



Helsinki-Uusimaa Regional Council

# Helsinki Smart Region – a forerunner in implementing the New European Innovation Agenda

#### Our key messages:

- 1. We implement Green and Digital Transition, and we will be Carbon Neutral by 2030.
- 2. We showcase how to reach the ambitious EU targets by working more together.
- 3. We have organised an innovative Science Meets Regions process with the JRC.
- 4. We mobilise extensive regional collaboration to increase the R&D investments to over 5 % of the GDP.
- 5. For us, being a forerunner means increasing partnering and collaboration with the EU and other European regions and cities.

### Helsinki Smart Region for a Resilient Green and Digital Transition

Helsinki Smart Region is one of the most innovative regions in Europe, and we are determined to keep that position. Our regional actors are fully committed to finding new solutions and technologies to address the most pressing societal challenges common to all of Europe and to bring them on the market. This would entail more productivity, more competitive companies, bringing wellbeing to citizens and nature, reinforcing Europe's technological sovereignty, and improving the resilience of our societies. We are strongly committed to the EU Twin Transition and the United Nations Sustainable Development Goals. With our new Regional Programme for the Helsinki Smart Region, we are set to play our part in implementing and supporting the transformation of European societies. The programme, with its vision for 2030, makes us a frontrunner in implementing the EU Green Deal, the European Digital Decade, and the new European Innovation Agenda.

#### In 2030, Helsinki Smart Region will be Well Ahead in



Climate change mitigation: Climate neutral region



Economic competitiveness: 5 % of the GDP will be invested in R&D



Wellbeing: 80 % employment rate

Implementation of the targets is steered by two strategies strongly supported by our regional stakeholders: the Climate Neutral Helsinki Smart Region 2030 Roadmap and the Regional Innovation Strategy 'Resource Wise Helsinki Smart Region. Higher education and research institutions are in the driver's seat in our regional innovation ecosystem, supported by cities and other stakeholders.

The Science Meets Regions process was organised in collaboration with the EU Joint Research Centre in 2022. Five events, three of those innovation camps, brought together 500 participants from all major actors and reinforced these topics further. We received The European Entrepreneurial Region award label for the second time for the years 2021-2022. This year has helped us promote the systemic change of placebased innovation and entrepreneurial activities for a greener, more digital and more entrepreneurial Helsinki Smart Region, which can contribute to the success of the EU Innovation Agenda.

The region was awarded the EER label already in 2012, which allowed the successful orchestration of the growth of services for young entrepreneurs. Today, the Helsinki region is one of Europe's most innovative regions with a strong entrepreneurial spirit offering opportunities for tech talent and creative professions increasingly driven by sustainability.



### A Regional Innovation Ecosystem for Green and Digital Transition

New solutions for societal challenges include such deep tech innovations as creating completely new materials or guiding personal health through genetic technologies or digital solutions to improve and change industrial processes into a more circular system. The green and digital transition offers new opportunities in almost every sector, from food production to the construction industry, and from healthcare to the processing industry.

In our region, we understand it as our common task to help deep tech and digital innovations commercialise and help growth companies expand. We want to have the most impactful start-up community in Europe and aim to create the ideal environment for the future-minded and sustainability-driven new generation of entrepreneurs to take the next leap and put their skills at the service of a deep social and economic transformation.

Helsinki-Uusimaa Region is the capital region in Finland, with around half of the national R&D expenditure. Our regional innovation strengths are crystallised under the umbrella of Resource-wise Helsinki Smart Region. Impactful research and innovation activities are supported by our regional innovation strategy. A multidisciplinary and multistakeholder approach drives the cooperation, supported by high-quality education.

The new Regional Innovation Steering Board, chaired by the VTT CEO Antti Vasara and

consisting of top-level representatives of RDI organisations (including companies) was established in 2021. Its role is to strengthen the regional cooperation in implementing the Regional Smart Specialisation Strategy. The development of innovation ecosystems has become an increasingly visible part of national and regional innovation policy and its implementation.

