



SWEDISH
LIFE CYCLE
CENTER

2017

SWEDISH LIFE CYCLE CENTER ANNUAL REPORT

Swedish Life Cycle Center Annual report 2017

No. 2018:1

First, I would like to thank all partners for an inspiring 2017! All together you have been part of as many as 80 events. That is what I call engagement! The year has focused on defining the role of the center when it comes to fulfilling its vision and mission.

My second thanks go to the technical secretariat, which has found new methods to better interact with partners, government agencies and external networks. Two staff members have become four and team work has been a key for success - something that is clearly needed when coordinating a network with almost 350 professionals.



In January, the technical secretariat had the opportunity to start up the project Swedish platform for the life cycle perspective, which is built on the ambition to engage more actors to apply a life cycle perspective in decision making. To better reflect identified needs by partners and integrate partners in the communication, a communication strategy has also been developed.

I am looking forward to a fruitful 2018 built on partners engagement and inspiration, experience and knowledge and also inviting new actors to be part in the collaboration!

Best Regards / Sara Palander
Director, Swedish Life Cycle Center

Transparency, openness, credibility, science and cross-sector solutions.

- Our values and principles, on which we build our work.



Our contribution to sustainable development 2017

Stronger with funds from Swedish Energy Agency

A common platform for knowledge building and collaboration is crucial to spread and develop life cycle thinking globally. The project Swedish platform for life cycle perspective, running from January 2017 to May 2020 and funded by the Swedish Energy Agency, aims to strengthen Swedish collaboration and engage more organizations applying a life cycle perspective. Through the project, several network and public activities have been arranged, for instance six webinars, a network conference, eight newsletters and several seminars in collaboration with other stakeholders. Also the development of a new homepage was initiated through the platform in 2017.

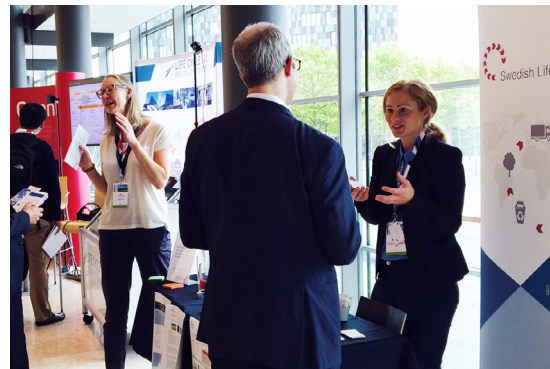
International impact

The global perspective is important. In our network decisions are rarely only influencing within a country's national borders or in a company's own production. Standards and policies need to be developed in collaboration with international colleagues. Below are some examples of international collaborations.



The Environmental Footprint process aims to develop a harmonized methodology for the calculation of the environmental footprint of products, services and organizations based on transparent methodologies. The center's expert group with the same name has followed the development of Product Environmental Footprint (PEF) and Organisation Environmental Footprint (OEF) over the years and has, through the partners, direct access into the harmonization

process in the EU. In February 2017, Swedish Life Cycle Center arranged a Nordic workshop regarding Product Environmental Footprint together with the



Nordic Environmental Footprint group of the Nordic Council of Ministers and IVL Swedish Environmental Research Institute. Hundreds of LCA experts and practitioners, mainly from the Nordic countries, came together. A successful way of collecting experience and input on the method to bring to the EU Commission.

The center was represented at two international conferences during 2017: LCM2017 in Luxembourg and ILCM in New Delhi, India.

In November, Swedish Life Cycle Center became member in the UN Environment Life Cycle Initiative (LCI) Strategy. This is a way to further influence the global life cycle development.

Towards more accessible life cycle data

For Swedish Life Cycle Center it is important to contribute to making LCA data more accessible and transparent globally as well as to work for a national LCA data infrastructure. Several steps in this direction was taken during 2017.

In May, a network conference with the topic "Why invest in LCA data?" was arranged by the center within the project Swedish platform for the life cycle perspective (funded by Swedish Energy Agency). This was an important conference where speakers from

various kinds of organizations gave their view on LCA data and its importance. Among others, Llorenç Milà i Canals from UN Environment gave the latest updates on GLAD (Global Lifecycle Access Data network). "Access to LCA data is a cornerstone for sustainable consumption and production", he stated and stressed the importance of the life cycle perspective in order to achieve Agenda 2030.

The Data strategy expert group exists within the center with the purpose to follow and influence the GLAD process. The group also investigates what requirements would be needed if a Swedish national database would be connected to GLAD in the future.

