

# FERMA LIVE WEBINAR

**Circular Economy and its impact  
on risk management**



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Federation of European  
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Invited speakers from  ZURICH®

# FERMA LIVE WEBINAR

## Circular Economy and its impact on risk management



**Penny Seach**  
Group Chief  
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Company



**Scott Toland**  
Chief Underwriting  
Officer EMEA  
Zurich Insurance  
Company



**Jelena Buha**  
Global Practices  
Leader Liability  
Zurich Insurance  
Company



**Pavlina Pavlova**  
University of Applied  
Sciences & Arts FHNW  
Sustainable Business  
and Circular Economy



**Valentina Paduano**  
Moderator





Invited speakers from  ZURICH®

# FERMA LIVE WEBINAR

## Circular Economy and its impact on risk management

### Agenda

Introduction to Circular Economy

Examples of companies that have adapted to the circular economy model

Risk Management and Insurance Perspective

Summary

Q&A



# Circular Economy and its impact on Risk Management

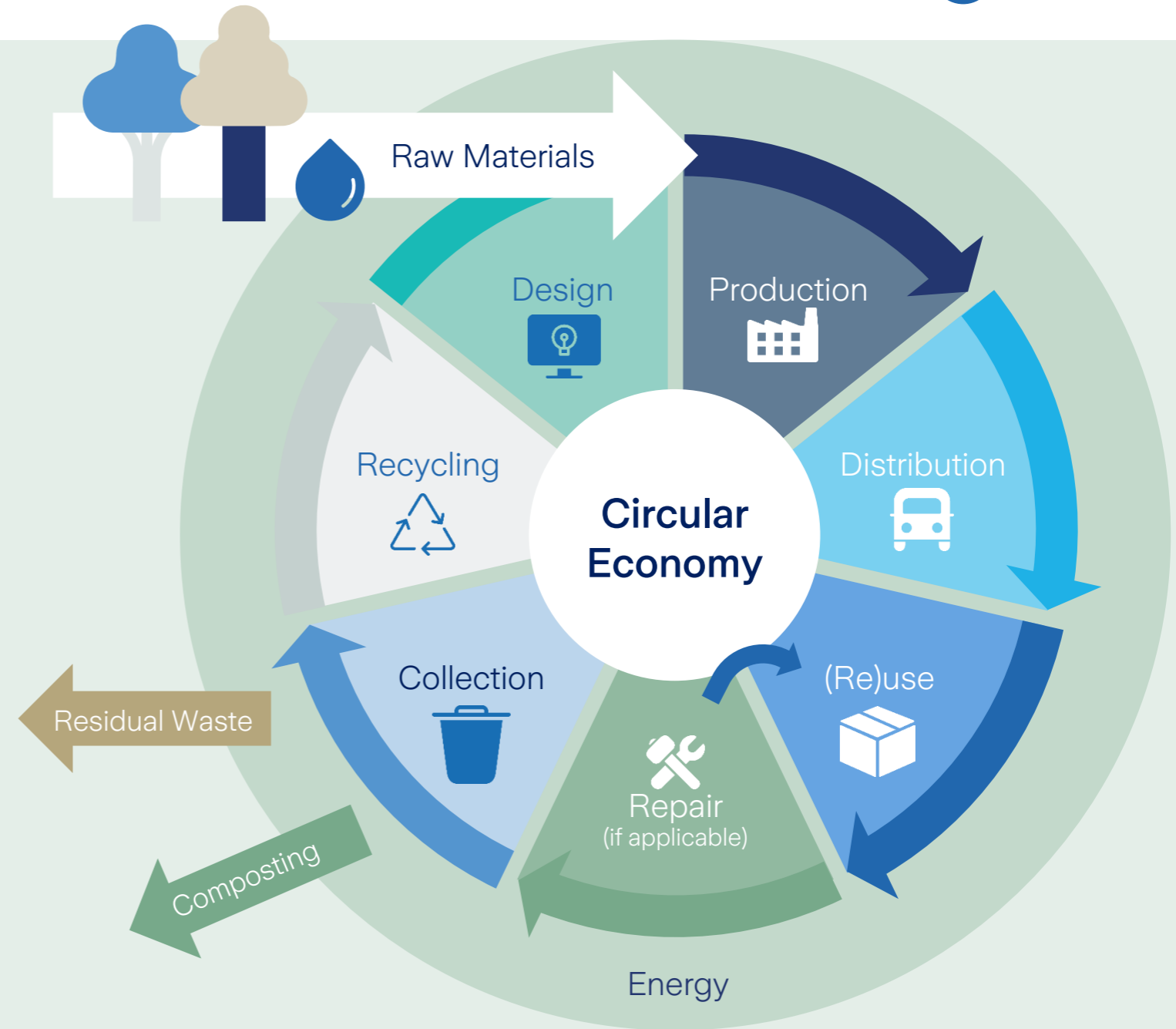


### Three principles of the circular economy<sup>1</sup>

1. Eliminate waste and pollution
2. Circulate products and materials
3. Regenerate nature

### Fundamentals of circular product design

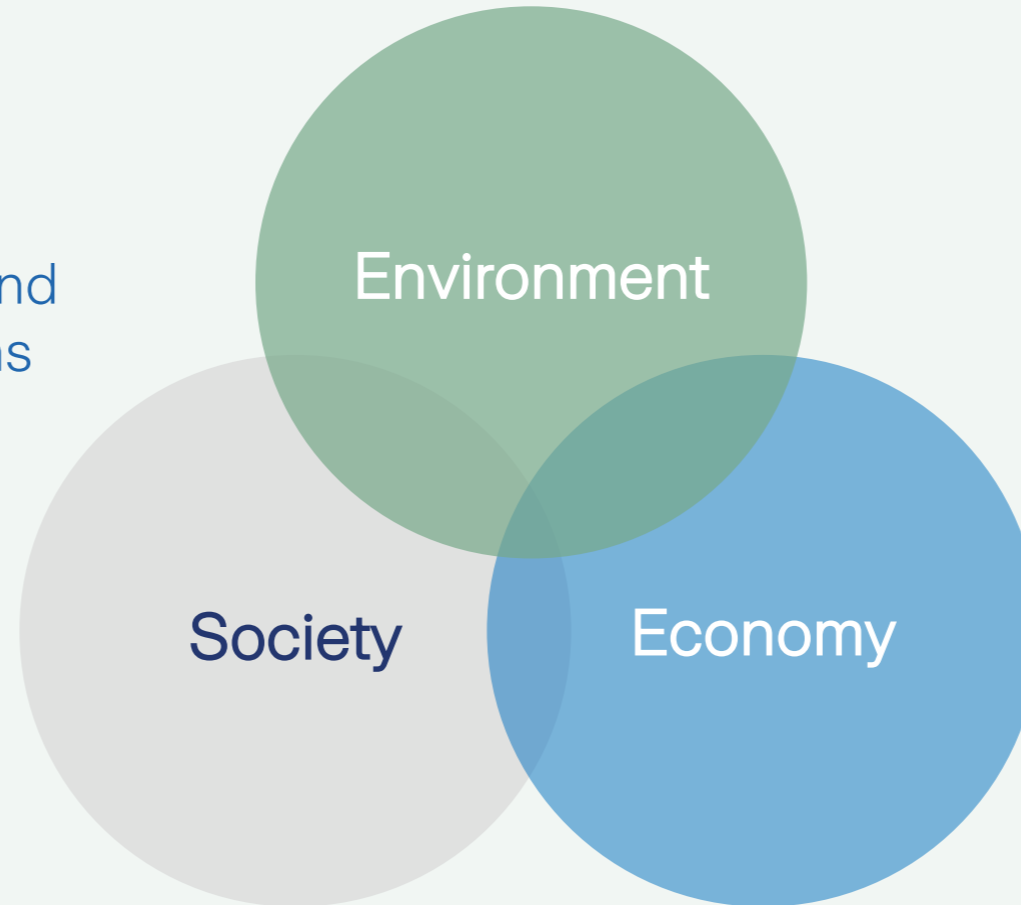
- Durable and reusable
- Able to be repaired/refurbished
- Recyclable and/or biodegradable



