

An international innovation strategy for Skåne region 2012—2020

Pilot area: smart sustainable cities

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Smart Sustainable Cities

Knowledge, products, processes, services and systems at the intersection between a broad range of technological areas, between technology and users, co-operation and governance models, stakeholder engagement, financing and business models that solves cities' sustainability challenges.







Integrated smart grids, Hyllie, Malmö



The next flagship for the city of Malmö on sustainable urban development

Overview

- New 'green field' area which will be an integrated part of the City of Malmö
- New Hyllie will include 9,000 office workspaces and 9,000 apartments until 2030.
- First building stage started 2012 and will includes the building of 2000 residents and 2000 workplaces

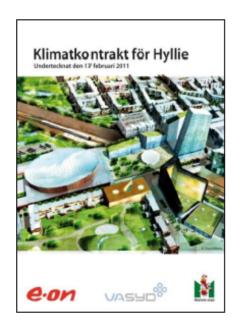
Cooperation between Malmö stad, VA SYD och E.ON

- Joint project initiated in March 2010
- Vision and framework was outlined in a Climate contract which was signed in February 2011

Vision

Hyllie to become the most climate smart city area in the Öresund region and an international role model for sustainable city development











Trends

Technical Solution



Technical System



Integration of technical systems



Integration of technical & non-technical systems

Need for faster adaption



Increased focus on:

- implementation
- scaling
- spreading



Increased focus on:

- user participation
- collaboration
- financing

Incentives to solve environment and resource issues



Solve environment, resource and social problems, create growth and jobs



Driven by needs



Understanding international markets

From building and energy issues to broader and more complex issues = need for smart system integration, cooperation and internationalization

Interacting with international markets necessary to be a leader

Skåne's internationalization strategy builds on existing relations, market opportunities and interest from stakeholders

- Baltic Sea Region Finland, Denmark, Germany.
- Europe engagement in relevant initiatives, partnerships on selected applications
- Asia building on existing co-operation with Guangdong and Hong Kong
- Building relations with international actors/organizations at the forefront of ideas and knowledge
- Supporting existing co-operations between actors in Skåne and international partners



Vision

Building on global challenges and international market needs, Skåne aims at by 2020

- be the international leader in creating and implementing innovations for smart sustainable cities
- be the best place and partner for R&D, prototyping, testing and demonstration of innovations in the field of smart sustainable cities

Focus innovation activities on selected thematic areas

- retrofit and regeneration for sustainability in existing buildings and city districts
 - smart collaboration and financing models
 - smart lighting
 - smart mobility
 - smart energy/heating/cooling

Execute this through demonstration in projects with critical mass and international participation



Hyllie, Malmö Southeast, Lund Northeast

Malmö Sustainable City Innovation platform

An initiative between the city, academia and the private sector to establish a structured long term innovation program focusing on the **physical regeneration of the existing 60s and 70s housing stock** as engine for social change, growth and decreased climate impact.

Work themes:

- Technical development of buildings
- Physical development of districts
- Social and economical development of inhabitants
- Collaboration, financing and business models

Partners: Malmö city, Malmö University, Lund University, University of Agricultural Science, Region Skåne, E.ON, MKB, Media Evolution, ICIM, Wilhem, Trianon, WSP, Schneider Electric, Skanska, NCC, Peab, IBM, HSB, Sabo, White



Lund Sustainable City Innovation platform

An initiative between the city, academia and the private sector to establish a structured long term innovation program focusing on utilizing investments into research infrastructure, new city districts and transport in combination with cutting edge competencies to create innovations and growth.

Work themes:

- Smart energy systems
- Smart mobility
- Smart lighting
- Efficient implementation

Partners: Lunds city, Lunds Energi, Lund University, Ideon, Region Skåne, E.ON, Sustainable Business Hub, SP, Akademiska Hus, Siemens



Challenges for Skåne

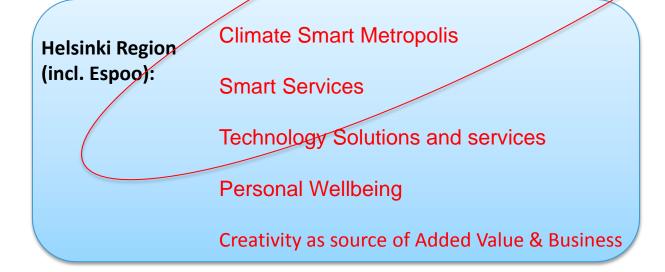
- Increase internationalization
 - Understanding of international needs/markets
 - Create partnerships with frontrunners
- Increase system capabilities for co-operation and execution, including long term preparation for calls/funding
- Increase participation from industry and increase commercial spinoff effects
- Explore white spaces/cross sectorial fields (like smart sustainable cities personal health)
- Find financing



Example: cooperation with Finland

Tampere INKA Smart cities

Health
Skåne
Personal health
Traffic
Innovation Platforms





Collaboration potentials with Tampere

- Innovation eco-systems within smart sustainable cities
- Smart mobility
- Retrofit for sustainability of existing city districts
- Smart Lighting
- Demola model for prototyping, applied on smart sustainable cities



Collaboration challenges to start working in BSR – Skåne and Tampere as example

- Focus areas, roles, partners etc
 - We can sort it out
- Cultural differences and capacity to cooperate
 - Takes time, need for improvement/training
- Financing is a real challenge, for example
 - National programs are not coordinated between nations (on themes, call dates, type of partners that can apply etc) to support common projects
 - National/regional ERDF programs are not coordinated to support common projects
 - We are in separate Interreg programs
 - It is hard to find financing for "border-walk-functions" that are useful in the conception and setup phase of cooperation
 - Long application processes
 - Without the above we risk to have less strength in preparing for H2020



Collaboration challenges to start working in BSR – issues to discuss

- How do we build capabilities to cooperate more efficient?
- How can program managers and funding agencies better coordinate to meet the needs of consortia that are setting up international, cross sectorial projects and cooperation?

