



## Program

15th – 16th April 2024

[Hotel Rossi](#) | Lehrter Str. 66, 10557 Berlin

## Overview agenda

Hotel Rossi | Lehrter Str. 66, 10557 Berlin

Time	Monday 15th of April		Time	Tuesday 16th of April	
	Main Room	Room 1		Main Room	Room 1
8:30-8:45	Registration & Welcome		8:30-8:45	Registration	
8:45-9:00			8:45-9:00		
9:00-9:15			9:00-9:15		
9:15-9:30	Opening & Keynote Speech (Andreas Ciroth: <b>openLCA Past, Present and Future</b> )		9:15-9:30	Keynote Speech (Michael Srocka: <b>Inside the openLCA calculation engine</b> )	
9:30-9:45			9:30-9:45		
9:45-10:00			9:45-10:00		
10:00-10:15			10:00-10:15		
10:15-10:30	Working & Collaborating with Data	LCA in the Energy Sector	10:15-10:30	Tools for Sustainability: A Smarter Way for Assessments	
10:30-10:45			10:30-10:45		
10:45-11:00			10:45-11:00		
11:00-11:15			11:00-11:15		
11:15-11:30			11:15-11:30		
11:30-11:45	Coffee break		11:30-11:45	Coffee break	
11:45-12:00			11:45-12:00		
12:00-12:15	Let's Discuss over LCA	LCA in the Energy Sector	12:00-12:15	Tools for Sustainability: A Smarter Way for Assessments	
12:15-12:30			12:15-12:30		
12:30-12:45			12:30-12:45		
12:45-13:00			12:45-13:00		
13:00 -14:15	Lunch break		13:00-14:15	Lunch break	
14:15-14:30	Keynote Speech (Alexander Koch: <b>Model-based LCSA &amp; openLCA</b> )		14:15-14:30	Keynote Speech (Andreas Ciroth: <b>A New LCA Database</b> )	
14:30-14:45			14:30-14:45		
14:45-15:00			14:45-15:00		
15:00-15:15	Hydrogen Systems: Case Studies &	Learning about Sustainability in Food Systems	15:00-15:15	Poster Presentations & Coffee Break	
15:15-15:30			15:15-15:30		

15:30-15:45	<b>Guidelines (SH2E)</b>		15:30-15:45		
15:45-16:00			15:45-16:00		
16:00-16:15			16:00-16:15		
16:15-16:30			16:15-16:30		
16:30-16:45	Poster Presentations & Coffee Break		16:30-16:45	LCIA Methods & Inventory	LCA in Polymers & Chemistry
16:45-17:00			16:45-17:00		
17:00-17:15			17:00-17:15		
17:15-17:30			17:15-17:30		
17:30-17:45	Panel Discussion: "It's not greenwashing, but.." Claims about Data Quality & Compliance		17:30-17:45	Closing Remarks	
17:45-18:00			17:45-18:00		
18:00-18:15					
18:15-19:30			18:00-19:30	Apero at GreenDelta!	
19:30-20:45	Dinner (19:30 onwards)		19:30-20:45		

## Schedule

Welcome to openLCA.conf – we are excited to host you on some days of learning, discovery and exchange

### Day 1 – 15<sup>th</sup> April 2024

08:30 **Registration opens** – come and get your badge and meet and greet others

#### 09:15 **Opening & Keynote**

Opening by Julia Cilleruelo Palomero, LCA Consultant and Communications Manager, *GreenDelta GmbH*

Keynote: “**openLCA Past, Present Future**” by Andreas Ciroth, Managing Director, *GreenDelta GmbH* 10:15

