On the road towards smart use of LCA data – A Swedish national strategy to provide reference data in key areas

LCA data is used by organizations to measure, follow up and reduce environmental impact. It can be used to ensure credible and reliable marketing of environmental performance of products. Increased availability of reliable national LCA data has the potential to strengthen competitiveness of businesses on the international market and even to be used to market nations as attractive regions to perform operations.

Environmental authorities, government agencies, municipalities, companies and academia among others have been identified to be in need of LCA data, either directly or indirectly, and the most commonly sought data concern energy production, transport, commodity production, the biggest export products and waste management.

The publishing of collected data results in a potential gain where data can be reused and individual organizations can avoid recollecting the same data. Small businesses, that lack the means to acquire data, and businesses in the public sector, who can use data in public procurement, have been identified as the ones in most need for open (free) data.

The public sector is advised to lead the way by publishing LCA data describing their own businesses, such as municipal energy companies, but also to support other national publishing initiatives.

The proposed strategy includes to identify, collect, and openly publish national reference data, that is, quality assured data representative of the national average operations, which can meet the needs of a large group of stakeholders. Reference data enables the focus of discussion to shift from focusing on which data that is applicable to focusing on managing the environmental issues of concern. Through a joint process, unnecessary work can be avoided for organizations that are in need of comparable data. Procedures and requirements for how the data will be managed needs to be agreed upon.

The lack of a clear political affiliation of the life cycle thinking is an identified challenge, as it links the environment, industry, and society together. The lack of understanding for the potential of open data in general and a lack of understanding of the benefits of LCA data in particular represent some of the other identified challenges. Further challenges includes that the benefits are spread over several, sometimes weak stakeholders, and that data need to reach a critical mass to become really useful. One identified opportunity is the ongoing digitalization which can be an enabler from data collection to use.

By making national reference data available to the public the chances increase significantly for all companies and organizations to increase awareness of their products and services from a life cycle perspective. This is a prerequisite for achieving real sustainable solutions throughout the value chain.