

“Providing a complete picture of a packaging system’s environmental impact – more should offer reporting like this”

More or less every company in the packaging industry claims to be sustainable, making reference to various business analyses.

You can start and finish a Life Cycle Assessment where you think it suits you. As one of the few firms in the packaging world to do so, the global food packaging company Ecolean has chosen to report its figures via an EPD – Environmental Product Declaration – which affords a complete overview of a packaging system’s impact on the environment.

Dairy giant Arla recently chose to use Ecolean’s filling machine figures, as there were no such figures available for their machines from Tetra Pak. It’s like comparing apples with pears since the machines have completely different designs and are incomparable as a result. We chatted with **Anna Palminger**, Sustainability Director at *Ecolean*.

TEXT BO WALLTEG PHOTO ECOLEAN

If you are going to be a competitive player in the packaging industry, you need a head for sustainability and an ability to communicate this to the potential and existing customers. That’s something most companies can do these days, but the problem is that the figures from their environmental impact analyses are rarely or never comparable. You can choose where in the process you start and finish your life cycle assessment: for example, do you do it from cradle to gate or from cradle to grave?

The latter produces figures that are better than those achieved in real life. In order to make comparisons, sustainability figures that are transparent and easily comparable are required. An Environmental Product Declaration – or EPD – is an effective tool for this purpose. It is often used in the construction industry during procurement processes. It would be desirable for the packaging industry to make up its mind as well.... With an EPD, you get complete transparency throughout the whole process, from raw material through

machinery, manufacturing, consumption and recycling. The observer is at no point left in the dark in relation to any aspect. Ecolean, which is headquartered in Helsingborg while carrying out manufacturing around the world (with a certain emphasis on Asia), has embraced this and invested in it over a number of years. Figures were presented for the first time at the most recent Anuga FoodTec trade fair. Anna Palminger, Sustainability Director at Ecolean, has been responsible for this work. She has used EPDs in previous roles. ▶

A woman with blonde hair and glasses, wearing a red jacket over a white shirt and blue jeans, stands in a factory setting. She is looking towards the camera with a slight smile. The background is a blurred industrial environment with red and green structural elements.

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*Anna Palminger,
Sustainability Director at Ecolean*

What is an EPD?

An EPD is based on a completed Life Cycle Assessment (LCA), but also contains complementary information about the product or service declared. The chief difference between an EPD and a general LCA study is:

- Common computational rules (PCR, Product Category Rules).
- The result is always publicly presented in a given reporting format
- Verification of the EPD document and underlying calculations

An EPD is compiled and published within the framework of a program operator which complies with the ISO 14025 international standard. To find an EPD, you therefore need to visit their homepage or in some other way access their EPD database.



► - We are one of just a few packaging companies globally going down the EPD path. For a while we were possibly the only one, she says. “Everyone these days chooses to do their calculations on their own. We have chosen a standardised route which I think many more should opt for, instead of making calculations which always result in highlighting their own excellence in a way that perhaps isn’t so believable. There is always documentation on how they calculated their values, but it is rarely all that accessible. If you are interested, you have to ask for it. We are as transparent as it is possible to be and display all the values.

- As I’m sure most people know, we manufacture packaging systems – both filling machines and packaging for the dairy and beverage industry – and we can confirm that our two biggest competitors here in the Nordics have not chosen this route.

Anna Palminger emphasises the importance of digging into the small print in supplier documentation when presenting carbon footprints. What has been included, where are the boundaries drawn, what kind of system

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are they using? This doesn’t require a lot of effort when you have a clearly-structured EPD in front of you.

- EPD is something I’m truly passionate about. For twenty years I have worked on sustainability issues across different sectors. Ecolean is the first company I have been at where the EPD is a part of the basic concept from the very beginning. A very holistic approach is taken here and clear figures can be shown.

- Otherwise it is often the case that companies leave environmental issues to one side. You deal with them when you have to, when it’s time for an ISO audit. That’s not the way we work here. Additionally, the family who

owns us is very interested in environmental issues. Greater transparency is needed in the industry; more companies need to be open about their activities.

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Is it difficult?

Of course, the question remains of how difficult it is to produce a comprehensive EPD? How much knowledge is required? Bringing in a consultant is a good way to start. Although Anna Palminger has worked with EPDs previously, she decided to bring in external help in order to get everything right.

- External help makes things easier, but it’s not simply a case of bringing in a consultant and getting to work. They also need to understand our different processes, like which raw materials we use and in what volumes, what the process looks like, how much energy we consume and so on. Everything must be mapped out, and this is quite a consuming task.



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- We then use an LCA database called GaBi, where we construct the whole flow. Every step gets mapped. When it's finished, you have the actual model itself and there's less work when it's time to update it.

- We still work with our consultant, but have brought in GaBi, which makes it possible for us to insert ideas for changes into the flow to see what affect they have.

