

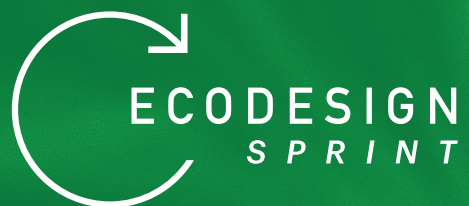
INTRODUCTION TO **ECODESIGN** **SPRINT**

*The strategic tool for circular
business development*

DESIGN FORUM
FINLAND

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ECODESIGN
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CONTENTS

7	FOREWORD
8	WHY ECODESIGN SPRINT?
10	WHAT IS IT? WHO IS IT FOR?
12	OUTCOMES & DELIVERABLES
14	ECODESIGN SPRINT – HOW?
	Phase 1: Understand
	Phase 2: Ideate
	Phase 3: Deliver
24	AFTERWORD

The primary goal of EcoDesign Sprint is to develop the business of SMEs and create more sustainable products and services for them. Another goal is to provide the participants with in-depth knowledge on the possibilities and business models of the circular economy.

FOREWORD

This booklet has been created to introduce the EcoDesign Sprint method and to give the reader an overview of its processes as a whole.

EcoDesign Sprint is a unique business development and acceleration programme: it is a combination of innovation, practical training and product & service development through circular economy thinking and design methods. It is a strategic and hands-on tool for companies of all sectors, bringing together a multidisciplinary team of experts to work with the client company's needs and novel circular business opportunities.

In EcoDesign Sprint programme, SMEs are client companies and they get to learn more about the circular economy, its business models and design methods together with a circular economy expert and a design agency. The design agencies' role in EcoDesign Sprint is to develop circular concepts that help enhance the business of the client companies. In addition, they get to deepen their expertise in the circular economy and utilise it in design.

EcoDesign Sprint has been developed by *Design Forum Finland* as part of the *EcoDesign Circle* project. *EcoDesign Circle: EcoDesign as driver of innovation in the Baltic Sea Region* is a three-year (2016–2019) development project partly funded by the *Interreg Baltic Sea Region Programme* of the *European Union*. *EcoDesign Circle* develops circular economy and related business, research and educational activities with the means of design and design thinking.

So far, EcoDesign Sprint has been piloted in six client companies and six design agencies in three of the partnering countries of EcoDesign Circle – Finland, Sweden and Estonia.

WHY ECODESIGN SPRINT?

Our linear economic model is based on the take-make-waste model, which is already outdated with its overuse of raw materials, overconsumption and value loss. This is unmanageable and short-sighted way of operating and we have already exceeded the planetary boundaries. The circular economy approach offers a far more compelling way of developing business. Circular businesses run on renewables and know how to decouple growth from the increasing use of virgin materials.

