



SUOMEN ITÄMERI-INSTITUUTTI  
THE BALTIC INSTITUTE OF FINLAND



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# BSR Stars S3 project aims

- Improve capacities of regions to **implement regional smart specialization strategies with focus on bio- and circular economy**
- Enhance **new partnerships and business-research cooperation** in bio-/circular economy and **co-specialization of the BSR**



# Partners

- 1 The Baltic Institute of Finland (FI)
- 2 Nordic Council of Ministers (DK)
- 3 Baltic Development Forum (DK)
- 4 Business Link Greater Copenhagen (DK)
5. Nordregio (SE)
- 6 The Swedish Agency for Economic and Regional Growth (SE)
- 7 Värmland Region (SE)
- 8 Council of Tampere Region (FI)
- 9 MITA – Agency for Science, Innovation and Technology (LT)
- 10 Vilnius Gediminas Technical University (LT)
- 11 Lithuanian Innovation Centre (LT)
- 12 Sør-Trøndelag County Authority (NO)



# Why bio- and circular economy?

Prime Minister of Finland, Mr. Juha Sipilä:

*”BSR offers great potential in both the circular economy and the bioeconomy. The move towards the circular economy is likely to **cut carbon emissions by almost 70% by 2030**. We will have new bio-based, reusable and clean products and services. Through ecologic leadership we improve **competitiveness**. And we will see remarkable gains in **employment**”*



# What is needed in circular economy?

- In circular economy waste and side streams have business value that has to be created
- Industrial symbiosis means innovations that allow one company to utilize waste or side products of another company.
- Public support and transnational cooperation is needed
- Challenge is to identify all relevant stakeholders and create value chains
- Development of circular business models where profit is not the only factor to be considered



# Tampere Region support for circular economy

- The shift to a low-carbon circular economy is a high priority in Tampere Region
- During 2014-2020, a total of 25 % of the ERDF funding will be directed at low-carbon activities
- Circular economy is also one of the main areas in RIS3
- Tampere Region Environment Program 2017 is a roadmap for resource efficiency, renewable energy and bio- and circular economy and helps to implement Sitra National roadmap to Circular economy.

# Circular economy in Tampere

- Tampere Region's strength in cleantech and energy industry is based on the world class research and university-industry collaboration as well as high level of technology
- The companies and research institutions in Tampere Region are already working in the fields of energy efficiency, biogas, water solutions and circular economy.
- For circular companies especially the **ECO3 Eco-Industrial park** provide opportunities to test and develop new business models, technologies and services in co-operation with universities, companies and public organisations.

# Tampere Region case: ECO3 Park

- ECO3 Eco-Industrial Park is a 600-hectare sized hub of circular economy companies
- It is possible to create operational and logistics chains and utilize shared services and energy networks

First phase companies at the ECO3 area:

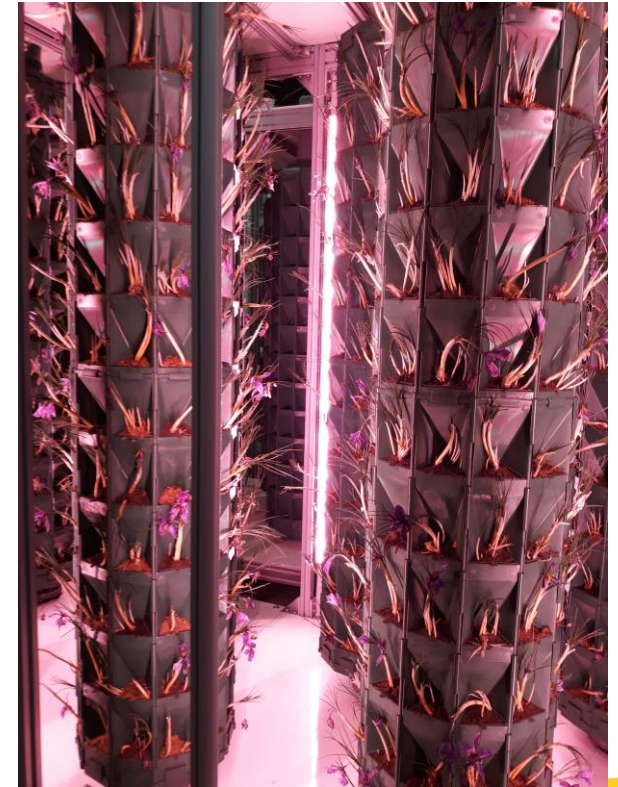
- Regional Waste Management company: biodigester
- Wastewater treatment plant
- Ecolan& Outotec companies: ash refinery
- Ecomation company: pyrolysis facility
- Nowaste company: recycling of plastics and rubber





