



Sustainable energy Positive & zero cARbon CommunitieS



Co-creation as a tool for developing future cities

Yhteiskehittäminen tulevaisuuden kaupunkien ja kaupunkiympäristöjen hahmottamisen työkaluna

1.11.2022

SPARCS-webinaari: Moniääninen kaupunki – yhdessä kehittämällä kohti kestävämpää kaupunkiympäristöä

Jani Tartia (FT) / *Erityisasiantuntija, Espoon kaupunki, Kestävänä kehityksen osaamiskeskus,*
City of Espoo, Centre of excellence for sustainable development,
H2020 SPARCS



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Topic: LC-SC3-SCC-1-2018-2019-2020: Smart Cities and Communities

Sustainable development work in Espoo

The Espoo Story

The Sustainable Espoo Programme

Goals



Espoo will be a pioneer in implementing the UN Sustainable Development Goals



Espoo will achieve carbon neutrality by 2030



The Espoo community and residents will act sustainably



Espoo will be a model city of sustainable urban development



Espoo is the best development partner for sustainable and smart urban solutions

Development entities

Mobility

Energy systems

Circular economy and sustainable living

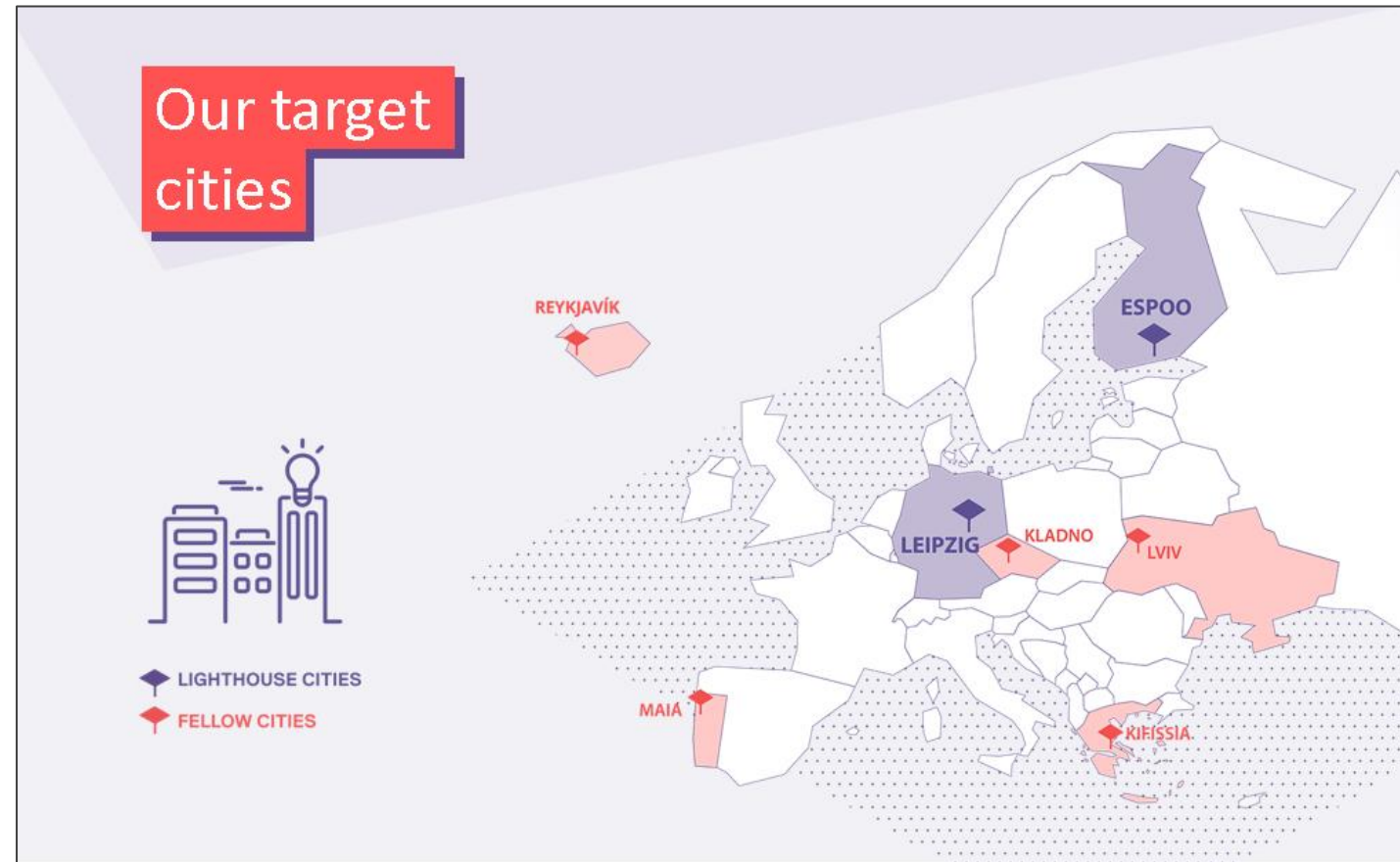
Sustainable land use and construction

Nearby nature and biodiversity



Horizon2020: SPARCS (2019-2024) project

- ▶ Smart city project
- ▶ +30 partners,
2 Lighthouse & 5 Fellow cities
- ▶ Future urban *positive energy districts*, PEDs
 - "Districts that produce more energy than they consume"
- ▶ Espoo demonstration areas: Leppävaara & Sello blocks, Espoonlahti & Lippulaiva blocks, Kera
- ▶ Focus areas on urban transformation towards CO2 reduction:
 - Local energy systems, balancing the system
 - E-mobility, charging and mobility behaviour
 - Citizen engagement, citizen-centric approaches



