

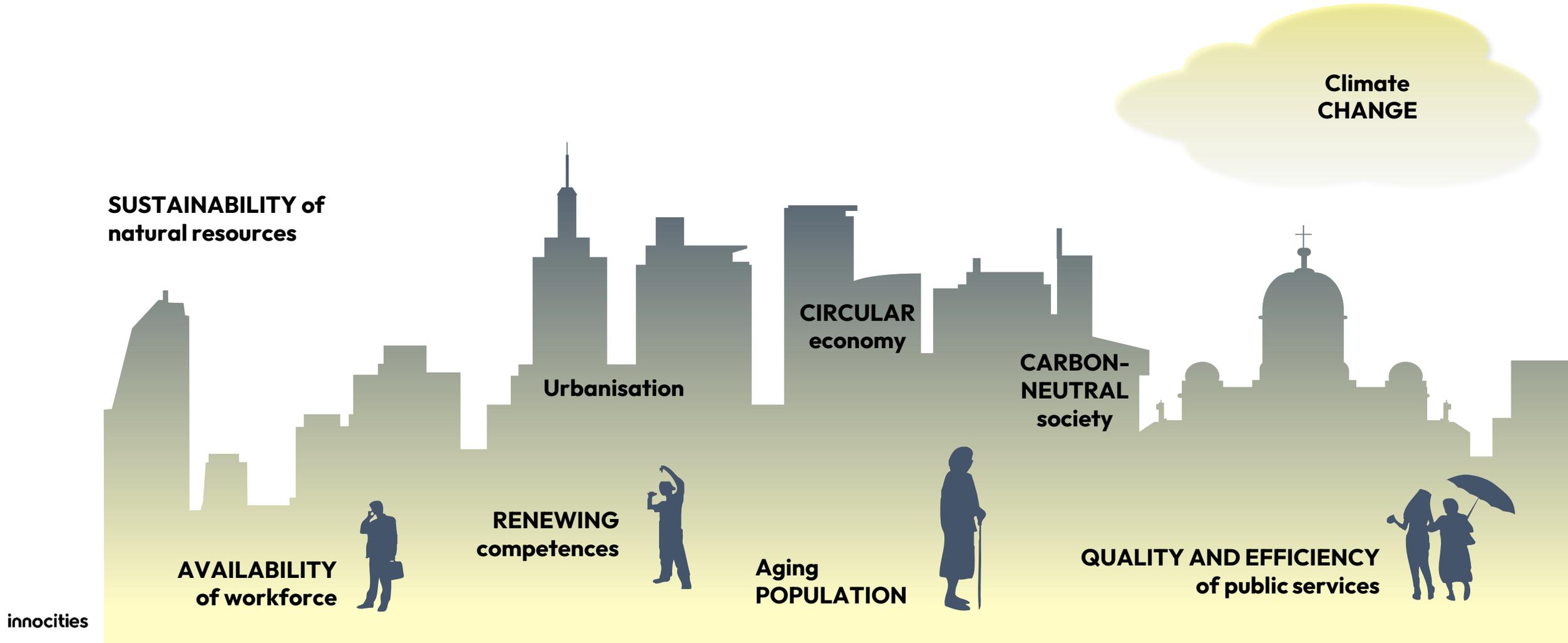
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Innovation ecosystems in Finland: National viewpoint

Olli Voutilainen
Ministry of Economic Affairs and Employment Finland
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Green and Digital Transition - Key Drivers of Innovation

Grand challenges – innovations play an important role in solving them
OFFERING OPPORTUNITIES TO CITIES AND COMPANIES





Mission

Innovative and pioneering cities aiming at innovation-led and sustaining growth by linking cities' endogenous strengths to the opportunities of digitalization and carbon neutrality

What roles for cities?

