

SWEDISH LIFE CYCLE CENTER ANNUAL REPORT

Swedish Life Cycle Center Annual report 2023

No 2024:01

Collaboration is a cornerstone for driving the life cycle field forward

Reflecting on the events of 2023, it has been an eventful year for the Swedish Life Cycle Center. We commenced the year with a poignant farewell to Sara Palander, who excellently served as the Center's Director for the past 12 years. Simultaneously, the leadership of the Board underwent a change, with Susan Iliefski Janols assuming the role of Chair, succeeding Lars Mårtensson. Furthermore, Yulia Liu joined the Center in the autumn as a Project Manager, bringing her extensive experience in LCA from both industry and academia, thereby strengthening our Technical Secretariat team.

Collaboration has been a cornerstone of our endeavors throughout the year, ranging from consortium formations for various applications to the inclusion of new partners and collaboration organizations. Notably, Luleå University of Technology and Asker Healthcare joined as partners, while the authority dialogue expanded with the inclusion of the Swedish Agency for Marine and Water Management, Vinnova, and the Geological Survey of Sweden. Additionally, three new small and medium enterprises, Dalemarken, ZeBevond, and Nilu, joined through our SME-agreement - These collaborations are anticipated to yield fruitful outcomes and collaborations as we move forward.

Key projects, such as "the Environmental Footprint project" and "the Expert group Environmental footprint", "the Biodiversity in LCA working group", and the "Two-day course in applied life cycle thinking", have yielded valuable outcomes aligned with our mission. The anticipated restart of the working group "Data and methodology" took place at our yearly network conference in November, with discussions and dialogues around several highly relevant and interesting topics giving the group a head start and a lot of good input for further meetings. The Life Cycle Talks initiative has evolved from a newcomer to a well-established platform for disseminating research and fostering competence building.

The project "Innovation cluster for the life cycle perspective" continues to be important for the Swedish Life Cycle Center, our partners and for many of our activities. It provides a meeting place where industry, academia, authorities and other actors meet to create opportunities for an increased understanding and use of the life cycle perspective. For example, to promote our working groups, the network conference, to be able to develop Life Cycle Talks and to develop training material. The project is financed by the Swedish Energy Agency and Swedish Life Cycle Center's partners and will run until May 2025.



Maria Rydberg, Director, Swedish Life Cycle Center. Photo by Carolina Pires Bertuol

In March, we proudly announced our role as hosts for the 26th SETAC Europe LCA Symposium, a major scientific conference which represents the fulfillment of a target set by the Swedish Life Cycle Center Research Strategy. Scheduled for October 2024, the symposium in Gothenburg promises insightful presentations, new collaborations, and enriching networking opportunities. Our active participation in SETAC's 33rd annual meeting, LCM 2023, and the organization of our Network conference underscored the revival of interest in life cycle thinking, emphasizing the apparent need for in-person interactions after the challenging "covid years." As we move forward, our approach will continue to balance digital and inperson engagements within the Center, drawing inspiration and preparation from the events of 2023.

Anticipating the coming year, 2024 holds the promise of new working groups and projects, offering fresh avenues for exploration and collaboration. We remain committed to advancing sustainable life cycle practices and fostering impactful collaborations within our growing community, embodying the spirit of progress and shared objectives.

Best regards, Maria Rydberg Director Swedish Life Cycle Center

The network in numbers

Applied life cycle thinking has always remained in focus and this has gathered experts from our partners, building a critical mass of researchers, practitioners and decision makers who use the Center as their common arena upon which further activities and perspectives are developed over time. Below is a summary of 2023 in numbers:



Age: 27 years

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I like the very short format talks, sometimes it is just the right amount of time to answer the question."

- Participant of a Life Cycle Talk, 2023



Collaborating and engaging expertise to advance the life cycle field

Swedish Life Cycle Center has historically participated in a great amount of research projects and contributed to many successful research results within the field of life cycle management and life cycle assessment.

