | **Monia Niero**, Sant'Anna School of Advanced Studies, Italy	**3.03.B.T-10** In-Depth Assessment of the Need for Life Cycle Competence in Swedish Industry and Authorities | **Anna Wikström**, Chalmers University of Technology, Sweden	**Discussion** about the value of qualitative studies for LCA development and practice
Palmstedtsalen	**4.07 - Better Data and Modelling for Sustainable Transport** | Selma Brynolf, Rei Palm and Johanna Berlin		
	4.07.B.T-09 Life Cycle CO2e Intensity of Commercial Aviation with Sustainable Aviation Fuels using Actual Flight Data | **Aron Bell**, Trinity College Dublin, Ireland	**4.07.B.T-10** Life Cycle Assessment of CO2 Capture from Lime Production and its Conversion into E-methane for its Utilisation as Fuel in a Ship | **Jordy Motte**, Ghent University, Belgium	Poster spotlights: 12:00 **4.07.P-Tu073** 12:05 **4.07.P-Tu068**
Ledningsrummet	Carl Karheiding and Tomas Rydberg		
	1.02.T-04 Use of LCA as a Tool for Sustainable Product Development: A Chemical Industry Example | **Ravinder Menon**, Afton Chemical Corporation (NewMarket Corporation), United States	**1.02.T-05** Electric Motors: A Parametrized Life Cycle Inventory Model Bolstered by Interdisciplinary Primary Data | **Mohamed Sahaoui**, Mines Paris - PSL, France	Poster spotlights: 12:00 **1.02.P-Tu003** 12:05 **1.02.P-Tu005**

Tuesday Platform Presentations Block 3

	13:30	13:45	14:00
RunAn	**4.01 - Life Cycle Assessment of Batteries** | Linda Ager-Wick Ellingsen and Marco Raugei		
	4.01.T-01 Carbon Footprint of Electric Vehicle Battery Use Phase: A Model and Application | **Hyung Chul Kim**, Ford Motor Company, United States	**4.01.T-02** Social and Environmental Impacts of the Lithium-Ion Battery End of Life | **Julius Ott**, University of Graz, Austria	**4.01.T-03** Life Cycle Inventory for Structural Battery Cell Production | **Natalia Sieti**, Chalmers University of Technology, Sweden
Scania	**3.01 - Integration of Life Cycle Assessment in Policy Deployment - Solving the Method and Data Challenges**		
	3.01.T-01 Future Nordic Developments Through Learning from Successful Life Cycle Network | **Maria Rydberg**, Swedish Life Cycle Center/Chalmers University of Technology, Sweden	**3.01.T-02** EU Regulations on the Modelling of Electricity and Residues | **Tomas Ekvall**, TERRA, Sweden	**3.01.T-03** Environmental Product Declarations in Procurements – Practical Experiences with focus on Concrete Sleepers | **Kevin Sandberg**, WSP Sweden, Sweden
Palmstedtsalen	**2.03 - Biodiversity and Ecosystem Services: Paving the Way Forward Towards Their**		
	2.03.T-01 Rethinking the Life Cycle Impact Assessment Framework to Foster the Consistent Inclusion of Potential Impacts on Ecosystem Services | **Laura Debarre**, Polytechnique Montreal, CIRAIG, Canada	**2.03.T-02** Riverine Fish Biodiversity in Peril: The Effects of Global Water Consumption | **Kamrul Islam**, National Institute of Advanced Industrial Science and Technology (AIST), Japan	**2.03.T-03** Time-Integrated Approach Based On GLOBIO And LCA Endpoint Models To Evaluate The Life Cycle Impacts On Biodiversity | **Magdalena Czyrnek-Deletre**, I Care, France
Ledningsrummet	**1.03 - Hybrid LCAs for a Circular Economy: The Added Value of Combined**		
	Poster spotlights: 13:30 **1.03.P-Tu006** 13:35 **1.03.P-Tu008** 13:40 **1.03.P-Tu007**	**1.03.T-02** Using Multi-Regional Input-Output Models for Absolute Environmental Sustainability Assessments of Industries | **Abdur-Rahman Ali**, Technische Universität Braunschweig, Germany	**1.03.T-03** Combined Assessment of Planetary Boundary Exceedance and Life Cycle Damage of Global Consumption | **Santiago Acosta-Izquierdo**, Technical University of Denmark (DTU), Denmark

	14:15	14:30	14:45
RunAn	**4.01 - Life Cycle Assessment of Batteries** | Linda Ager-Wick Ellingsen and Marco Raugei		
	4.01.T-04 Bio-Based Materials for Lithium-Ion Batteries | **Rebecca Thorne**, Institute of Transport Economics, Norway	**4.01.T-05** Transparent and Informed Decision-Making Through a Holistic LCA Approach In Battery Energy Storage Systems | **Luka Smajila**, KTH - Royal Institute of Technology, Sweden	Poster spotlights: 14:45 **4.01.P-Tu065** 14:50 **4.01.P-Tu066**
Scania	| Björn Spak, Evert Bouman, Didier Beloin-Saint-Pierre, Ole Jørgen Hanssen, Florence Bohnes and Serenella Sala		
	3.01.T-04 Assessing the Environmental Impact of Products: The Role of Data Quality in Ecolabels | **Maëlys Courtat**, University of Surrey, Unilever, United Kingdom	**3.01.T-05** Leveraging Digital Product Passports for Automated Environmental Impact Assessment Using an Information System | **Berend Mintjes**, Leiden University, Netherlands	Poster spotlights: 14:45 **3.01.P-Tu031** 14:50 **3.01.P-Tu029**
Palmstedtsalen	**Quantification in LCA** | Sara González-García, Sara Hornborg, Carla Coelho and Francesca Verones		
	2.03.T-04 Impacts of Organic Olive Cultivation on Ecosystem Services: a Life Cycle Assessment Approach | **Sara Lago**, University of Santiago de Compostela & Contractica SL, Spain	**2.03.T-05** A Life Cycle and Ecosystem-Based Approach to Assess the Environmental Sustainability of Multi-Use Offshore Farms | **Laura Vittoria De Luca Peña**, Ghent University, Belgium	Poster spotlights: 14:45 **2.03.P-Tu022** 14:50 **2.03.P-Tu023**
Ledningsrummet	**Methodologies** | Anna Walker and Elenore Louiseau		
	1.03.T-04 Recalibrating the European Aluminium Sector towards a Circular Economy Transition: An Integrated Assessment | **Paola Federica Albizzati**, European Commission - Joint Research Centre (JRC), Spain	**1.03.T-05** The Circular Industrial Transformation System (CITS) Model - Assessing the Environmental Impact of Circular Strategies | **Sietske Lensen**, TNO, Netherlands	Discussion

Poster Schedule

Setup	08:00-09:30
Poster exhibition	09:00-18:30
Poster social	17:25-18:30
Take down	18:30-19:00

Poster Areas

Poster Area 1: NCC Square
Poster Area 2: Ascom and Catella

Poster Sessions

1.02 - Collecting Internal and Collaborative Data for LCA – Securing Availability and Quality | Carl Karheiding and Tomas Rydberg