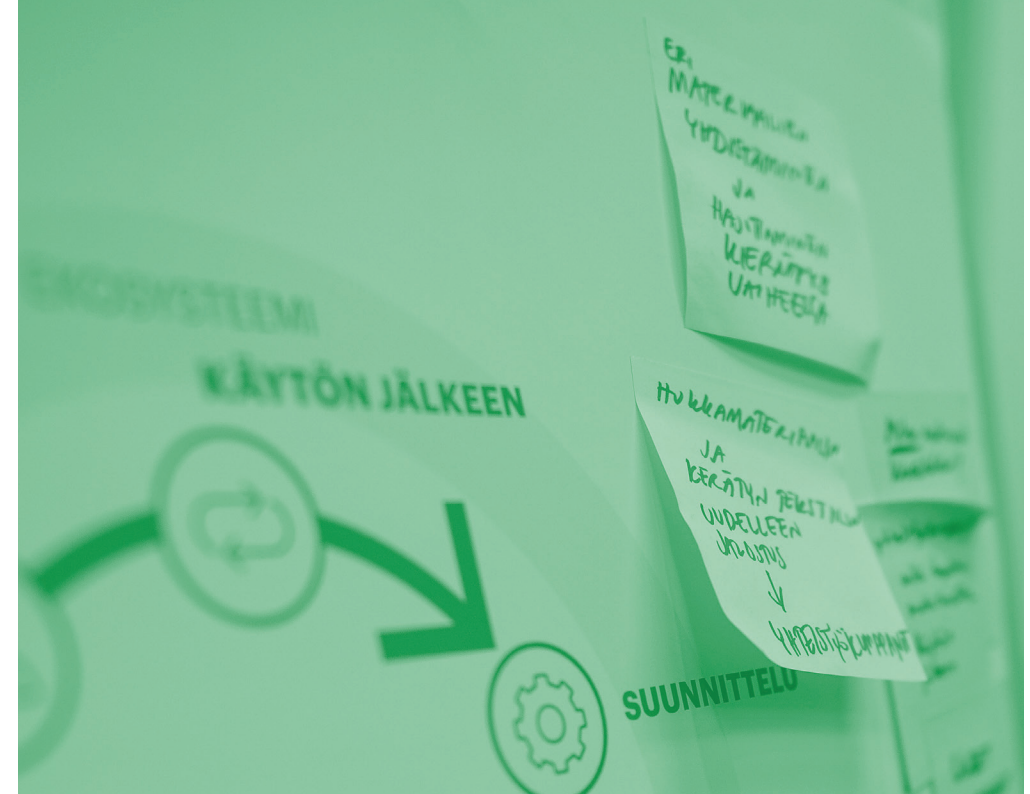
Design and its methods and mindsets are some of the most influential ways of creating a better functioning world and society. With design, many complex and wicked problems can be grasped and even solved.

Utilising design methods and design thinking helps a company understand its customers and their needs. It also serves as a tool in helping develop products and services from a comprehensive and wide perspective.

There is much unused potential in design. With the strategic use of design, companies can create sustainable growth and competitiveness by being better prepared for both challenges of today and tomorrow.

Ecodesign in this text refers to circular design approach that is based on systems view and circular economy principles. It aims for creating a positive impact on the environment through radical redesign instead of only minimising a negative environmental impact. Ecodesign is restorative and regenerative by nature, it requires understanding of biological and technical cycles, and it explores novel business opportunities across the lifecycle of the product – not just when selling the product. Accordingly, ecodesign aims at decoupling growth from the use of raw materials and resources.

EcoDesign Sprint is a training programme intended for SMEs and design agencies that are interested in the business opportunities of the circular economy. Its aim is to enhance operational models that combine design and the principles of the circular economy, thus ensuring competitiveness now and in the future.



CIRCULAR ECONOMY PRINCIPLES:

- 1) Circular economy is a resource wise economic model restorative and regenerative by nature. It operates within the planetary boundaries.
- 2) Materials cycle endlessly in technical and biological loops in society. Materials are safe & non-toxic.
- 3) Value of products, components and materials is maintained and increased through refinement.
- 4) All energy is renewable and is used efficiently.
- 5) Solutions are systemic and based on designing life cycles, ecosystems and multiple purposes.
- 6) Equal distribution of resources and well-being is in the heart of the circular economy.

WHAT IS IT? WHO IS IT FOR?

EcoDesign Sprint is a three-day training and acceleration programme in the circular economy. It is for any company interested in being future fit. It increases the company's competitive edge through developing its business towards a circular model, finding new product-service concepts and identifying future customer needs. For design agencies, EcoDesign Sprint offers valuable knowledge and material for harnessing circular economy thinking in their own work.