In 2023 the Center was involved in the following projects: "Environmental footprint in Swedish industry - increased understanding and implementation"; "Modelling of electricity in Product Environmental Footprints"; "Innovation cluster for the life cycle perspective" and "TwinWins: Measuring business model environmental performance".

The Center's competence and resource base are its partners a network of life cycle professionals. A significant part of the research in the life cycle field is conducted through partners, which is not highlighted in this report.

Environmental footprint - projects with potential policy impact

In late 2022, the Center started two projects related to Product Environmental Footprint (PEF). The PEF is a method launched by the European Commission to measure and communicate the environmental performance of products (both goods and services) across their life cycle, from raw material extraction or cultivation to the end-of-life management, via production, distribution, and use. PEF is also being referred to in EU legislation.

The first project, titled "Modelling of electricity in Product Environmental Footprints", aimed to investigate the need for revised texts regarding electricity production modeling in both the EU Ecodesign Regulation for photovoltaics and the general PEF rules. Additionally, it aimed to propose any necessary revisions. These revisions are expected to influence the Battery Regulation, as it also incorporates the PEF method.



Photo by iStock

The second project, titled "Environmental Footprint in Swedish Industry - Increased Understanding and Implementation", began with the mission to raise awareness within the Swedish industry, authorities, and the public sector. Its primary aim was to inform these sectors in Sweden about product-related policy development based on Environmental Footprint at

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The open and insightful discussions among the project participants helped clarify many of the questions and challenges in relation to the implementation of the Circular Footprint Formula."

- Sofia Poulikidou, LCA Specialist at Höganäs AB

the EU level. The project also sought to explore the intricate methodological choices inherent in Product Environmental Footprints (PEF), providing a nuanced understanding of their potential ramifications on the Swedish industry.

As part of this endeavor, two comprehensive case studies were undertaken to unravel the complexities associated with the Environmental Footprint methodologies. The first case study within the project delved into the modeling of climate change impacts, particularly focusing on biogenic carbon in interlinked product systems and long-lived products.

The second case study navigated the application and consequences of the Circular Footprint Formula (CFF) within the automotive industry, with a specific emphasis on materials used in batteries. An important part of this project has been facilitation of meetings in the Environmental footprint Export group and coordination of Swedish members of the EU Environmental footprint Technical Advisory Board (TAB).

Results from the first project show that there is a need for clearer definitions of key concepts such as contractual instruments, Guarantees of Origin, tracking and tracking systems, residual mix, etc. When these are not fully defined or sufficiently explained it makes it difficult for PEF practitioners to apply the PEF method. Another finding is that there is a concern that

Guarantees of Origin and similar instruments indicate that the electricity is renewable, even when there is no increase in renewable electricity production. This gives companies an The primary objective of these courses was to deepen incentive to buy Guarantees of Origin rather than investing participants' understanding of applying life cycle thinking in electricity efficiency. Lastly the project also found that the within their organizations, utilizing real cases and proven use of national residual data overestimates the significance methods. Each course featured presentations, guest lectures, of national borders between countries with interconnected numerous practical examples, several group exercises, and electricity grids, especially in cases where the countries form extensive dialogue between participants and instructors. a common electricity market. The results from the project have Additionally, the courses provided networking opportunities been presented and discussed within the Swedish Life Cycle for participants. Center Environmental Footprint Expert group.



Screenshot from the webinar Environmental footprint in Swedish industry, 26 October 2023.

Results from case studies conducted within the second project illuminated challenges with the Circular Footprint Formula, attributed to its complexity, lack of clear guidance, and ambiguity in its application. One case study specifically mentioned concerns regarding the effective differentiation between post-consumer and pre-consumer materials. Furthermore, the lack of specific guidance on biogenic carbon content modeling and the discord between the PEF guidance and the EN 15804 standard contributed to variances in modeling approaches, underscoring the need for harmonization. The case studies additionally underscored challenges pertaining to data availability and interpretation, with inconsistent usage leading to non-comparable results.