1.02.P-Tu001 Environmental Evaluation of Automatic Washing Machine | **Anastasiia Timofeeva**, University of Bologna, Italy

1.02.P-Tu002 Life Cycle Assessment (LCA) of Graphene Production: A Review of Data Collection Methods and Challenges in building Life Cycle Inventory (LCI) | **Agata Costanzo**, University of Padova and Scuola Superiore Sant'Anna, Italy

1.02.P-Tu003 How the Use of Different Databases Affects the Comparability of Life Cycle Assessment Results of Fiber Reinforced Polymer Composites | **Karina Kroos**, German Aerospace Center (DLR), Germany

1.02.P-Tu004 Life Cycle Assessment (LCA) Methodology to Address the Environmental Sustainability of New Materials Developed and Used to Treat Wastewater | **Dimitrios Ziotas**, University of Bologna, Italy

1.02.P-Tu005 Life Cycle Assessment in Paper and Pulp Industry: Addressing the Data Exchange Challenges | **Hansani Perera**, Aalto University, Finland

1.03 - Hybrid LCAs for a Circular Economy: The Added Value of Combined Methodologies | Anna Walker and Elenore Louiseau

1.03.P-Tu006 Novel Diagrammatic Notation for Hybrid Life-Cycle Assessment | **Michael Weinold**, Paul Scherrer Institute (PSI), Switzerland

1.03.P-Tu007 Material-Energy Efficiency Through Input-Output Analysis: Italian Case Study in Wood Furniture Sector | **Elena Battiston**, University of Padova, Italy

1.03.P-Tu008 Combination of Spend Based and Activity Based Approaches for Efficiently Calculating Global Corporate Carbon Footprint of Organizations | **Marco Scherer**, iPoint-Systems GmbH, Germany

2.03 - Biodiversity and Ecosystem Services: Paving the Way Forward Towards Their Quantification in LCA | Sara González-García, Sara Hornborg, Carla Coelho and Francesca Verones

2.03.P-Tu009 Life Cycle Assessment Based Modelling of Welsh Timber Product Systems Incorporating Ecosystem Services Impacts | **Thomas Henderson**, Bangor University, United Kingdom

2.03.P-Tu010 A Food Biodiversity Database – Meal Service Case Study | **Viktor Lundmark**, Research Institutes of Sweden AB (RISE), Sweden

2.03.P-Tu011 Quantitative Assessment of Forest Fires in LCAs of Extensive Livestock Grazing Systems | **Montserrat Nunez**, Institute of Agrifood Research and Technology (IRTA), Spain

2.03.P-Tu012 Biodiversity Efficiency vs. Effectiveness at the Product Level | **Jan Paul Lindner**, University of Augsburg, Germany

2.03.P-Tu014 Analyzing the Importance of Cultural Ecosystem Services in Spanish Agricultural and Livestock Sectors: Metrics, Valuations, and Harmonization | **Almudena Hospido**, University of Santiago de Compostela, Spain

2.03.P-Tu015 Integrating the Effect of Wheat–Chickpea Rotation on the Provision of Ecosystem Services in the Life Cycle Assessment Methodology | **Sara Lago**, University of Santiago de Compostela & Contractica SL, Spain

2.03.P-Tu016 Regional Landscape Connectivity: a Complementing Layer for Life Cycle Impact Assessments | **Emke Vrasdonk**, Swedish environmental research institute (IVL), Sweden

2.03.P-Tu017 Urban Vegetation to Regulate Air Quality: Assessment of the Effects on Plants and Humans | **Rachna Bhoonah**, Agro ParisTech, France

2.03.P-Tu018 Life Cycle Assessment on an Algae-based Cosmetic and the Effectiveness of Results Communication | **Sophia Storm**, Maastricht University, Netherlands

2.03.P-Tu019 Is Life Cycle Assessment Ready To Integrate Biodiversity Effects of Seafood Production? | **Sara Hornborg**, RISE Research Institutes of Sweden, Department Agriculture and Food, Sweden

2.03.P-Tu020 Exploring Evidence-Informed Policy Making for an Environmentally Sustainable Blue Economy | **Laura Vittoria De Luca Peña**, Ghent University, Belgium

2.03.P-Tu021 A Novel Approach for Land Use Impact Assessment in Past and Present | **Marta Galindo Díaz**, KU Leuven, Belgium

2.03.P-Tu022 Sea Use Characterization in LCIA: The case of shellfish farming at Thau Lagoon, France | **Catherine Lalongé**, CIRAIG / UQAM - ISE, Canada

2.03.P-Tu023 Synthesizing Landscape of Approaches for Biodiversity Footprinting for Private and Public Sectors | **Ira Bhattarai**, Natural Resources Institute Finland, Finland

2.04 - Social Life Cycle Assessment: Priorization, Disaggregation and Contextualization of Subcategories and Impacts | Claudia Mair-Bauernfeind and Martina Zimek

2.04.P-Tu024 Use of Participatory Tools in the Prioritization of Social Impact Subcategories in the Assessment of Clean Solid Biofuel from Encroached Bush in Southern Africa | **Alexandre Souza**, alexandre.monteiro.souza@slu.se, Sweden

2.04.P-Tu025 Indicators for Assessing Use Phase Social Impacts from Swedish Wind Power – Informed by the Jädraås Windfarm | **Elisabeth Ekener**, KTH - Royal Institute of Technology, Sweden

2.04.P-Tu026 Social Life Cycle Assessment (SLCA) of a District Cooling Centre | **Gerhard Piringer**, University of Applied Sciences Burgenland, Austria

2.04.P-Tu027 Prioritization of Indicators in Social Life Cycle Assessments: A Case Study in the Energy Storage Sector | **Claudia Mair-Bauernfeind**, University of Graz, Austria

2.04.P-Tu028 Delving into Frameworks for Social Life Cycle Assessment of Hydrogen-Related Products Based on Target Audience | **Sumanth Maddula**, IMDEA Energy, Spain

3.01 - Integration of Life Cycle Assessment in Policy Deployment - Solving the Method and Data Challenges | Björn Spak, Evert Bouman, Didier Beloin-Saint-Pierre, Ole Jørgen Hanssen, Florence Bohnes and Serenella Sala

3.01.P-Tu029 Unlocking the Potential of Digital Product Passports for Quantitative Sustainability Assessments | **Chen Li**, Leiden University, Netherlands

3.01.P-Tu030 Can Chained Life Cycle Analysis be Economically Viable? | **Sampsa Nisonen**, Natural Resources Institute Finland (Luke), Finland

3.01.P-Tu031 Overcoming Data Challenges in Realising the Circular Economy: Exploring the Role of the Digital Product Passport and Life Cycle Assessment | **Damon Waterworth**, Yordas Group, United Kingdom

3.02 - LCA and Sustainable Consumption | Göran Finnveden, Stefano Zuin and Anna Wikström

3.02.P-Tu032 Life Cycle Assessment of Chicken Co-product Valorisation in the UK | **Yiming Sui**, University of Reading, United Kingdom