EcoDesign Sprint

- is an intensive and fast business development programme: it focuses on the company's strategic goals and operations, and explores novel opportunities through the circular economy, thinking both in the short term and long term
- is a concrete and rapid service/product development process with a multi-disciplinary team of experts consisting of a circular economy expert and designers
- utilises the company's understanding and competence to harness the circular economy as an innovation tool for strategy development and R&D, bringing it to a completely new level
- is a hands-on tool based on learning by doing and co-design methods
- provides an opportunity to create a pathway to circular growth

"I became aware of the significance of the circular economy and especially on how it can create new business opportunities for design agencies. The Sprint made me realize the business potential of developing circular products and services for companies." – Design Agency





13

Participating companies gain concrete deliverables from EcoDesign Sprint:

- Two novel product/service concepts or prototypes for further development
- Identification of future customer needs
- Tools for short-term and long-term business development
- In-depth understanding of circular economy business opportunities and how to start implementing them
- Circular boost for the existing strategy and operations across the supply chain
- Concrete action points for future development
- Tailored support and mentoring

ECODESIGN SPRINT

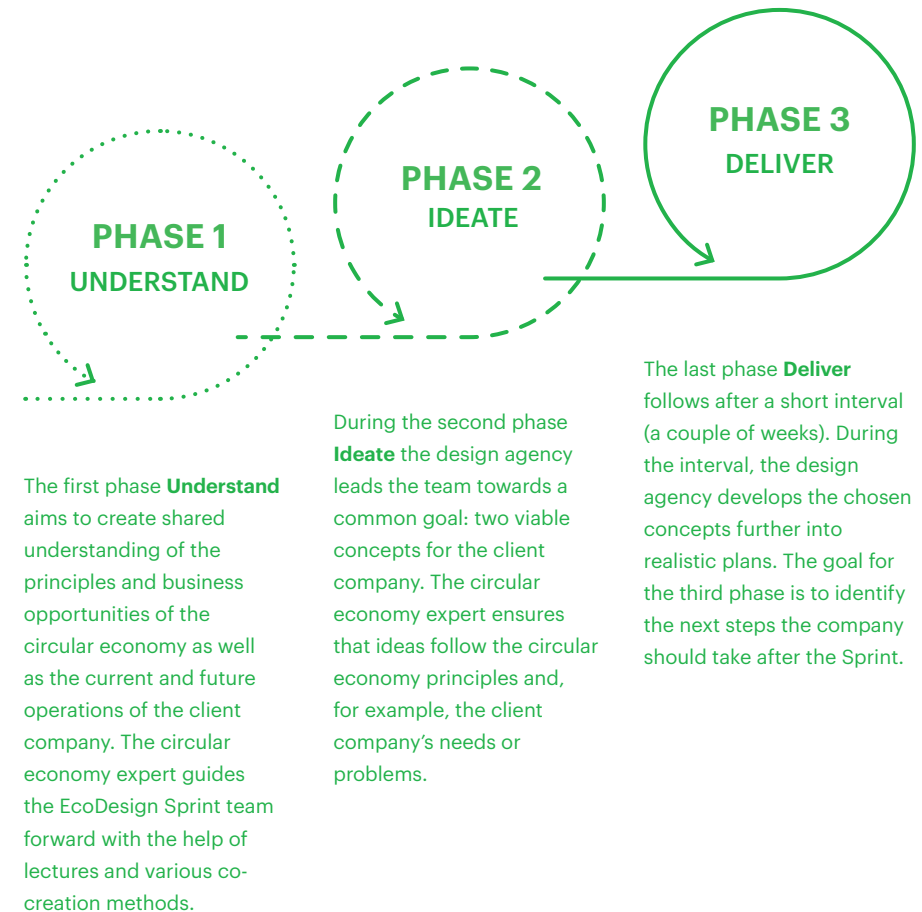
– HOW?

EcoDesign Sprint consists of three phases / workshops: *Understand* – *Ideate* – *Deliver*, each lasting approximately a working day. Each EcoDesign Sprint is a joint project between a client company, a design agency and a circular economy expert.

The EcoDesign Sprint team consists of representatives of the design agency and key persons from the client company. A circular economy expert brings in the essential special knowledge of the field and also runs the Understand workshop while the design agency facilitates the Ideate workshop. The design agency is selected so that its expertise fits the company's business area and development needs.