Ecolean carries out manufacturing in Pakistan and China, and that part of the world is very

much on track to catch up with the west when it comes to these issues, according to Anna Palminger.

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Since Ecolean's global competitors don't use EPD in reporting, it is certainly difficult to compare outcomes (it is the ability to compare that is important), but Anna Palminger believes that Ecolean comes out looking good in relation to its counterparts. "We know that we are scoring well," she says. Some of their Nordic competitors have had EPDs, but, for some reason, have chosen not to proceed with them.

- We are working on our twelve areas of sustainability, which cover everything from social aspects to environmental issues. We measure our carbon emissions and put a lot of work into securing green energy for our factories. Additionally, we focus a great deal on recycling issues.

Is EPD of any benefit then, when you are pretty much alone in presenting your figures with such transparency? "Yes," says Anna Palminger, pointing out two effects.

- On the one hand, we have an outstanding way to communicate our environmental impact. When we receive queries from our existing and prospective customers, we are able to provide answers based on a standard and which are audited by a third party. If we have any customers who wish to make their own calculations, they can take our data and put it straight into their own such calculations.

- However, it is not just a tool for communication. We use EPDs internally to see what we can improve in order to become even better. It's easy for us to identify where we have the greatest impact.

Other companies take advantage

Although Ecolean is almost alone in pursuing this type of transparency, there is one player who uses their figures in their analysis of climate impact, without, so it seems, realis- ▶



▶ ing that it is an impossible comparison. In a report that mentions a zero carbon footprint, Arla has used Ecolean's figures for filling machines as starting point, as it could not get the equivalent figures from the supplier of the machines, Tetra Pak. Strange, one might think, as it's an impossible comparison- since their machines are technically so radically different to Tetra Pak's.

- Arla's consultants have undertaken the gargantuan task of documenting their supply chain to identify what level of climate compensation measures are necessary, but when they got to the filling machines they hit a dead end. There were no figures to find, so it was decided to use ours. It was probably assumed to be the closest you could get.

- The crux of the matter, and what we are pushing for the whole time, is that if everyone starts using EPDs it will become a standardised way to facilitate comparisons between different suppliers. We are setting out what we stand for and trying to teach

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our customers that if you want green procurement, you should ask for EPDs from different suppliers.

A pandemic of plastic

As things stand, we are experiencing something which be closely likened to a pandemic of plastic, where the only vaccine appears to be knowledge. Sadly, far too many people don't seem to want to get vaccinated, and plastic packaging gets an undeserved bad reputation. It seems that many are determined

that all packaging currently made from plastic should be made from other materials.

- We can demonstrate that our plastic packaging has a low carbon output. We use very little material, and as a result, very little energy. It would have been interesting if the cardboard or glass industry had done the same, so that comparisons could be made. If you look at the total, it appears that paper packaging often has higher carbon values. This a challenge that we are facing.

- It is difficult for the consumer to disentangle complex sustainability and environmental issues, and with all the information in circulation, this perhaps isn't so strange. It's not only about plastic as a material. There's so much else at play and it's about getting people to realise how it's all connected, says Anna Palminger.

- We have a strong forestry industry in Sweden, but when we cut down trees for use in cardboard materials and paper bags, it uses a lot of energy, water and transport.



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This should be highlighted from an LCA perspective, and an EPD would have clarified the situation.

- It is almost frightening that alternatives to plastic – usually made from fibres – come onto the market without having had real LCA analyses done. It compounds public belief that plastic is so much worse. Thankfully, there are a number of brand owners who realise this and take responsibility.

Anna Palminger talks about a seminar she attended in Brussels, shortly before Belgium went into lockdown last year. It was about plastic recycling. A representative of the owner of a global brand proudly spoke of how they had replaced the shrink film around their six packs with sturdy cardboard.

- There was a question then from the audience. Had an LCA analysis been done for this? There was a silence lasting at least twenty seconds, which is a long time on stage, before the representative said no and added that this was something that their customers wanted.

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Recycling

Plastic recycling is a critical issue. This is a demanding area, but once it is solved, the circle will be complete.

- It's perhaps not the case that a piece of recycled food packaging can become new food packaging in a circular system. I think people quite often get lost here. It is important to ensure food safety, but the material can of course be reused for a completely different type of packaging. Some refer to this as the spiral economy. The challenge lies in getting politicians at all levels to understand that it's possible to divide packaging in different ways, depending on what it is to be used for. Otherwise we are at risk of losing fantastic material, which really protects food and has a low environmental impact.

- Why should we change to something that is worse, only to perhaps realise in thirty years' time that we now have another problem to deal with? We lack the holistic perspective.

The question is whether the packaging industry dares take on board the possibilities of comparable environmental data, or whether the industry chooses to report adapted data. For the individual company it might be negative, for the industry it should be positive. **nord emballage**