1. Source: Ellen MacArthur Foundation

## Benefits of the circular economy:

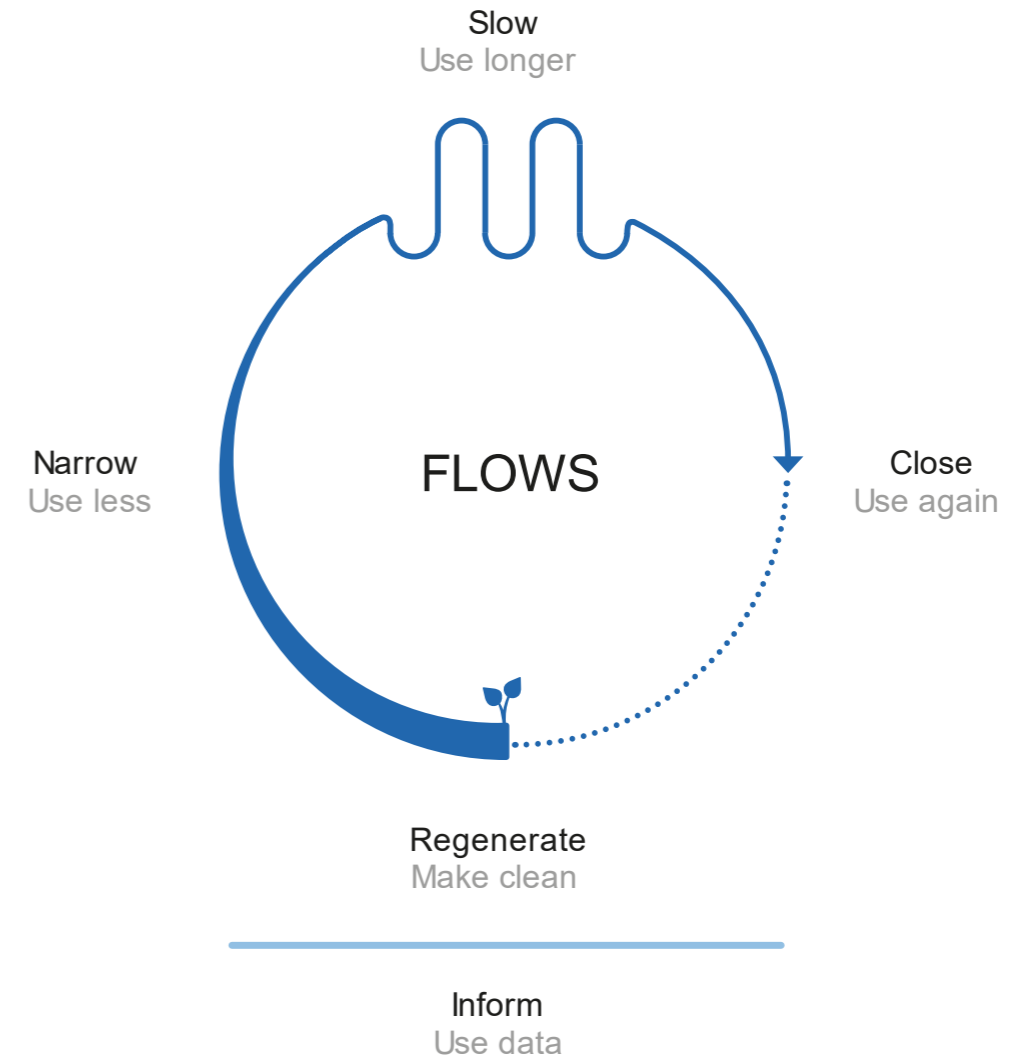
- Reduced environmental impact
- Improved resource efficiency
- New business models, products and markets usually with higher margins
- Cost reduction (increased competitiveness)
- Job creation
- More resilient economy



*“The circular economy gives us the tools to tackle climate change and biodiversity loss together, while addressing important social needs.”<sup>1</sup>*

1. Source: Ellen MacArthur Foundation

*“The circular economy is a **systems solution** framework that tackles **global challenges** like climate change, biodiversity loss, waste, and pollution.”*