To raise awareness among businesses, authorities, and the public sector in Sweden about product-related policy development based on the EU Environmental Footprint, various communication efforts have been made within the project. Preliminary project results were presented at the LCM 2023 conference in Lille, France, and stakeholder meetings were held for each case study. Additionally, an open webinar was conducted on October 26, 2023, which explored practical aspects of the methodology, presented case study findings, and provided insights into the broader legislative perspective of the EU Environmental Footprint process.

Training for professionals

During the year 2023, the Center conducted two instances and LUT University. of the two-day course, Applied Life Cycle Thinking. The first course took place on October 24-25, and the second on March Course leaders were Tomas Ekvall, Adjunct Professor at the 14-15. Both courses were given in English at Chalmers University Division of Environmental Systems Analysis, Chalmers and

of Technology in Gothenburg, with a total of 29 attendees.

The courses were led by Karin Sanne from IVL Swedish Environmental Research Institute and Kristian Jelse from Greendesk AB. Guest speakers included Sara Heimersson from Essity and Sofiia Miliutenko Martin from the Swedish Transport Administration. Both courses received high praise from participants, earning a nine out of ten rating in the final course evaluation.



Photo taken from the course Applied Life Cycle Thinking, 25 October 2023. Photo by Technical secretariat.

Advances in Life Cycle Assessment for PhD students

In April and May, the Swedish Life Cycle Center and our university partners arranged the third edition of the PhD course, "Advances in Life Cycle Assessment." This time, the course was not just for PhD students but also ran as a parallel program for life cycle professionals. The outcome? A diverse group of 25 PhD students and five professionals benefited from a three-week in-depth LCA course, with sessions in Gothenburg, online, and in Uppsala.

Networking was a highlight of the course as participants mingled with both experienced LCA researchers and their peers, forming connections and informal networks. Partner organizations, including Swedish University of Agricultural Sciences (SLU), KTH Royal Institute of Technology, Chalmers University of Technology, IVL and SKF Group, were wellrepresented. Participants also came from institutions like Norwegian University of Science and Technology (NTNU), Technical University of Denmark (DTU), Dalarna University Niclas Ericsson, Researcher at the Division of Agricultural Engineering, SLU.

The course received an impressive average rating of 4.4 out of 5 from participants in the course evaluation. Notably, the PhD students highly appreciated the presentations delivered by their peers regarding their individual research projects.



Photo taken from the course Advances in Life Cycle Assessment. Photo by Technical secretariat.

Webinars providing knowledge towards a sustainable future

During the year 2023, four Life Cycle Talks have been given with a total number of 498 participants and 655 views on YouTube. Life Cycle Talks is a series of talks presenting the research front to keep you up to date with the science and application of the life cycle perspective.

The following Life Cycle Talks were arranged, and are available on our YouTube-channel: "Why do we need a life cycle perspective on negative emissions?" with Cecilia Sundberg, "LCA for optimization in early design phases of buildings" with Alexander Hollberg, "Is the distinction between attributional and consequential LCA useful?" with Tomas Ekvall and "Can we guantify the impact on biodiversity in LCA from food products?" with Serina Ahlgren.

In the winter of 2022-2023, a webinar series was conducted to provide municipal professionals with insights into the life cycle perspective and its application. This free series covered crucial topics such as procurement, sustainable food systems, energy systems, and construction processes. Each session featured experts who offered insights and practical examples of applying the life cycle perspective in the public sector. Professionals from various institutions, including the National Agency for Public Procurement and the University of Gothenburg, led the seminars. Participants gained valuable knowledge to improve resource efficiency and promote sustainability in their respective fields.

Strategic business intelligence meetings

During the year, two strategic business intelligence meetings were arranged within the Center for its partners and SMEs, in collaboration with the Center. The first strategic business

intelligence meeting focused on the topic "EU policies and their relevance to the circular transition of Swedish industrial companies", with speakers Lukas Hallquist and Emanuela Vanacore from Sustainable Business at RISE, and Björn Spak from the Swedish Environmental Protection Agency. The other meeting was conducted as a reading circle led by Kristian Jelse from Greendesk, focusing on the updated General Programme Instructions of the International EPD® System. Both meetings attracted a total of 80 participants.