3.02.P-Tu033 Toward Adequate Nutrition: Exploring the Environmental and Nutritional Characteristics of Belgian Diets | **Margot Cooreman-Algoed**, Ghent University, Belgium

3.02.P-Tu034 A Systematic Approach To Evaluate Uncertainties in Absolute Environmental Sustainability Assessment | **Gonzalo Puig-Samper**, Mines Saint-Etienne, ENGIE Lab CRIGEN, France

3.02.P-Tu035 Insects, a Sustainable Animal Feed? | **Emily Dawson**, Ricardo, United Kingdom

3.02.P-Tu036 Novel Sustainable Food Profiling Model to Evaluate the Absolute Environmental Sustainability of Foods While Considering Nutritional Quality | **Venla Kyttä**, Natural Resources Institute Finland (Luke), Finland

3.02.P-Tu037 Assessing the Environmental Impact of Faba Bean Tofu: Consequences of Introducing a Legume-Based Protein Alternative in the Swedish Agri-Food System | **Johan Nilsson**, Swedish University of Agricultural Sciences (SLU), Sweden

3.02.P-Tu038 Climate Impact Dataset to Promote Sustainability of Food Service Operators in Finland – Learnings From Dataset Creation | **Venla Kyttä**, Natural Resources Institute Finland (Luke), Finland

3.02.P-Tu039 Addressing Nutrition in Functional Unit for Food LCA | **Merja Saarinen**, Natural Resources Institute Finland (Luke), Finland

3.02.P-Tu040 Does Utilizing Fish Sludge as Biofertilizer Reduce Pressure on Planetary Boundaries? - A Case Study | **Anna Woodhouse**, NORSUS-Norwegian Institute for Sustainability Research, Norway

3.02.P-Tu041 Global Environmental Impacts of Hidden Flows Generated From China's Passenger Car Production | **Binze Wang**, Tohoku University, Japan

3.02.P-Tu042 Integrating System Perspectives in Sustainability Assessments of Digital Health Devices: A Case Study on Digital Display Label in Clinical Trials | **Erasmo Cadena**, Ghent University, Belgium

3.02.P-Tu043 Are We Trading Lightweight Airframes for Climate Change? | **Su Natasha Mohamad**, University of Sheffield, United Kingdom

3.02.P-Tu044 Environmental Impacts of Alternative Reductant in UK Blast Furnace Ironmaking | **Siti Ahmad**, University of Sheffield, United Kingdom

3.02.P-Tu045 Enhancing Food Consumption-based LCA Accuracy Through Regionalization: A Case Study of the French Riviera's Highly Imported Diets | **Andrea Lulovicova**, Université Côte d'Azur, France

3.02.P-Tu046 Navigating Consumption Dynamics through Consequential Life Cycle Assessment of Fish Products | **Giovanni Codotto**, Aalborg University, Denmark

3.02.P-Tu047 Towards Sustainable Protein Consumption: Life Cycle Assessment of Cell Banking For Cultured Meat Production | **Maria Ignacia Rodriguez**, Ghent University, Belgium

3.02.P-Tu048 Life Cycle Assessment of agri-food waste utilization– case study example of lemon waste enzymatic extraction | **Eveliina Hylkilä**, VTT Technical Research Centre of Finland Ltd., Finland

3.03 - Qualitative Life Cycle Studies Exploring the Practical Meaning of Life Cycle Studies | Henrikke Baumann, Michael Martin and Hans Garvens

3.03.P-Tu049 The Role of Value in Bridging Life Cycle Assessment and the Circular Economy Concept | **Kobe Vulsteke**, Ghent University, Belgium

3.03.P-Tu051 Investigating Disparities in Environmental Impact Reporting of Battery Energy Storage Systems: A Qualitative Analysis of Industry and Regulatory Perspectives in the EU | **Luka Smajila**, KTH - Royal Institute of Technology, Sweden

4.01 - Life Cycle Assessment of Batteries | Linda Ager-Wick Ellingsen and Marco Raugei

4.01.P-Tu052 Life Cycle Assessment of Lithium Recovery Alternatives from Mine Tailings | **Joana Gouveia**, INEGI - Instituto de Ciência e Inovação em Engenharia Mecânica e Engenharia Industrial, Portugal

4.01.P-Tu053 Is a Stationary Second-Use the Most Sustainable Option for a Lithium-Ion Battery of a Car? | **Martina Serra**, Swiss Federal Laboratories for Materials Science and Technology (EMPA), Switzerland

4.01.P-Tu054 Does "Abundant Materials" Equal "Environmentally Benign"? Life-Cycle Impacts of Sodium-Ion Batteries | **Sanna Wickerts**, Chalmers University of Technology, Sweden

4.01.P-Tu055 LCA of an Energy Community with Electricity Storage: Vanadium Redox Flow Battery vs. Li-Ion Battery | **Eva-Maria Wiener**, University of Applied Sciences Burgenland, Austria

4.01.P-Tu056 Prospective Life Cycle Assessment of Hydrometallurgical Recycling of Lithium-ion Battery Cells in a Large-scale Industrial Facility | **Mudit Chordia**, Chalmers University of Technology, Sweden

4.01.P-Tu057 Prospective Life Cycle Assessment of Organic Redox Flow Batteries | **Shan Zhang**, Swedish University of Agricultural Sciences, Sweden

4.01.P-Tu058 Energy-Efficiency and Environmental Performance of Lithium-ion Batteries as an Energy Carrier for Container Ships | **Meem Muhtasim Mahdi**, University of Iceland, Iceland

4.01.P-Tu059 Up-to-date LCA of a Sodium-Ion Battery Based on Primary Data | **Friedrich Jasper**, Karlsruhe Institute of Technology, Germany

4.01.P-Tu060 Future Climate Imapcts of All-Solid-State Batteries | **Shan Zhang**, Swedish University of Agricultural Sciences, Sweden

4.01.P-Tu061 Challenges in Conducting Carbon Footprint Declarations in Compliance with the European Union Battery Regulation | **Emanuel Bengtsson**, Research Institutes of Sweden AB (RISE), Sweden

4.01.P-Tu062 Comparative Life Cycle Assessment of Lithium-Ion and Redox-flow Energy storage systems | **Anna Spindlegger**, Institute of Waste Management and Circularity, BOKU University, Austria

4.01.P-Tu063 Beyond Battery Life Cycle Assessments: Creating a Framework to Measure Sustainability for the UK Electric Vehicle Battery Supply Chain | **Sophie Kempston**, University of Warwick, United Kingdom

4.01.P-Tu064 A Battery Is Only as Green as the Sum of Its Parts – A Case Study on Future Impacts of Nickel Production for Cathode Active Material Manufacturing | **Sophia Roy**, Polytechnique Montreal, Canada

4.01.P-Tu065 Influence of Technical Performance Parameters on the Life Cycle Impacts of Large Stationary Energy Storage Systems | **Julia Wenger**, University of Graz; Graz University of Technology, Austria

4.01.P-Tu066 Environmental Profiles of Key Materials for All-Solid-State Lithium-ion Batteries – Early Insights from the AM4BAT Project | **David Wilde**, Leitat Technological Center, Spain