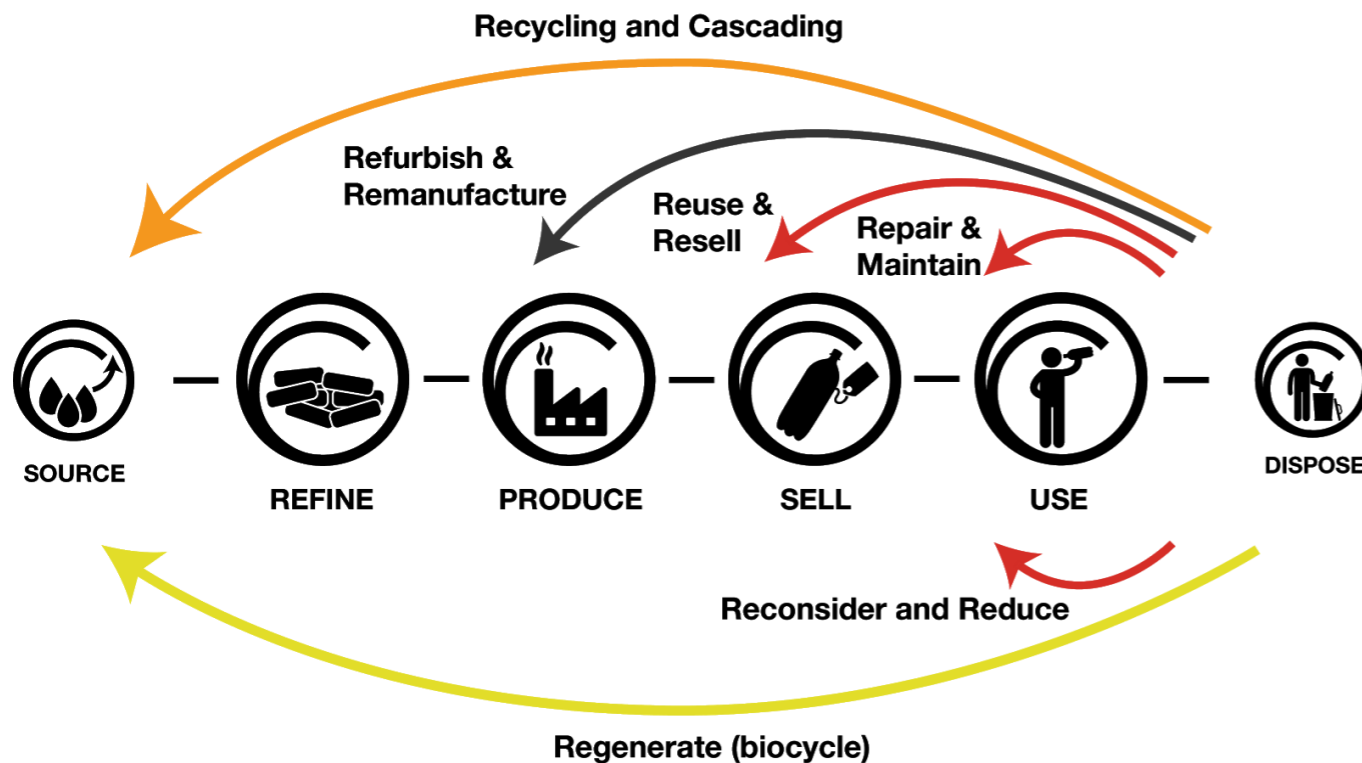


Source: Ellen MacArthur Foundation. Circular Strategies by Jan Konietzko



## Circular Economy Activities and Mindset

What are the key activities that allow to narrow, slow, close, and regenerate material and energy loops?



What innovative mindset can I adopt to start my circular economy journey?



### Think in system

relationship of the whole to the parts



### Celebrate diversity

There is no "one-size-fits-all"



### Acknowledge multiple values

economic value, use value, intrinsic value, social value etc.

Cyclon

The Shoe

Subscription

FAQ

Pre-Register

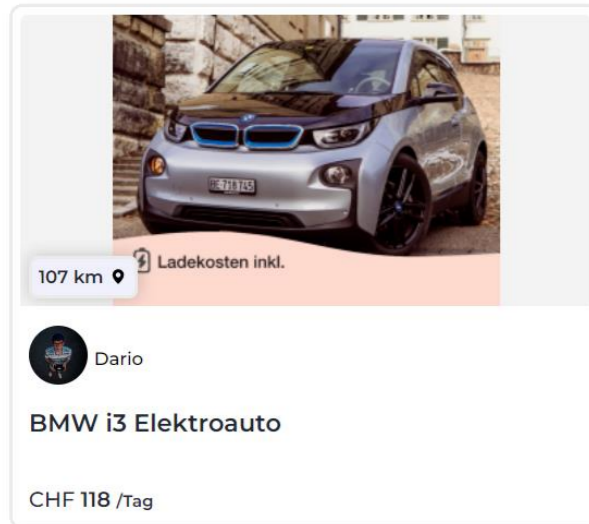
This is **Cyclon.** ▾

And this is the running **shoe** ▲  
**you will never own.**



- Dye-free and **durable**
- Single cut = zero waste
- Biodegradable materials –made from beans
- **Product as a service** subscription model
- 600 km per pair

Narrow



- **Incentivise** customers to consume less
- And/or provide service around the **maintenance** of the products
- Provide **sharing/resell** opportunities

## Slow - share

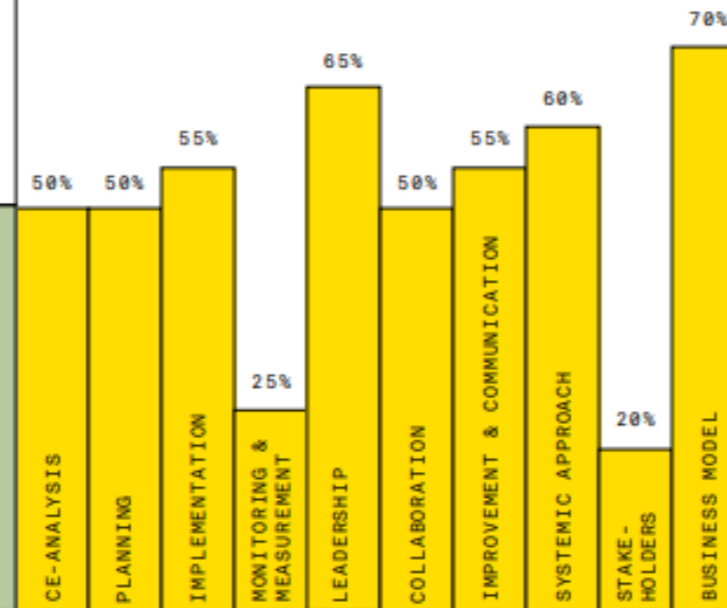




505/1,000

POINTS: «FUNDAMENTAL»

CIRCULAR MATURITY BY CATEGORY



## Close

- Upcycled **truck tarp bags** since 30 years
- Circularity in the DNA of the company
- First one to be **certified on Circular Globe**
- On a journey to revolutionise the tarp industry

YASAI.