#### Parallel sessions

	Main Room	Room 1
	<b><i>Working &amp; collaborating with Data</i></b>	<b><i>LCA in the energy sector I</i></b>
	<b>Chairs</b> Alexander Koch Bach Tran	<b>Chairs</b> Shravya Hebburmurali Ash Hamed
10:15-10:30	<b>Development of a data migration interface for interoperability between GREET and openLCA</b> Longwen Ou, Argonne National Laboratory, US	<b>Decarbonizing Direct Air Capture with Solar Power</b> Enric Prats-Salvado, Institute of Future Fuels - Part of German Aerospace Center (DLR), Germany
10:30-10:45	<b>Using USLCI and Federal LCA Commons Resources in openLCA</b> Paige Weiler, Eastern Research Group, Inc., US	<b>Is the PV modules assembly an ecofriendly process?</b> Valeria Vazquez, National Autonomous University of Mexico, Mexico
10:45-11:00	<b>Optimizing Lifecycle Inventory Databases through AI-Enabled Semantic Analysis and Data Integration Techniques</b> Huimin Chang, Tsinghua University, China	<b>LCA of an Energy Community with Redox Flow Battery: Exploring Variations in Electricity and Heat Supply</b> Eva-Maria Wiener, University of Applied Sciences Burgenland, Austria
11:00-11:15	<b>Integrating OpenLCA and AWS Sustainability Insights Framework to enable Corporate Carbon Accounting</b> William Sia, Amazon, -	<b>The impact of ecodesign measures for PEM fuel cell stacks on social life cycle impact indicators</b> Jure Gramc, University of Ljubljana, Slovenia
11:15-11:30	<b>How to model chemical reactions with secondary data in openLCA: A general modelling approach based on metal-organic frameworks</b> Conrad Spindler, GreenDelta GmbH, Germany	<b>Comparative Life Cycle Analysis (LCA) of novel NiZn battery technology from Cradle to Grave</b> Ashwani Kumar Malviya, School of Civil Engineering, Universitat Politècnica de València, Spain

11:30 **Coffee break** (ground floor & first floor)

12:00 **Parallel sessions**

	Main Room	Room 1
	<b><i>Let's discuss over LCA (advanced topics)</i></b>	<b><i>LCA in the energy sector II</i></b>
	<b>Chairs</b> Kirill Maister Loay Radwan	<b>Chairs</b> Shravya Hebburmurali Ash Hamed
12:00-12:15	<b>Overview on new and upcoming ISO documents related to LCA modelling</b> Lenka Wimmerova, Czech Univerzity of Life Sciences Prague, Czech Republic	<b>Joint GREET and openLCA to guide the flexible energy layouts for sustainable transportation: a well-to-wheel case study of methanol and hydrogen fuel cell vehicles</b> Jiaxuan Li, Chongqing University, China
12:15-12:30	<b>Why Model Net-Positive Environmental Benefits</b> Delwyn Jones, Evah Associates, Australia	<b>Environmental impact analysis for electric bus batteries including second-life application.</b> Harini Hewa Dewage, Hitachi Europe GmbH, Germany/UK
12:30-12:45	<b>Approaches to Uncertainty Analysis in the Environmental Impact Assessment of Pavement Maintenance and Rehabilitation Alternatives</b> Tomas Navarrete, University of Twente, Netherlands	<b>Ecological risks and opportunities of biological methanation in power-to-methane systems</b> Nora Elhaus, Friedrich-Alexander-Universität Erlangen-Nürnberg, Germany
12:45-13:00		<b>Parametric Life Cycle Inventory of energy systems applied to geothermal resources</b> Claudio Zuffi, University of Florence, Italy

13:00 **Lunch break** (ground floor)

14:15 **Keynote: “Model-based LCSA & openLCA”** by Alexander Koch, LCA Consultant and Researcher, *GreenDelta GmbH*

