

Circular Design – a path towards circular economy, pilot programme

Highlights and experiences from attending companies

Circular
Design

DESIGN FORUM
FINLAND

ethica



Ympäristöministeriö
Miljöministeriet
Ministry of the Environment

VTT



S Y K E

SITRA

frankly

miltton



ALICE LABS

A unique training programme targeted at both company leaders and product and service developers started in autumn 2022. The pilot online programme is free of charge, and Finnish companies from various sectors and of diverse sizes, interested in developing their business towards carbon neutral circular economy, were invited to apply.

The programme consists of two tracks. The strategic track is designed for the executives / board members / owners and investors. The R&D track, with its more concrete and practical contents, is designed for people in charge of or taking part in product and service development.

Being part of the National Strategic Circular Economy program of Finland, this training program is led by the Ministry of Environment and coordinated by Design Forum Finland and Ethica Ltd.

Other partners include VTT (Technical Research Centre of Finland), the Finnish Environment Institute, the Finnish Innovation Fund Sitra, Frankly Partners, Milton and Alice Labs.

Aito Support Oy

Aito Support is an authorized repair partner for Samsung mobile devices, laptops, and wearables in Finland. Our Aito Cycle concept (Aito Kierro in Finland) is a platform of lifecycle services aiming to extend the life cycle of devices and reduce the amount of WEEE waste.

The concept is scalable to a wide variety of IT and electric devices. Our goal is to make it as effortless, cost efficient and reliable as possible for the customers to buy or rent new and refurbished devices as a service, repair and reuse them, and extend the life cycle of the devices and their components to the maximum.



The programme has contributed to our knowledge and toolbox on circular economy. We have found the curated content very valuable and time saving, providing a reliable and professionally structured framework to build on.

FootBalance System Oy

Design Agency Fyra

With the Circular Design training programme, we wanted to bring the circular economy framework into interior design. Our idea was to go through our entire design process, and for each stage, define certain goals and actions according to the circular economy. The result would be a simplified checklist with circular economy criteria for design assignments. With the checklist we can then validate, both for the design team and the customer, that the criteria are met in a design assignment.



Photo: Fyra

Luomoa Oy

All along this project, our aim has been to create a basis for our internal organisational culture where the circular economy is the guideline cutting through all of the company's operations and the roadmap guiding all our functions.

- Analysing and developing our production process and facilities according to the circular economy (the result: improved process map of the production; investment plan for revamping production facilities)
- Critical evaluation and refinement of our products and the modular system from the circular economy viewpoint (the result: sidestream products and survey of alternative materials)
- Bringing new service models to be a part of the building industry offering and into practice (e.g. convertible building, leasing, renting, partial payment) (the result: the first leasing projects carried out with financial institutions)
- Analysing and critical evaluation of the company, production, logistics and subcontracting chain from the circular economy viewpoint (the result: simplified circular economy map and Luomoa's 9R)

luomoa



Photo: Luomoa

The structure of the training programme has been excellent. The well-planned workshop materials and preliminary tasks have created a great framework for our work. The appropriate pace of progress has given us time to work on topics between meetings.

The coaching programme has provided us with high-quality learning materials, and an encouraging environment for developing our capabilities. We have been able to apply new frameworks in practice.

In our opinion, the preliminary readings of the programme were excellent. Several people from our company have been inspired to read Cradle-to-cradle, encouraged by our team.

Genelec Oy

Ensto Oy

We have a complex product that also has a long life cycle, and for some of the product's materials there are not yet fully functional recycling technologies.

Now we have mapped the biggest effects of the product's formation and the opportunities to increase the circulation of materials, for example from the fractions created during the installation or from the side streams of production.



Photo: Ensto

We are very pleased with the new information we have received about the changes brought to the value chain by circular economy. We have a strong vision that we will find our place in the value chain and the reuse of used and detached concrete elements will become more common in the next few years.

Rockx Oy

Nomen Nescio

Before Circular Design pilot program Nomen Nescio already had recycled and organic materials in their products. Product warranty, care and repair services as well as 2nd cycle services were also available. To make the collection more circular the aim is to make products mono-material and modular and therefore easier to modify, repair and recycle at the end of a long life cycle. This of course together with the aim of a carbon-neutral production. A long-term goal is to track the life cycle of materials from cradle to gate, which requires a lot of effort and open dialogue with stakeholders.



Photo: Nomen Nescio / Timo Leskelä

Kiilto Oy

Typically, for example office desks are designed for single use and cannot be refurbished when they are out of date or get damaged.

Through the program we have found partners who are interested in finding a solution for de-bonding the surfaces without damaging the other parts, so that the surfaces can be replaced and the desks get a new life.

We are proceeding towards the first industrial trial in a customer manufacturing process in May.



Photo: Kiilto Oy

The personnel's increased understanding of the circular economy and the demands of the green transition as part of the business has progressed gratifyingly quickly. This has been seen e.g. as measures aimed at everyday energy saving and as a transition to alternative bio-based side stream materials.