Screenshot from Strategic business Intelligence meeting 20 June 2023, with speaker Emanuela Vanacore

Record breaking Network Conference

On Thursday, November 23, 2023, the Swedish Life Cycle Center convened its annual network conference, hosted at Chalmers University of Technology, centered around the theme "LCA Data & Methodology." The event attracted over 70 participants spanning academia, industry, research institutes, SMEs, and government agencies.

Archana Datta, representing UNEP's Life Cycle Initiative, delivered a keynote speech addressing global perspectives on the current state and future possibilities of life cycle approaches. Professor Thomas Zobel from Luleå University of Technology, shared insights into their research on digitalization and the circular economy. Babak Kianian of Höganäs AB provided practical insights into the application of life cycle thinking within their organization, while RISE researchers Raphael Gazzotti and Valentina Ivanova explored the integration of LCA data with AI and the Semantic Web.

The day's discussions, conducted in a World Café format, covered diverse topics such as biogenic carbon modeling in LCA, prospects for prospective LCA, effective data utilization, waste management modeling, monetary valuation of environmental impacts, envisioning the future of LCA data sourcing, social LCA, and maintaining data quality for credible communication. Facilitated by experts from Chalmers, Ecoinvent, Essity, IVL, KTH, RISE, and SLU.

The conference concluded with a networking session, fostering interactions among attendees, and providing a platform for collaboration and innovation in the sustainability field. This event was organized as part of the Innovation Cluster for the Life Cycle Perspective project, supported by funding from the Swedish Energy Agency and Swedish Life Cycle Center's gaps within the area. The group "Dialogue Forum for Government Agencies", among other activities, held an partners. open meeting on October 6th, where all partners and SMEs Working groups for sharing practice in collaboration with the Center were invited. The theme was "the Sustainable battery value chain", and the seminar During the year, six working groups and expert groups have attracted 59 participants. Speakers of the seminar were Carolina Liljenstolpe at Geological Survey of Sweden and Greger Ledung at the Swedish Energy Agency. In December, the "LCA Data & Methodology" working group resumed its activities after being dormant for a few years. The group is led by Sofia Poulikidou at Höganäs and Madeleine Pehrson at Essity. The first meeting focused on the theme of "Prospective LCA," featuring speakers Rickard Arvidsson, Chalmers and " Nilay Elginoz Kanat, IVL.

been coordinated within the Innovation cluster. These groups were "Academy group", "Biodiversity & LCA", "Dialogue forum for government agencies", "Environmental footprint Expert Group", "Recent and current standardization in LCA" and "LCA Data & Methodology". These groups have been developed

The working group gives the opportunity to share practice with others that can be connected to your priorities in your organization."

- Board member, 2023

and chaired by partners with support from the Technical secretariat of Swedish Life Cycle Center. The Environmental footprint group has met three times this year and it has been an important part of the project Environmental footprint in Swedish Industry, both giving input to the case studies done

At the beginning of the year, the Swedish Life Cycle Center, within the project while also being a place for sharing and discussing ongoing developments within the EU Environmental together with FSLCI, arranged a second meeting for other Life footprint. The Academy groups most important work this year Cycle Networks. The goal was to share information, knowledge, has been the PhD-course "Advances in Life Cycle Assessment", challenges, and success stories, fostering mutual learning. but the group has also been instrumental for forming the This dialogue continued at the 11th International Conference research ideas and topics for a competence center application on Life Cycle Management (LCM) in Lille, France, held from that was sent in to a call by Vinnova in March 2023. September 6th to 8th, 2023. Here, the Center played a crucial role in shaping further discussions by hosting the The working group "Recent and current standardization session titled "Developing the Future Life Cycle Network". in LCA" had its final meeting in January with the topic Additionally, in May, the Center participated in the SETAC 33rd annual meeting held in Dublin, Ireland. At this event, "Standardization and harmonization in LCA - What could and should be standardized in LCA?". The working group the Center co-chaired the session titled "LCA and Beyond -Biodiversity and LCA held two workshops during the year and, Integrating Sustainability and/or Other Dimensions for a together, identified common research areas and knowledge More Comprehensive Analysis". At both the LCM conference and the SETAC annual meeting, several contributions were made by partners of the Swedish Life Cycle Center.