Innovation activities have regional, national, and global influence – thus serving the country's competitiveness, sustainable growth, and well-being. We have identified key actions to strengthen our regional innovation ecosystem and these actions are support the implementation of the flagships of the European Innovation Agenda:

- To support regional innovation actors and the key place-based innovation ecosystems to build EU & international partnerships for co-development, colearning, and knowledge sharing
- 2. To support the world-class research and innovation infrastructure and testbed system
- To connect the Business Finland funded company-led innovation ecosystems to the regional RDI actors and new companies entering our region
- 4. To cooperate with the regional stakeholders for foreign talent attraction
- To attract funding for RDI activities and for investments and to support the creation of new funding instruments for deep tech and digital solutions
- To anticipate competence needs together with the educational institutions in our region



Helsinki region is one of the European forerunners as an ecosystem of several place-based and thematic ecosystems. One of our ongoing tasks related to the EU Innovation Agenda is to use the experienced ecosystem experts of VTT and others in conceptualizing the methods to improve ecosystems' effectiveness and scale up the outcomes. Reaching our regional targets requires more co-creation in an open and dynamic framework with tailor-made leadership and management structures and roles of orchestrators, facilitators, and other professionals. This methodical development is needed, especially in planning and running the extensive multi-actor and multi-stakeholder initiatives such as circular valley, the city climate neutrality missions and regional innovation valley. In these, the Regional Council can be an encouraging initiator and supporter for the RDI actors, including municipalities.



### Regional Innovation Strategy - Resource wisdom

To us, resource wisdom means utilising existing resources and creating growth through new resources in a way that is deliberate and economically, socially, and environmentally sustainable. This mindset towards innovation is one of our main strengths.

#### **EU-level strategic cooperation:**

Circular Cities and Regions Initiative – Helsinki Smart Region was selected as one of the 12 pilot areas. During 2022-2025 we will strengthen our regional circular valley platform and the key circular systemic solutions together with the CCRI stakeholders and experts. We will work towards transformative solutions, tackling climate change and other global challenges, and work with other European regions to bring these solutions to European and global markets.

#### **Regional umbrella initiative:**

The Helsinki–Uusimaa Circular Valley is a platform for various actors to co-develop, co-learn, share knowledge, and find funding together. Circular Economy is key to achieving the key goals of the region, climate neutrality, innovation intensity, and employment. As a highly innovative region, our view is that financing criteria across Europe should focus more on the quality and impact to speed up the transition and the development and scale-up of sustainable solutions. Good examples of the use of this criteria are the Finnish Climate Fund, a Finnish state-owned special-assignment company and the RRF financing by Business Finland.

### Implementation of the innovation agenda:

- During the European Entrepreneurial Region Year 2021-2022 our region's Universities of Applied Sciences developed and piloted Circular Economy training instruments and packages for SMEs, digitalised incubation activities, and developed an innovative model for sustainable public procurement.
- Helsinki-Uusimaa Region circular incubation and education programmes.
   Examples of these are Laurea CE Living Lab and Urban Tech Helsinki Innovator

#### Examples of European-level projects where our innovation players are actively connected to European counterparts to develop solutions:

- TREASOURCE Territorial and Regional Demonstrations of the Systemic Solutions of Key Value Chains and Their Replication to Deploy Circular Economy. The consortium, led by VTT, consists of 17 partners from seven European countries, including three industrial partners.
- 2. Circular Construction in Regenerative Cities (CIRCuIT): Four major cities, including the city of Vantaa, work together with 31 partners to undertake a full circular and regenerative transition.

#### Examples of our regional projects, where stakeholders employ a multidisciplinary and multistakeholder approach:

 In 2021, 68 circular economy projects were identified, with a budget totalling more than 120 million euros and comprising of more than 300 stakeholders.

#### **Company initiatives:**

 Kilpilahti Industrial ecosystem: Led by two leading company Neste and Borealis, Kilpilahti will be a circular industrial area. They have received RDI partnership funding from Business Finland (partly financed through the Rescue and Recovery Facility (RRF)) to solve significant future challenges and to increase their RDI investments in Finland. The companies each lead their ecosystems formed of business and other RDI-related organizations varying in size, background, and sector.



## Climate Neutrality by 2030

The Helsinki Smart Region has set a goal to be carbon neutral by 2030. The ambitious target calls for cooperation on a wide scale in all sectors; public, private, and RDI. The work is guided by our Regional Climate Neutrality Roadmap.