# Tampere Region case: Hiedanranta Urban district

- Future urban district under planning situated around an old pulp factory area near the city centre
- Experiments and innovations for the future
- Food & nutrient & energy cycle: Carbofex (biochar), Evergreen farm (vertical farming), nutrient cycle (use of toilet waste as fertiliser and soil improvement)



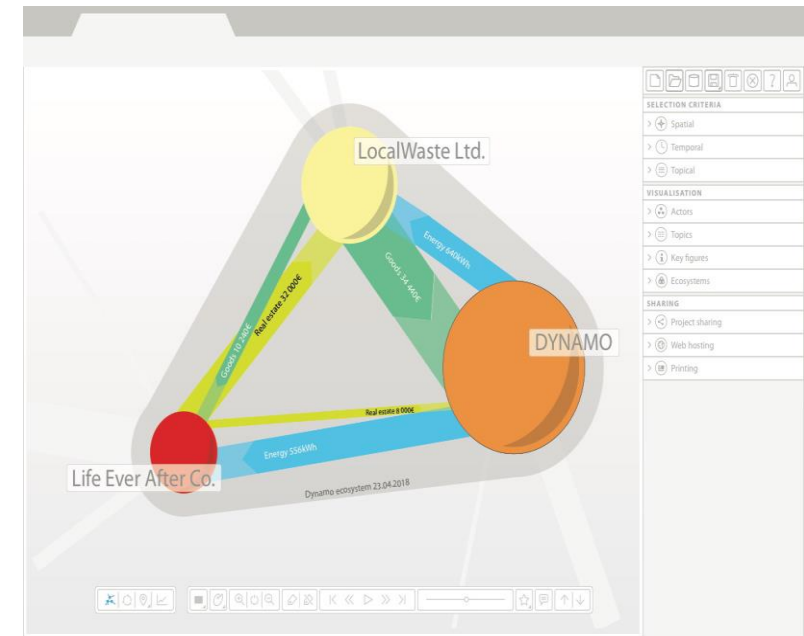
# Example: #WastetoValuables event, 23-24 Nov. 2017

- 150 participants (business, public, research)
- Company cases
- Thematic working groups:
  1. Circular economy in construction
  2. Circular economy business models and digitalization
  3. Making business from nutrient cycle
- Circular business coaching
- Site visits to ECO3 and Hiedanranta
- <https://www.youtube.com/watch?v=4bwcewOgxCw>
- Transnational matchmaking and business coaching will be organized in Karlstad, late 2018



# Example: ecosystem management tool

- Tampere demonstrates an open data based visualization tool for innovation ecosystem management
- Idea is to get real time information on circular economy ecosystems including actors and their linkages
- Tool will use data from global and regional sources to visualize how innovation gets initiated, fueled and adopted both regionally and cross-regionally



# Example: Bio- circular study visits

- Nordregio organizes relevant study visits during project
- The study visits are open to wide group of experts from BSR Stars S3 partner countries
- Next study visit: Kemi-Tornio, Finland in June 2018





Thank you!

**Smart specialization in bio- and circular economy in the Baltic Sea region** through enhancing cross-sectoral business-research partnerships and innovation ecosystem management.

<http://www.bsr-stars.eu>