15:00 **Parallel sessions**

	Main Room	Room 1
	<b><i>Hydrogen Systems: case studies &amp; guidelines</i></b>	<b><i>Learning about sustainability in food systems</i></b>
	<b>Chairs</b> Ash Hamed Loay Radwan	<b>Chairs</b> Raphael Zimmermann Sarah Serafini
15:00-15:15	<b>Defining Comprehensive Guidelines for Lifecycle Sustainability Assessment of Fuel Cell Hydrogen Systems: Environmental and Social Dimensions</b> Ashrakat Hamed, GreenDelta GmbH, Germany	<b>Life cycle assessment of cultured meat: Mapping of an unknown system</b> Derrick Risner, University of California, Robert Mondavi Institute for Wine and Food Science, US

15:15-15:30	<b>openLCA in SH2E: A dedicated tool for Life Cycle Sustainability Assessment of Hydrogen Systems</b> Andreas Ciroth, GreenDelta GmbH, Germany	<b>Overall Sustainability Assessment of large-scale salmon farming systems</b> Petridi Angeliki, Dignity Private Company, Greece
15:30-15:45	<b>Up-to-date guidelines for life cycle sustainability assessment of hydrogen energy systems.</b> Diego Iribarren, IMDEA Energy, Spain	<b>Life Cycle Assessment of Basse Brazil Nuts</b> Rajhans Negi, Porter School of Environment and Earth Sciences Tel Aviv University, Israel
15:45-16:00	<b>Life cycle sustainability assessment of hydrogen from solid oxide electrolysis coupled with a concentrated solar power plant</b> Diego Iribarren, IMDEA Energy, Spain	<b>Hotspot Analysis of Keratin Production from Chicken Feather Waste</b> Rafael Marques Vanderlei, Federal University of Sao Carlos, Brazil
16:00-16:15	<b>SH2E project : Case study application : FCEV and BEV</b> Jade Garcia, Symbio, France	<b>Life cycle assessment of mid-scale production of beverages distilled from Agave in different regions of Mexico</b> César Camou, EarthShift Global LLC. Kittery, US
16:15-16:30	<b>Applying a new resource indicator to manufacturing of water electrolysis cells</b> Christina Wulf, Forschungszentrum Jülich, Germany / Andreas Ciroth, GreenDelta GmbH, Germany	<b>Synergy between LCA and AMC for more science-based informed decisions: a case study in agrifood mountain value chains</b> Fabrizio Mazzetto, Free University of Bozen/Bolzano, Italy

#### 16:30 Poster presentation with coffee

16:45 - 3 posters highlights will be presented at the start of the session (those chosen have already been notified). (#1-20 at end of program) 17:30

#### Panel Discussion: "It's not greenwashing, but..." Claims about Data Quality & Compliance"

About the discussion:

*Representative, compliant, verified, reviewed, high quality, independently verified, science-based: There is an increasing number of terms used to underline the importance of sustainability and life cycle data, study results, findings, and tools.*

*Similar to the well-known greenwashing, defined by Collins as "an attempt by businesses to seem environmentally friendly without actually doing anything serious to protect the environment", there is probably a temptation to overstress the quality, reliability and transparency of sustainability data, tools, findings. Let's talk about it! With questions such as: do we see this as an issue at all? If yes, what would be a good name for it? What is a good communication of environmental performance considering these quality terms? How could potential counter-measures look like? Etc.*

Panellists: Rawaa Ammar, Chief Sustainability & Impact Officer, Resortecs, Belgium

Tom Bradley, Director, Decerna, United Kingdom

Paige Weiler, LCA and Sustainability Analyst, ERG, United States

Andreas Ciroth, Managing Director, GreenDelta GmbH, Germany

19:30 **Conference Dinner** at Hotel Rossi



GreenDELTA

**Day 2 – 16<sup>th</sup> April 2024**

09:30 Keynote: **“Inside the openLCA calculation engine”** by Michael Srocka, Lead Software Developer, *GreenDelta GmbH* 10:30

