

Circular economy catalysts accelerating the systemic change

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What is Circular Economy?

The shift to the circular economy requires

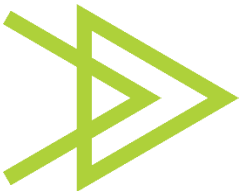
- innovation and technology development
- change in behavior
- business development - redesigning products, services, and business models...

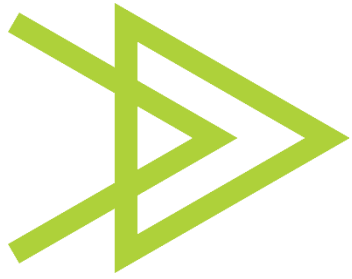


Why the shift to the Circular Economy is not easy?

- The transition to CE and sustainable society is a crosscutting socio-technical transition (Geels & Schot, 2007):
 - it concerns a wide system and its diverse actors concurrently.
- Hence, the sustainability and CE shift creates not only **opportunities** but also **challenges** for business and society

- Lower prices of virgin materials compared to recycled ones.
- The competition between companies, cities, countries and industries will change
- Our norms, behavior and thinking still follow the linear logic





The Circular Economy transition
is progressing in companies and cities

Advancing the CE transition in business: new CE companies and branches

- Neste – Large oil refining company:
Producing biofuel from renewable raw materials
- Netlet – a start-up in a construction industry ecosystem:
Reducing construction waste by gathering surplus materials and selling them in outlet



Advancing the CE transition in cities

- Developing circularity in Finnish cities: From waste management to managing resource flows
 - Developing circular economy hubs/parks in cities: CIRCHUBS collaboration of six major city regions in Finland
 - Ekomo (Helsinki metropolitan area), Topinpuisto (Turku), Kolmenkulma & Taraste & Hiedanranta (Tampere area) and Ruskonniitty (Oulu)
 - Advancing circularity and sustainable use of large volume masses in cities (ash, clay, zero fiber): CIRC VOL collaboration