Photo from the annual network conference, Archana Datta delivering a keynote speech. Photo by Daniel Karlsson.



Photo from the International Conference on Life Cycle Management closing ceremony Photo by Technical secretariat.

International collaboration and conferences

The LCM conference, convened 950 participants from 44 countries, making it clear that life cycle management is of global importance and on a lot of people's agendas, a promising outlook for the co-arrangement of SETAC Europe 26th LCA symposium that the Center will arrange together with SETAC in October 2024.

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The Center gives fuel to the discussions around strategies and ways of working on sustainability, and LCA is a place for informal exchange on how the LCA/LCM area are progressing."

- Board member, 2023

Activities 2023

Many of the events are arranged within the project Innovation cluster for the life cycle perspective (funded by the Swedish Energy Agency) and Swedish Life Cycle Center. A selection of events is presented below.

JANUARY 17 Webinar: Standardization and harmonization in LCA - What could and should be standardized in LCA? with Tomas Ekvall, TERRA and Chalmers University of Technology.

JANUARY 19 Webinar: The life cycle perspective and sustainable food systems with Pernilla Tidåker.

JANUARY 19 Working group meeting with Academy group.

JANUARY 31 Webinar: Life cycle perspective and energy systems with Ingrid Nyström, Chalmers Industriteknik.

JANUARY 31 Seminar: Forum for Life Cycle Networks and Communities.

FEBRUARY 9 Webinar: Life cycle perspective in construction processes with Tove Malmqvist Stigell, KTH and Sara Borgström, WSP.

MARCH 14-15 Two-day course in Applied Life Cycle Thinking, organized by Swedish Life Cycle Center through a close collaboration with IVL Swedish Environmental Research Insitute and Greendesk AB.

APRIL 4 Life Cycle Talks: Why do we need a life cycle perspective on negative emissions? with Cecilia Sundberg, SLU.

APRIL 17 – MAY 25 PhD course: Advances in life cycle assessment, 5 HP/ECTS.

APRIL 20 Working group meeting for government agencies.

 $\label{eq:APRIL 25} \text{Working group meeting with Biodiversity and LCA}.$

APRIL 26 Working group meeting with Academy group.

APRIL 30 – MAY 5 Conference: Participation and session chair at SETAC Europe 33rd Annual Meeting, Dublin, Ireland.

MAY 12 Expert group meeting Environmental Footprint group.

MAY 23 Working group meeting with Biodiversity and LCA.

MAY 26 Expert group meeting Environmental Footprint group.

JUNE 16 Working group meeting with Academy group.

JUNE 20 Strategic business intelligence gathering: EU policies and its relevance to the circular transition of Swedish industrial companies with Lukas Hallquist and Emanuela Vanacore, Sustainable Business at RISE and Björn Spak, Swedish Environmental Protection Agency.

