

The life cycle approach shows indirect impact

– Löfbergs' coffee production

This example comes from Löfbergs and shows how the life cycle perspective can help a company determine where its environmental impact is the greatest. Founded in 1906, Löfbergs is still a family-run business in the coffee industry.¹

After a life cycle assessment, Löfbergs learned that their greatest environmental impact was in primary production – that is to say, the growers. Now they're carrying out development projects in the producing countries and making sure to purchase products certified under the KRAV, Fairtrade, Rainforest Alliance and UTZ labels.² In addition, Löfbergs is working to reduce the environmental impact of its own plant, through a focus on aspects like energy efficiency.

1. Löfbergs Lila AB, 2016: <https://en.lofbergs.se/about-us/> (accessed in September 2016)

2. Löfbergs Lila AB, 2016: <https://en.lofbergs.se/sustainability/> (accessed in September 2016)

Löfbergs' coffee production corresponds to about 10.5 million cups a day, and its sales amount to SEK 1.5 billion per year. The company has more than 300 employees in five countries and its core markets are Sweden, Norway, Denmark, Finland, Estonia, Latvia, Lithuania and the UK.

Löfbergs wants to take its responsibility for people and the environment through development projects in the producing countries and by purchasing certified coffee. (3) The company is certified to ISO 9001, 14001 and 22000, as well as FSSC 22000.(4) In the past, Löfbergs worked extensively on environmental improvement measures at home, but a life cycle assessment showed that they can make a huge difference through the type of coffee they purchase, and through measures in the producing countries. Eva Eriksson, sustainability manager at Löfbergs, tells us more.

How does Löfbergs apply the life cycle perspective?

- We work with the whole value chain. We like to call it working 'From bean to cup', taking responsibility for people and the environment. We really try to show consideration and think of every link in the chain. Every part of the organisation adopts a life cycle perspective; it's a part of our strategy and our vision.

How has this advanced your work?

- We focused on environmental issues at our plant even before we started thinking 'From bean to cup'. Back then, it wasn't such a concrete aspect in every part of the value chain, though it's become clearer in recent years.

What does applying a life cycle perspective mean for you?

- We've carried out a few life cycle assessments on selected products and examined the entire value chain, from cultivation to consumption. A life cycle assessment is very specific, but you can gear your thinking along the same lines without doing a complete assessment.

How long have you been applying the life cycle perspective?

- I started working here in 1988, and even then we had a strong life cycle focus. We conducted our first LCA in 1994. It was quite limited back then. We didn't include cultivation in that assessment, we simply compared different types of packaging while all the other aspects remained unchanged, so it wasn't a complete life cycle assessment. But even then we were thinking about renewables and how we could reduce our use of resources. In the past we've carried out energy assessments. We've had a strong focus on energy efficiency since 1991, when we started documenting our energy use. We established our environmental policy in 1992 and bought our first cargo container of ecological coffee way back in 1995. We launched the Fairtrade concept in 2000, and in 2011 we conducted a sustainability assessment, including all aspects of sustainability.

“Responsible customers choosing us is our greatest incentive.”

How did you come to be involved with the life cycle perspective?

- This approach is something of a tradition in the company. We like to say that responsibility has been a part of the family business right from the start. It's clear in our core values and it's included in our strategy. The idea of working from a life cycle perspective is both to conserve energy and to further reduce our environmental impact by finding where it is greatest.

What are the advantages of adopting a life cycle perspective?

- The advantages are that we attract staff, customers and consumers by demonstrating our dedication to the idea. We don't actually call it a life cycle perspective, we talk about taking responsibility, from bean to cup. Or sustain-

3. Löfbergs Lila AB, 2016: <https://en.lofbergs.se/about-us/> (accessed in September 2016)

4. Löfbergs Lila AB, 2016: <https://en.lofbergs.se/about-us/> (accessed in September 2016)

nable development – the life cycle perspective is sort of a part of that.

What do you see as the greatest incentives for enhancing your company's life cycle approach?

