



The Helsinki-Uusimaa Circular Valley: from projects to clusters and ecosystem

#northgoesgreen
#HelsinkiSmartRegion



Helsinki-Uusimaa
Regional Council

**Helsinki
Smart
Region**

Helsinki-Uusimaa

A Cool, Vibrant and Happy Region

“ **The most progressive area within the EU**“

- European Union Innovation Scoreboard 2019

“ **The European Capital of Smart Tourism**“

- Helsinki, named by the European Commission 2019

“ **2nd in wellbeing in the EU**“

- Regional Social Progress Index 2020

“ **2nd most innovative region in the European Union**“

- European Union Innovation Scoreboard 2021

“ **Offers the best work-life balance**“

- Helsinki, ranked in a study by US-based Kisi 2019

Helsinki-Uusimaa - A European Entrepreneurial Region 2022



- **Green and digital entrepreneurship** is the theme of the year
- **Sustainable growth by business expertise in circular economy and digitalization**
- Acknowledgement, cooperation, growth and partnership
- Events for SMEs and other regional actors
- Competence and consultation offered for enterprises and students
- #EER2022Uusimaa

Climate targets for regional development



**Climate neutral
EU 2050**
- 55 % 2030
(Green Deal 2019)



**Climate neutral
Finland 2035**
Government program 2019
National Energy and Climate
Strategy 2022
Circular Economy Programme
(2021)

**Climate neutral
Helsinki-Uusimaa
Region 2030**
Regional programme 2021
Climate Roadmap 2035 2020
Regional Innovation strategy 2020

Helsinki-Uusimaa - Well ahead 2022-2025



Targets of our Regional programme:

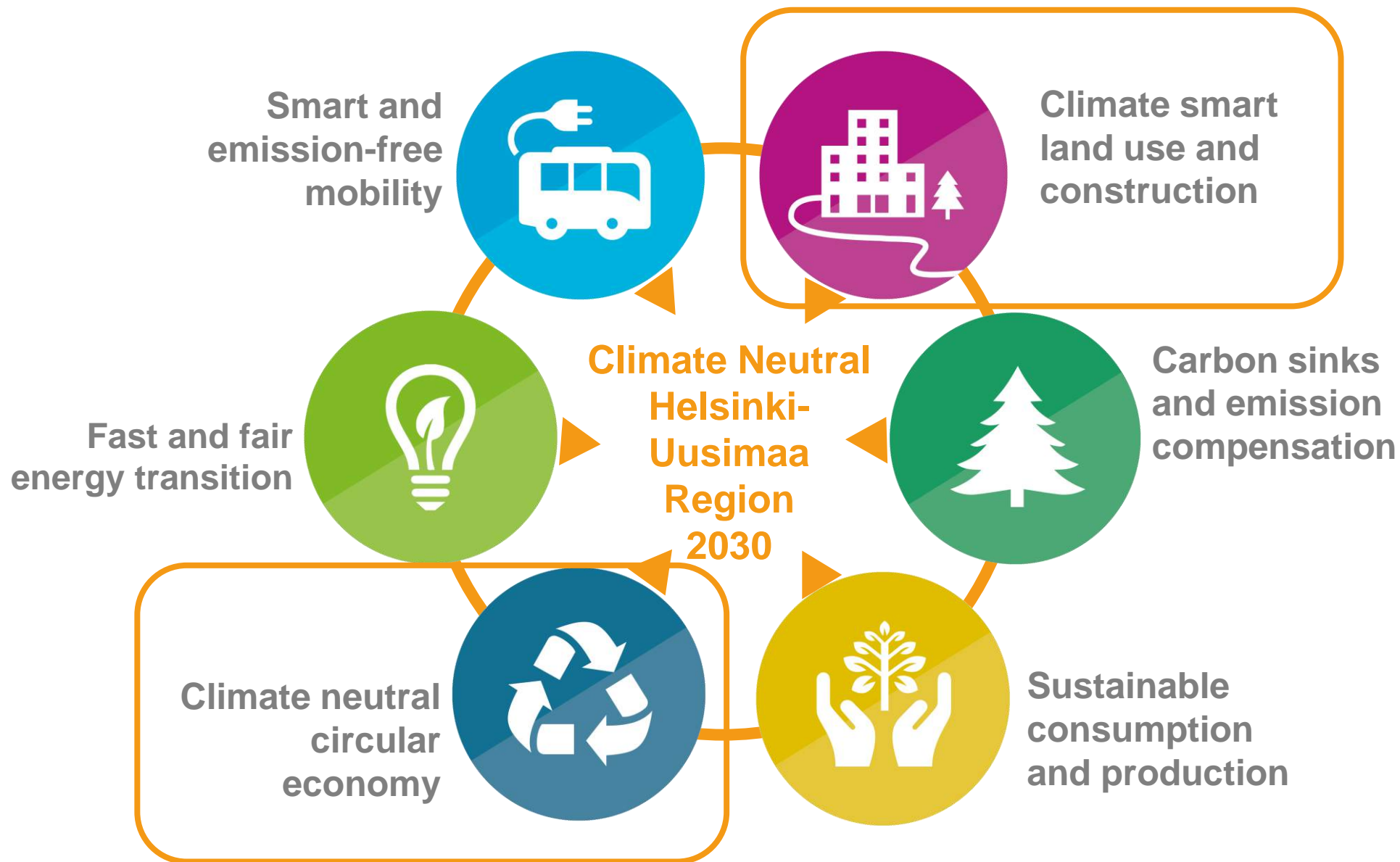
- **Climate change mitigation:**
Helsinki-Uusimaa: Carbon neutral region by 2030
- **Economic competitiveness:**
Increase of RTD expenditure to 5% of GDP by 2030
- **Well-being:**
Increase of employment rate to 80% by 2030