Maker3D Oy

Kind Pet Asseccories

The Circular Design program has encouraged us to source even more natural and safe materials for our dog accessory collection. Our collection already includes dog products that are designed in line with mono-material principles. Our Aamu dog blanket is made of undyed, sturdy yet soft 100% heavy-linen. The filling is 100% warming wool. The Herkku food storage bag and feeding placemat are made from 100% linen, waxed with vegetable resin containing pine resin. We also offer spare parts for our dog beds for conscious customers. In the future, we will develop this service and make spare parts, such as inner cushions made in Finland, even more available.



Photo: Kind Pet Asseccories

We have received wide-ranging information and good tangible examples from professionals in the training programme.

The circular economy terminology has become clear and the tools used in workshops have been of great assistance when we have conceptualised the circular design of working clothes.

Image Wear Oy

Mirka

Our work started at recognising where we already operate according to the circular economy principles and where we could yet do better.

This spring, we have organised workshops with our product development team. Sharing information has proved important. We also have discussed a potential new business model for a product's lifecycle. We have started to write a designers' guide in circular design for our product development team. Altogether, we plan to make training materials for our entire personnel and thus increase awareness in sustainable development and circular economy activities.

The work on the roadmap has begun, meaning that we have defined what needs to be done for being successful in the green transition.



Photo: Mirka

Owatec Group

There is a lot of technological, environmental and chemistry related expertise and know-how within our teams but there has been little understanding on how Owatec's business model connects to the many perspectives of the circular economy, and how the whole business model ought to be re-evaluated and reframed. Strategic thinking and having the circular economy as a strategic objective have been missing.

The circular economy has been an element that supports the business, not the business itself.

Today the circular economy is our core business. Not because we have invented something new since the program started but because we have analyzed and crystallized who we are and what we are doing. Our products and services form a text-book example of a brilliant circular economy business model. It is not all the way thought through and we cannot yet call ourselves regenerative, but we are on an exciting path towards this strategic objective.



Photo: Owatec Group

*We are pleased with the comprehensive amount of information we have received.
We have gained a lot of new and different perspectives for our own operations.*

*We (as surely as many other companies) think about the company development
from our own perspective; our products, our services and our available resources.*

*The Circular Design program has brought a lot of understanding of the society and
from other industries. With this information we can mirror our own operations, so that
we will develop in a way that benefits our customers and the market in total.*

*Now we can see better the needs of our customers' customers and take into account the
multifaceted needs and opportunities of the circular economy.*

We are grateful for the comprehensive package of the Circular Design program.

Sycore Oy

Pomppa Oy

The new RePomppa second-hand service (launched November 2022) meets one of the main goals of Pomppa's sustainability work: supporting the circular economy in all operations. The service aims to extend the life cycle of existing Pomppas even further, making it possible for one Pomppa coat to have multiple owners in its lifetime. With RePomppa, customers can grant a new life to Pomppa products that are no longer in use, and at the same time, seek and purchase rare Pomppa treasures from the past collections.

We believe the new service will have a wider impact on the lifecycle of Pomppa, not just through the RePomppa service, and will raise the value and status of a used product once it has been given new value by us.

The demand for RePomppa products has been huge, the biggest bottleneck has been getting consumers to sell their used Pomppas to us. This is also what we have been developing during the Circular Design programme: how to involve our retailers in RePomppa and create value for them as well.



Photo: Maija Vinnikka / Pomppa Oy

The training has pushed us into e.g. to study the experiments and innovations already made in Wienerberger Group and network with other industries concerning the use of recycled materials.

In the programme we are yet at the stage where we chart possibilities for developing materials and new kinds of products, as well as the circular economy potential of supporting services.

Wienerberger Oy

Martela

We are broadening our view on circularity and how it supports the sustainability of our customer organisations.

We are looking for new ways to develop the sustainability of our products and services as well as processes.



Photo: Martela

I have been satisfied with how widely the training programme takes into consideration e.g. chemicals and customer buying behaviour in the circular economy.

We also have quite recently recruited new persons to our team, and the programme has been a good introduction to the subject.

Tella Oy

Stockmann

The circular economy plays an even stronger role in Stockmann's sustainable business and responsibility strategy where the leading theme is resource-wise business.

Progress:

1. Increasing the circular economy models, design and understanding in the organisation is growing, as well as general understanding of their importance.
2. The circular design roadmap for developing operations is under work; the aim is to combine this with Stockmann Group's SBTI goals, which will be defined in Q3/2023.
3. The first version of the organisation's internal circular design handbook is completed.
4. One of the development goals is also a service concept where services supporting the circular economy are gathered together and brought thus easily available for customers. This will be an essential part of the business's service offering.



Photo: Stockmann

More information:



www.circulardesignsuomi.fi

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