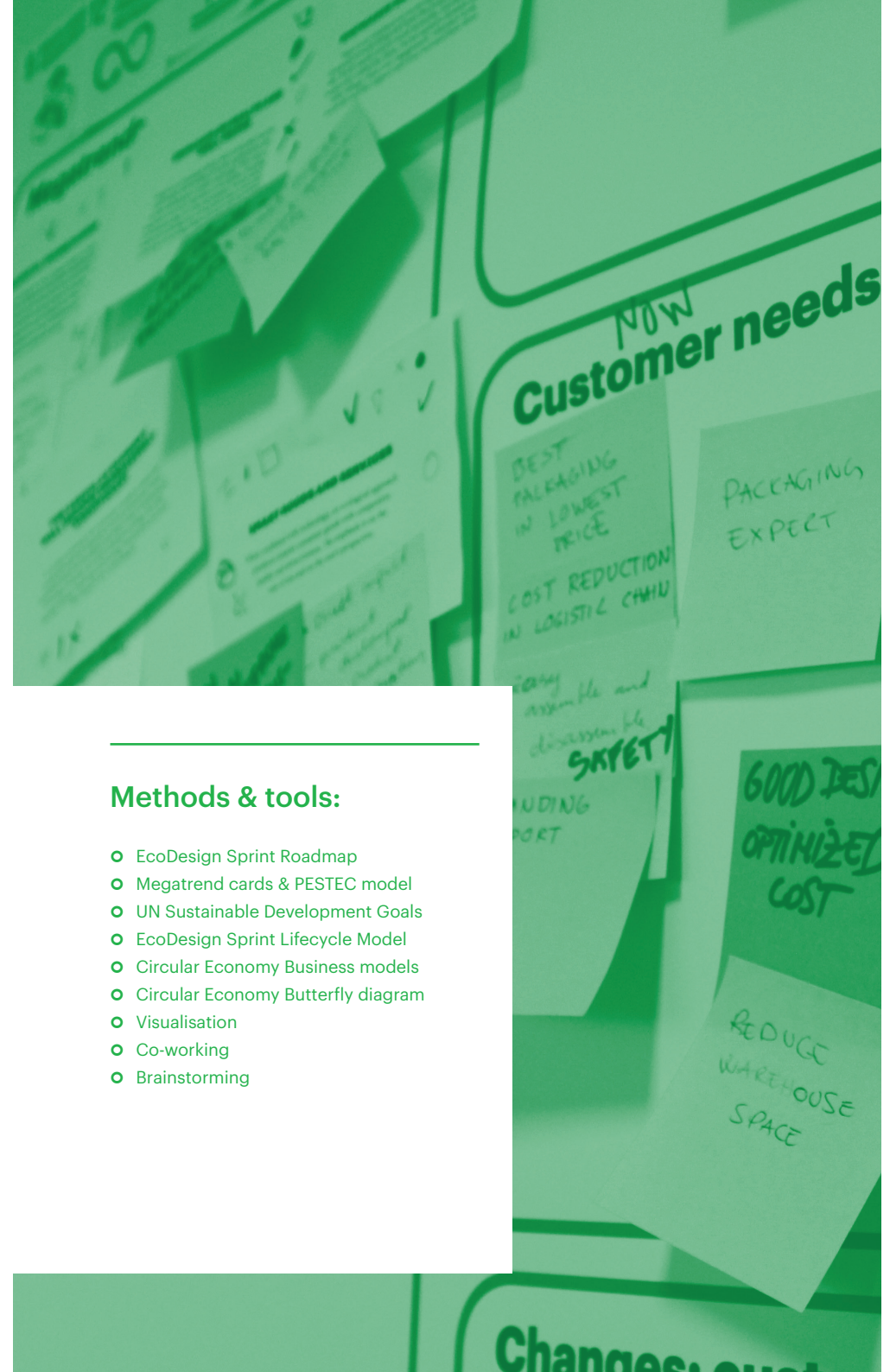
The work in EcoDesign Sprints is done as one team. To make the most out of the Sprint, it is beneficial to have a cross-disciplinary team taking part in the Sprint; in addition to strategic key people, staff ranging from sales to customer interface are invited to be part of the Sprint team. In order to keep the work goal-oriented and leading to concrete results and strategic changes, it is essential that the right people from the client company are part of the team.