- ✓ Neutral **platforms** for strengthening collaboration between companies, universities and research
- ✓ Large scale **infrastructure investments** for RDI-collaboration
- ✓ **Innovation hubs** capable to allure international and national RDI-investments and talents to Finland
- ✓ **Pioneers** as building digital, low carbon and resource effective **urban area** – offering at the same time new business opportunities
- ✓ **Reference markets** for export companies (investment and innovative public procurement)
- ✓ **Leading roles** for thematic **networks** (ie. Clusters)

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Future innovation environments and testbeds



Supported by
the European Union

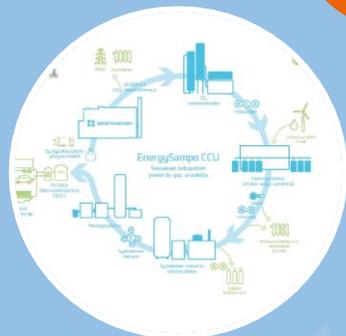
Smart Technology Hub

Partner Campus



EnergySampo CCU

Energy Storage



Wasa Innovation Center

H-Flex-E



Aurora Botnia



Service Center Know-how

Digital Economy

Ravilaakso



40%

of coal can be replaced with renewable biofuels

The export rate is over

80%

How does innovation ecosystem look alike?

Co-creation Vaasa

Innolab



Vebic

EnergySpin

VASEK



Hybrids

The largest Nordic Energy technology hub employs

13 000

Robotics & 3d Printing

Merinova



Vaasan Sähkö

Team Finland



Sundom Smart Grid

GigaVaasa

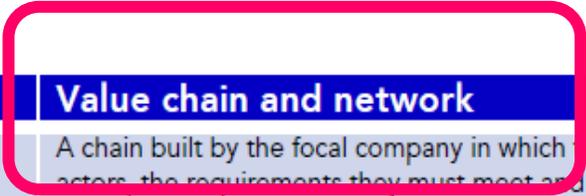
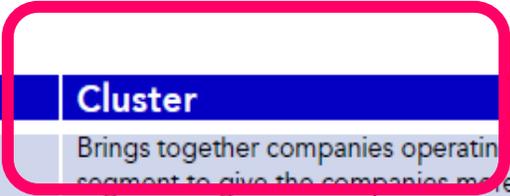
Conclusions and policy lessons raised in interim evaluation

- **National targets attached** to ecosystem agreements fit well with local /regional needs
- **Strategic areas of action** selected in agreements experienced as well pointed and succesful
- **Yet, more focusing in selected areas** as well as stronger **approach driven by companies' needs** was identified.
- **National coordination and network function** considered as valuable element and has improved national impact
- **Added-value has been created** in terms of shared agenda, goals, image effects and lubrication of collaboration

- **Operational model of financial management** has proved challenging and calls for better flexibility
- **Even better interaction** and partnership with national players (ministries) and more utilisation of Business Finland by cities should be built
- **In the course of the remaining period 2025-27** better impact at **companies level, ambitious and front-running actions** and **portfolio approach** is suggested

Ecosystem, clusters and value chains & networks as complementary cooperation models

	Ecosystem	Cluster	Value chain and network
Definition ¹⁵	Serves as a co-creation environment in which actors are committed to joint RDI functions and business initiatives.	Brings together companies operating in the same business segment to give the companies more visibility and to highlight common views on development agendas towards the public sector.	A chain built by the focal company in which the tasks of the chain actors, the requirements they must meet and the prices they must pay are specified on a contractual basis. A value network is a cooperation model in which interconnected partners create value for end users (customers).
Participant	technologies, business operations or wicked problems.	Industrial actors share the same knowledge base and business logic; may be geographically concentrated.	Companies possess mutually supportive expertise, which is required for supplying the product or for offering more extensive packages as a joint effort.
Management and constraints	Decentralised and hybrid innovation and renewal	sectoral boundaries may place restriction on new expertise.	Responsibility lies with a centralised spearhead company or group; functions are very similar even though individual actors belong to several different value chains. The value network is steered by shared core functions and interconnected earning models.
Dynamics (competitiveness, sustainability)	Actors are often engaged in cooperation; diversity of actors makes the system more sustainable.	Unconstrained by the competitive situation between the companies; overlapping expertise	As a rule, cooperation is on a mutual basis and the roles and tasks are well-defined. The value network is a structure combining functions between the parties.
	One Sea, Taltioni, Smart Otaniemi, GreenE		ect delivery networks and Fjeldstad, Ø. 1998



Innocities Initiative
(2021 =>)

INKA Programme
(Innovative Cities, 2010's)

Centers of Expertise Programme
(from 1990's to early 2010's)

=> Finnish path from value chains to ecosystems

¹⁵ Definition based on ISO 44001 standard (Collaborative business relationship)

Thank you