#### **EU-level strategic cooperation:**

Cities have a crucial role in climate change mitigation. The two main cities from our region, Helsinki and Espoo, are part of the EU Mission to deliver 100 climate-neutral and smart cities. We are also well-connected to the European-wide networks CapaCITIES and DUT.

Being a Charter Signatory of the EU Mission on Climate Adaptation adds regional measures on building resilience against the impacts of climate change.

#### **Regional umbrella initiative:**

Our regional and local measures in implementing the EU Innovation Agenda extensively support the EU Missions on climate mitigation and adaptation. Implementing our regional roadmap to be carbon neutral by 2030 brings added value for the other EU regions. The city-level action plans include close collaboration with industry and academia based on City Contracts. The focus is on regional systemic change and the orchestration of the regional ecosystem projects and other measures.

### Implementation of the innovation agenda:

- Our stakeholders are active in developing
   Hydrogen Valleys
- Our stakeholders are active in Erasmus+Alliances and promoting cooperation among European universities
- We have specific Women In Tech programmes with a climate focus
- Urban Tech Helsinki incubator for clean and sustainable urban solutions, which supports the transformation of business ideas into growth-oriented start-ups that focus on solving challenges of the modern-day cities.

#### Examples of European-level projects where our innovation players are actively connected to European counterparts to develop solutions:

 The mySMARTLife project: the three Lighthouse Cities of Nantes, Hamburg and Helsinki work together to be more environmentally friendly by reducing the CO<sub>2</sub> emissions of cities and increasing the use of renewable energy sources.

#### Examples of our regional projects, where stakeholders employ a multidisciplinary and multistakeholder approach:

- Towards Carbon Neutral Municipalities and Regions (CANEMURE): a six-year (2018-2024) project for promoting climate mitigation actions at a regional level.
- 2. Films for future -initiative Biorecycle Deeptech from Finland. VTT clear cellulose film technology enables plastic replacement in flexible packaging applications. The same film can be integrated into paper and board materials to provide barrier properties to reduce food losses. Materials are recyclable together with paper and board recycling.

#### **Company initiatives:**

 Finnish and other Nordic companies have already 2014 established the Climate Leadership Coalition CLC to innovate and accelerate the transition to carbon neutrality. The industry is committed to RDI investments focusing on innovative climate handprint solutions.



### **Citizens' City**

Well-functioning everyday life, the wellbeing of citizens, and urban development in a climate neutral region are key goals of the Helsinki Smart Region. Solutions for urban mobility, improved housing, urban planning, and accessible and affordable healthcare are being sought after in cooperation with our stakeholders.

#### **EU-level strategies:**

Societal challenges will be solved in cities. Our biggest cities Helsinki, Espoo, and Vantaa are active members of Eurocities, while also having regular dialogue with the Commission in the context of the Urban Agenda. At the regional level, we are also part of the European Safe and Sustainable mobility platform.

#### **Regional umbrella initiatives:**

HEVI – Helsinki+Espoo+Vantaa Innovations – is a platform for innovations that change the world. HEVi aims to promote the strategic allocation of public and private RDI funding and strengthen globally competitive ecosystem. Their work is based on the Six City Strategy (6Aika) from years 2014-2020. This strategy was the one of its kind in Europe.

### Implementation of the innovation agenda:

- Supported by the world's largest startup event Slush, our most impactful startup community includes actors like Maria01 (leading startup campus in the Nordics), AaltoES – Aalto Entrepreneurship Society (most prominent and active studentrun entrepreneurship society in Europe) and Helsinki Think Company (the entrepreneurship society of the University of Helsinki, having roots in the activities of the HURC first EER year in 2012).
- Testbed opportunities offered by the cities. The most exciting example is the Helsinki Testbed – the whole city as an innovation platform
- Vantaa Capacity Campus, which will be a hub of continuous learning and a local innovation environment

#### Examples of European-level projects where our innovation players are actively connected to European counterparts to develop solutions:

 Reciprocity -project: ERRIN led project to initiate and support replication projects in at least 20 different type of cities and municipalities. Helsinki-Uusimaa Region and Forum Virium are partners in the project.