4.07 - Better Data and Modelling for Sustainable Transport | Selma Brynolf, Rei Palm and Johanna Berlin

4.07.P-Tu067 Life Cycle Assessment of Electric Ferries Based on Various Lithium-ion Battery Technologies | **Fayas Malik Kanchiralla**, Chalmers University of Technology, Sweden

4.07.P-Tu068 Recycling of Organic Residues and CO2 Into Fuels (reTURN) - Carbon Footprint Modell of a Novel Fuel Production Route Power-and-Biogas-to-Liquid (PBtL) | **Felix Hoenighausen**, University of Applied Science Bonn-Rhein-Sieg, Germany

4.07.P-Tu069 Review of Methodological Challenges in Life Cycle Assessment of Heavy Duty Road Transport | **Kari-Anne Lyng**, NORSUS Norwegian Institute for Sustainability Research, Norway

4.07.P-Tu070 The Propagation of Uncertainty in the Life Cycle Assessment of Sustainable Aviation Fuel and Commercial Flights | **Aron Bell**, Trinity College Dublin, Ireland

4.07.P-Tu071 The Importance of Reliable Secondary Life Cycle Data in Databases – The Example of Nickel | **Pablo Rodríguez Domínguez**, Nickel Institute, Belgium

4.07.P-Tu072 LCA Model for Roads at District Scale | **Alexandre Mielniczek**, Ecole des Ponts, IGN, France

4.07.P-Tu073 Methodological Challenges in Aviation Life Cycle Assessment | **Elisa Accorsi**, Politecnico di Torino, Italy

Notes

Wednesday, 23 October

08:00–09:30	**POSTER SETUP AND BADGE PICKUP**	Entrance Foyer
08:45–10:15	**PRESENTATION SESSIONS**	
10:15–10:40	**COFFEE BREAK**	Volvo Foyer
10:40–12:10	**PRESENTATION SESSIONS**	
12:10–13:25	**LUNCH BREAK AND POSTER SESSIONS** (note that there are two poster areas)	Volvo Foyer Poster & exhibition area (posters)
13:25–14:55	**PRESENTATION SESSIONS**	
13:30–18:00	**SIDE EVENTS**	
14:55–15:45	**COFFEE BREAK AND POSTER SESSIONS** (note that there are two poster areas)	Volvo Foyer Poster & exhibition area (posters)
15:45–16:30	**CLOSING CEREMONY** (featuring a closing panel)	RunAn

Workshops

Biogenic Carbon in LCA Recommendations (Life Cycle Initiative)

University of Bath

13:30—18:30 CEST | Scania

Reviewing the progress of the project. Discussing options to be recommended, the rationale for this and implications to different contexts/cases.

Closing the Gap. The Critical Role of LCA Methodology in Decision Making. Effective Policy Requires Harmonization – Way Forward for PEF and EPD

NEF - Nordic Environmental Footprint Group

13:30—18:00 CEST | Ledningsrummet

Life cycle thinking has increasingly found its way into legislation and other initiatives over the past decade. The market, consumers and businesses, shall act as a driver for more sustainable products by demanding LCA-based environmental performance results. The ability for the consumer (or even a professional procurement departments) to indeed make this choice may depend on whether it is possible to identify the best choice based on objective criteria. The credibility associated with product-related claims is a central element in the success of this ambition. In this event, the Nordic Environmental Footprint Group discusses the consequences of calculating and presenting value-chain LCA-based ESG data when the methodological frameworks regarding the value-chain approach, the types of environmental impacts, data quality and other methodological issues are not harmonized. The presentation will investigate the effect of methodological freedom. Alignment and criteria guiding the solidity of claims will be discussed as a means to support the intention with the inclusion of LCA in legislation and other market-oriented initiatives The presentation and discussion are based on the paper: "Closing the gap. The critical role of LCA methodology in decision making. A case of harmonization between PEF and EPD". The paper can be downloaded from www.nordic-pef.org.

Wednesday Platform Presentations Block 1

	08:50	09:05	09:20
RunAn	**3.04 - Circular Economy and Life Cycle Assessment: Towards Sustainable Decisions** |		
	3.04.A.T-01 Could Business Model LCA be Considered a Way Towards Decoupling? | **Ana Carolina Bertassini**, Chalmers University of Technology, Sweden	**3.04.A.T-02** The Reuse of Goods: a Model to Quantify the Environmental Benefits | **Giulia Cavenago**, Politecnico di Milan, Italy	**3.04.A.T-03** Circularity Metrics and Life Cycle Environmental Management of Wind Turbine Blades | **Joan Manuel F. Mendoza**, University of Mondragon, Spain
Scania	**4.02 - Ex-ante, Prospective, and Circular LCA for Buildings: Envisioning Future Impacts**		
	4.02.T-01 Renovate or Replace - What is the Optimal Decision for a Single-Family House Considering Cumulative CO2 Emissions? | **Roland Hischier**, Swiss Federal Laboratories for Materials Science and Technology (EMPA), Switzerland	**4.02.T-02** Reuse and Recycling Potential for Mass Timber Curtain Walls: A Consequential, Ex-Ante Life Cycle Assessment | **Marley Dowling**, University of Waterloo, Canada	**4.02.T-03** A Participatory Approach to Prospective Life Cycle Assessment of the European Cement and Concrete Sector | **Anna M. Walker**, European Commission - Joint Research Centre (JRC), Spain
Palmstedtsalen	**1.05 - Modelling Biogenic Carbon in Life Cycle Assessment** | Cecilia Sundberg, Iris Kral		
	1.05.A.T-01 Biogenic Carbon Accounting: An Open Framework Towards ALIGNED Practices for a Diversity of Bioeconomy Stakeholders | **Damien Arbault**, INSA Toulouse, France	**1.05.A.T-02** Comparing Life Cycle Assessment of Biobased and Fossil-based Products – Transition to a Bio- and Circular Economy Demands Fair Comparisons | **Pernilla Cederstrand**, Essity Hygiene and Health AB, Sweden	**1.05.A.T-03** Dynamic Carbon Footprint For The Full Life Cycle With A Temporal Inventory Database (Dyplca) – Tailoring & Application To Biobased Circular Systems | **Thomas Schaubroeck**, Luxembourg Institute of Science and Technology, Luxembourg
Ledningsrummet	**4.05 - LCA-Assisted Decision-Making in Circular Packaging Systems** | Mateo Saavedra del Oso,		
	4.05.T-01 Life Cycle Assessment of Circular Flexible Plastic Food Packaging Collected from Businesses through Reverse Logistics | **Sophie Huysveld**, Ghent University, Belgium	**4.05.T-02** Terrestrial Characterization Factors for Microplastics Ingestion and Additives Release in the Terrestrial Compartment: From Experimental Data to LCIA | **Brais Vázquez Vázquez**, Universidade de Santiago de Compostela, Spain	**4.05.T-03** Circularity Assessment of Reusable Packaging Developed in the BUDDIE-PACK Project | **Justine Gloz**, Industrial Technical Center for Plastics and Composites (IPC), France