- **AUGUST 29** Life Cycle Talks: LCA for optimization in early design phases of buildings, with Alexander Hollberg, Chalmers University of Technology.
- **SEPTEMBER 6-8** Conference: Participation, session chair, oral presentation and poster presentation at LCM 2023, Lille, France.
- **SEPTEMBER 22** Expert group meeting Environmental Footprint group.
- SEPTEMBER 27 Working group meeting with Academy group.
- **OCTOBER 6** Working group meeting for government agencies, themed: Sustainable Battery Value Chain.
- **OCTOBER 11** Life Cycle Talks: Is the distinction between attributional and consequential LCA useful? with Tomas Ekvall, Chalmers University of Technology.
- **OCTOBER 12** Information meeting: Become a partner in Swedish Life Cycle Center.
- **OCTOBER 24-25** Two-day course in Applied Life Cycle Thinking, organized by Swedish Life Cycle Center through a close collaboration with IVL Swedish Environmental Research Insitute and Greendesk AB.
- **OCTOBER 26** Webinar: Environmental footprint in Swedish Industry with Björn Spak, Swedish Environmental Protection Agency, Torun Hammar, RISE, Erika Kloow and Josefine Neuwirth, IVL Swedish Environmental Research Insitute.
- **NOVEMBER 23** Network conference: Let's meet & talk! About LCA Data & Methodology, Gothenburg.
- **NOVEMBER 29** Strategic business intelligence gathering: Reading circle on the updated General Programme Instructions of the International EPD® System. Moderated by Kristian Jelse, Greendesk AB.
- NOVEMBER 30 Working group meeting with Academy group.
- **DECEMBER 7** Working group meeting with LCA Data & Methodology.
- **DECEMBER 14** Life Cycle Talks: Can we quantify the impact on biodiversity in LCA from food products? with Serina Ahlgren, RISE.

Research projects

Environmental footprint in Swedish industry – increased understanding and implementation **Project manager:** Maria Rydberg, Swedish Life Cycle Center. **Time period:** 2022-12-01 – 2023-11-29.

Funded by: Vinnova, Sweden's innovation agency. Participating organizations: Partners in the Center and Government agencies and SMEs in collaboration with the Center. Jernkontoret, TERRA and Swedish Forest Industries. Project outcomes: Increased understanding of Environmental footprint methodology and its implementation in policy. Two case studies have been performed and four meetings with the Environmental footprint Expert group have been held within the project. Preliminary results were presented at LCM 2023 and final results were presented at an open webinar in October 2023.

Read more about the research project.

Modelling of electricity in Product Environmental Footprints

Project manager: Tomas Ekvall, Chalmers University of Technology & TERRA.

Time period: 2022-10-16 - 2023-01-31.

Funded by: Swedish Energy Agency.

Participating organizations: Chalmers University of Technology, RISE Research Institutes of Sweden, TERRA. **Project outcomes:** The project investigates the need for revised methods and revised text on the modelling of electricity supply in Product Environmental Footprint (PEF) as given by the general PEF guidelines and in the draft PV Regulation. Project results has been communicated to the Swedish Energy Agency, the Swedish EPA and a presentation of the results, followed by a discussion was held at a meeting in the Environmental footprint Expert group. **Read more about the research project.**

Innovation cluster for the life cycle perspective Project managers: Anna Wikström & Sara Palander. Time period: 2020-06-01 - 2025-05-31. Funded by: Swedish Energy Agency. Participating organizations: Partners in the Center and Government agencies and SMEs in collaboration with the Center.

Project outcomes: The project will be evaluated and presented after the project is finalized in May 2025. Some outcomes are; webinar series about the life cycle perspective for the public sector, working groups, dialogue group for government agencies, Life Cycle Talks, global network for life cycle networks & communities, network conferences, etc. **Read more about the research project.** TwinWins: Measuring business model environmental performance Project managers: Tomas Zobel, Luleå University of Technology. Time period: 2023-09-01 - 2026-08-31. Funded by: The Kamprad Family Foundation for Entrepreneurship, Research & Charity. Participating organizations: Chalmers, Essity, Electrolux, Lintex, Presto, Ihopa, Light my fire. Project outcomes: The project will be evaluated and presented after the project is finalized in August 2026.

Publications

Ekvall, T., Lorentzon, K., Einarsson Lindvall, E., Palander, S. (2022) <u>Modelling electricity in environmental footprints</u>. Project report: 2023:02. Swedish Life Cycle Center.

Wikström, A., Rydberg M. (2023) <u>Learnings, success stories</u> and views from <u>Swedish Life Cycle Center</u>. LCM 2023. Platform presentation.

Wikström, A., Rydberg, M., Hammar, T., Kloow, E. (2023) Application of Environmental Footprint in Swedish industry – learnings from case studies. LCM 2023. Poster presentation.