Climate neutral Helsinki-Uusimaa region 2030

*The roadmap
towards a common
goal*

Six focus areas of regional climate work



Good regional opportunities to develop Circular Economy



Circular economy development areas in construction

- Large volume in the Helsinki-Uusimaa Region: construction waste 190 000 ton / year
- Ageing building stock: renovation with circular economy solutions, recyclable components, material recycling
- Infrastructure of Land masses: reduction of land mass transport, recycling
- Material recycling: concrete and wood, construction waste sorting; demolition waste, reuse, eg stone products
- Development of Low carbon concrete
- Development of Smart buildings



Circular economy development areas in construction



- New solutions / experiments promoting the reuse of building components
- Green climate neutral and circular procurement
- Data on recycling and reuse of demolition sites, demolition mapping and database
- Permit Issues and Planning (Metropolitan area + 30 km: no areas suitable for circular economy are available. It is often necessary on schedule that the material can be stored and possibly processed during storage.)
- Jointly agreed pilot sites where know-how and also the potential for failure are shared.



HYPPY - “JUMP” project by GNF

Reuse of building components and demolition materials as a promoter of the circular economy

Theme 1. From site to circulation: "How to increase the reuse of building components and movables in Helsinki?"

Theme 2. Reuse of building components from the perspective of planners: "How can parts of buildings be reused better?"

The main themes of the workshops:

1. Inventory and storage
2. Meeting supply and demand
3. Demonstration of eligibility



Kestävää kasvua ja

Vipuvoimaa
EU:lta
2014–2020



Euroopan unioni
Euroopan aluekehitysrahasto

Proposals selected by the HYPPY project for the future

- **Coordination of the process of supply and demand**
- **An up-to-date database** of upcoming demolition sites: building frame material, size, location, planned time of demolition
- **Active schedule or "clock" for demolition**
 - E.g. information about the demolition site/structures in the database well before demolition
- **Need for experience/training** in undamaged demolition and its requirements
- **Planning from a circular economy perspective:** Planning new buildings for reuse
- The importance of **aesthetics**
 - For example in the Nordic countries, England and the Netherlands, aesthetics have often been a major factor in the reuse of building components
- So far, **no significant financial incentives have been provided** for re-use



Kestävää kasvua ja

Vipuvoimaa
EU:lta
2014–2020



Circular Economy block in Jätkäsaari, Helsinki (2021-2024)

- a communal block of flats
- The CLT-structured block is designed and built according to the principle of a circular economy: structures are long-lasting, adaptable and can be easily separated and reused later.
- materials used are either renewable (e.g. wood) or recyclable (e.g. steel, bricks, wood).
- CE is taken into account from construction to operation and maintenance (construction products, construction, recycling), energy production, use and recovery (renewable energy, surplus energy recovery, energy storage), water consumption, housing & living and mobility



Cluster program for Circular Economy in Land Use and Construction

- Creating Business Opportunities Together

- Launched by the City of Helsinki for implementing carbon-neutral circular economy in land use and construction
- Climate goal to be carbon neutral by 2030, carbon zero by 2040
- The city as a development platform – including private sites
- For construction and property sector businesses, material providers, digital solution providers, universities, research institutes
- 3-year program, 3 million funding from the city



What does the program do?