	09:35	09:50	10:05
RunAn	Asma Al Hosni, Lucia Rigamonti, Upadhyayula Venkata Krishna Kumar and Yulia Liu		
	3.04.A.T-04 Model-Based LCA Decision Support for Circular Steel Production | **Friedrich Halstenberg**, GreenDelta GmbH, Germany	**3.04.A.T-05** Product Lifetime in Life Cycle Assessment of Circular Strategies | **Adeline Jerome**, Chalmers University of Technology, Sweden	Poster spotlights: 10:05 **3.04.P-We037** 10:10 **3.04.P-We039**
Scania	| Holger Wallbaum and Nicole Unger		
	4.02.T-04 Prospective Life Cycle assessment of Building Stocks: What Does it Take to Reach Net-Zero in 2050? | **Nicolas Alaux**, Graz University of Technology, Austria	**4.02.T-05** Comparative Assessment of Decarbonization Strategies in New Urban High-rise Residential Buildings in cold climatic regions of China based on Consequential Life Cycle Assessment | **Kaiwen Li**, Cardiff University, United Kingdom	Poster spotlights: 10:05 **4.02.P-We054** 10:10 **4.02.P-We053**
Palmstedtsalen	and Gulnara Shavalieva		
	1.05.A.T-04 Requirements and Guidelines for Comparative LCA of Bio-based Products with their Fossil-based Equivalents | **Iris Vural Gursel**, Wageningen Food & Biobased Research, Netherlands	**1.05.A.T-05** 9,000+ Deforestation Carbon Footprints for Agricultural Commodities: A Global Life-Cycle Inventory Database | **Martin Persson**, Chalmers University of Technology, Sweden	Poster spotlights: 10:05 **1.05.P-We006** 10:10 **1.05.P-We008**
Ledningsrummet	Rothman Rachael and Tatjana Karpenja		
	4.05.T-04 Reusable Rice Packaging: An Extended Comparative Life Cycle Assessment | **Gwenny Thomassen**, Ghent University/University of Antwerp, Belgium	**4.05.T-05** Assessing Complementarity of Polymer Recycling Technologies Through Life Cycle Assessment | **Stuart Coles**, University of Warwick, United Kingdom	Poster spotlights: 10:05 **4.05.P-We072** 10:10 **4.05.P-We073**

Wednesday Platform Presentations Block 2

	10:45	11:00	11:15
RunAn	**3.04 - Circular Economy and Life Cycle Assessment: Towards Sustainable Decisions** |		
	3.04.B.T-06 LCA Analysis of Circular Economy Business Models: A Case Study on Heat Pumps Materials Recycling and Reuse | **Pietro Bartocci**, RISE Research Institute of Sweden, Sweden	**3.04.B.T-07** Improving Circularity Assessment in Bio-Based Systems at the Product Level: A Review of Circular Economy Indicators | **Cristian Pérez Hernández**, Ghent University, Belgium	**3.04.B.T-08** Modelling of Upcyling According to ISO14040-44, PEF Method, and GHG Protocol | **Massimo Pizzol**, Aalborg University, Department of Sustainability and Planning, Denmark
Scania	**1.04 - Open-Data and Reproducibility: Towards Replicable, Reliable and Transparent**		
	1.04.T-01 Data Sharing – Challenges and Opportunities for LCA | **Massimo Pizzol**, Aalborg University, Denmark	**1.04.T-02** Beyond Data Sharing: Addressing the Reproducibility Challenge in LCIA through a Software-Agnostic DSL | **Tomás Navarrete Gutiérrez**, Luxembourg Institute of Science and Technology, Luxembourg	**1.04.T-03** Reproducibility Starts Before the Project: A Framework for Harmonised Data Collection in LCA | **Valentina H. Pauna**, Norwegian Institute for Sustainability Research (NORSUS), Norway
Palmstedtsalen	**1.05 - Modelling Biogenic Carbon in Life Cycle Assessment** | Cecilia Sundberg, Iris Kral		
	1.05.B.T-06 Quantifying the Climate Impacts of Wood-Based Construction in LCA – Importance of Considering Biogenic Carbon and Forest Management Dynamics | **Ambrose Dodoo**, Linnaeus University, Sweden	**1.05.B.T-07** Life Cycle Assessment of Wood-Based Textile Products: Using a Flexible Parametric Model for Carbon Accounting | **Adisa Ramadhan Wiloso**, University of Helsinki, Finland	**1.05.B.T-08** Unraveling the Climate Neutrality of Wood Derivatives and Biopolymers | **Akshat Sudheshwar**, Empa–Swiss Federal Laboratories for Material Science and Technology, Switzerland
Ledningsrummet	**2.02 - Chemical Footprint: Informed Decision Making for Reduced Chemical Risks**		
	2.02.T-01 Making Chemical Footprints Practical: User Needs and Drivers | **Pernilla Andersson**, Chalmers University of Technology, Sweden	**2.02.T-02** Risks and Impacts of Chemicals in Consumer Products on Human Health and Ecosystems: Extending USEtox Coverage | **Olivier Jolliet**, Technical University of Denmark, DTU-Sutain, Quantitative Sustainability Assessment, Denmark	**2.02.T-03** Adding up the Additives: Data Availability and Needs to Enable Robust LCAs of Plastics | **Heather Logan**, Technical University of Denmark, Denmark

	11:30	11:45	12:00
RunAn	Asma Al Hosni, Lucia Rigamonti, Upadhyayula Venkata Krishna Kumar and Yulia Liu		
	3.04.B.T-09 Approaching Circularity In Power Electronics | **Paula Burfeind**, Clausthal University of Technology, Germany	**3.04.B.T-10** CCU Fuels – How Circular Thinking and Climate Reductions Collide | **Ingunn Saur Modahl**, NORSUS - Norwegian Institute for Sustainability Research, Norway	Poster spotlights: 12:00 **3.04.P-We040** 12:05 **3.04.P-We041**
Scania	**LCA Practices** | Tomás Navarrete Gutiérrez and Tomas Rydberg		
	1.04.T-04 A New Paradigm for Findable, Maintainable, and Flexible Open Industrial Ecology Databases | **Chris Mutel**, Cauldron Solutions, Switzerland	**1.04.T-05** TianGong Database: An Open-Source Life Cycle Unit Process Database for China's Industrial System | **Jianchuan Qi**, Tsinghua University, China	Poster spotlights: 12:00 **1.04.P-We004** 12:05 **1.04.P-We001**
Palmstedtsalen	and Gulnara Shavalieva		
	1.05.B.T-09 Life Cycle Assessment of Bioenergy with Carbon Capture and Storage: a Sweden-Norway Case Study | **Kåre Gustafsson**, KTH - Royal Institute of Technology, Sweden	**1.05.B.T-10** Dynamic Life Cycle Assessment of Climate Change Impacts in Biochar Systems | **Magnus Karlsson**, Roskilde University (RUC), Denmark	Poster spotlights: 12:00 **1.05.P-We007** 12:05 **1.05.P-We012**
Ledningsrummet	| Hanna Holmquist and Olivier Jolliet		
	2.02.T-04 Substitution of (Cyclic) Siloxanes in Cosmetics, a Case Study to Apply Life Cycle-Based Chemicals Assessment Tools with-in the Safe and Sustainable-by-Design Framework | **Jutta Hildenbrand**, Research Institutes of Sweden AB (RISE), Sweden	**2.02.T-05** On the Applicability of Incorporating Bioassays in Life Cycle Assessment for More Complete Evaluation of Advanced Wastewater Treatment | **Sofia Högstrand**, Department of Process and Life Science Engineering, Lund University, Sweden	Poster spotlights: 12:00 **2.02.P-We018** 12:05 **2.02.P-We019**

