

CIRCULAR ECOSYSTEMS

There are different ways how circular ecosystems can be structured. They differ in their goals, the actors involved and the spatial scale in which they operate. **You can use the overview below as an introduction to these types.**



Industrial Ecosystems

WHAT

A regional community of **industrial actors** who sustainably produce goods and services in symbiotic collaboration, recycling and resource sharing.

WHO

- Manufacturers
- Services providers
- Utilities

SHARED RESOURCES

- Energy
- Water
- Materials & waste
- Infrastructure



Urban Ecosystems

WHAT

A network of public actors aiming to deliver sustainable and circular public amenities to citizens and businesses

WHO

- Public amenities
- Citizens
- Service providers
- Local governments

SHARED RESOURCES

- Energy
- Water
- Materials & waste



Innovation Ecosystems

WHAT

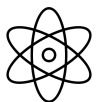
A set of multiple stakeholders engaged by a main firm to innovate sustainable value propositions along supply chains through circular business models.

WHO

- Main firms
- Suppliers
- Clients
- Consumers

SHARED RESOURCES

- Materials
- Data
- Logistics



Knowledge Ecosystems

WHAT

Loosely coupled **networks** of independent actors who advance the translation of CE research and knowledge into sustainable practices

WHO

- Universities & research facilities
- Schools
- Public governments
- Firms

SHARED RESOURCES

- Skills
- Data
- Information



Entrepreneurial Ecosystems

WHAT

Regional community of independent actors who facilitate the scaling and starting of circular business models

WHO

- Investors
- Accelerators
- Coworking spaces
- Makerspaces
- Government
- Educational institutions

SHARED RESOURCES

- Skills
- Information
- Space