

Being a partner

PARTNERS IN SWEDISH LIFE CYCLE CENTER ARE

- Committed to sustainable development and life cycle thinking and having an own engagement in and resources for these commitments
- Interested in initiating and being involved in joint activities within the
- Interested in developing scientifically based ways of working to create credible cross-sectoral solutions

ADDED VALUE OF BEING A PARTNER

- Scientific results, knowledge and tools to be abblied and implemented in internal strategies and working processes
- Cross-sectoral cooperation and a common way of working
- Credibility in commitments for
- sustainability
- Access to high quality decision support and network
- Strategic involvement in the center development and in the center board
- Key partner in consultations
- Access to a broad network (international and national) of life cycle experts, practitioners and frontrunners in academia, research institutes, industry and government agencies/public authorities
- Common strategic intelligence

OBLIGATIONS

- Adhere to the vision of Swedish Life Cycle Center
- Yearly member fee
- Three years of commitment
- Advocate of the Swedish Life Cycle Center and the common vision, mission and goals
- Engage and get involved in activities

Complementary documents

This operational plan is one of the centers strategic document. All our additional strategic documents, which are listed below, are available for our partners in our internal webpage.

- Main agreement Stage 8
- Operational handbook
- Activity plan
- Communication plan

Contact & more information

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Partners

Swedish Life Cycle Center is hosted by Chalmers University of Technology

























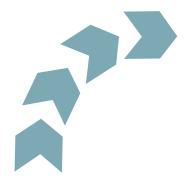




DPERATIONAL PLAN

Stage 8 (2016-01-01 - 2018-12-31) Appendix A

This operational plan is an appendix (Appendix A) to the main agreement for the Swedish Life Cycle Center Stage 8 (2016-2018). It is a result of a development process by Board, Preparatory Board and Technical Secretariat. The operational plan has been approved by the Board on February 11, 2016. Updated on November 9, 2017.



About Swedish Life Cycle Center

Swedish Life Cycle Center is a center of excellence for the advance of applied life cycle thinking in industry and other parts of society. The center is a joint collaboration platform for universities, industries, research institutes and government agencies for competence building and exchange of experience to move the life cycle field forward.

Current partners are AkzoNobel, Chalmers University of Technology (host of the Center), Essity Hygiene and Health, IVL Swedish Environmental Research Institute, KTH Royal Institute of Technology, NCC Construction, RISE Research Institutes of Sweden, SKF, Sandvik Materials Technology (from 2018) Swedish University of Agricultural Sciences, Sony Mobile Communications (until 2017), Swedish Environmental Protection Agency, Vattenfall, Volvo Car Group and Volvo Group.

Background & aim

THE SOCIETAL CHALLENGE

We are collectively facing immense challenges with unsustainable consumption and production systems which lead to increased burden on the environment and society. To achieve sustainable solutions (ecological, social and economic) a better understanding of the life cycle perspective is crucial. In our global community, decisions are rarely only influencing within a country's national borders or in a company's own production. Society, including business, consists of a chain of organizations and individuals that moves resources. The only long term sustainable way of addressing them is by using a holistic life cycle perspective, which aims for resource efficiency and minimized environmental impacts without suboptimal solutions, while also creating new business opportunities and innovations.

THE LIFE CYCLE PERSPECTIVE

The supreme merit of the life cycle perspective is that it enables a focus on how the different parts of consumption and production systems are interlinked and highlights the fact that actions in one part of the chain have effects in other parts as well. With a life cycle perspective suboptimization can be avoided and optimizations made over chains are encouraged. In other terms - a life cycle perspective is necessary for real sustainable improvements.

To address major societal challenges in a comprehensive manner the life cycle concept provides means for increasing efficiency, reducing environmental and societal impacts and conserving resources. All

processes are covered - from raw material acquisition to end-of-life handling of a product, via production and use phase. The life cycle concept takes as its starting point on physical and monetary flows and illustrates how the entire chain of actors works together to create products and services.

WHY WE EXIST

We believe that the life cycle perspective should be a natural part of and integrated into processes and decision making at all levels in business as well as in political governance. We are committed to building, creating and providing meeting places for learning and exchange of experience between different environments such as business, authorities and universities. We are convinced that this is the solution to approach more sustainable consumption and production patterns and increased resource efficiency.