## Regenerate

- **Vertical farming in the heart of Zurich**
- **Increased efficiency** – 200 x surface and 365 days a year
- **Reduced transportation costs and greenhouse gas emissions** through local urban production
- **Maximised use of fresh water, nutrients, and energy**
- **100% renewable energy**
- **Zero waste and zero pesticides**

**M** Material passport  
Madaster Demonstration Building



**OWNER**  
Circular Holdings

**PREPARED BY**  
Circular Architects

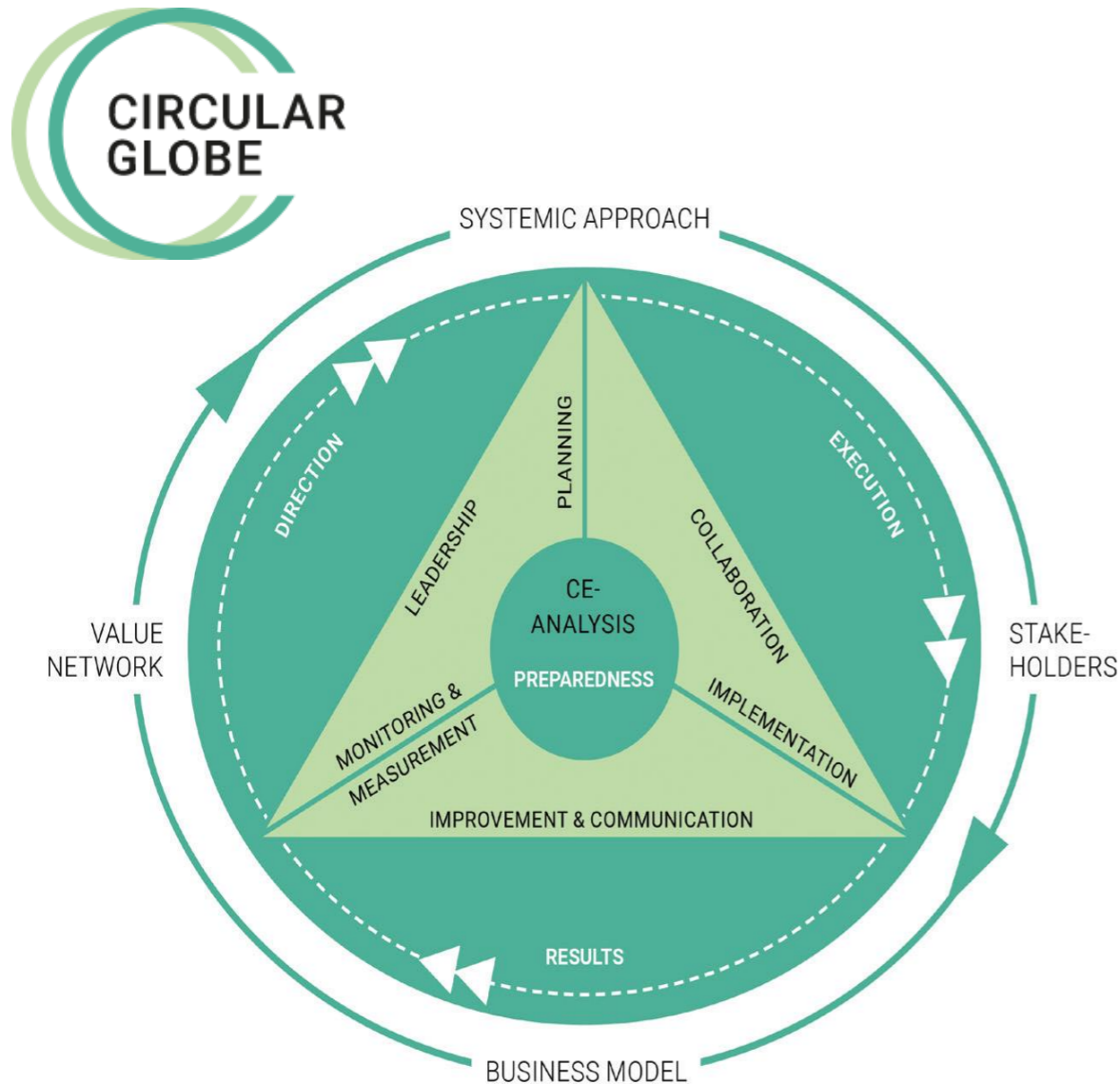
**ADDRESS**  
Circularity Street 123  
12345 Amsterdam  
Netherlands

