

TOURISM POLICIES AND FASHION, ART AND FOOD INDUSTRIES

Circular Economy

Lecture 22

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Learning Objectives

- ✓ Defining CE
- ✓ Linear vs. circular models
- ✓ Opportunities and challenges of CE
- ✓ Degree of development
- ✓ Initiatives and actions for CE development

Introduction

A **circular economy** (CE) is an economic system of closed loops in which raw materials, components and products lose their value as little as possible, renewable energy sources are used and systems thinking is at the core (3-R approach).

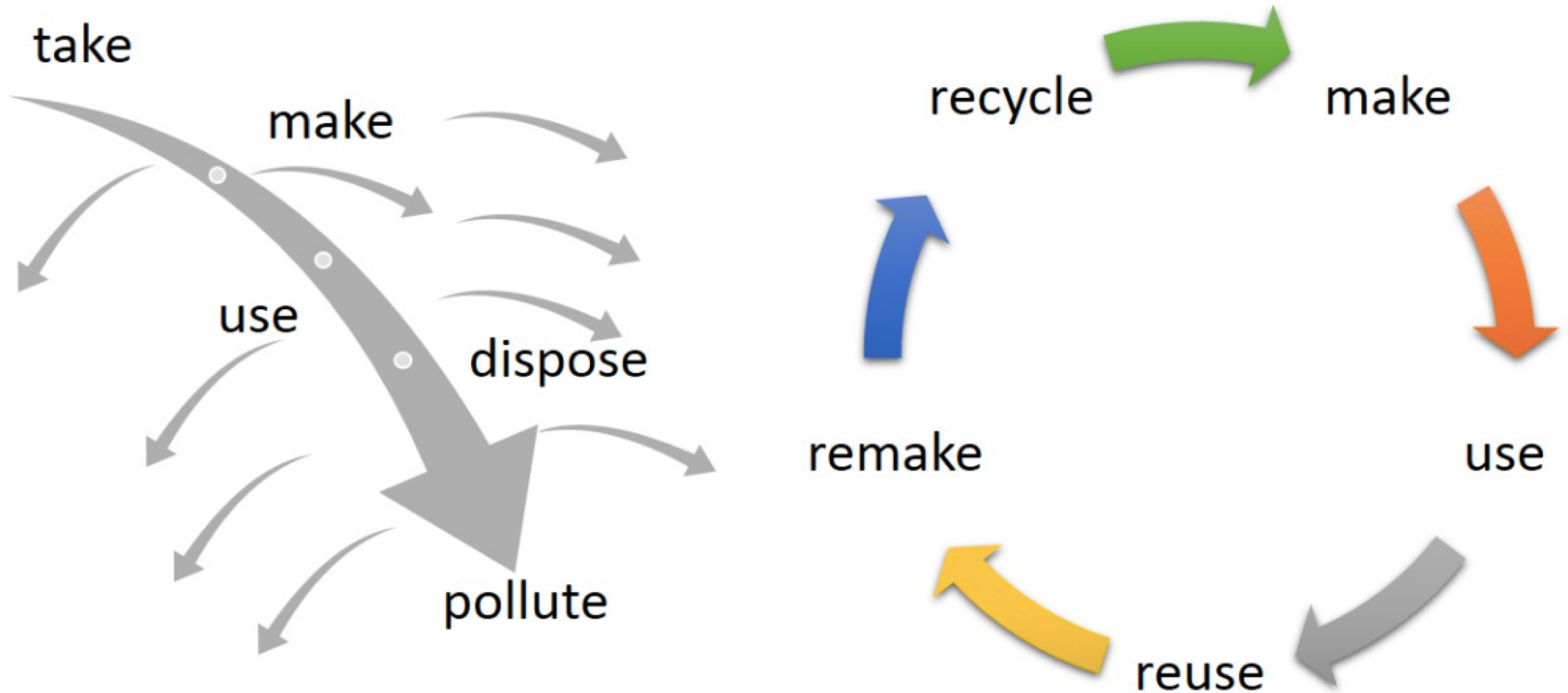
Mobility can serve as a good example. Sharing cars mean that fewer people have to buy their own cars. This reduces the use of raw materials (reduce). The broken cars can be used to make or refurbish another car (reuse). When these parts can no longer be reused can be melted down so that a new car can be made of them (recycling).

Three elements of circularity

According to Korhonen et al. (2018), CE definition often emphasize three core elements:

- 1. Closed cycles:** material cycles are closed following the example of an ecosystem.
- 2. Renewable energy:** as for the raw materials and products, energy also lasts as long as possible in a circular economy.
- 3. Systems thinking:** Every actor in the economy (company, person, organism) is connected to other actors.

