

Circular ecosystems boosting business

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VTT is currently evaluating circular economy (innovation) ecosystems

- Main research questions are:
 - What is the economic potential?
 - What are the bottlenecks preventing realising the potential?
 - What needs to be done to accelerate the ecosystems?
 - What are the innovation / technology needs?
 - Is there a need for new innovation ecosystems?
- Study is co-financed by Ministry of Economic Affairs and Employment and expected to be finalized in Autumn of 2019

Some observations from the study on two major growth factors

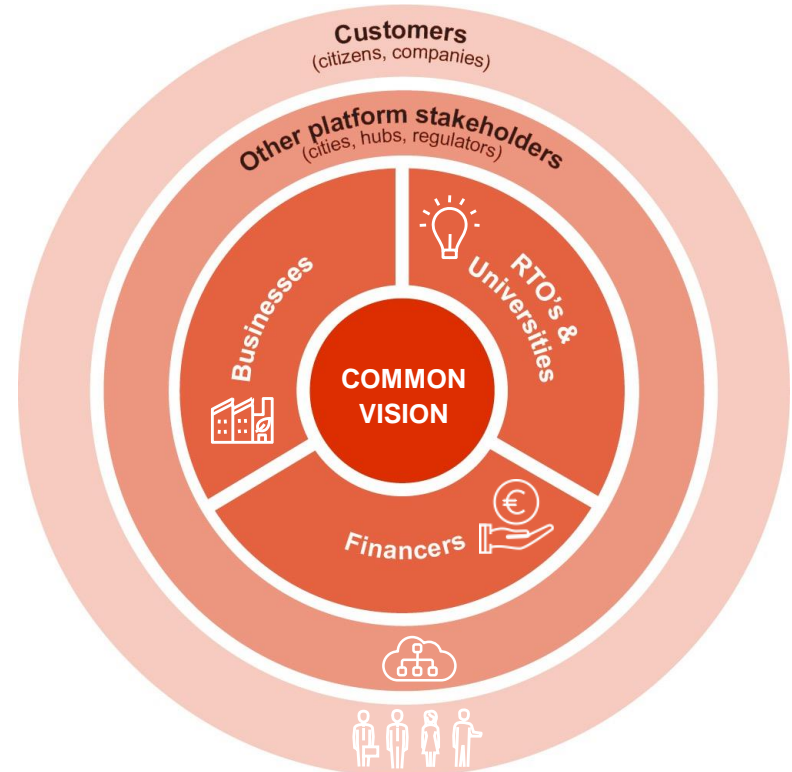
- Competencies and innovations
 - HURDLES: Lack and/or access to competences and technologies, lack of knowledge/statistics, insufficient collaboration
- Collaboration and working culture
 - PROMOTERS: Cross-sectoral collaboration, partnerships, open innovation and joint experiments
 - HURDLES: Attitude, insufficient knowledge on players and material flows, access to networks
- NB: The two other factors are value creation and regulation

An Innovation Ecosystem is...

A partnership of complementary players who share the same vision and are willing to contribute to joint actions in order to achieve the individual and joint goals.

Innovation ecosystems are necessary, because challenges and solutions are so **complex and systemic** that no actor has the capacity nor the capability to create successful business applications alone in the needed time frame.

Needs programme-type financial support to create and nurture the networks



Innovation Ecosystem vs Business Ecosystem

	Innovation Ecosystem	Business Ecosystem
Purpose	To transform ideas, inventions, insights/observations into innovations and concepts to be utilised in business	To create products and services based on innovations
Common vision	Solve a societal challenge and find possible future business opportunities	Harness a business opportunity
Value creation	New value creation, multiple directions, value for all parties involved (but not necessarily profit)	Present value production, towards the leading businesses clients, focused on profit, shared value
Key actors	Actors from different fields, private and public sector together, policy makers, people as end-users and co-creators	Businesses and their partners, people as customers
Leadership / control	Democratic / orchestrated, more loosely coordinated	One business, hierarchical
Ambition	Radical, innovative leaps	Incremental, aiming for high profits as soon as possible
Risk	High (but defined and taken on purpose)	Lower compared to innovation ecosystems
Time to market	Long	Short
Attractiveness	Appealing to the general public and society	Appealing for businesses
Participation	Flexible: easy to change participants, easy to join & leave	Less flexible: longer-term partnerships

What could the future CE innovation ecosystem(s) be?

- Build one strong, globally interesting rather than several weaker ones
- Focus on material flows that are important for Finland and have global significance, like
 - Minerals
 - Polymeric materials, like cellulose, textiles and plastics
- Incorporate cross-cutting themes, e.g. sustainability, servitization, value-sharing models, digital platforms
- Knowledge foundation on strong, globally significant knowledge hubs in Finland