

Towards urban symbiosis of critical raw materials: collaborative value creation models in circular ecosystems - UrbanSymbiosis

Project

UrbanSymbiosis is a 4-year (2022-2025) research project, that focuses on creating sustainable pathways for cities by increasing the circularity of critical raw materials.

Urbansymbiosis.fi





Consortium

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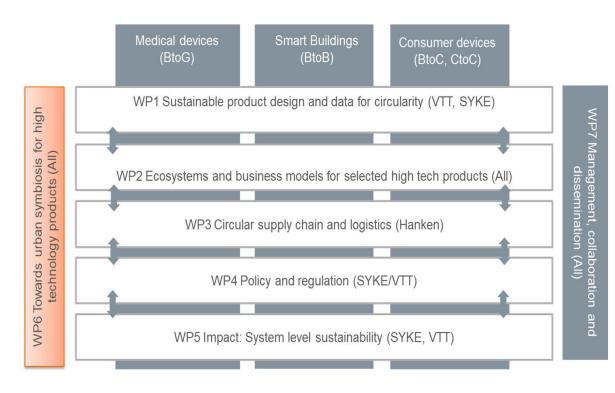


Creating sustainable pathways for cities by increasing the circularity of critical raw materials

Aim

The project aims for finding efficient and innovative solutions to stem the loss of resources in the future economy.

To boost the change towards urban symbiosis of CRMs, the project aims to explore what kind of new sustainable value creation models in cities would be the most impactful in the selected high technology products



The focus is on three application areas: Medical devices, Smart buildings and Consumer devices.



- Ecosystemic business models for urban symbiosis that will optimize the sustainability impact on selected high-tech products, value for stakeholders and competitiveness in global markets
- Identification of circular supply chain configurations that support urban symbiosis, and contextual conditions under which proposed solutions are effective
- Understanding of the role of cities in Urban Symbiosis as a value creating actor in business ecosystems for promoting circular product design, novel business model innovation, logistics and supporting regulation
- Tools and models to support sustainable circular product design and decision-making
- Pathways for each application area: synthesizing the business ecosystems, actor roles, value flows, city-level policy options and the sustainability impact