Focus: Co-creation as a tool

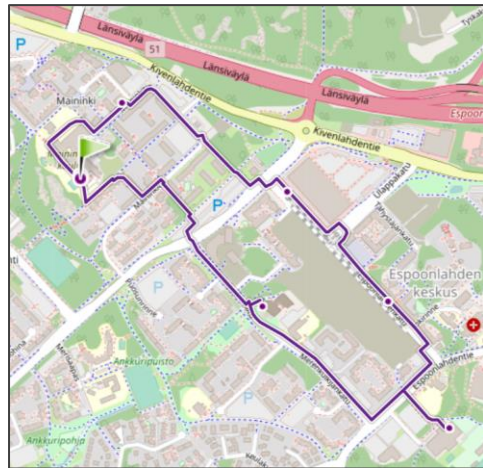
- ▶ Human-centric approaches to smart city development
- ▶ Three co-creation cases from SPARCS project on smart and sustainable city development
 1. Buddy Class activities (i.e. the grass-root level)
 2. E-mobility hub concept development (i.e. the local/block level)
 3. Co-creation model for developing future smart and sustainable urban areas (i.e. the district level)

01: Buddy Class

- ▶ Two Buddy Classes in Espoo
- ▶ 7th → 9th grade, 2020-2023
- ▶ Dialogues about sustainable development themes with the students:
 - Knowledge share
 - Workshops
 - Site visits
- ▶ Focus themes: mobility, circular economy, future cities, energy, participation
- ▶ Buddy Class meeting series as a process:
 - Feedback → learning → development of future activities
- ▶ Scaling: Learnings for a model that can be used elsewhere



#01 SPARCS Buddy class (cont.): Orientation in the future city in Espoonlahti, spring 2021



"... a lot of sports possibilities, art, forests and tranquility. Skate parks for the kids, and places for young people to hang around would be nice. A shopping centre would also need to be close..."

"I would like to live in the center of some city. I'd like to have good services close by and preferably some fun 'city center' things to do..."

"I'd like to live in a modern environment. I want more stores. I want more parks (in natural state). I want activities but also places where it would be quiet and relaxed..."

"I would like to have more green spaces, and more bus routes."



"...in a safe and clean environment. There needs to be a train station close by and good bus routes. And a big park! Benches and a fountain in the park..."

