





# Smart&Clean Helsinki Capital Region – world-class reference area for leading smart and sustainable solutions

Finnish companies need an international scale reference area in which they can develop and commercialize ecological sustainable and smart solutions, test innovations and operational models and show their knowhow to the rest of the world. References are in crucial role in developing business and accessing international markets and therefore also in strengthening the competitiveness of Finland as a whole.

By combining the knowhow and resources of the cities, companies, the state, universities and research institutions, we can elevate Helsinki Capital Region to become globally recognized reference area in the development, deployment and piloting of Smart & Clean –knowhow.

By doing this, we can also solve significant sustainability challenges such as the need for low-carbon solutions of transportation and energy systems, material and energy efficient infrastructure and sustainable housing and lifestyle.

The planning phase of Smart&Clean partnership project is now underway. The aim is to start the project 1st of January 2016.



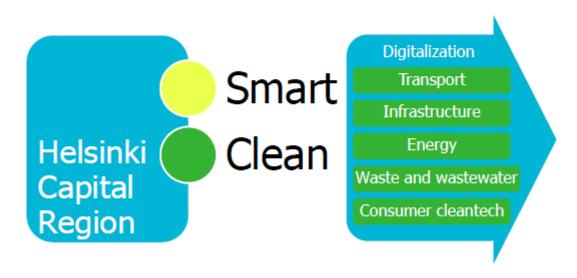




## Smart&Clean Helsinki Capital Region - the mission of the project

Helsinki Capital Region will be internationally leading reference area of smart and sustainable solutions by creating

- 1. concrete Smart & Clean business and references in the Helsinki Capital Region. The aim is to execute 20-30 significant projects within five years.
- internationally strong brand, such as "World Smart Clean Capital", by combining Smart&Clean projects and operations under one globally interesting communications



2020 Helsinki Capital Region is globally leading Smart&Clean -reference area



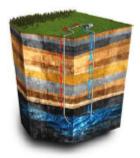
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#### The speardheads of the Smart&Clean - partnership project

Spearhead theme	Projects (examples)
Low-carbon transportation and mobility as an export of Finland	<ul> <li>Ecological and efficient transportation; public, private, goods</li> <li>Smart transportation systems, Mobility as as Service (MaaS)</li> <li>Ecological airport and low-carbon fuels for air transportation</li> <li>Harbours which enable Zero emission –seafaring</li> </ul>
Build environment that has positive impact on the environment	<ul> <li>Renovation: highly energy efficient and smart solutions         "Smart retrofit" in existing buildingstock, utilizing of sensors         and big data</li> <li>Smart and energy efficient construction: Smart houses in         which renewable energy and energy storage are based on         hybrid models.</li> <li>Environmentally positive Östersundom –area; circular         economy, natural building</li> </ul>
Smart and sustainable energy system	<ul> <li>De-centralized heating and cooling, large-scale utilizing of renewable energy and excess heat</li> <li>Decentralized solutions of renewable energy, energy storages, demand flexilibility</li> </ul>
The most efficient waste and wastewater treatment globally	<ul> <li>Water efficiency, closed cycles</li> <li>Utilizing byproducts and –flows of energy and materials in the waste and water treatment</li> <li>Ecopark of Ämmänsuo and opening of the water related infrastructure in the Helsinki Capital Region</li> </ul>
Sustainable lifestyle	<ul> <li>Consumer cleantech; housing and mobility</li> <li>New business models such as products and services of sharing economy</li> <li>Consumer based circular economy</li> </ul>
SITRA	Open data applications (public and private data)



Fiksu Kalasatama (Smart Kalasatama -area)



ST1 & Fortum Deep Heat



Allas - ecological seabath, cleantech-showcase

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Strategic co-operation with universities

Start-up and innovation platforms

City as innovation platform and testbed

New innovation tools

Scaling up enterprice development services

Invest-in



Life science

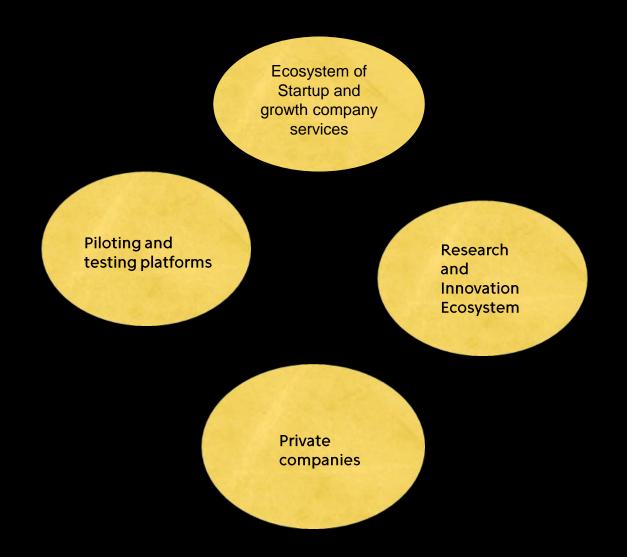
Smart ja clean Helsinki

Marine ICT / smart marine

Design

New ventures

### Open, collaborative Innovation system



- I New collaboration models
- 1. Reasearch and business based innovation systems
  - Health Capital Helsinki
  - Marine ICT
  - Pasila TV studios

- 2. Pre -start up services for students
  - Helsinki Think Company
- 3. Service models for strat up to growth companies

- II City to become an active player in the innovation ecosystem
- 1. Recognizing Innovation potential
  - City wide catalogue of challenges
- 2. Model and testing for early stage market dialogue
  - first pilots in Health and Cleantech sectors
- 3. Model for a reference site for companies

- III Making the Inno Lab activities permanent
- 1. Preparing the model, using service design
- 2. Innovation coordinators hired for Health and Cleantech
- 3. Portfolio of cases

## **Objectives:**

- Increases Helsinki's readiness for innovation cooperation
- Activates the city to develop and use new solutions
- Strenghtens cooperation with businesses
- Ensures services to growth companies