Linear versus circular economy



Circular economy life cycle phases



Opportunities

Potential opportunities include:

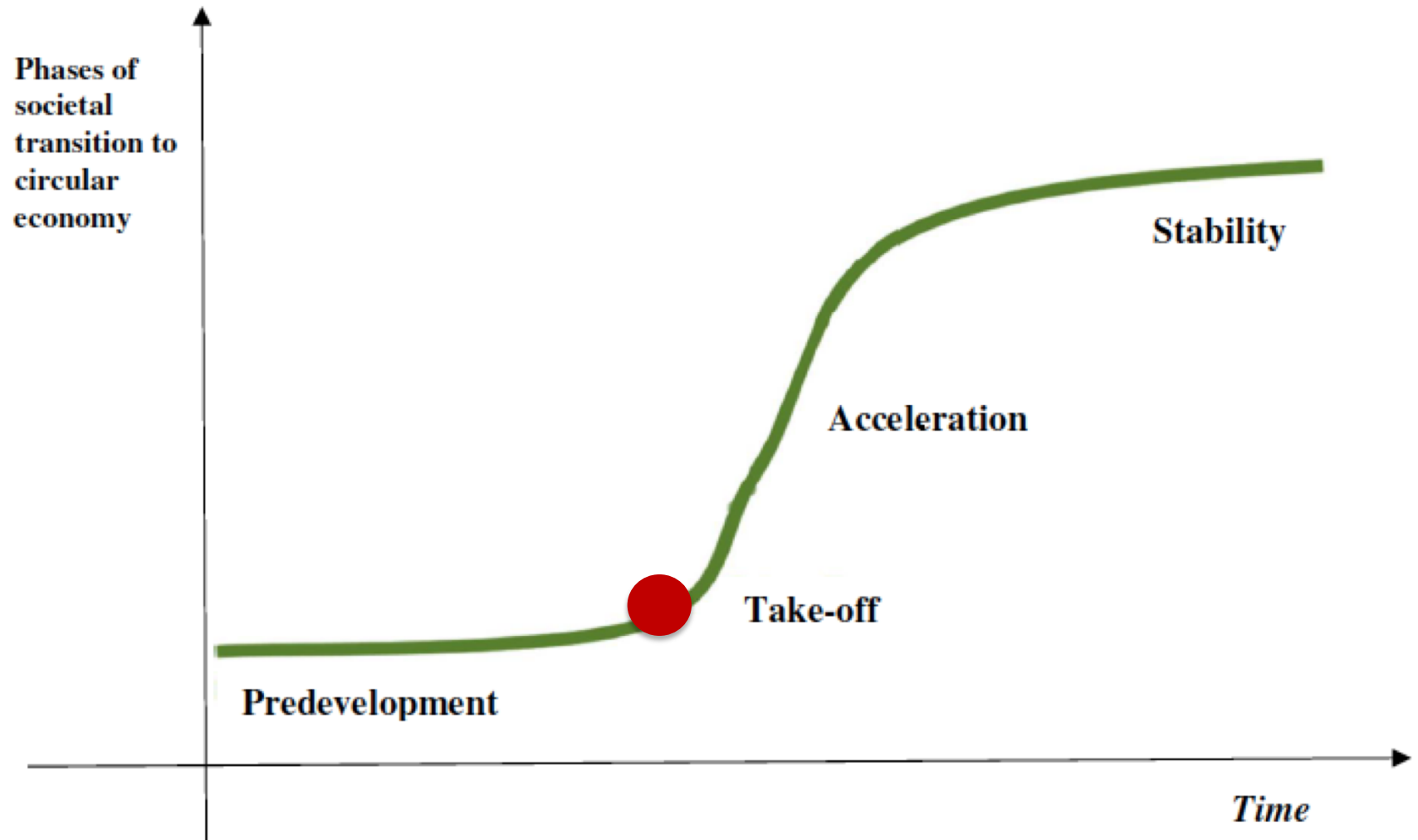
- Reduced pressures on the environment
- Enhanced security of supply of raw materials
- Increased competitiveness
- Diffusion of innovations
- Growth and jobs

Challenges

Potential challenges include:

- Financial transition costs
- Adequate economic enablers are lacking
- Technical skills are not present in the work force
- Resistance in consumer and firms behaviours
- Multi-level governance

Degree of development of the circular economy



Closing the loop – an EU Action Plan for the Circular Economy

- **Production:** Both the design phase and production processes have an impact on sourcing, resource use and waste generation throughout a product's life.
- **Consumption:** The choices made by millions of consumers can support or hamper the circular economy. These choices are shaped by the information to which consumers have access.
- **Waste management:** It plays a central role in the circular economy determining how the waste hierarchy is put into practice.

Priority areas

A number of sectors face specific challenges in the context of the circular economy, such as:

- Plastics
- Food waste
- Critical raw materials
- Biomass and bio-based products

Managing the transition to the Circular Economy

The current implementation of the CE at global level can be the result of planned initiatives at public and private levels:

- Extended producer's responsibility
- Favourable framework conditions
- Education and qualification
- Green Finance
- Political support

Contacts and office hours

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