- Responsible customers choosing us is our greatest incentive. The fact that Löffbergs is a family business tells you that we're in it for the long term: it's easier to make decisions about investments that may not be very profitable in the short term, but that we see will be valuable down the road. What's good about conserving energy and resources is that it not only spares the environment but also saves money; that makes it easier to motivate our decisions. Sometimes an investment is costly, and it can take a while before it pays off.

Do you have an example of a life cycle based change that has led to reduced environmental impact?

- We conducted a life cycle assessment in 2010 in collaboration with three other big roasting houses in Sweden as a cross-sector comparison between instant coffee and brewed coffee, 500 g packages of vacuum-packed, roasted coffee. That's when we saw that the greatest impact, 80%, is in primary production – not our direct influence, but our indirect influence via the growers we use. That's why we make a point of buying certified products to reduce our climate impact.

“I was surprised at the comparatively low impact of our plant”

Was there anything that stood out when you conducted a life cycle assessment of the entire value chain?

- I was surprised at the comparatively low impact of our plant, our haulage operations and packaging materials, compared with primary production and consumption.

What changes have you made now that you are aware of the significant climate and environmental impact of coffee cultivation?

- In connection with the sustainability study of 2011, we decided that by 2016 all Löffbergs coffee would be certified to Krav, Fairtrade, Rainforest Alliance or UTZ, all of which focus on reducing climate and environmental impact. It's our way of ensuring the least possible negative impact.

How does your production in Sweden work?

- Since 1991, Löffbergs has worked extensively to reduce the environmental impact of its own plant. We don't use any oil to heat our facilities, only electricity from wind power, geothermal heating and district heating. When we invested in roasters with preheating, it drastically cut our energy consumption, because we could recycle the

heat from one roast to preheat the next roast. It saved time, electricity and LPG. It may be the single most energy-efficient measure we've implemented. As regards the plant, we've surveyed our energy consumption and we have measuring points in the plant to locate any leakage, high-energy-consuming equipment, or equipment that's running overnight even though it shouldn't be.

When we make new investments, we look for the solution that's gentlest on the environment, most energy efficient and resource conserving. For example, we've replaced three pumps with a single one, resulting in an energy saving of 80% (corresponding to 4 houses per year). Replacing a vacuum pump for compressed air reduced noise, saved energy and resulted in lower maintenance costs.

Who initiated the energy-efficiency measures?

- Often it's suppliers who come to us with a proposal and an estimate of how much energy and money we can save. We're very open to innovations. We were the first in Europe to install the new roaster – we were a pilot facility – and it's still fairly unique. Energy-efficiency measures are initiated by managers at the plant, who work according to our objectives, which I monitor as Sustainability Manager.

Do you feel that it takes certain knowledge from you as a customer to work with external players?

- Yes, you always have to tell them what you want to compare and where you're setting your system boundaries, and as the buyer you have to gather a lot of data. The consultants ask relevant questions to guide you in the right direction, so that's a support, but you do have to understand the information.

What tips do you have for others to get started with or further develop their own work on the life cycle perspective?

- Complete life cycle assessments are quite complicated. It's important to set up system boundaries – it doesn't have to be the whole life cycle, even if it's incredibly interesting to look at the big picture. You can do a comparative analysis between various scenarios, for example when a change is planned. You keep all the conditions the same, except for the one change you're looking into, for example in a packaging material. By getting involved in a larger context, you can join forces with other players and have a greater influence, take joint initiatives to make things happen.

Will you continue to apply the life cycle perspective?

- Absolutely, without a doubt.

Contact

Eva Eriksson, Sustainability Manager at Löfbergs,
eva.eriksson@lofbergs.se

Interview 24 September 2015: Kristin Stamyr, researcher at the Royal Institute of Technology (KTH)

Text and layout: Rebecka Hallén Jorquera, Project Manager, Swedish Life Cycle Center and Kristin Stamyr, researcher at the Royal Institute of Technology (KTH).

This article is part of the project entitled: Good examples – Inspiration for energy efficiency through the entire value chain, which was carried out with funding from the Swedish Energy Agency. You can find out about additional examples of applied life cycle thinking, read more about Löfbergs' work on climate change or learn more about the life cycle perspective via these links:

[Löfbergs' work on climate change](#)
[More examples of applied life cycle thinking](#)
[Swedish Life Cycle Center](#)