“The working group *Get the prices right* has been effective in its work of bringing the standard forward within the time frame of the project, appreciated within ISO.” Jimmy Yoler, SIS and secretary for the WG7

Monetary valuation is gaining increased importance

Monetary valuation of environmental impacts is increasingly used as a basis for decisions in environmental and sustainability issues. Such data are especially valuable in the occurrence of goal conflicts. Monetary valuations of environmental impacts are easy to use without understanding of the many ways which they can be calculated and the many perspectives which they can represent. Through the development of the EPS-method (Environmental Priority Strategies) and a number of projects Swedish Life Cycle Center has been discussing monetarization for several years. Within the working group *Get the prices right*, several research projects have been initiated as well as collaborations with external stakeholders. Through SIS - Swedish standard Institute the group has also convinced ISO to start working on the standard "Monetary valuation of environmental impacts and related environmental aspects" (ISO 14008). The aim is to create a common language and an international guideline in this field.

During 2017, the research project "Development of methodology to communicate environmental damage cost data", lead by Bengt Steen, has developed a

survey to study how metadata should be communicated and presented. Three case studies of energy choices with sensitivity analysis to determine which parameters are most important have also been executed.

Courses in applied life cycle thinking

One of the center's strongest missions is to spread life cycle thinking and build knowledge in the life cycle field. In collaboration with RISE Research Institutes of Sweden and IVL Swedish Environmental Research Institute the center has 2017 educated professionals from government agencies and the business sector in how to apply life cycle thinking in their organizations. The courses will continue during 2018.



Closer academic collaborations

Calls for a forum to discuss questions of interest to academic partners has been announced for several years. Thanks to the project Swedish platform for life cycle perspective the academy group could be realized during 2017. It consists of academic members from the Board and Scientific Advisory Group. The aim of the group is to gather researchers from university partners to discuss topics related to education at university level.

During 2017 the group conducted an inventory of researchers active within the field of life cycle thinking at partner universities. A common PhD course in life cycle assessment was also initiated and is planned for 2018.

Continued dialog with government agencies

A formalized cooperation between government agencies and Swedish Life Cycle Center was set up during 2016, with regular meetings to share experience and build common knowledge. During 2017, the group gathered several times for knowledge sharing and discussing a variety of topics, such as: LCA data, Environmental Product Declarations (EPD) and Product Environmental Footprint (PEF). The group is currently planning the seminar “Sustainable procurement - the role of life cycle perspective”, which will be held in May 2018.

An open platform for LCA & vehicles

LCA for vehicles started as a working group in the beginning of 2017 together with the Swedish Energy Agency and the Swedish Transport Administration. The agencies had identified gaps in the existing guidelines and research of electrified vehicles and asked the center through the project Swedish platform for the life cycle perspective to gather a group. This time the working group was extended to include



both partners and external actors.

In October, the group gathered for a full day to discuss and exchange knowledge from the industry and research area. Data, standards, next life, infrastructure, valuation of resources, new user patterns, LCA in early stages, new materials, policy, development and LCA in the design process were some of the topics. Next step is to prioritize and take actions for new research projects in the prioritized areas.

Lars Mårtensson new chairman

In 2017, Lars Mårtensson became the new chairman of Swedish Life Cycle Center Board. He is also Director of Environment and Innovation at Volvo Truck and has contributed with long experience from the sustainability field to the center.



“ The year with Swedish Life Cycle Center has been fun and inspiring. We have a lot of challenges ahead of us and the strong engagement from partners is very promising for the future.”

Lars Mårtensson, chairman of Board

More communication in focus

Thanks to the project Swedish platform for the life cycle perspective (funded by the Swedish Energy Agency) the center had resources to recruit a Communications Officer during 2017. With one person dedicated to the center's communication, several moves were made: a communication strategy was put in place, a new graphic identity and homepage were developed and the visibility for Swedish Life Cycle Center and the platform online increased.

Research projects

Adapted decision support for increased energy efficiency in value chains

Project manager: Emma Rex, RISE Research Institutes of Sweden.

Funded by: Swedish Energy Agency.

Participating organizations: RISE Research Institutes of Sweden, AkzoNobel, IVL Swedish Environmental Research Institute, Swedish Environmental Protection Agency, Vattenfall, Volvo Car Group.

The aim of the project: To facilitate for the various functions of a company to contribute to increased energy efficiency in a life cycle perspective. Through mappings and case studies, different departments' understanding and use of life cycle related energy data is analyzed. In 2017 a workshop was arranged with preliminary results from the project and open discussions on the findings. Three interesting case studies from Volvo Cars, AkzoNobel and Volvo Trucks were presented. To be finalized summer 2018.

Development of methodology to communicate environmental damage cost data

Project manager: Bengt Steen, Chalmers University of Technology.

Funded by: Swedish Energy Agency.