#### Examples of our regional projects, where stakeholders work in a multidisciplinary and multistakeholder way:

- The three cities Helsinki, Espoo and Vantaa, will create a large project portfolio for urban development and innovation activities in 2021–2027.
- 2. The DigiOne service platform and ecosystem's goal is to improve learning and wellbeing by creating a groundbreaking change in how educational services are produced. Supported by the cities of Vantaa and Espoo.



### **Industrial Modernisation**

For us, industrial modernisation means green and digital transition. We see that digital solutions can help achieve climate and welfare goals. Helsinki Smart region is a developer of leading-edge technologies for future industries and processes.

#### **EU-level initiative:**

European Digital Innovation Hubs (EDIH) will be created to help the industry and public sector utilize new technologies and opportunities for improved and sustainable solutions. Finnish AI Region (FAIR) is a candidate for European EDIH, with a large consortium of actors from our region.

The Helsinki Smart Region has signed the Living.in.EU Declaration on joining forces to boost sustainable digital transformation in cities and communities in the EU.

#### **Regional umbrella initiatives:**

Helsinki Smart Region wants to focus on the most promising deep tech and digital strong points, new materials serving circular economy development and transformative impact. We aim to support local solutions effectively scaled for national, EU and global impact.

### Implementation of the innovation agenda:

- Health Proof Helsinki combines Helsinki's three most significant public RDI environments in the form of a unified service entity for companies in the fields of health technology and medical technology.
- Local incubators turn business ideas into growth-oriented start-ups that focus on solving the challenges of modern cities. The main example is the Helsinki Campus Incubators Programme creating a network of incubators and enabling diverse collaboration.

 The joint action to bring and utilise sufficient public and private investments in digital services, technologies, infrastructures, and skills to achieve the goal. Our actors are actively using instruments such as Business Finland funds, Climate Fund of Finland, funding from the Tesi (Finnish Industry Investment) and different equity funds.

#### Examples of European-level projects where our innovation players are actively connected to European counterparts to develop solutions:

 We have joined the European parliament's preparatory action called DT4Regions to create a challengebased innovation platform for public administrations to enable AI and big data solutions.

#### Examples of our regional projects, where stakeholders work in a multidisciplinary and multistakeholder way:

 The LIMOWA Logistics Cluster is a Finnish network association to develop and support intelligent logistics solutions and boost the competitiveness of Finnish companies.

#### **Company initiatives:**

 Business Finland financed Company-led business ecosystems to support green and digital transition in cities, which create new business opportunities for small companies, start-ups and scaleups – thus supporting the EU Innovation Agenda.

# Key stakeholders in the RDI network

The active RDI network of the Helsinki Smart Region includes a large number of stakeholders. In addition to municipalities and companies, the key stakeholders are the following organisations:

#### **Research institutes**

- VTT Technical Research Centre of Finland
- Finnish Environment Institute
- Natural Resources Institute Finland (Luke)
- Finnish Meteorological Institute
- Geological Survey of Finland
- Finnish Institute for Health and Welfare

#### Universities

- Aalto University
- University of Helsinki
- Hanken School of Economics
- University of the Arts Helsinki

#### Universitities of Applied Science

- Metropolia
- Laurea
- Haaga-Helia
- Arcada
- Diak
- Novia
- Humak

#### **Development companies**

- Forum Virium Helsinki
- Posintra
- Novago
- Keuke
- Technology Center TechVilla

#### **Other stakeholders**

- Helsinki University Hospital
- Health Capital Helsinki
- Limowa Logistics Cluster
- Clic Innovation
- Green Net Finland
- MyData
- KIRAHub
- The Finnish Innovation Fund Sitra
- Entrepreneurs Associations
- Startup Foundation
- Confederation of Finnish Industries and other Industry Associations

#### **National Organisations**

- Business Finland
- Academy of Finland
- Ministry of Economic Affairs and Employment of Finland

#### Helsinki-Uusimaa Region



26 municipalities, including the Finnish capital Helsinki



4 universities and 7 universities of applied sciences

World-class



Rich and unpolluted **nature**, combined with a modern infrastructure and high living standards
1.7 million inhabitants





Over **110 000 companies** and **837 000 jobs** 

research institutes and

innovation organisations



40 % of the Finnish GDP



50 % of the RDI expenses in Finland



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