**GROSS SURFACE AREA**  
300 m<sup>2</sup>

Material Intensity	2.17 t/m <sup>2</sup>	Material intensity measures the amount of materials used per m <sup>2</sup> .
Circularity	49%	Circularity measures the degree of secondary materials used during construction, and potential for reuse & recycling at their end of use.
Detachability	73%	Detachability measures the degree to which materials and products can be disassembled without being damaged.
Net Present Value (NPV)	103 €/m <sup>2</sup>	Net Present Value (NPV) measures the present monetary value of materials at their end of life, accounting for the costs of disassembly, transportation and processing for re-sale.
Embodied Carbon (GWP)	299 kg CO <sub>2e</sub> /m <sup>2</sup>	The total environmental impact for A1-A3 (EN 15804).

# Inform

- **Material passport** – register all the materials and products that are incorporated in a building or infrastructure object
- **Circularity Index** – shows the circular value of materials and how they are applied within the objects.
- Insight in **CO<sub>2</sub> storage**
- **Public data** register
- Legislation **compliance**



## CE certification for products and companies

- The **label** for circular companies
- Assessment and certification possible for **projects, organisations and ecosystems**
- Modular and multi level to facilitate an **easy start** to the transformation.
- Four dimensions, split into eleven chapters with a total of **239 criteria** make up the Circular Globe Model.
- **Risk assessment** at all levels





## Possible Risks



**During Transformation**

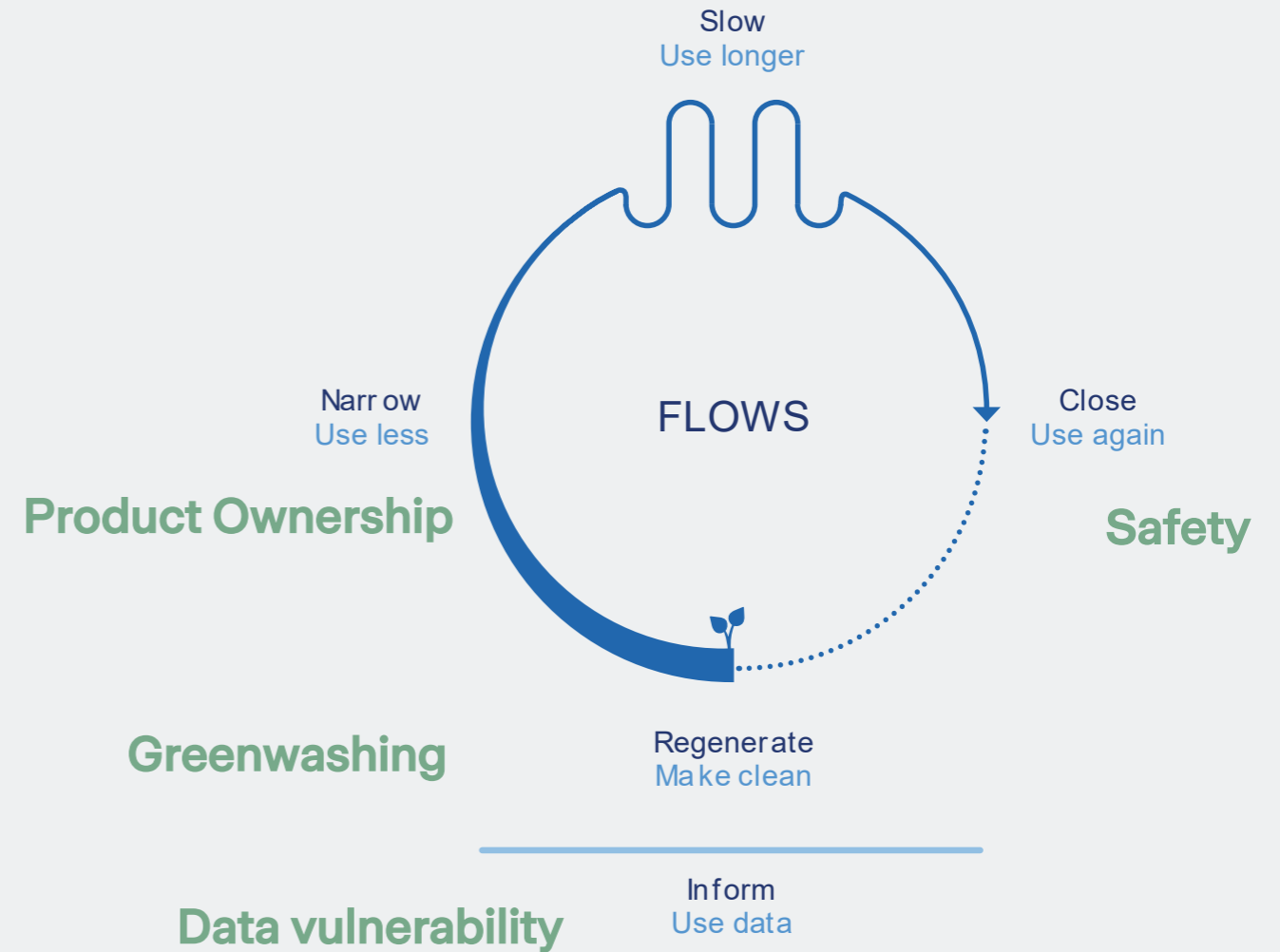
- Business case / Costs
- Safety
- Scale up
- Regulation change
- Government subsidies



