

2019-2021

SUMMARY OF SWEDISH LIFE CYCLE CENTER SELF-ASSESSMENT REPORT



Summary of Swedish Life Cycle Center Self-assessment report Stage 9 2019-2021

Introduction

Swedish Life Cycle Center (from here on referred to as "the Center") is a Center of Excellence and a collaboration platform for academia, research institutes, industry, and government agencies – fostering competence building and knowledge exchange in the advance and application of the life cycle field.

The self-assessment report covers the Center's achievement of goals in relation to the operational plan for stage 9. Is focuses on collaboration, utilization and research and describes results and relevance of the Center and its activities during the stage. It also presents results from a survey regarding how partners perceive benefits and effects (added value) from collaborating through the Center.



Organization

The Center's vision is "credible and applied life cycle thinking globally" and the 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.

Stage 9 includes 16 partners representing three universities, two research institutes, nine industry partners, one consulting company and one government agency. There is also a formalized collaboration with nine government agencies and so far one SME.

During Stage 9, 23 applications has been initiated and coordinated within the Center, and 11 of these have been approved. These applications all have a greater common purpose of collaborating, to make a greater impact, to create spin-off effects and coordinate dialogues and collaborations that would not take place without the Center's involvement and initiation. Several projects inspired by the Center or previous projects are conducted in partner organizations where the Center is not directly involved and the total turnover for

spin-off projects is unknown. In addition to research projects, the Center also acts as a national body for life cycle related issues and give support and input to government and funding agencies.

One important development during Stage 9 (which started in Stage 8) has been strategic efforts to reach out to other people and organizations outside the current Center partners, to include these other organizations in the Center's activities (webinars, seminars, social media channels, trainings, expertmgroups, working groups) and in research projects (and applications).

This effort, to reach out beyond current Center partners, has been possible through the <u>Platform project</u> and <u>Innovation cluster project</u>. Both these projects have had and has a specified aim to spread applied life cycle thinking to more organizations and people, with dedicated funding for this.

Achievements

Some achievements in stage 9 are the projects <u>Modeling of recycling</u> – where different allocation methods were tested and evaluated; <u>Nature capital and value creation</u> – where the Environmental Priority Strategy (EPS) system was updated with new monetary values and student literature was published; <u>Environmental Footprint in Sweden</u> – which focused on national coordination, communication and test of the Product Environmental Footprint method, and <u>Joint actions for managing life cycle data along the value chain</u> – initiated by industry to work for improved collection of LCA data from suppliers.

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I personally do not know any similar organisation globally that has the same ambition and efficiency/effectiveness in the wide area of lifecycle science and applications. This makes your center unique in the (LCA/sustainability) world."

- External reviewer of the Center, 2021

A close collaboration between Swedish researchers is key to secure knowledge and capacity building in Sweden. Work within the Center's <u>Academy group</u> has resulted in the <u>PhD course Advances in life cycle assessment</u>, a network conference to highlight the Swedish research front within LCA and to the joint application to the Swedish Energy Agency, Life Cycle Excellence Centre for a Sustainable Energy System. In stage 9, the Scientific advisory group was replaced by a Scientific director working to increase the scientific quality of the Center in close collaboration with the Center director.

The dialogue group for Swedish government agencies, hosted by the Center, has grown and involved nine government agencies and almost 50 people. This group aims to contribute to a life cycle competence and knowledge building among these agencies and create forum for sharing experiences and increase collaboration. In 2019, the Nordic Dialogue forum for LCA, climate and buildings started as a collaboration between Swedish Life Cycle Center and the Nordic building authorities.

Projects and activities have impacted the international agenda. Swedish representatives have been active in the EU Environmental footprint development through e.g. taking part in the Environmental footprint technical advisory board and in the development of new standards and in the process on updating the LCA standards within the ISO framework.

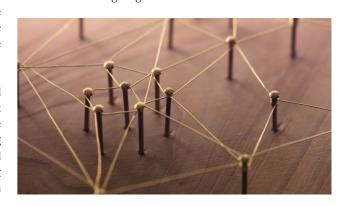
Added value of being a partner

The follow up sessions and surveys clearly shows that the Center is as an important vehicle for dissemination of research insights, an arena for mutual learning and common practice and to identifying challenges and moving forward towards solutions via joint projects and collaboration (e.g. Environmental Footprint and Modeling of recycling). Its various activities span from high level collaboration and strategic discussions to joint projects (approaching common challenges in a solution-oriented manner).

The Center is a bridge between academia and industry/public authorities in making life cycle thinking and the research within the life cycle related field applicable. It is a network of unique contacts and highly competent and dedicated partners learning from each other and providing consultation on how to work with life cycle issues.

The application and utilization of Center results has also given great added value for partners, tools and knowledge to implement in their own organizations that has led to changes and positive development (e.g. from research projects

Modeling of recycling, Natural Capital and Value Creation, Environment footprint in Sweden – increased competence and communication etc.) The evaluation of Stage 9 shows that university partners continue to emphasize the university collaboration and the Academy Group as a very important contribution during stage 9.



The commitment from the Swedish Energy Agency (through the Platform project and Innovation project) has made it possible for other agencies to get involved, creating a momentum where agencies have an ambition and interest in developing competence.

Conclusion

The self-assessment report describes values and relevance of the Center and its important impact on advancing and application of life cycle thinking. The development of the Center and its activities have been appreciated by all actors and are needed to respond to an increased interest in life cycle thinking, life cycle based information and in development of life cycle based policies and legislation.

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 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









Partners 2021

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Swedish Life Cycle Center

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