

CIRCULAR ECONOMY

Towards common definitions and business models

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Five Sitra facts

1. A gift from Parliament to the 50-year-old Finland. Still operates under the Finnish Parliament.
2. An independent future house: a futurologist, visionary, developer, experimentalist, financier, partner, trainer, and networker.
3. The aim is the successful Finland of tomorrow, the vision is the next era of well-being – a fair and sustainable future.
4. Funded by returns on endowment capital and capital investments.
5. The vision is implemented by three themes and hundreds of projects.

+ the most important of all

Building our future *together*.



VISION

**The next era
of wellbeing:**
How do we get
a sustainable
future
for everyone?



ITRa

Today's talk

1

Why we need a shift to circular economy

2

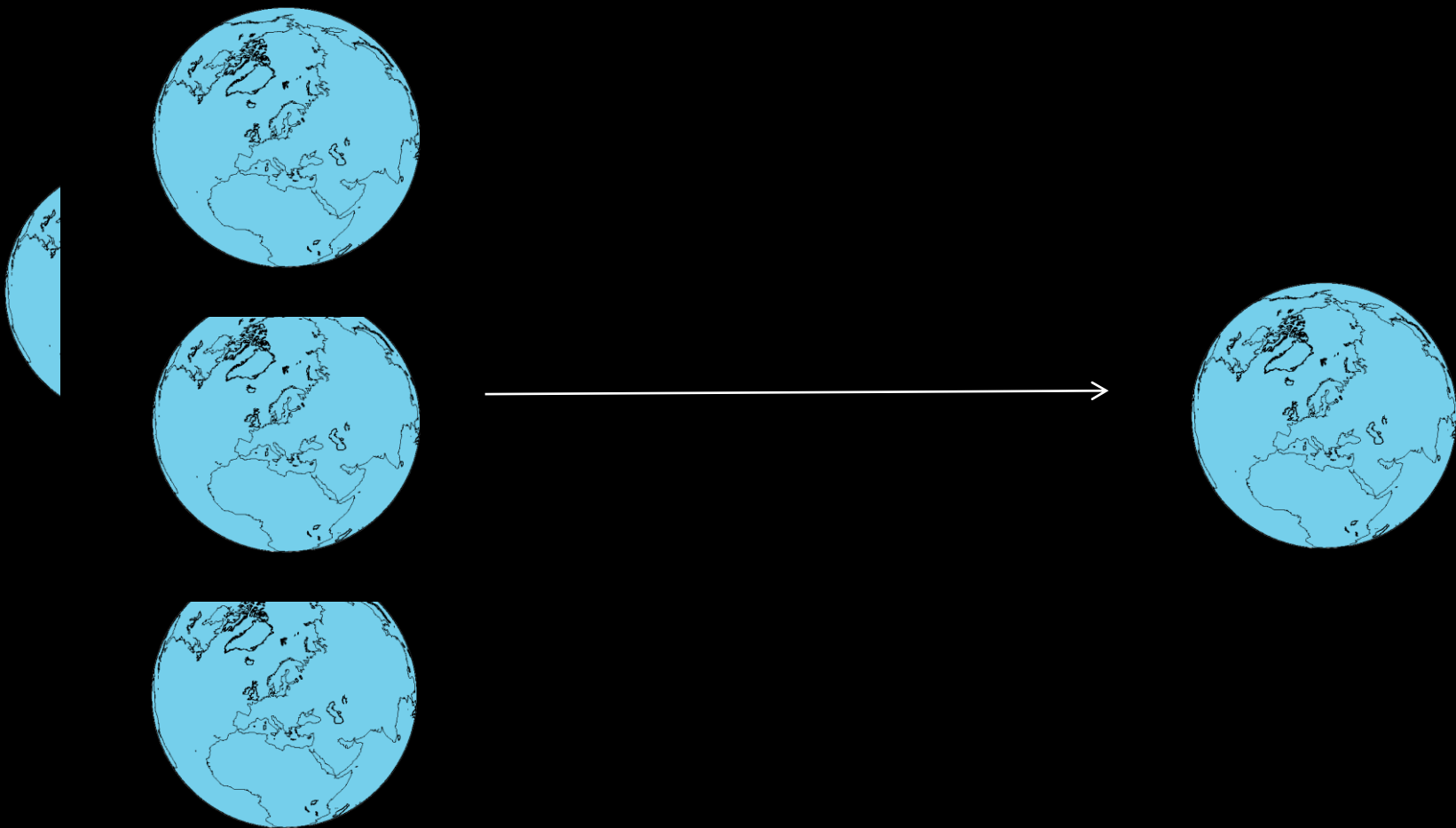
All clear! Although, how do we define a circular economy?