**In Operation**

- Product Ownership
- Reputation / Trust
- Safety
- Greenwashing
- Supply chain
- Data vulnerability

## Reputation/Trust





01

Using safe/natural/  
circular/cascaded materials



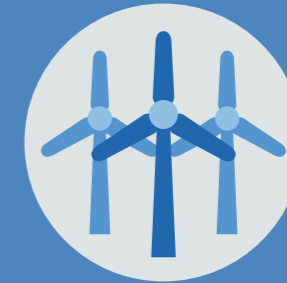
02

Safely instructed disassembly,  
repairability and maintenance



03

Transparent/regional  
supply chains



04

Security of energy supply with  
renewable energy sources



05

Management of environmental  
impacts and ESG reporting



06

Safe working conditions



07

Stakeholder management  
and build up of trust

## Narrow

### Use less

- Sharing economy
- Ownership and liability
- Customer behavior

## Slow

### Use longer and again

- Product ownership/service
- Product usage monitoring
- Customer retention
- Innovative insurance products

## Close

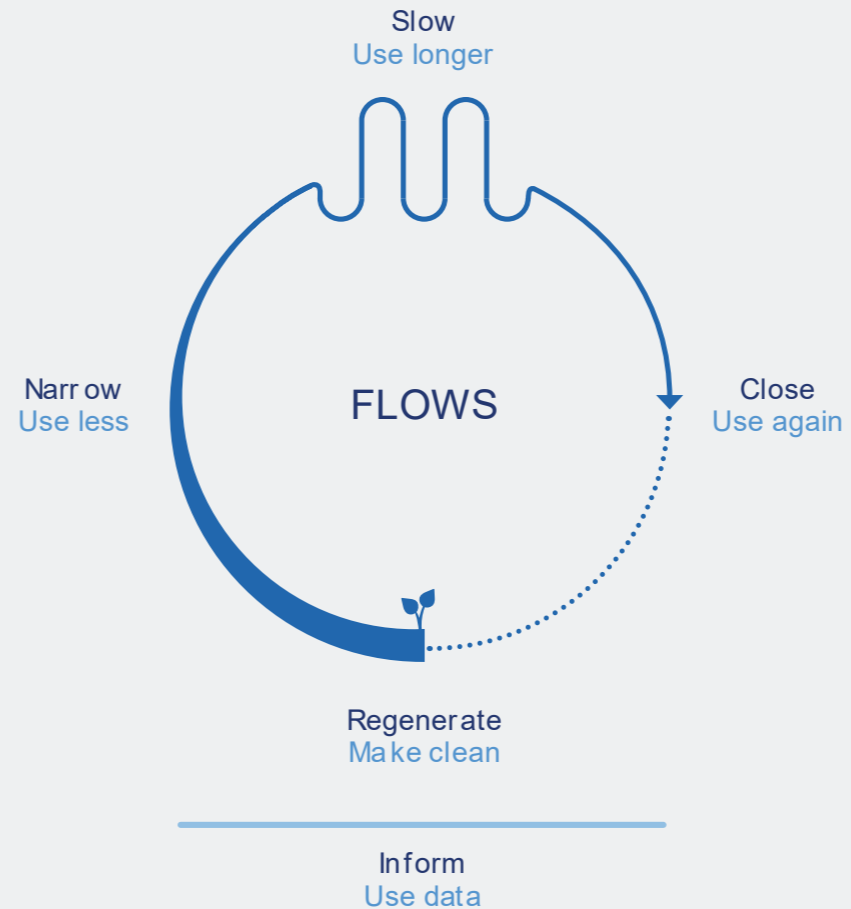
### Use again

- Product design
- Safety and quality issues
- Processes adaptation

## Regenerate

### Make clean

- Greenwashing
- Product contamination



## Inform

### Use data

- Data vulnerability
- Data alteration
- Product liability extension

## Regulatory

- Compliance with Environmental Laws / Regulation (e.g. European Green Deal)
- Right to Repair
- EU PLD
- GPSR