Palander, S., Wikström A., Rydberg, M. (2022) <u>Swedish Life</u> <u>Cycle Center Annual report 2022</u>. Project report : 2023:01. Swedish Life Cycle Center

Ekvall, T., Jelse, K., Davis, J., Hakkarainen, V., Riise, E., Rydberg, M., Steen, B. (2023) From experience to a vision of LCA standards. LCM 2023. Poster presentation.

Working groups

Academy group Biodiversity & LCA Dialogue forum for government agencies Environmental footprint LCA data & methodology Recent and current standardization in LCA

Board 2023

Anna Hedlund Åström, Associate professor, KTH Royal Institute of Technology Babak Kianian, LCA Specialist, Höganäs AB Cecilia Sundberg, Senior lecturer, SLU Swedish University of Agricultural Sciences Elin Eriksson, Director, Key Accounts and Assignments, IVL Swedish Environmental Research Institute Erik Nellström, Senior Engineer, Scania Eva Ahlner, Senior Advisor, Swedish Environmental Protection Agency Frida Røyne, LCA specialist, Polestar Performance Gianluca Brotto, Director Environment, Electrolux Gregory Peters, Professor, Environmental Systems Analysis, Chalmers University of Technology and Scientific director Swedish Life Cycle Center (Adj) Jenny Köhler, Programme Manager, Swedish Energy Agency (Adj) Johanna Berlin, Technical Leader Climate Action, Volvo Cars Karin Strömberg, Vice President Strategy & Operational Excellence, Volvo Group Lars-Gunnar Lindfors, Secretary (Adj) Lena Landström, Senior Advisor Environment, Vattenfall Lionel Belzons, Innovation Product Owner for Sustainable Mobility, CEVT Lisbeth Dahllöf, Senior LCA specialist, Volvo Cars Marcus Linder, Director of Sustainable Business, RISE Maria Rydberg, Director, Swedish Life Cycle Center (Adj) Mats Berglund, Product and Service Sustainability Performance, SKF (Vice chair) Rickard Arvidsson, Associate professor, Environmental Systems Analysis, Chalmers University of Technology Sanna Norman, Head of ESG, Asker Healthcare Susan Iliefski Janols, Vice President Sustainability Products & Services, Essity Hygiene and Health (Chair) Tomas Zobel, Professor, Luleå University of Technology Preparatory board; Anna Björklund, KTH, Elin Einarsson

Preparatory board; Anna Bjorklund, KTH, Elin Einarsson Lindvall, RISE, Susan Iliefski Janols, Chair of the Swedish Life Cycle Center board, Lionel Belzons, CEVT, Mats Berglund, SKF and Maria Rydberg, Director Swedish Life Cycle Center.

SMEs in collaboration with the Center

- CHM Analytics Dalemarken Greendesk Miljögiraff Nilu
- ZeBeyond

Government agencies

- Geological Survey of Sweden
- National Board of Housing, Building and Planning Swedac
- Swedish Agency for Marine and Water Management
- Swedish Board of Agriculture
- Swedish Energy Agency
- Swedish Environmental Protection Agency
- Swedish Geotechnical Institute
- Swedish Transport Administration
- The National Agency for Public Procurement
- The Swedish Agency for Growth Policy Analysis, Growth Analysis
- Vinnova

A neutral platform

The partners of Swedish Life Cycle Center are its foundation. Partners contribute to activities, start cross-sector research projects, hold a seat in the Board and form the agenda of the Center. Contact us if you are curious about partnership!

The Center is financed jointly by partners and Chalmers University of Technology (host for the Center). From June 2020 Swedish Life Cycle Center is managing the project Innovation cluster for the life cycle perspective, funded by the Swedish Energy Agency and Swedish Life Cycle Center partners.

Contact





In collaboration with

The Center hosts a dialogue group with twelve government agencies in Sweden and engages six small and mediumsized companies through a letter of collaboration. Additionally, it enters into collaborative partnerships with other life cycle organizations at a global level.

Swedish Life Cycle Center

Chalmers University of Technology. Text and layout by Swedish Life Cycle Center's Technical secretariat.