- **Experiments and piloting, innovation challenges and R&D&I co-development**
 - Reuse of construction elements
 - Piloting new operational models in demolition processes
 - Developing new circular construction materials
 - Promoting circular design in construction
 - Digital solutions and making use of existing data
- **Circular economy and CE data platform concept in Vattuniemi 2021-2023/2024:** Data-driven operating model for recycling of deconstruction materials and reuse of building components
- **Reimagine buildings:** Developing building part reuse & implementing outdoor storages for sports facilities from reused building parts
- **Innovation challenge for the concrete industry, 2022**

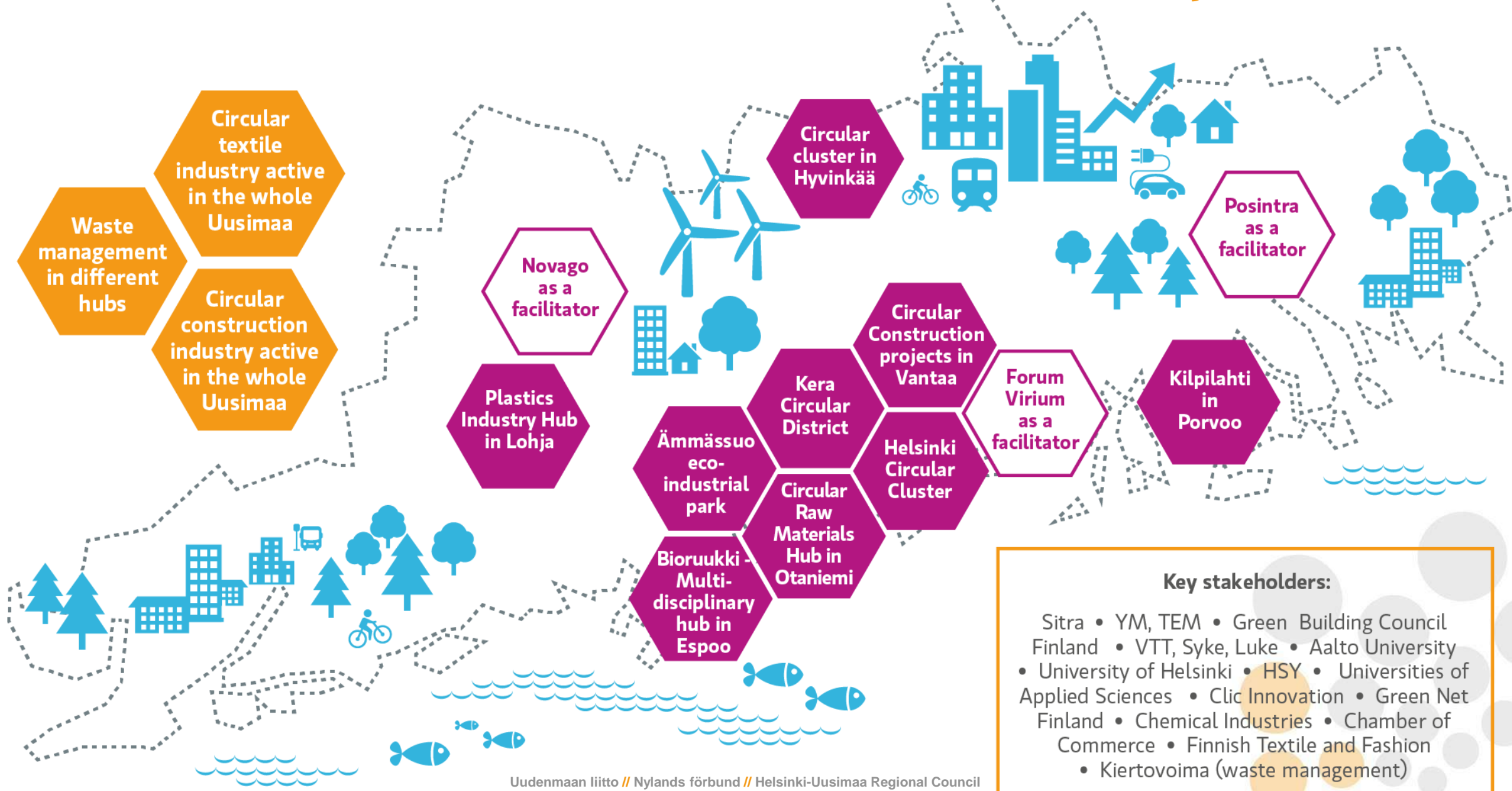


What is the Helsinki-Uusimaa Circular Valley?

- A regional initiative to promote systemic change in Circular Economy
 - Wide Ecosystem development project bringing together local ecosystems, companies, researchers, developers and municipalities,
 - Offering and connecting platforms and pilot areas
 - Orchestrating regional work: bringing together projects for co-learning and co-development processes
 - Learning and development of Land use planning processes
 - Focus areas: construction, plastics, textiles, electric waste, biomaterials
 - International branding and communication
-
- National initiative of regional low-carbon CE commitments 2022 (Green deal)



The Helsinki-Uusimaa Circular Valley



Thank You!

More information: pia.tynys@uudenmaanliitto.fi



uudenmaanliitto.fi/en
helsinkismart.fi



@Uudenmaanliitto
@Helsinkismart



My Uusimaa