**Better environmental outcomes after disasters**, incl. guidance about safe and environmentally friendly disposal.

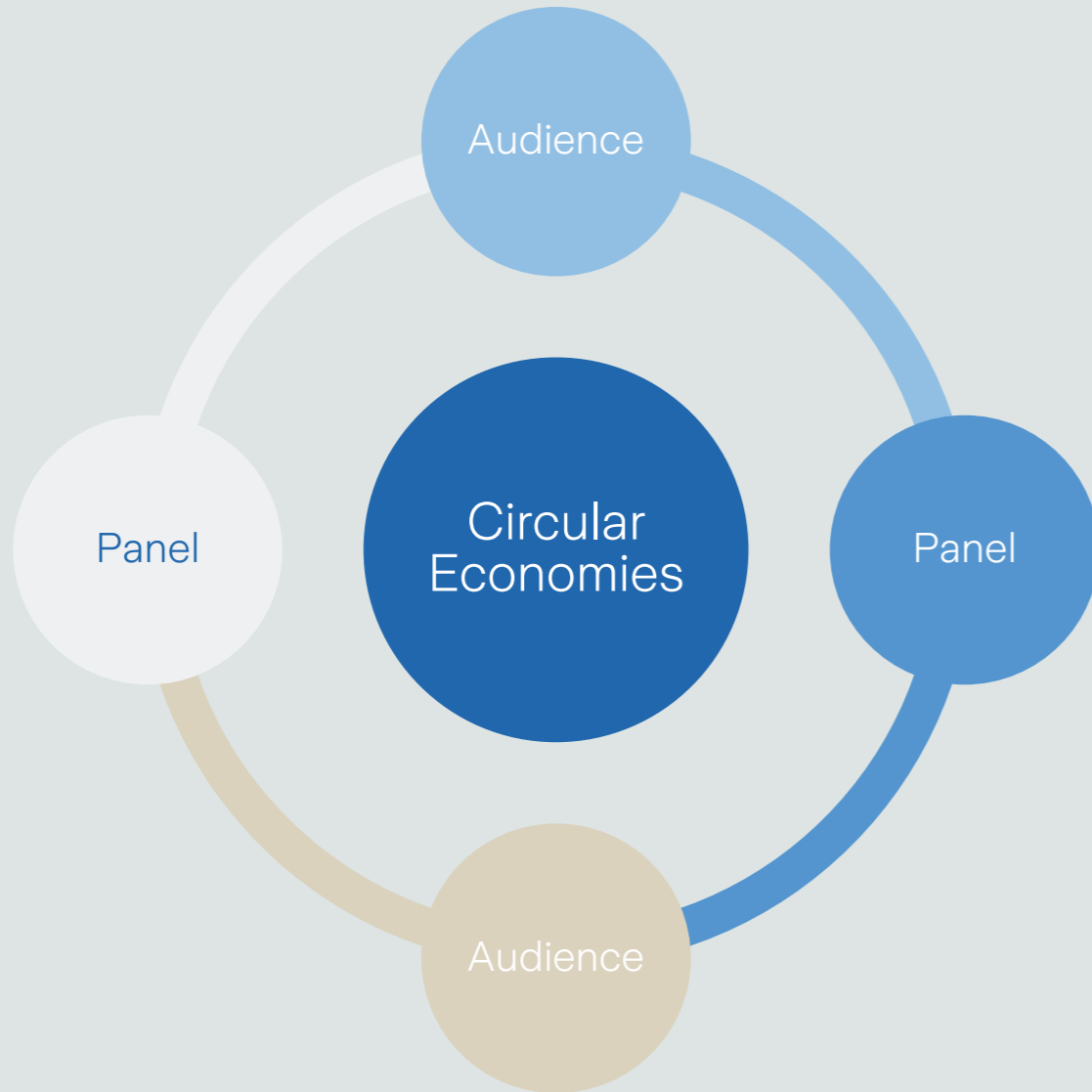
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**Insure new activities related to product disassembly**, refurbishing and recycling, as well as to offer new insurance solutions of properties, vehicles and objects to enable sharing economy to promote the circular economy.

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**Addresses climate change**, a shifting risk landscape, a growing eco-conscious customer demographic, and increasing government policies requiring corporations to release ESG reports with circular economy, focused disclosures supporting customer throughout the transition.





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