3

Five Circular Economy Models

4

Questions





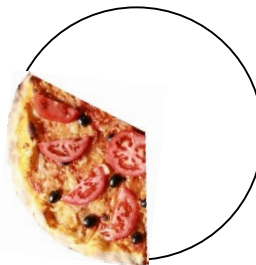
On average, materials in Europe are used only once.



Cars are standing still 92-98% of the time.



Offices are empty 60% of the time.



One third of food ends up in the trash bin.

Around 80% of the nitrogen and between 25 and 75% of the phosphorus in food is

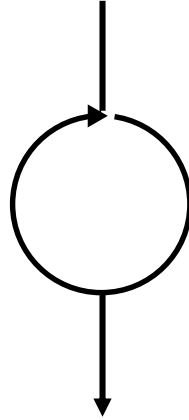
I wouldn't mind it.



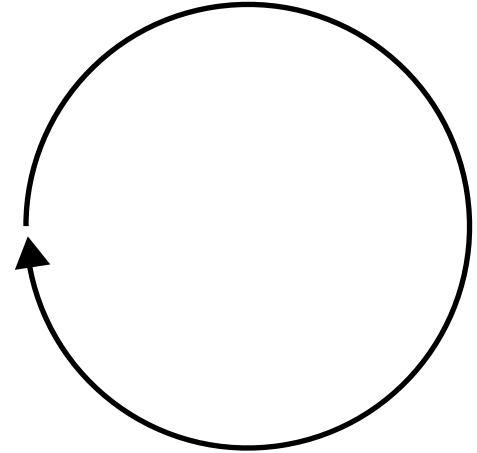
THE LINEAR ECONOMY



THE RECYCLING ECONOMY



THE CIRCULAR ECONOMY

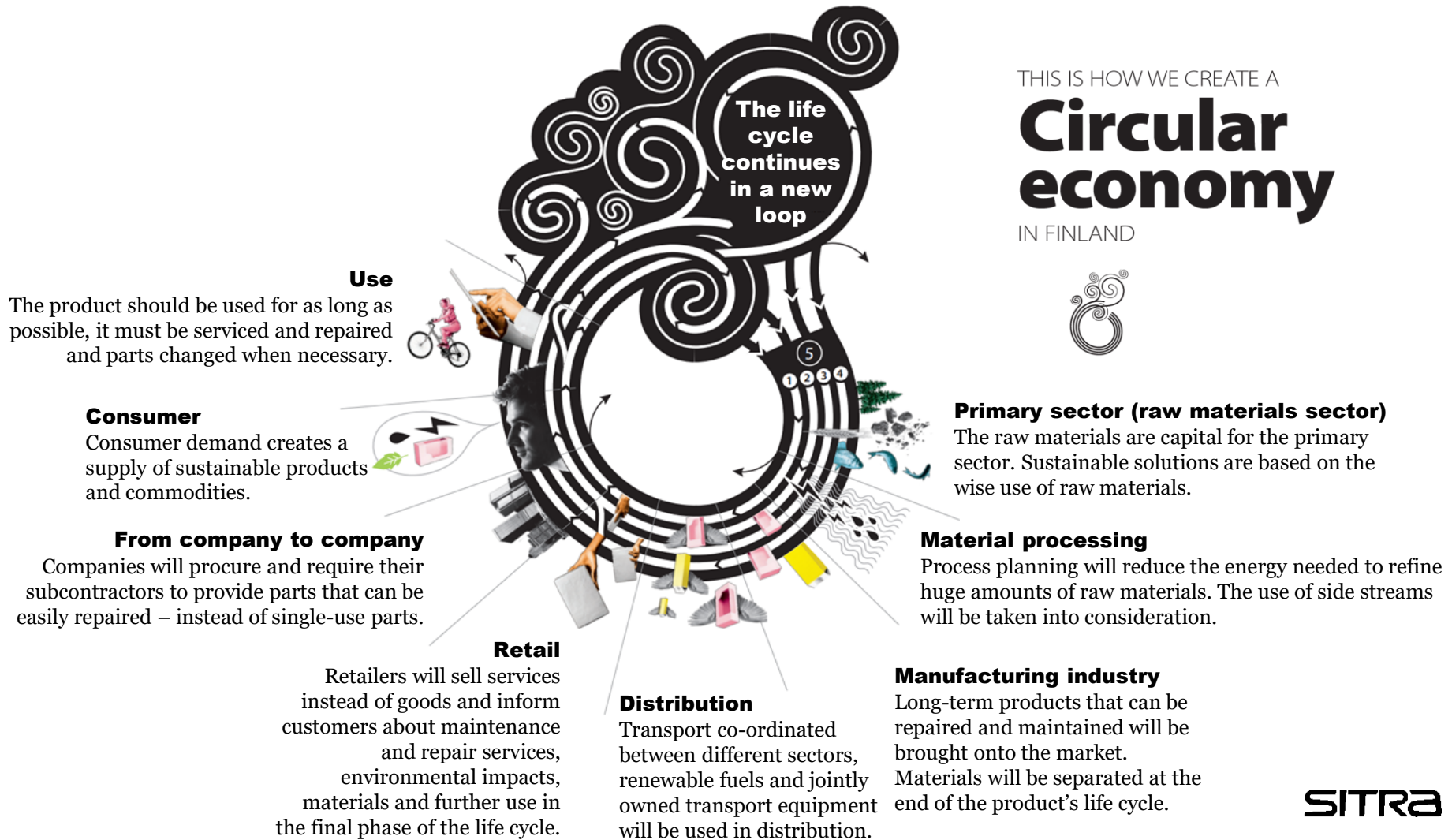


SITRA

THIS IS HOW WE CREATE A

Circular economy

IN FINLAND



Use
The product should be used for as long as possible, it must be serviced and repaired and parts changed when necessary.

Consumer
Consumer demand creates a supply of sustainable products and commodities.

From company to company
Companies will procure and require their subcontractors to provide parts that can be easily repaired – instead of single-use parts.

Retail
Retailers will sell services instead of goods and inform customers about maintenance and repair services, environmental impacts, materials and further use in the final phase of the life cycle.

Distribution
Transport co-ordinated between different sectors, renewable fuels and jointly owned transport equipment will be used in distribution.

Manufacturing industry
Long-term products that can be repaired and maintained will be brought onto the market. Materials will be separated at the end of the product's life cycle.

Primary sector (raw materials sector)
The raw materials are capital for the primary sector. Sustainable solutions are based on the wise use of raw materials.

Material processing
Process planning will reduce the energy needed to refine huge amounts of raw materials. The use of side streams will be taken into consideration.

***A circular economy* is an economic model of the future, in which natural resources are used within the Earth's carrying capacity.**

Product-life extension



Product-as-a-service



Sharing platforms



Renewability



Resource efficiency and recycling





Valtra: Remanufactured tractor gearboxes

Examples available: <https://www.sitra.fi/en/projects/interesting-companies-circular-economy-finland/>



SHARING PLATFORMS



PRODUCT AS A SERVICE

Sharetribe: A marketplace for underused goods

Examples available: <https://www.sitra.fi/en/projects/interesting-companies-circular-economy-finland/>



Ekokem: Using plastics as recycled raw material