**Parallel sessions**

	Main Room	Room 1
	<b><i>Tools for sustainability: a smarter way for assessments I</i></b>	<b><i>LCA in Industry</i></b>
	<b>Chairs</b> Sebastian Greve Francois Le Rall	<b>Chairs</b> Friedrich Halstenberg Tomas Slany
10:30-10:45	<b>openLCA in Education: Evaluating the potential of ChatGPT 4.0 and user interface enhancement to support product lifecycle assessment</b> Clemence Granade, McGill University, Canada	<b>Illuminating the Transition: Leveraging Life Cycle Assessment for Circular Economy</b> <b>Centric Advancements in Automotive Headlamp Design</b> Alexander Flekler, Fraunhofer-Institut für Entwurfstechnik Mechatronik IEM, Germany
10:45-11:00	<b>openLCA and OpenSemanticLab - Autocreate Inventories from Scientific Knowledge Graphs</b> Simon Stier, Fraunhofer Institut für Silicatforschung, Germany	<b>Environmental Assessment of Interior Components in Vehicle through openLCA</b> Hee-Sun Cho, Korea Electronics Technology Institute, Korea
11:00-11:15	<b>Automation of agri-food systems environmental impact calculations with MEANSInOut and OpenLCA</b> Caroline Malnoë, INRAE, MEANS Platform, France	<b>Social LCA for textile supply chains</b> Jutta Hildenbrand, Research Institutes of Sweden RISE AB, Sweden
11:15-11:30		<b>Small Change big impact: A comparative LCA of disassembly with recycling methods of closed loop denim</b> Rawaa Ammar, Resortecs (Chief Sustainability & Impact Officer), Belgium

11:30 **Coffee break** (ground floor & first floor)

**12:00 Parallel sessions**

	Main Room	Room 1
	<b><i>Tools for sustainability: a smarter way for assessments (tools) II</i></b>	<b><i>LCA in Industry</i></b>
	<b>Chairs</b> Sebastian Greve Francois Le Rall	<b>Chairs</b> Friedrich Halstenberg Tomas Slany
12:00-12:15	<b>Automated generation of Life Cycle Assessment models from enterprise data</b> Nils Weiher, Fraunhofer Institute for Production Systems and Design Technology (IPK), Germany	<b>Advancing Circular Economy strategies in urban construction using a combined MFA and LCA approach.</b> Daniel Horak, Austrian Institute of Technology (AIT), Austria



12:15-12:30	<b>OpenLCA Integrated tool to Environment for modelling, Simulation and Optimization</b> Simone Miyoshi, Universidade Federal do Rio de Janeiro, Brazil	<b>Life Cycle Sustainability Assessment of Industrialized Renovation Solutions</b> Friedrich Hastenberg, GreenDelta GmbH, Germany
12:30-12:45	<b>Automatized LCA of Parametrizable Passenger Car Glider Models</b> Philipp Weber, Karlsruher Institut für Technologie (KIT), Germany	<b>Life Cycle Analysis of Laparoscopic Scissors: Evaluating Environmental Impact and Circular Strategies for Carbon Reduction</b> Pete Culmer, School of Mechanical Engineering, University of Leeds, UK
12:45-13:00		<b>A screening assessment of biodiversity impacts for large organizations: an LCA approach.</b> Maria E. Correa-Cano, Environment & Sustainability Institute, University of Exeter, UK

13:00 **Lunch break** (ground floor)

14:15 **Keynote: “A New LCA Database”** by Andreas Ciroth, Managing Director, GreenDelta GmbH

15:15 **Poster presentation with coffee** (#20-33 at end of program)

15:30 - 4 posters highlights will be presented at the start of the session (those chosen have already been notified).