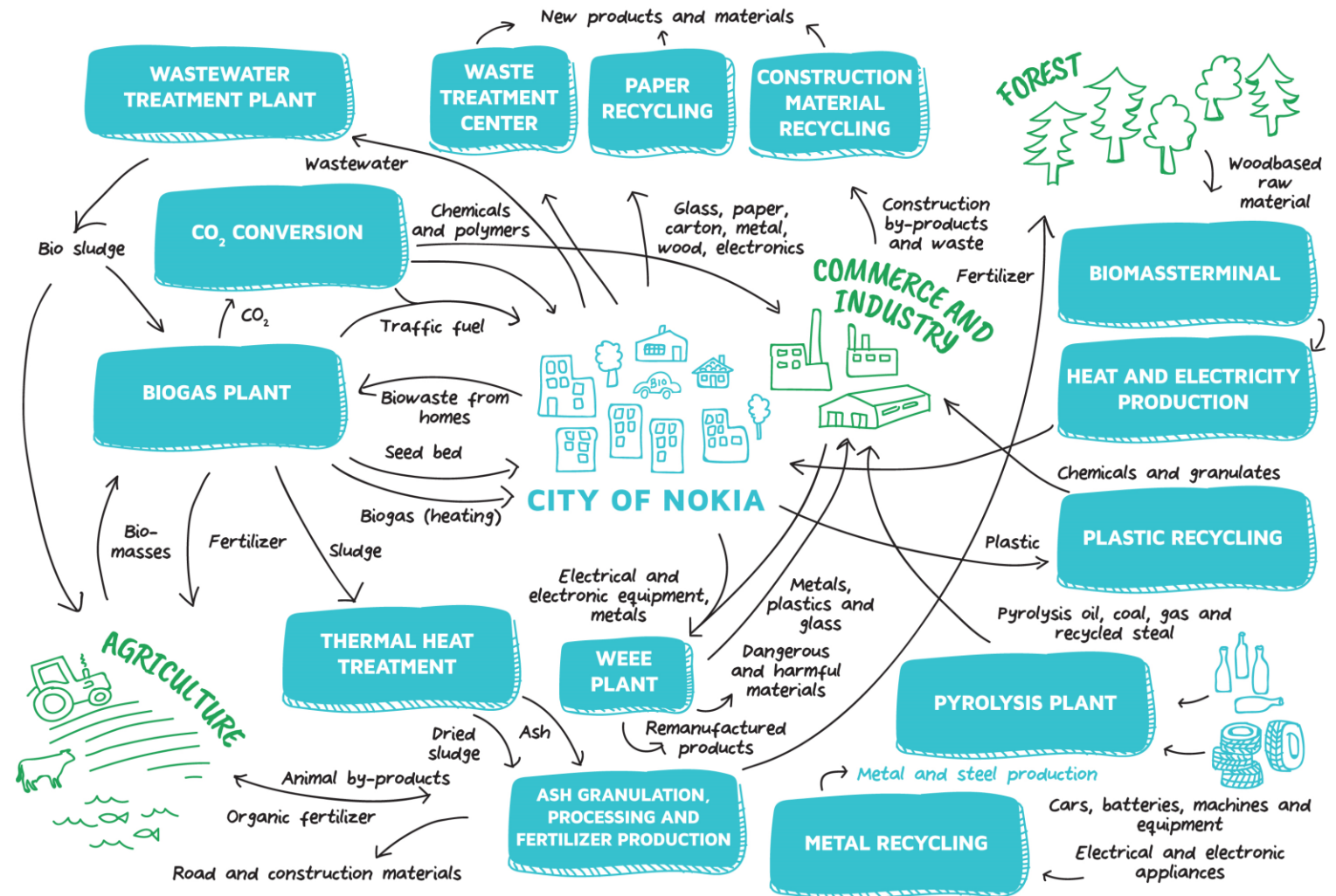


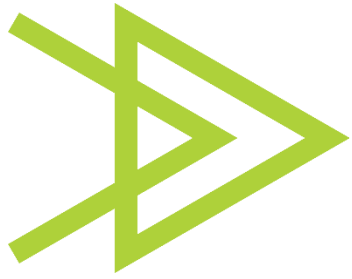
CircHubs



Example on city and companies collaborating

Eco-industrial park:
Managing resource flows and turning them valuable in public-private collaboration