Examples available: <https://www.sitra.fi/en/projects/interesting-companies-circular-economy-finland/>

Five business models for the circular economy



Product-life extension

Products are used according to their original purpose for as long as possible or repaired and refurbished for multiple re-uses, thus reducing the need for purchasing and manufacturing new products.



Product as a service

The customer pays for certain functions or performance and avoids the risks of ownership. The total costs of ownership remain with the service provider, with revenue being earned by means of, for example, a leasing or rental agreement.



Sharing platforms

Digital-based platforms are used to promote the increased use of goods and resources and the extension of their life cycle, such as by renting, selling, sharing and re-use. Peer-to-peer, company-to-company, municipality-to-municipality.



Renewability

Renewable, recyclable and biodegradable materials, as well as the principles of eco-design, are preferred for products and their design. Fossil fuels are replaced by renewable energy.



Resource efficiency and recycling

Technological development enhances resource efficiency in value chains, processes and products, and allows for more effective recycling. Side-streams are valuable raw materials for recycled products and materials.

FINNISH ROADMAP TO A CIRCULAR ECONOMY 2.0



Challenge

Funding for well-being is based on an economic model, which wastes natural resources

Objective

fund our well-being in a genuinely sustainable manner. Finland's transition to a circular economy by year 2025.

What does the road map contain?

- **4** strategic goals
- **4** visions for the key players
- **29** actions

What was the road map created for?

- Under the leadership of Sitra, together with the stakeholders and Deloitte
- Mapping the current situation of the circular economy
- **25** specialist interviews
- **110** participants in the workshops
- **350** ideas and comments



New Focus Area: The goal is to **scale up solutions for a fair and inclusive circular economy** to address the global sustainability crisis

Yeah!

Municipal decision-makers choose to support the circular economy and low-carbon transport.



Repairers maintain and fix bicycles.



Inhabitants choose city bikes.

Urban planners design cities for cyclists.



Manufacturers build bicycles from sustainable, recycled and recyclable materials.

RISE TO SHINE!



Thank You!
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