#### 16:15 Parallel sessions

	Main Room	Room 1
	<b>LCIA Methods &amp; inventory</b>	<b>LCA in polymers and chemistry</b>
	<b>Chairs</b> Julia Gutke Mubeena Chathanchira	<b>Chairs</b> Jonas Hoffmann Conrad Spindler
16:15-16:30	<b>How to best assess sustainability within the framework of Life Cycle Sustainability Assessment.</b> Indicators that need to be assessed in the sake of sustainability Alexander Griebler, Montanuniversität Leoben, Austria	<b>Study of Carbon Capture Utilization and Storage Implementation Potential on Ammonia Production in Indonesia using Life Cycle Assessment Approach</b> Agus Adi Putra, Ailesh, Sweden
16:30-16:45	<b>Nature Positive Environmental Declarations</b> Mathilde Vlieg, Evah Associates, Australia	<b>Life Cycle Assessment of Kerosene from HEFA Process</b> Pablo Silva, Technical University of Munich, Germany
16:45-17:00	<b>The Crucial Role of HVAC Life Cycle Inventory Templates</b> Scott Unger, Pacific Northwest National Laboratory, USA	<b>Microplastic emissions from rubbers in LCA: A case study on artificial turf football pitches</b> Lukas Zeilerbauer, ENERGIEINSTITUT AN DER JOHANNES KEPLER UNIVERSITÄT LINZ, Austria
17:00-17:15	<b>Towards a general framework for integrating concrete work noise impact in BIM-life cycle assessment method</b> Rabaka Sultana, Charles Darwin University, Australia	<b>The Role of n-Generation Carbon Sources on Environmental Footprints of Biodegradable Polyesters Produced by Fermentation</b> Guilherme Castro Dela Corte, Federal University of São Carlos (UFSCar), Brazil



17:15-  
17:30 **Holistic and Integrated Life Cycle Sustainability Assessment: Background, Methods and Results from Two Case Studies**  
Walther Zeug, Helmholtz-Zentrum für Umweltforschung GmbH, Germany

**Increasing transparency for inventory data of plastic production by modeling the olefin supply chain**  
Jonas Hoffmann, GreenDelta GmbH, Germany

17:30 **Closing remarks** (Main Room) by GreenDelta

18:00-19:30 **Apero** at GreenDelta!

We would like to invite you to a drink at our new office (a part of it) to unwind and say good bye .

Address: Alt-Moabit 130, 10557 Berlin, Germany (walking distance from Hotel Rossi)

#### **Posters:**

##### Day 1

- 1 - Accounting for ecosystem services in Life cycle assessment: case study of a community garden in Prague; Aurore Guillaume, University of Chemistry and Technology | Onsite participant
- 2 - Role of Open-LCA in sustainable aquaculture development; Daniela Summa, University of Ferrara | Onsite participant
- 3 - The role of Open-LCA in supporting the development of sustainable agriculture; Elena Tamisari, Department of Environmental and Prevention Sciences, University of Ferrara | Onsite participant
- 4 - Life Cycle Assessment of male and female lines of a dual-purpose chicken breed using openLCA; Maryam Mehri, Faculty of Life Sciences, Rhine-Waal University of Applied Sciences | Online participant
- 5 - Analysis of the potential contribution of disease-resistant grape varieties to sustainable agriculture: a case study in South Tyrol; Pasqualina Sacco, Independent Researcher and Consultant | Onsite participant
- 6 - Comparative LCA of virgin and recycled materials to assess the sustainability of paved surfaces in agricultural environment; Enrica Santolini, Alma Mater Studiorum-University of Bologna | Onsite participant
- "7 - LCA of unexploited material flows: A case study on paper and board recycling from lightweight packaging waste; Hannah Köhler, ANTS – Institut für Anthropogene Stoffkreisläufe RWTH Aachen University | Onsite participant"
- 8 - Global warming potential of electrochemical hydrogen production based on CSP/PV hybrid power plants; Andreas Rosenstiel, Deutsches Zentrum für Luft- und Raumfahrt | Onsite participant
- 9 - Calculating GHG emissions of offshore windfarms from a lifecycle perspective: case study; Katerina Milerova, Ørsted | Onsite participant
- 10 - Techno-economic and life cycle assessment of hybrid renewable energy system: Case study in Finland; Mohammadreza Akhtari, University of Turku | Onsite participant
- 11 - Sustainability assessment of different type of solar cells manufacturing in the new energy context; Patricio Cano, Blue Synergy | Onsite participant
- 12 - Sustainability Assessment of Electric Vehicle Charging Techniques in the UK; You Wu, WMG, University of Warwick | Online participant
- 13 - Social Life Cycle Assessment (SLCA) of an urban district cooling plant – applying the Soca database to an energy system; Doris Rixrath, University of Applied Sciences Burgenland | Onsite participant