PHASE 1: Understand

The objective of this first phase is to generate a 'big picture': the level of understanding and use of design, sustainable thinking and circular economy principles in the client company. It is a combination of charting out the existing strategy and operations while scanning the horizon and envisioning future pathways and business opportunities.

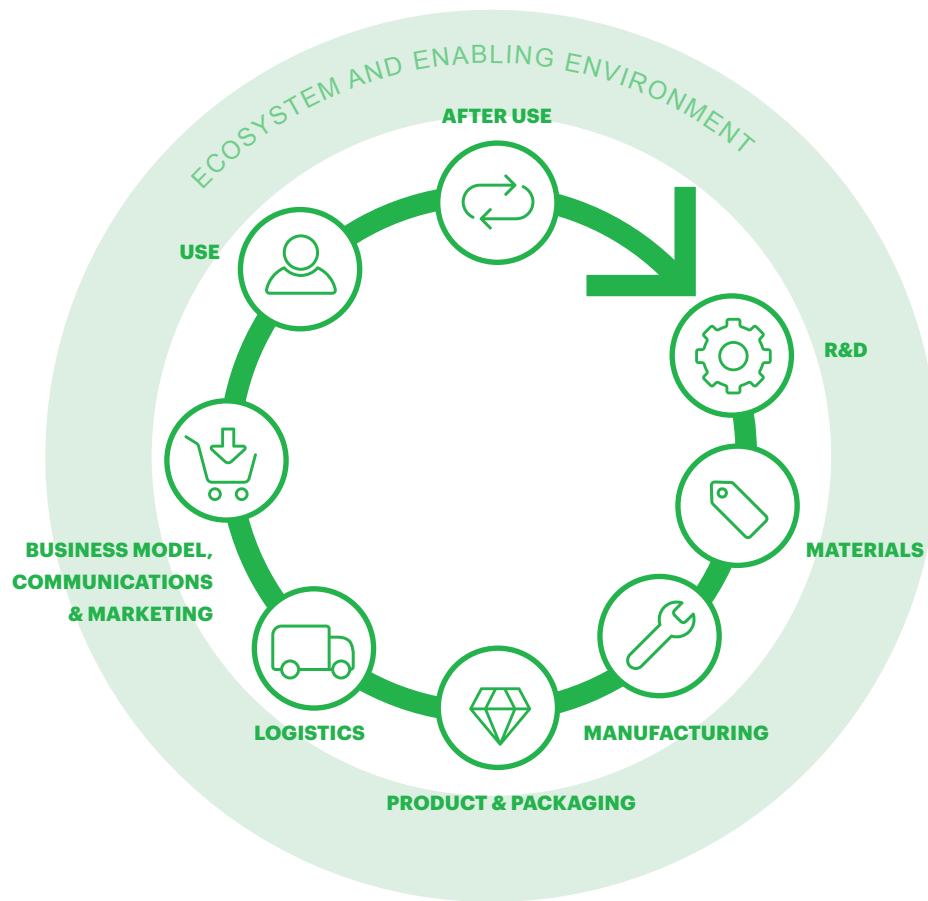
Through a number of exercises, ideas and questions are generated and opportunities are identified. The most important findings are mapped out on the *EcoDesign Sprint Roadmap*, which forms a foundation for the first and second phases. The *Lifecycle Model* is a great tool to go through all the operations of the company, starting from design and raw materials to circulation strategies. Filling out the Lifecycle Model canvas will help the client company to see the product or service as a whole and to pinpoint areas which can be improved to be more circular.