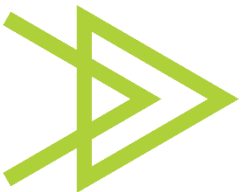




Learning from the forerunners & Identifying the catalysts that drive the change

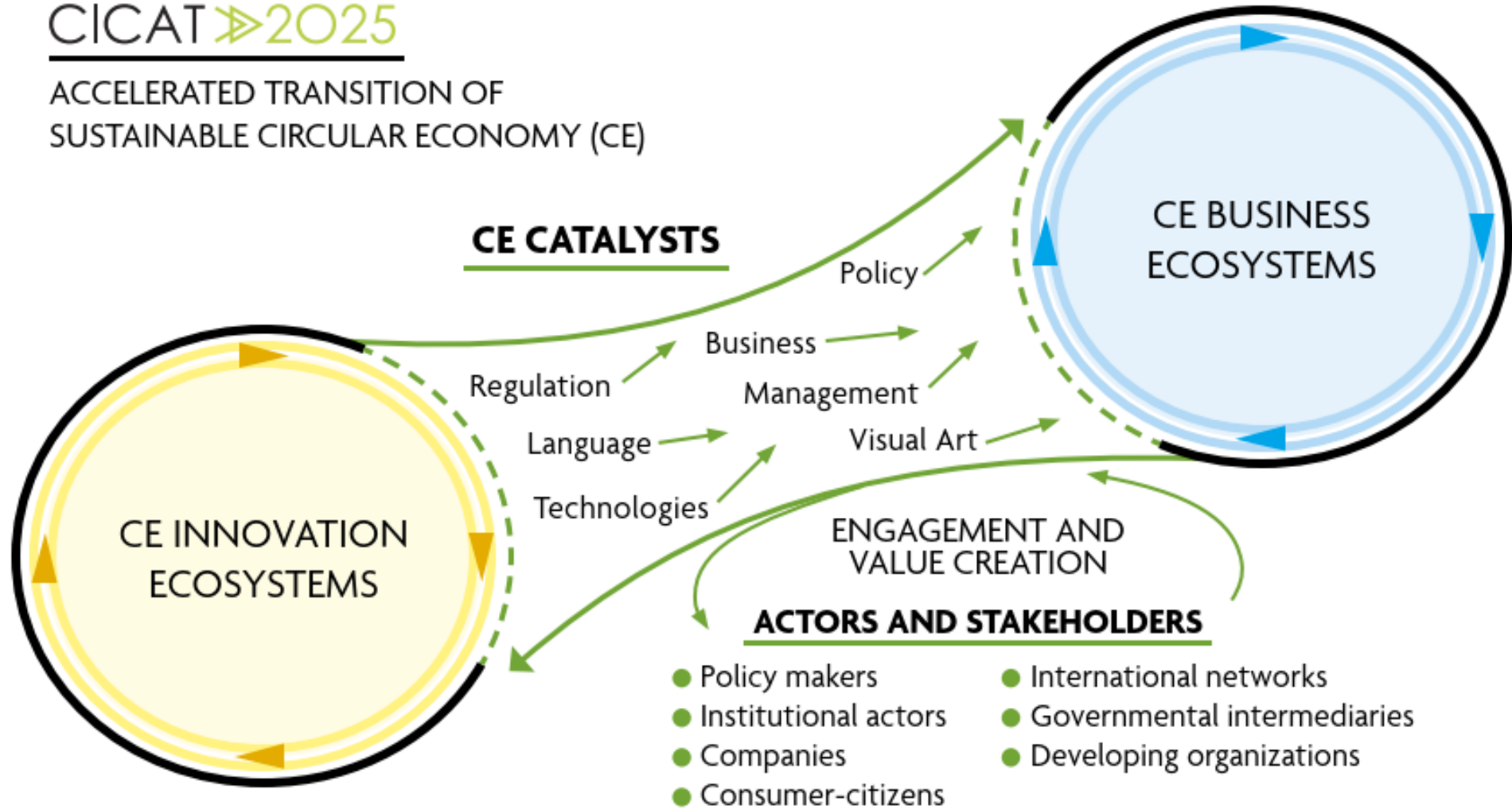
Taking a catalyst approach

- In order to realize and accelerate the CE shift and systemic change, new understanding on CE drivers needs to be developed.
- **Thereby, we in the CICAT2025 propose a catalyst approach.**
- **Catalyst is a metaphor, referring to diverse means and mechanisms** that enable turning CE technologies and innovation into business and accelerating the CE and sustainability transition in the society.



CICAT 2025

ACCELERATED TRANSITION OF SUSTAINABLE CIRCULAR ECONOMY (CE)



Diverse CE Catalysts driving the transition

Technology

Material and process technology, nutrients, minerals, digital technologies, logistics

Business

Business models, commercialization, public procurement, collaboration, financing

Organization and leadership

Strategic management, leadership, change management, innovation culture

Regulation

EU and Finnish law, investments, contract law, regulation

Sustainable policy

Scalability, places and spaces

Language

Terminology, framing, discourse

Visual arts

Visual arts, visual communication, visual service design

Stakeholder engagement

Collaboration with and learning from stakeholders

How to move forward in the CE transition

Diverse catalysts

Technology – enabling materials and digital solutions

Language – encouraging and clear wording

Regulation – enabling laws and incentives

Business – creating economic value

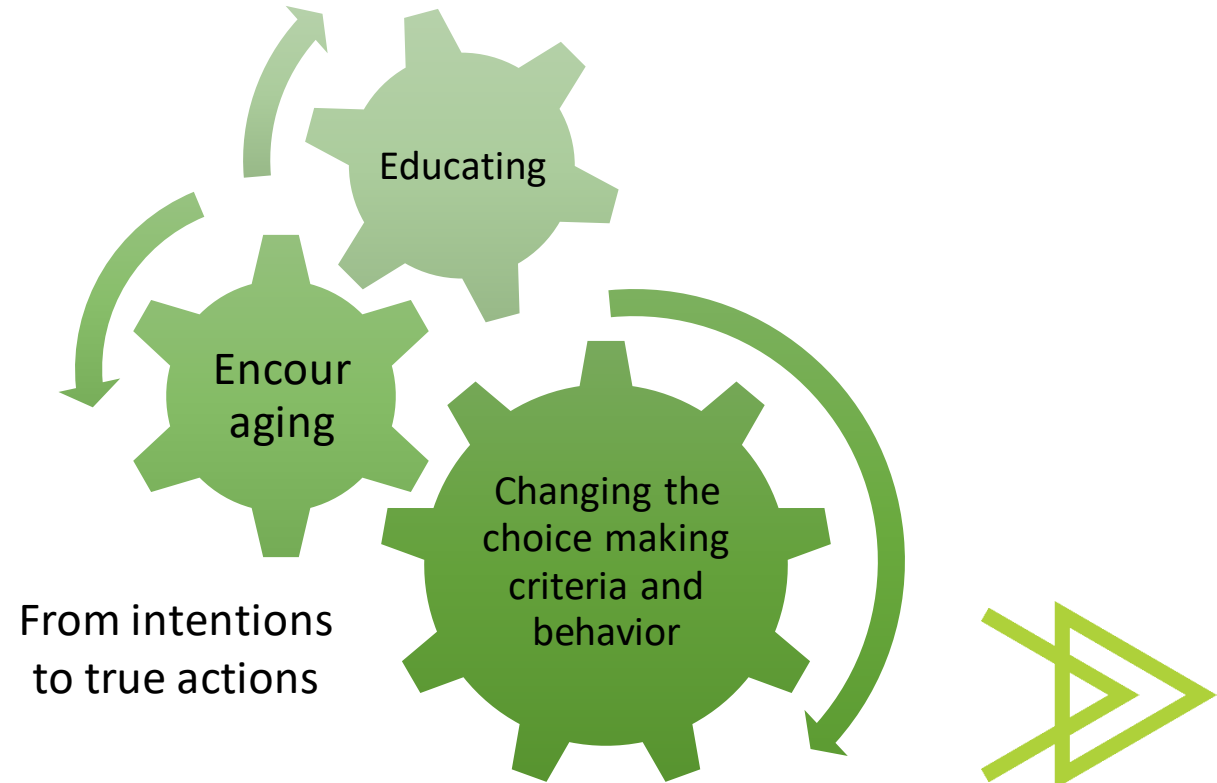
Policy – ensuring sustainability policy

Images – that provoke us to change

Management – pushing and allowing change

We need to IDENTIFY and KNOW the catalysts

We need to USE and ACTUALIZE them as tools



Thank you!

Join the CICAT2025 movement, research and actions!

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