

# The life cycle perspective makes things clear

– Provides key figures, approaches and parameters

The Swedish EPA report *The Climate Impact of Consumption* shows that dairy products accounted for 17% of the climate impact of Swedish food product consumption in 2008.<sup>1</sup> This example comes from the company Oatly and it shows how the life cycle perspective can help an organisation to develop concrete objectives to minimise its environmental and climate impact. Using life cycle assessments, Oatly was able to locate development areas that would benefit both the company and the society as a whole.

In 2013, SP Technical Research Institute of Sweden carried out a life cycle assessment on Oatly's oat-based drink, based on the ISO 14040 standard. The results were compared with the corresponding cow's milk product and found that cow's milk had 2.6 times more climate impact than the oat drink.<sup>2</sup>

For Oatly, the assessment pointed out potentials for improvement in energy consumption. This resulted in the goal of reducing consumption by 30%, which was a positive development for the company and also reduced its environmental and climate impact.

1. Swedish Environmental Protection Agency, 2008, *The Climate Impact of Consumption*, Report: 5903

2. SIK, 2013, *LCA på färsk och aseptisk havredryck (LCA of fresh and aseptic oat drink)*, final report: PX20462

Oatly was founded in the 1990s and produces oat-based food products. At the beginning of 2015, Oatly had about 70 employees, but the number is growing rapidly. It is important to Oatly that their own production strives for minimal environmental and climate impact, and that their products are significantly better environmental choices in the supermarket than the more traditional animal-based products. Oatly is an inspiring example of the life cycle perspective, because they work actively to reduce the environmental impact of their operations and have utilised life cycle assessments to develop the necessary basic data to set up goals and implement concrete measures.

We met with Carina Tollmar, sustainability manager at Oatly, to learn more:

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- Previously we've gone on our gut instinct to find areas where we were better or poorer in terms of environmental issues, but we wanted real facts. We wanted both to compare how our oat drink compares with cow's milk, and to find areas we can further develop and improve.

The life cycle assessment that SP conducted showed that Oatly's gut feeling was accurate – producing a fresh oat-based drink has less environmental impact than the corresponding production of cow's milk. It was very clear that the oat-based product holds up well in the comparison, but it also revealed Oatly's potential for improvement.

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needed to work most on climate impact and our water and energy use. Our energy consumption was 40% of that of cow's milk, and we felt that was too much. So we had quite a bit to work on.

## **Why do you apply the life cycle perspective?**

- Many people in the company have great dedication to environmental issues, and an environmental improvement group formed spontaneously among dedicated employees. The first time a life cycle assessment was carried out that covered the entire life cycle was in 2013, though it started in 2012. It was conducted primarily for our own benefit, to help us to set priorities for how we can improve. At the same time, the difference in environmental impact between oat drink and cow's milk began to be a common question from consumers and we could only answer that our drink most likely had less impact, but we didn't have figures for that.

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

- The life cycle assessment confirmed some areas of production that we suspected could be developed, and energy use was one of them. We've begun implementing measures in that regard, and once all the new technology is installed, we will have reduced our energy use by 30% – and reduced climate impact goes hand-in-hand with that. In production, we've installed a heat pump that recycles energy, sealed off the water system better and replaced 20–25% of our use of natural gas with biogas. In the long term, a new heat-treatment machine will be installed, which will further reduce energy use.

Those are the biggest measures. We also have a smaller project that involves thermal insulation, and when we replace machines, we now choose all the accessories we can to make them more energy efficient.

### **Have you run into any challenges?**

- We're in a huge expansion phase right now, so it's hard to get an overall view of how our energy use really looks and how it is decreasing. It's difficult to measure because it's not a static process, and right now it's going too quickly. Our planning was too restricted, so this is a difficulty in everything we're doing right now.

### **What have you done to meet this challenge?**

- We're trying to see the big picture. When we reorganised, we formed our own team, a process improvement team that could provide technical solutions.

### **How do you work on sustainability in addition to the life cycle perspective?**

- We work on environmental goals that we're currently further developing. We have great ambitions to further include employees and suppliers, and to develop monitoring systems. In addition we're working on external communication. We would also like to see our excess heat being used externally in some way. Even though we use it to heat our offices and warehouses, we still have a surplus.

### **What are the advantages of adopting a life cycle perspective?**

- It clarifies things and makes them concrete. It provides key figures and helps us to develop our approaches and parameters. It showed us new areas that we didn't think were so significant, but that actually had a great influence. If you do a proper assessment, you can find alternatives right from the start.

### **Can you give an example of how the life cycle perspective has influenced your working methods?**

- We've had interdepartmental teams, with staff from, say, production and marketing, and held discussions back and forth about various issues in the environmental sphere. That's given us a lot as an organisation, and now we want to put those words into action. It's good for a company to understand its operations, where you have hotspots and where you can implement measures. It's a combination of internal people developing data and brainstorming with external experts. The life cycle assessment was carried out by SP.

### **Who would you like to see influenced by your particular case story regarding the life cycle perspective?**

- Above all, I think we should create a bit of inspiration in other food product companies, because that's the industry we're mainly involved with. We want to get a discussion going about the difficulties in the industry, as well as its opportunities and what can be done. But we also have a strategy of showcasing for external parties what we can do and what we have done. Our distri-

butors and consumers should see that we want to, and that we can achieve something, that we're not doing everything right, but we're constantly working to be better.

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

- Just get started! But first and foremost, you need to understand why you're doing it, that it actually can make a difference. And as always, it's important to have internal support. If you understand that you have to do this, and it's well supported in the organisation, you can trigger a lot of creativity in the company. They'll start developing ideas and holding discussions about how to work together both in-house and with the community. We deliver a by-product for pig fodder, and will, among other things, start to work together with oat growers. We need to help each other, both internally and externally.

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If you know you want to make a difference and understand how that can be done, it's easy to get started. And it can't all be on one person to do everything. It's easiest to bring in external assistance to carry out the life cycle assessment. If the LCA is carried out internally, it will take resources from the company, and the person doing the work must be familiar with the methods.

### **Will you continue to apply a life cycle perspective?**

- Absolutely!

### **Contact**

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*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 Oatly's work on climate change or learn more about the life cycle perspective via these links:*

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