Partners	Megatrends	Company mission & vision
Strategic goals + Circular economy goals		Customer needs
	COMPANY	
Circular economy business model + Design goals	PRODUCT / SERVICE CONCEPT	Changes: customer, organisation, partners

Methods & tools:

- EcoDesign Sprint Roadmap
- Megatrend cards & PESTEC model
- UN Sustainable Development Goals
- EcoDesign Sprint Lifecycle Model
- Circular Economy Business models
- Circular Economy Butterfly diagram
- Visualisation
- Co-working
- Brainstorming



EcoDesign Sprint Lifecycle Model

Lifecycle Model helps to analyse current products and services and future opportunities. Questions are examples, you can brainstorm more of them according to the client company.

R&D: What is the lifecycle of the product? What is the business model of the product? Can design eliminate the idea of waste? Can the product cycle endlessly in biological and technical cycles?

MATERIALS: What are the materials and chemicals used in production? What could replace harmful materials and chemicals? Can the materials be reused easily? Where do the materials come from? Can ecological, recyclable, recycled or alternative advanced materials be used?

MANUFACTURING: Does production generate waste and what happens to it in the company and outside the company? Is manufacturing energy efficient and does it use 100% renewable energy? Could the manufacturer get the materials back and remanufacture them?

PRODUCT & PACKAGING: What is the packaging material? What is the product durability & life span? Could the product be improved through one/some of the following: ease of maintenance & ease of repair, ease of assembly & disassembly, product modularity, upgradability and compatibility, use of digital solutions, use of biomimicry?

LOGISTICS: Are the logistics optimised with regards to efficiency & the environment? Can the logistics be optimised with the help of partnerships or new technology? Are packaging solutions optimised? Is logistics fossil fuel-free?

BUSINESS MODEL, COMMUNICATIONS & MARKETING: How could the business model help creating growth while using less raw materials and resource? Could the product be provided as a service/leased/rented? How could the product return to the retailer/third party for the next life cycle? How could marketing and communications help in creating multiple lifecycles?

USE: Is the product easy to maintain; can the user prolong the lifespan of the product? Are there any repair/reuse/recycling opportunities for the product? What are the rights & responsibilities of the user? What type of culture would support circular behaviour?

AFTER USE: What should happen after use and by whom? How can the product be reused/remanufactured over and over again?

PHASE 2: Ideate

At the beginning of the second phase, the two focus areas for further concept development are defined through design thinking and co-design methods. This phase is facilitated by the design agency and the overall objective is to ideate two circular concepts:

- 1) a short-term concept for immediate implementation,
- 2) a long-term, visionary concept to be implemented within the next 3–5 years.

The design agency chooses the methods to be applied in this phase from its own toolbox, to suit

best the client company's needs. Expertise of the design agency and various design and co-creation methods are utilised. For example, the Service Flip method helps recognise customers' core needs and ways in which making and selling products could be changed for renting and / or sharing economy.

The design agency's role is to develop the initial concepts into concrete proposals between the second and third phases. In order to succeed in this, the company has to have an understanding or insight of the future needs of its customers.

Methods & tools:

- 6-3-5 Brainwriting
- Customer Journey Canvas
- Personas
- Service Flip
- Visual Storyboard
- Double Diamond
- Identification of customer needs



"We were encouraged to think outside the box and generate crazy ideas, which does not happen in the comfort zone. We were able to develop the concepts together quite far in just two days." – Client Company

PHASE 3: Deliver

The last phase kicks off by reflecting on the previous phases, for example creating posters about circular economy learning as group work / co-creation. It is followed by the concept presentation by the design agency. The concepts are then evaluated together with the EcoDesign Sprint team. The goal for the third phase is to identify the next steps the company should take after the Sprint. In other words, the company takes ownership of the workshop results and concepts and starts planning concrete actions for execution, with the help of *What Next Canvas* and *Task Cards*.