Participating organizations: Chalmers University of Technology, AkzoNobel, Essity Hygiene and Health, IVL Swedish Environmental Research Institute, Volvo Group.



The aim of the project: To develop a methodology to communicate environmental damage cost data. Three case studies of energy choices has been executed with sensitivity analysis to determine which parameters are most important. The project group has also developed a survey to study how metadata should be communicated and presented. To be finalized summer 2018.

Working groups

Academy group
Biodiversity & land use
Government agency group
Get the prices right
LCA data & methodology
LCA & vehicles
Social LCA

Expert groups

Data strategy
Environmental footprint

Board 2017

Lars Mårtensson, Chairman
Anna Widerberg, Volvo Cars
Elin Eriksson, IVL Swedish Environmental Research Institute
Elisabet Kock, Swedish Environmental Protection Agency
Holger Wallbaum, Chalmers University of Technology
Johan K. Holmqvist, Sony Mobile
Karin Eriksson, Volvo Group
Katarina Lorentzon, RISE Research Institutes of Sweden
Klas Hallberg, AkzoNobel
Larissa Strömberg, NCC Construction
Lars-Gunnar Lindfors, Secretary (adj)
Lena Landström, Vattenfall
Miguel Brandao, KTH Royal Institute of Technology
Sara Palander, Director Swedish Life Cycle Center (adj)
Serina Ahlgren, SLU Swedish University of Agricultural Science
Stefano Marzola, SKF
Susan Iliefski Janols, Essity Hygiene and Health
Susanna Widstrand, Swedish Energy Agency (adj)

“The most valuable component of the center is the network of experts.”

- Johan K. Holmqvist, Sony Mobile, partner since 2016.



Network activities 2017

The network activities are invaluable cross roads for interaction between researchers and practitioners. Below a summary of 2017:

6 webinars

1 network conference

2 courses in applied LCT

8 internal newsletters

5 co-arrangements /contribution to external events

22 working group meetings

4 meetings for government agencies

6 expert group meetings



Activities 2017

A selection of events arranged by the project Swedish platform for the life cycle perspective (funded by the Swedish Energy Agency) and Swedish Life Cycle Center.

FEBRUARY 23

Workshop: Nordic workshop Environmental footprint. Co-arrangement with Nordic Environmental Footprint group (NEF) and IVL Swedish Environmental Research Institutes, Stockholm.

MARCH 24

Webinar: Putting a cost on environmental damages – a method for innovation with Lisbeth Dahllöf, IVL Swedish Environmental Research Institute.

MAY 11

Webinar: Product Environmental Footprint pilot on batteries with Claude Chanson.

MAY 17

Network conference: Why invest in LCA data?, Stockholm.

JUNE 20

Webinar: Lars Mårtensson, new chairman of Board.

SEPTEMBER 3-6

Conference: Exhibition booth and sessions at LCM2017 (Life Cycle Management), Luxembourg.

SEPTEMBER 15

Webinar: SOCA – a database add-on for Life Cycle Sustainability Assessment with GreenDelta.

SEPTEMBER 26

Webinar: Updates on ISO 14008 with Bengt Steen, Chalmers University of Technology.

SEPTEMBER 26

Webinar: Biobased building materials with Diego Peñaloza, RISE Research Institutes of Sweden.

OCTOBER 3-4

Education: Applied Life Cycle Thinking, Gothenburg.

OCTOBER 6

Conference: LCA & vehicles, Gothenburg.

OCTOBER 25

Conference: Program conference Förnybara drivmedel och system. Co-arrangement with f3 and Swedish Energy Agency, Uppsala.

NOVEMBER 7-8

Education: Applied Life Cycle Thinking, Stockholm.

NOVEMBER 13

Workshop: Adapted decision support with Emma Rex, RISE Research Institutes of Sweden, Gothenburg.

Short facts about Swedish Life Cycle Center

Organization type: A center of excellence

Location: Hosted by Chalmers University of Technology, Gothenburg

Vision: Credible & applied life cycle thinking globally

Age: 21

The center in 3 words: collaboration, knowledge building, life cycle thinking

Partners: 14 partners and in collaboration with 6 government agencies

A neutral platform

The partners of Swedish Life Cycle Center is the 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 in partnership!

The center is financed jointly by partners and Chalmers University of Technology (host for the center). From January 2017, Swedish Life Cycle Center is managing the project Swedish platform for the life cycle perspective, funded by the Swedish Energy Agency.

Contact



www.lifecyclecenter.se



lifecyclecenter@chalmers.se



Swedish Life Cycle Center



@Lifecyclecenter

Partners 2017



CHALMERS

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NCC

RI
SE

SKF



SONY



VOLVO



In collaboration with



Swedish Life Cycle Center

Chalmers University of Technology

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