Wednesday Platform Presentations Block 3

	13:30	13:45	14:00
RunAn	**3.04 - Circular Economy and Life Cycle Assessment: Towards Sustainable Decisions** | ...		
	3.04.C.T-11 Integrating the LCA Method and Circular Approaches by Using a Whole Life Carbon Assessment for Buildings | **Bojana Petrovic**, NORSUS - Norwegian Institute for Sustainability Research, Norway	**3.04.C.T-12** Trade-Offs between Technical Parameters, Environmental Impacts and Circular Economy: A Case Study on Using Recycled Fiber-Reinforced Polymer Blends | **Ulrike Kirschnick**, Montanuniversitaet Leoben, Austria	**3.04.C.T-13** Circularity Measurement and Assessment: Applicability of ISO/FDIS Standard 59020 and Life Cycle Assessment to Electric Vehicle Batteries | **Luis Alberto López Ruiz**, Catalonia Institute for Energy Research (IREC), Spain
Scania	**Workshop (13:30 – 18:30)**		
	Biogenic Carbon in LCA Recommendations (Life Cycle Initiative)		
Palmstedtsalen	**4.03 - Combined Methods for Energy Futures in Life Cycle Assessment** | Søren Løkke,		
	4.03.T-01 Life Cycle Assessment of Energy Transition Scenarios | **Romain Sacchi**, Paul Scherrer Institut, Switzerland	**4.03.T-02** Dynamic and Prospective LCA Combined with Energy System Modelling to Address the Temporal Impact of Energy Production and Storage | **Roel Degens**, Flemish Institute for Technological Research (VITO), Netherlands	**4.03.T-03** Green Hydrogen Production in Uruguay: Integrating Life Cycle Assessment and Energy System Optimisation using Impuls-urbs Framework | **Thushara Addanki**, Technical University of Munich (TUM), Germany
Ledningsrummet	**Workshop (13:30 – 16:00)**		
	Closing the Gap. The Critical Role of LCA Methodology in Decision Making. Effective Policy Requires harmonization – Way Forward for PEF and EPD		

	14:15	14:30	14:45
RunAn	Asma Al Hosni, Lucia Rigamonti, Upadhyayula Venkata Krishna Kumar and Yulia Liu		
	3.04.C.T-14 Is the Current LCA Practice Really Measuring the Environmental Consequences of Material Circularity? | **Francesca Reale**, Ecoinnovazione SRL, Italy	Poster spotlights: 14:30 **3.04.P-We042** 14:35 **3.04.P-We043** 14:40 **3.04.P-We044**	Poster spotlights: 14:45 **3.04.P-We045** 14:50 **3.04.P-We046**
Scania	**Workshop (13:30 – 18:30)**		
	Biogenic Carbon in LCA Recommendations (Life Cycle Initiative)		
Palmstedtsalen	Tomas Ekvall and Niclas Ericsson		
	4.03.T-04 Prospective Life Cycle Assessment of Hydrogen Production via Electrolysis: The Role of Background and Foreground Electricity | **Juliana Steinbach**, Mines Paris -PSL, France	**4.03.T-05** Consequential Life Cycle Assessment of Wind-to-X Using Near-Future Wind Energy Models | **Lasse Poulsen**, Aalborg University, Denmark	Poster spotlights: 14:45 **4.03.P-We067** 14:50 **4.03.P-We068**
Ledningsrummet	**Workshop (13:30 – 16:00)**		
	Closing the Gap. The Critical Role of LCA Methodology in Decision Making. Effective Policy Requires harmonization – Way Forward for PEF and EPD		

Poster Schedule

Setup	08:00-09:30
Poster exhibition	09:00-16:30
Take down	16:30-17:00

Poster Areas

Poster Area 1: NCC Square
Poster Area 2: Ascom and Catella

Poster Sessions

1.04 - Open-Data and Reproducibility: Towards Replicable, Reliable and Transparent LCA Practices | Tomás Navarrete Gutiérrez and Tomas Rydberg

1.04.P-We001 Mapping the Global Distribution of Supply Chains Using Customs Data | **Chunshuo Ge**, Chalmers University of Technology, Sweden

1.04.P-We002 Process Model-Based Life Cycle Assessment: Framework, Strengths, and Consistency | **Heikki Lappalainen**, Aalto University, Finland

1.04.P-We003 A Protocol Prototype for Enhancing the Reproducibility and Transparency in Life Cycle Inventory Building | **Tomás Navarrete Gutiérrez**, Luxembourg Institute of Science and Technology, Luxembourg

1.04.P-We004 Improving LCA Data Availability on Yarn Blends in Garments | **Heather Logan**, Technical Univeristy of Denmark, Denmark

1.05 - Modelling Biogenic Carbon in Life Cycle Assessment | Cecilia Sundberg, Iris Kral and Gulnara Shavalieva

1.05.P-We006 Critical Review: State of the Art of Dynamic Life Cycle Assessments for Bio-Based Products | **Marle de Jong**, Utrecht University, Netherlands

1.05.P-We007 The Environmental Potential of Hydrogen and Acid from Bio-alcohols: Reality or Biogenic Carbon Accounting Artifact? | **Inga-Marie Lahrsen**, Energy & Process Systems Engineering, ETH Zurich, Switzerland

1.05.P-We008 Impacts of Biogenic Carbon: New Forestry Based Emission Factors | **Stefan Füchsl**, Technical University of Munich (TUM), Germany

1.05.P-We009 Potential Carbon Sequestration of Biochar Using Willow Biomass in Sweden | **Pierre Van Rysselberge**, Swedish University of Agricultural Sciences, Sweden

1.05.P-We010 System Analysis and Life Cycle Assessment of Sustainable Transformation Strategies for the Chemical Industry | **Patrick Veiltl**, Technical University of Munich (TUM), Germany

1.05.P-We012 Application of LCA to document Carbon Dioxide Removals (CDR) from Pyrolysis and Incineration of Waste | **Hanne Lerche Raadal**, Norwegian Institute for Sustainability Research (NORSUS), Norway

2.02 - Chemical Footprint: Informed Decision Making for Reduced Chemical Risks | Hanna Holmquist and Olivier Jolliet

2.02.P-We013 Life Cycle Based Risk and Opportunity Mapping, Identifying Pathways and Dead Ends in Early Innovation | **Steffen Schellenberger**, RISE, Sweden

2.02.P-We014 Ecotoxicity Impacts of Pesticide Use in Finnish Field Vegetable Crops in 2003-2019 | **Kati Räsänen**, Natural Resources Institute Finland (Luke), Finland