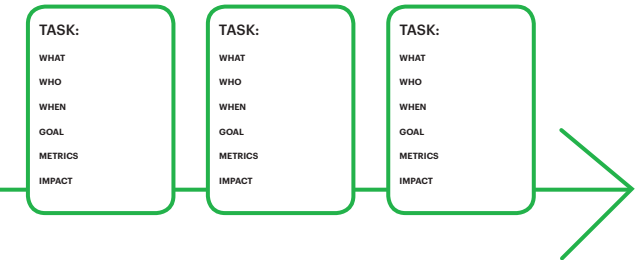
Deliver is the last phase of the Sprint, but the beginning for the client company and design agency and their possible future work together.

Methods & tools:

- Posters
- What Next Canvas and Task Cards
- Visualisation
- Iteration

What Next Canvas and Task Cards aid in mapping what should be done in the future

TIME



WHAT: the actual task, what is going to happen. A task can be big or small, e.g. piloting a service business model, or organising a meeting with the supplier.

WHO: who is responsible for the task, who needs to be involved?

WHEN: timeframe for the task. It is recommended to list both short-term (e.g. what happens tomorrow) and long-term (by 2020...) tasks.

GOAL: what is the envisioned goal that will be reached when the task is done?

METRICS: is there a way to measure the success, e.g. existing or new KPI for decreasing virgin material use, new service portfolio development, emission reduction targets etc.?

IMPACT: what is the impact on business (internally and externally) and what is the value and impact on society, e.g. creating business growth without increasing material use by X %; switching from fossil-fuel based virgin materials to circular materials and saving in emissions X % and virgin material/water/energy use X %?

"From our perspective, EcoDesign Sprint has brought us to a greater understanding on the significant potential of design in enabling and advancing the circular economy.

It is a great tool for creating solutions to complex problems."

– Client Company

AFTERWORD

The objective of EcoDesign Sprint is to become a strategic tool in developing the company's business operations. It offers a comprehensive impulse to launch operations according to the principles of the circular economy. The global ecological changes affecting us all will also change the operational environments of companies. EcoDesign Sprint takes these changes into account and aids companies in finding the future customer needs valuable for their competitiveness. EcoDesign Sprint is intended for the strategic development of the company's business operations as a whole.

The journey has been most enlightening, edifying and refreshing. We have received positive feedback from the participants as well as an insight into the importance of the circular economy and design. But this is only the beginning, the work goes on!

The EcoDesign Sprint method has been developed with great people and companies alike. Special thanks to *Ethica* and circular economy expert *Anne Raudaskoski*, without whom this tool would not have seen daylight. Equally important were these open-minded client companies and design agencies who attended the pilot sprints:

In Finland, organised by *Design Forum Finland*:

- Järki Särki, Pentagon Design and Ethica
- Lumir, Muotohiomo and Ethica
- R-Collection, Arctic Factory and Ethica

In Sweden, in cooperation with *Swedish Industrial Design Foundation*:

- Nola, Idesign and Ethica
- Primus, Them and Ethica

In Estonia, in cooperation with *Estonian Design Center*:

- Nefab, MI/KL Industrial Design Studio and Ethica

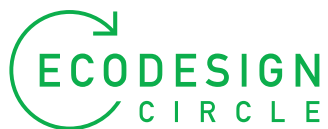
Did you get interested in EcoDesign Sprint?

You can find more information here: www.designforum.fi/ecodesignsprint

You can also email us: ecodesign@designforum.fi

More information of EcoDesign Circle: www.ecodesigncircle.eu

DESIGN FORUM FINLAND promotes the use of design in Finnish companies, especially as a tool for leadership on the strategic level, thus enhancing the international competitiveness of companies. We are a non-profit organisation, and through our extensive network of design professionals, we will find the best design partners for companies.



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How to create circular business?

EcoDesign Sprint is a unique business development and acceleration programme. It is a combination of innovation, practical training and product & service development through circular economy thinking and design methods.

For companies, it is a strategic and hands-on tool, bringing together a multidisciplinary team of experts to work with the company's needs and circular business opportunities.



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