Our values and principles, on which we build our work on, are: Transparency - Openness - Credibility - A scientifical base -Cross-sectoral solutions

Vision, mission & strategic ways of working



Credible and applied life cycle thinking globally

OUR MISSION

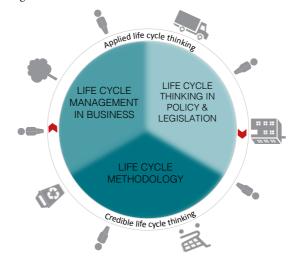
Work for the integration of the life cycle perspective into processes and decision making in industry, policy and other parts of society, to make more sustainable products and services, increase resource efficiency and accelerate the transition towards more sustainable consumption and production patterns

This will be reached by our strategic ways of working:

- Developing and securing relevant and scientifically based methods, practices and tools
- Supporting the competence and knowledge building
- Influencing national and international initiatives

Strategic areas

The picture below shows an overview of the areas, where the Swedish Life Cycle Center is running projects and activities. All activities aim to support and reach our vision, i.e. credible and applied life cycle thinking globally, and will be worked through our strategic ways of



- Data & databases Social & environmental assessme and footprints
- Water, biodiversity land use, toxicity, circular perspectiv ISO standards
- tions: products and
 - Life cycle commun

Sustainable innova

- Sustainable consumtion & production
- Circular economy
- · Monetary valuation Product environmental footprint and Organisation
- footprint Procurement
- Ecodesign

Management & organization

Swedish Life Cycle Center is an immaterial organization with the human resources and excellence distributed among partners. Chalmers University of Technology is hosting the Center with Gothenurg Centre for Sustainable Development, GMV as host department until 2017. From 2018 Technology Management and Economicsis is the host department. The permanent organization consists of a Board (each Partner represented), Preparatory Board, Scientific Advisory Group and a Technical Secretariat (run by a Director and Project Manager(s)). Committees, working groups, expert groups and project groups are established by the Board.

The center was founded in 1996 as a joint effort between Nutek (later Vinnova), Chalmers and a range of international companies. Since the start, seven stages of respectively 2-3 years have been accomplished. The partner constellation and the different areas of focus have varied from the start of the center, but the focus on applied life cycle thinking has remained as its base. The picture "Decades of continous collaboration" shows the different areas of focus during the center's all stages. Swedish Life Cycle Center has been instrumental for the development and adoption of the life cycle perspective in Swedish companies and has made important contributions to international standardization in the life cycle field.

How we work

RESEARCH PROJECTS

Swedish Life Cycle Center has a scientific base, gained from collaboration between the center's partners in cross-sectoral research projects. The center is also running other types of projects, which are focusing on communication, coordination and collaboration in strategic joint efforts.

WORKING GROUPS & EXPERT GROUPS

The working groups aim to build up competence and exchange information between experts. The groups manage discussions on hands-on issues, methodologies, new research questions and joint strategic intelligence. Swedish Life Cycle Center is also coordinating expert groups for specific tasks or advising support.

COMMUNICATION & NETWORKING ACTIVITIES

Main communication and networking activities are workshops, seminars, webinars, educational courses and Swedish Life Cycle Center's network conferences. These activities are either internal for partners or for our external network. The communications channels are our LinkedIn-group, website and newsletters.

Expected outcomes of Stage 8

In the end of Stage 8, the following outcomes are expected to be achieved for the following strategic ways of working:

SECURE RELEVANT AND SCIENTIFICALLY BASED METHODS, PRACTICES AND TOOLS

- Increased publishing of results, such as reports, tools, position papers, working papers and other documents in the information channels.
- Continued support of the development of the life cycle
- methodologies in strategic areas (see picture under Strategic

SUPPORT THE COMPETENCE AND KNOWLEDGE BUILDING

- Increased networking activities for PhD students & researchers.
- Increased collaboration with Swedish Life Cycle Center's extended network (SMEs, cutting edge firms, government agencies and funding agencies).

INFLUENCE NATIONAL AND INTERNATIONAL **INITIATIVES**

- Followed and supported the development of Global LCAccess, Environmental Footprint (PEF and OEF), UNEP programme 10 YFP on Sustainable Consumption and Production.
- Led the development of an ISO standard on Monetary
- Followed and been a part of the global life cycle community, e.g. UNEP SETAC Life Cycle Initiative.
- Actively contributed with input to the circular economy development in Europe.

Expected outcomes are followed up and updated on a yearly basis by the Board. Activities to reach these expected outcomes are specified in a separate document, Activity plan, which are followed up and updated on a yearly basis by the Board.