- 14 - Carbon footprint of solvent-based and innovative UV-based coatings; Giorgio Cantino, University of Eastern Piedmont | Onsite participant
- 15 - Social Life Cycle Assessment of Plastic Value Chains; Krajnc Damjan, University of Maribor | Onsite participant
- 16 - Successful EPD creation – choice of EPD programme, software, and development approach; Luke Schneider, Uniconsult GmbH | Onsite participant
- 17 - How to instruct the public to understand the environmental information of EPDs with less efforts and why declared indicators are important?; Yuzhi Zeng, EPD China Support and PCR development | Online participant
- 18 - Consistency analysis on life cycle impact assessment (LCIA) methods implemented in different LCA software; Sussie Wu, SusDataability Ltd | Online participant
- 19 - Spatially explicit life cycle assessment of solar power in Gansu, China in 2020; Shuning Shi, University of Exeter | Onsite participant

## Day 2

- 20 - Modeling requirements for the PSILCA database - worker hours vs. raw values approach; Sally K. Springer, Institute of Energy and Climate Research Systems Analysis and Technology Evaluation (IEK-STE) | Onsite participant"
- 21 - Using OpenLCA for microalgae production systems; Tom Bradley, Decerna | Online participant
- 22 - Life Cycle Assessment of tap Water of Annaba City - Algeria; Mehdi Belhani, National Higher School of Technology and Engineering | Online participant
- 23 - Green Packaging Materials for Long-term Storage of Paper Collection; Randa Deraz, Heritage Science Lab Ljubljana (HSL) | Onsite participant 24 - Dynamic LCA used for evaluating production of abrasives; Xiang (Peter) Hu, (Project Researcher, Sustainability and LCA Industrial Engineering and Management) University of Turku | Online participant"
- 25 - A Comparative Life Cycle Assessment between conventional and energy storage integrated heat pump; Geng Qiao, Global Energy Interconnection Research Institute | Onsite participant
- 26 - Life cycle assessment for a small onshore 600W wind turbine; Ghaidaa Nassef, Environmental Engineering Program, Zewail City of Science and Technology | Online participant
- 27 - Streamlining Life Cycle Assessment using OpenLCA for a medium sized UK based Manufacturer; Irene Mazzei, Stoane Lighting Ltd | Online participant
- 28 - Social Life Cycle Analysis for plant protein enriched beverage production; Petridi Angeliki, Dignity Private Company | Online participant
- 29 - Systematic, parametric LCA modeling of novel carbon-storing building materials; Stephanie Carlisle, Carbon Leadership Forum, University of Washington | Onsite participant
- 30 - Driving Sustainable Design for Additive Manufacturing through OpenLCA; Rasool Okhovat, Technische Universität Berlin | Onsite participant
- 31 - Integrating OpenLCA in the Analysis of Transport System Decarbonization; Anne Syré, Technische Universität Berlin | Onsite participant
- 32 - How automatise life cycle analysis in the context of electrical equipment and electronic; Axelle Bertrand, Université de Bordeaux | Onsite participant
- 33 - Developing an assessment framework for sustainable extraction and utilization of agricultural residues with spatially resolved LCIA results; Christoph Siol, DBFZ Deutsches Biomasseforschungszentrum gemeinnützige GmbH | Onsite participant