2.02.P-We015 Decreased Ecotoxicity Impacts of Sun Care Products With Laccase-Based Solutions | **Katri Behm**, Technical Research Centre of Finland Ltd. (VTT), Finland

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2.02.P-We016 Life Cycle Impact Assessment of Metals in Mine Tailings | **Johannes Drielsma**, Drielsma Resources Europe, Netherlands

2.02.P-We017 Comparative Life Cycle Assessment of Photocatalytic Flow Reactors for Solar-Driven Processes to Obtain Sustainable Long-Chain Alcohol-Based Fuels | **Ana García Moral**, University of Burgos (ICCRAM), Spain

2.02.P-We018 A Life Cycle Based Assessment Toolbox to Assess and Improve Safety and Sustainability of Chemicals – Half Time Report | **Thomas Rydberg**, ChemSec, SweGermanyn

2.02.P-We019 SSbD in Practise: Environmental, Economic and Social Pre-assessment for Early-Stage Decision Making | **Sonia Martel Martin**, University of Burgos, Spain

3.04 - Circular Economy and Life Cycle Assessment: Towards Sustainable Decisions | Asma Al Hosni, Lucia Rigamonti, Upadhyayula Venkata Krishna Kumar and Yulia Liu

3.04.P-We020 Circular Economy Implementations in Industry – Towards a Broader Use of Sustainability Approach | **Birgit Brunklaus**, RISE Research Institute of Sweden, Sweden

3.04.P-We021 Comparative Life Cycle Assessment of Fabric from Post-industrial Polyethylene Terephthalate (PET) Waste vs Virgin PET | **Thulangi Gayathma Balasuriya**, Technical University of Denmark (DTU), Denmark

3.04.P-We022 From Waste to Resource: Assessing Circular Economy Strategies for Bread Surplus | **Pedro Brancoli**, University of Borås, Sweden

3.04.P-We023 The Role of Circular Economy in the Machinery Sector: A Comprehensive Analysis of Key Technologies to Reduce its Environmental Footprint and Resource Use | **Alejandro Arias-Castillo**, Institute Für Industrial Ecology (INEC), Germany

3.04.P-We024 Multifunctionality In The End Of Life Of Products: Is Circular Footprint Formula The Answer? | **Hazem Eltohamy**, Leiden University, Netherlands

3.04.P-We025 Towards Sustainable Synthesis: Exploring Egg White as a Possible Gelation Agent for Eco-Friendly Activator Materials in the Realm of Plastic Pyrolysis | **Ann-Katrin Emmerich**, Technical University Darmstadt, Germany

3.04.P-We026 Optimizing Performance of Global Mobility and Relocation Using Life Cycle Assessment (LCA) | **Haniyeh Hajatnia**, University of Bath, United Kingdom

3.04.P-We027 Sustainable Pathways: Empowering Decision Making Through Environmental Analysis in the Plastics Industry | **Bruna Machado**, PIEP-Centre for Innovation in Polymer Engineering, Portugal

3.04.P-We028 Environmental and Economic Performance of Municipal Wastewater Treatment Plant: A Case Study - Søndre Follo Renseanlegg, Norway. | **Alifiya Ikhsani**, University of Agder, Norway

3.04.P-We029 Challenges and Opportunities in Carbon Fiber-Reinforced Polymer Composites Circularity: A Prospective LCA Case Study | **Ulrike Kirschnick**, Montanuniversitaet Leoben, Austria

3.04.P-We030 Data Center It Hardware Refresh Driven by Life Cycle Assessment for a Circular Economy | **Parvathi Maya Thampi**, Research Institutes of Sweden, Sweden

3.04.P-We031 Combining Material Flow Analysis and Life Cycle Assessment to Define Regional Reuse Strategies for the Steel Industry | **Chloe Ruda**, Viry - Fayat Group, France

3.04.P-We032 Chemicals Production from an Alternative Carbon Source: Techno-economic and Environmental Aspects of Supply Chain Design | **Ariane Silveira Sbrice Pinto**, Durham University, United Kingdom

3.04.P-We033 Assessing the Environmental Benefits of Refurbishment: A Case Study of Self-Contained Emergency Lighting Luminaires | **Neha Shastri**, Eaton India Innovation Center, India

3.04.P-We034 LCA as Decision Support Tool for Multi-Functional Systems in a Circular Economy: the case of Anaerobic Digestion of Waste and Recycling Contaminated Soil | **Hanne Lerche Raadal**, NORSUS - Norwegian Institute for Sustainability Research, Norway

3.04.P-We035 Bin-To-Product: Maximizing the Use of Plastic Waste as a Resource While Minimizing Environmental Impacts | **Remy Richie**, Radboud University, Netherlands

3.04.P-We036 Towards Prospective Circularity Assessment of Batteries | **Jana Benita Husmann**, Technische Universität Braunschweig, Institut für Werkzeugmaschinen und Fertigungstechnik, Germay

3.04.P-We037 Life Cycle Assessment of a Single-Use, Battery-Powered Surgical Stapler Used in Minimally Invasive Surgery | **Naomi Muindi**, Ghent University, Belgium

3.04.P-We038 LCA Analysis of Circular Economy Business Models: A Case Study on Heat Pumps Materials Recycling and Reuse | **Pietro Bartocci**, RISE Research Institute of Sweden, Sweden

3.04.P-We039 Examination of Recycling Processes for Metallized Polymer Foams Using Life Cycle Assessment | **Pauline Langbehn**, iPoint-systems gmbh, Germany

3.04.P-We040 Agro2Circular Circular Solution Life Cycle Assessment Approach | **Essi Paronen**, Technical Research Centre of Finland Ltd. (VTT), Finland

3.04.P-We041 Business Model LCA Applied to a Product as a Service Model: An Electrolux Group Pilot | **Albert Norin**, Chalmers University of Technology, Sweden

3.04.P-We042 Reviewing the Final Phase of Offshore Wind: A Life Cycle Perspective | **Célestin Demuytere**, Ghent University, Belgium

3.04.P-We043 Study on the Decarbonisation Potential of Hydrogen Implementation in Float Glass Industry using Life-Cycle Assessment (LCA | **Mahmoud Gadelhaq**, University of Sheffield, United Kingdom

3.04.P-We044 Using LCA for Evaluating Hotspots and Circularity Strategies in Semiconductor Manufacturing | **Noora Harju**, Technical Research Centre of Finland Ltd. (VTT), Finland

3.04.P-We045 Designing a Circular Packaging System in Light of PPWR. | **Pieter Callewaert**, NORSUS Norwegian institute for Sustainability Research, Norway

3.04.P-We046 Driving Sustainability in Utility Pole Production: A Circular Economy Approach | **Inês Costa**, PIEP – Innovation Centre in Polymer Engineering, Portugal

4.02 - Ex-ante, Prospective, and Circular LCA for Buildings: Envisioning Future Impacts | Holger Wallbaum and Nicole Unger

4.02.P-We047 Integrating Dynamic Prospective LCA and Circularity Strategies for Sustainable Buildings | **Haitham Abu-Ghaida**, Hasselt University, Belgium

