

Checklist:

Getting started with life cycle perspective

Humans have a huge impact on the environment, in many different ways. This impact occurs in many different places in the short and long term. To avoid the risk that reducing one type of environmental impact leads to greater emissions somewhere else, at some other time or of some other type, we must view the environmental impact of goods and services from a life cycle perspective.

Adopting a life cycle perspective is different from simply examining an organisation's own direct impact on the environment. The strength of this perspective is that it can enhance our own understanding of a product and where it comes from, differentiate between aspects of greater and lesser impact, and avoid just passing along the problem to somewhere else.

There can be many reasons to work on these issues besides a desire to reduce your environmental impact. For a company, the goal may be to become more knowledgeable about its own products than any other organisation, and to live up to demands or be prepared for future requirements. For a municipality or government agency, the goal may be to specify the right requirements in procurement or to help set priorities.



1. Map



2. Improve



3. Intensify



4. Communicate



Swedish Life Cycle Center

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This checklist was developed within the project “Good examples – Inspiration to energy efficiency through the entire value chain”. The project was funded by the Swedish Energy Agency and coordinated by Swedish Life Cycle Center.



1. Map

Are you interested in adopting a life cycle perspective? Start with an assessment.

- Start on a small scale: Choose a product, a type of environmental impact or some other delimiter.
- Investigate the environmental problems others have identified as significant for this product group: What is under discussion in that industry and what do customers, environmental organisations, environmental labelling criteria say? What are the environmental criteria of the National Agency for Public Procurement, are there any scientific or other studies that we can learn from?
- Turn to examples of best practice for inspiration, for example Swedish Life Cycle Center’s project “Good examples – Inspiration to energy efficiency through the entire value chain”.
- Assess the product’s life cycle: What materials and components does it consist of and what’s their origin? How is the product used? What happens to it after the use phase?
- Get help: Does your organisation lack the necessary skills or time? Get help from a consultant, bring in a master’s thesis student or recruit someone who can work on this.
- Document: Save the data you collect – they may be useful.
- Draw conclusions: What conclusions can you draw from your results and what is prioritised? Avoid drawing to far-reaching conclusions – this is just an initial step!

Suggested methods: sustainability SWOT, simplified industry-specific tools, analysis of significant environmental aspects as per ISO 14001, simplified life cycle assessment (LCA) or footprinting study, i.e a hotspot analysis. Suggestions of consultants with life cycle expertise: IVL Swedish Environmental Research Institute, RISE Research Institutes of Sweden and Miljögraff.



2. Improve

Have you carried out an assessment and drawn conclusions about your product’s, service’s or organisation’s environmental impact from a life cycle perspective? Put them to use and make improvements!

- Identify who can make the improvement: Your own organisation, your suppliers, your customers (how the product is used) or some other stakeholder?
- Start from what aspects can be influenced and what does the most good, for example:
 - Improving your own production/processes: This can be linked to streamlining, which can lead to better technological and financial performance – motives that are not even related to the environment.
 - Product development: Depending on the most significant environmental aspect, you might change your choice of materials, reduce energy consumption in the use phase, or better prepare the product for re-use and recycling.
 - Make demands on your suppliers, and choose them based on their environmental performance: Is it possible to collaborate to systematically reduce the environmental impact?
 - Review your business models: Are there alternatives with a lower environmental impact?
- Spread knowledge internally: Which staff can benefit from the information generated and the improvements that have been made?
- Follow up on your results: Have the desired outcomes been achieved?

Suggested methods and tools for improvement: Eco-design, constant improvements under ISO 14001.



3. Intensify

Did your experiences with the life cycle perspective leave you wanting more? Then it’s time to intensify your efforts!

- Increase your scope or level of ambition: Analyse more products/types of environmental impact.
- Use more advanced tools: For example professional software for analysing energy and material flows and calculating their potential environmental impact.
- Add on the cost aspect: Calculate the life cycle cost or the product’s eco-efficiency.
- Learn more: Take a course, attend conferences or networks with other organisations that apply the life cycle perspective, such as Swedish Life Cycle Center.
- Get help: Does your organisation have the necessary skills? Get help from a consultant or master’s thesis student, or recruit a specialist in the field.

Suggested methods: Life cycle assessment/environmental footprint, eco-efficiency, life cycle costing/LCC.



4. Communicate

Do you have expertise in your product’s life cycle and environmental impact, and have you made improvements you want the world to know about? Then it’s time to communicate!

- First decide on your goal: What is relevant to communicate and to what target group – internal, suppliers, customers, end consumers or someone else?
- Decide on your communication format: Information on the website, an Environmental Product Declaration (EPD), a marketing campaign or an integrated part of the sales process.
- Follow laws and regulations: There is strict legislation about what you can say and how you can use environmental claims in your marketing to avoid misleading consumers. Read at the Swedish Consumer Agency, learn if there is a standard practice in the industry, and follow the standards of ISO 14020 series.

Examples of communication format: Environmental labelling, Environmental Product Declaration (EPD), environmental reporting, environmental statements in your brochures or on your website.

Further reading:

Would you like to know more about the life cycle perspective and the methods and tools that are available?

- Swedish Life Cycle Center: www.lifecyclecenter.se
- Projects carried out by Swedish Life Cycle Center with partners, such as: Good examples, TOSCA, Dantes. www.lifecyclecenter.se/projects
- Miljöbron (the Environmental Bridge): www.vastragotaland.miljobron.se/english
- EU environmental footprint projects at the Swedish EPA: (in Swedish only) <http://www.naturvardsverket.se/Miljoarbete-i-samhallet/EU-och-internationellt/EUs-miljooarbete/EU-och-resurs-effektivitet-EU-2020/Fardplan-for-ett-resurseffektivt-Europa/Miljoavtryck/>
- International standards linked to environmental management: <http://www.sis.se/tk207> (information in Swedish) and <http://www.iso.org/iso/iso14000>
- Swedish Consumer Agency's information on environmental statements in advertising (in Swedish only): <http://www.konsumentverket.se/Foretag/Marknadsforing/Miljopastaenden-i-reklam/>
- National Agency for Public Procurement's information on sustainability requirements in public procurements: <http://www.upphandlingsmyndigheten.se/en/sustainable-public-procurement/sustainable-procurement-criteria/>
- International Environmental Product Declaration (EPD) system: www.environdec.com
- Software for life cycle assessment: www.gabi-software.com, www.simapro.com
- Textbook in LCA: Baumann and Tillman, The Hitch Hiker's Guide to LCA

