Trading Services for a Circular Economy

Dr. Saara Tamminen, Finnish Innovation Fund Sitra

4.3.2021
BIODIVERSITY LOSS

CLIMATE CHANGE

OVERCONSUMPTION OF RESOURCES
90% OF BIODIVERSITY LOSS AND WATER STRESS ARE CAUSED BY RESOURCE EXTRACTION AND PROCESSING

OECD Global Material Resources Outlook to 2060
Ellen MacArthur Foundation, 2019

45% OF CLIMATE EMISSIONS ARE ASSOCIATED WITH MAKING PRODUCTS

GLOBAL MATERIAL USE IS PROJECTED TO MORE THAN DOUBLE FROM 79 GT IN 2011 TO 167 GT IN 2060.
The circular economy is an economic model that aims to **optimise the system as a whole** and tackle the root causes of biodiversity loss, climate change and depletion of natural resources.
Rather than producing more and more goods, in a circular economy we get more value from what we have, and we keep that value in the economy for as long as possible through smarter design, digital solutions and a shift from owning products to using services.
5 main business models in Circular Economy

As a service models are mostly concerned with the product use phase, but span across the value chain.

Most circular opportunities are in the product use phase, bringing companies closer to their customers.

**Product as a Service**
- Remove the need to own and increase use

**Circular supply chain**
- Recycled direct materials
- Sustainable indirect materials

**Sharing platform**
- Virtual sharing platform
- Physical sharing platform

**Recovery & Recycling**
- Recover
- Downcycle

**Product life extension**
- Restore
- Repurpose
- Refresh

---

**Legend**
- Linear value chain
- Circular Economy Value Chain
- Circular Supply Chain
- Product Life Extension
- Sharing platform
- Product as a service
- Recovery & Recycling

---

**Source:** Accenture
**MaaS Global** is a Mobility as a Service pioneer offering mobility without the hassle of car ownership.

**Hygglo** is a peer-2-peer rental platform for most household equipment and tools.

**Spinnova** is a material innovation company aiming to replace synthetic textiles and cotton by spinning fibre from wood pulp.

**Repack** is a company providing a foldable and reusable packaging solution refundable through the mail.

**MaaS Global**

**Hygglo**

**Spinnova**

**Repack**
Trading Services for a Circular Economy

In achieving a global circular economy transition in an interlinked world – through goods, services and data – trade cooperation is essential.

Global trade has been increasingly characterised by servicification and digitalisation.

The limited existing research on trade and the CE has focused on goods trade, while goods and services trade is increasingly interconnected.

First insights on services and services trade related to circular economy in a study launched by The Finnish MFA, Sitra and IISD.