4.02.P-We048 Renovate or Replace, Phase II: Finding Optimal Solution for Multi-Family Houses Considering Cumulative CO2 Emissions | **Zhaniya Mukhamadiyeva**, Swiss Federal Laboratories for Materials Science and Technology (EMPA), Switzerland

4.02.P-We049 Circularity – Not So Straightforward: The Application of LCA for the Performance Assessment of Renovations in a Circular Economy Context | **Shibeal Mc Cann**, Utrecht University, Netherlands

4.02.P-We050 Prospective LCA of Advanced Insulating Materials for Buildings to Estimate the long-term Environmental Impacts | **Angela Daniela La Rosa**, NTNU, Norway

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4.02.P-We051 Understanding Embodied Greenhouse Gas Emissions from Real Case Building Renovation projects in Sweden: Quantification, Drivers and Characterization | **Zoé Barjot**, KTH, Sweden

4.02.P-We052 Selective Deconstruction: A Case Study of Waste Management Optimization | **Jan Pešta**, Czech Technical University in Prague - University Centre for Energy Efficient Buildings, Czech Republic

4.02.P-We053 Advancing Environmental Performance in Construction Industry Through Systemic and Holistic Thinking Using LCA | **Magnus Sparrevik**, NTNU, Norway

4.02.P-We054 Prospective Life Cycle Assessment of Building Structures | **Pierre Navaro Auburtin**, Ponts Paristech, France

4.03 - Combined Methods for Energy Futures in Life Cycle Assessment | Søren Løkke, Tomas Ekvall and Niclas Ericsson

4.03.P-We055 General Lci Model for Heat Supply and Demand With Specified Temporal and Spatial Data: Determining Marginal Heat Suppliers for Informed Decision Support | **Timen Boeve**, Aalborg University, Denmark

4.03.P-We056 Energy Resilient Recovery of Puerto Rican School Infrastructure | **Andrea Boero Vera**, University of Massachusetts Lowell, United States

4.03.P-We058 A Life Cycle Assessment of Green Hydrogen Production Using Proton-Exchange Membrane Water Electrolysis Coupled with Desalination in Saudi Arabia | **Holkan Vazquez-Sanchez**, King Abdullah University of Science and Technology, Saudi Arabia

4.03.P-We059 Assessing the Validity of the Net-Zero Claims of Electricity Generation From "Waste Coal" | **Marie-Odile Fortier**, University of Nevada, Las Vegas, United States

4.03.P-We060 Consequential Life Cycle Assessment Of On-road Electric Mobility Deployment In France | **Magdalena Czyrnek-Deletre**, I Care, France

4.03.P-We061 A Methodological Approach to Prospective Life Cycle Assessment for the Harmonization of the Foreground and Background Systems | **Gandhi Pragada**, German Aerospace Center (DLR), Germany

4.03.P-We062 Coupling Environmental Assessment with Integrated Thermal Energy Storage Systems Modelling | **Tanima Sharma**, KTH Royal Institute of Technology, Sweden

4.03.P-We063 Material Criticality for Clean Energy Technologies: a Systematic Literature Review | **Justine Mast**, Ghent University, Belgium

4.03.P-We064 Excess Heat Utilization – LCA Modelling the Temporal Differences and Understanding How These Matter | **Thomas Elliot**, Aalborg University, Denmark

4.03.P-We066 Evaluation of the Life Cycle of Bioethanol and Petrol Blends within the UK's Transport Sector | **Vittorio Mercusa**, University of Warwick, United Kingdom

4.03.P-We067 Dynamic System Strategies for Climate Social Tipping Points | **Thomas Elliot**, Aalborg University, Denmark

4.03.P-We068 Life Cycle Assessment of Latent Heat Thermal Energy Storage in Building Heating and Cooling Systems | **Haoyang Dong**, KTH Royal Institute of Technology, Sweden

4.05 - LCA-Assisted Decision-Making in Circular Packaging Systems | Mateo Saavedra del Oso, Rothman Rachael and Tatjana Karpenja

4.05.P-We069 Environmental Assessment of Reusable Take-Away Packaging: A Holistic Perspective | **Stanislava Borisova**, Swedish Environmental Research Institute (IVL), Sweden

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4.05.P-We070 How Environmentally Sustainable is Flexible Plastic Packaging when Shifting from Multi- to Mono-materials? | **Trang T. Nhu**, Ghent University, Belgium

4.05.P-We071 Closing the Loop of the Beverage Carton: A Life Cycle Assessment on the Chemical Recycling of the Polyethylene-Aluminum (PolyAl) Fraction | **Estefania Sanabria Garcia**, Ghent University, Belgium

4.05.P-We072 Assessment of Sustainable Packaging for Thermosensitive Products Transport | **Catarina Faria**, PIEP, Portugal

4.05.P-We073 Food Packaging, Wasted Food? A Critical Look at LCA Methodologies in the Food Packaging Industry | **Musharof Hussain Khan**, Natural Resources Institute Finland (Luke), Finland

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Environmental Systems Analysis at Chalmers

We were among the first to start applying and researching LCA; for over 30 years, we have been one of the leading LCA environments in the world. Important contributions include the popular textbook “Hitchhiker’s Guide to LCA”, the EPS monetarization weighting method and recent developments on prospective LCA for emerging technologies.

In addition to LCA, we also apply other sustainability assessment methods and study sociotechnical transitions, to meet the environmental challenges and resource limitations that our society faces. We do this with a systems approach and we include the technology itself, the natural systems, as well as the actors, the humans, in these systems. The challenges we address demand cross-disciplinary approaches, which is reflected in the group’s composition and publications. The division has about 40 employees and a broad competence profile encompassing natural sciences, engineering sciences and social sciences. We have a particularly strong presence in the master’s programme on Industrial Ecology.

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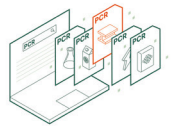
Join our endeavour as a verifier or contribute to the PCR development to provide transparency and credibility in environmental data of a product or service to facilitate the transition towards sustainable options.

A verifier can support with implementing verification on an EPD and its associated documents.



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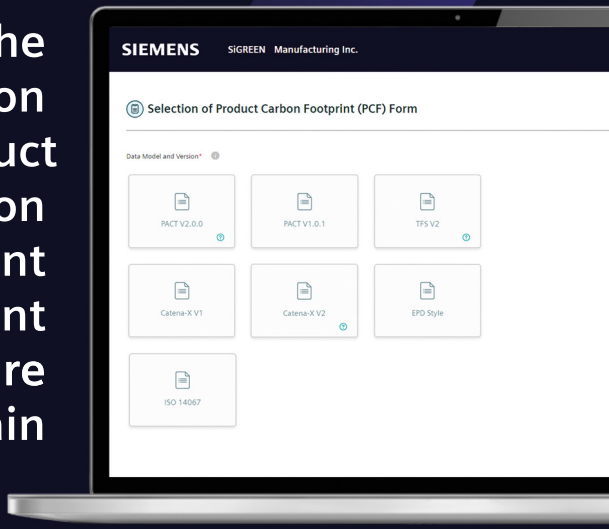

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