02: E-mobility hub conceptualization workshops

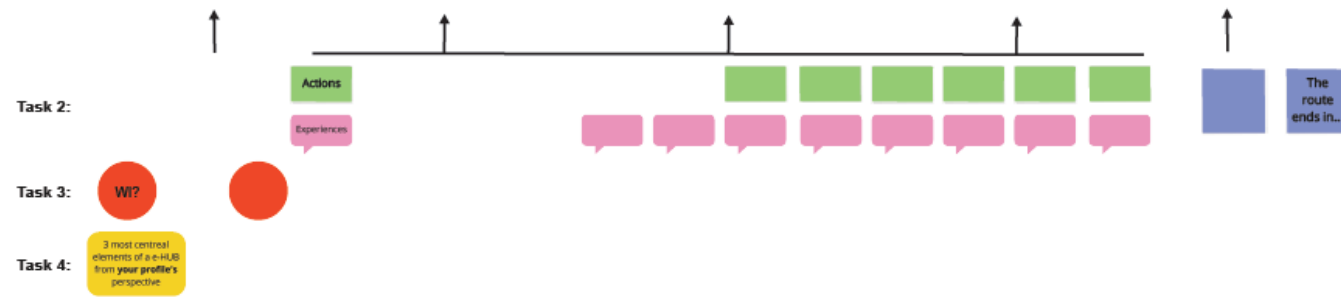
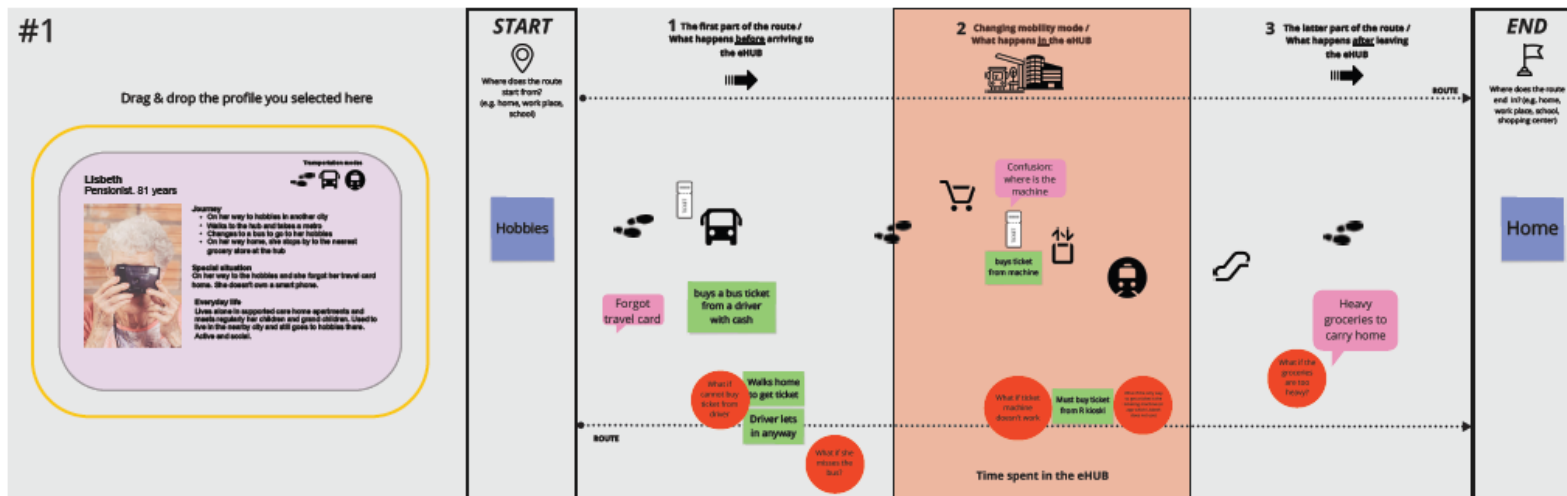
- ▶ A workshop series (2021) developing the concept of a future 'e-mobility hub' with different stakeholders:
 - Lead users (citizens)
 - Service providers (companies, organizations)
 - Professional/work related hub users (e.g. logistics)
 - City officials (departments)

- ▶ Mobility is not a technological question but a question of habits, routines, social interaction, possibilities

Mobility modes are turning electric in a rapid pace – what changes does it mean for mobility hubs? (Or does anything change?)



02: E-mobility hub conceptualization workshops (cont.)



MOBILITY MODE icons



SERVICE & ECOSYSTEM icons



03 Co-creation model for future urban development

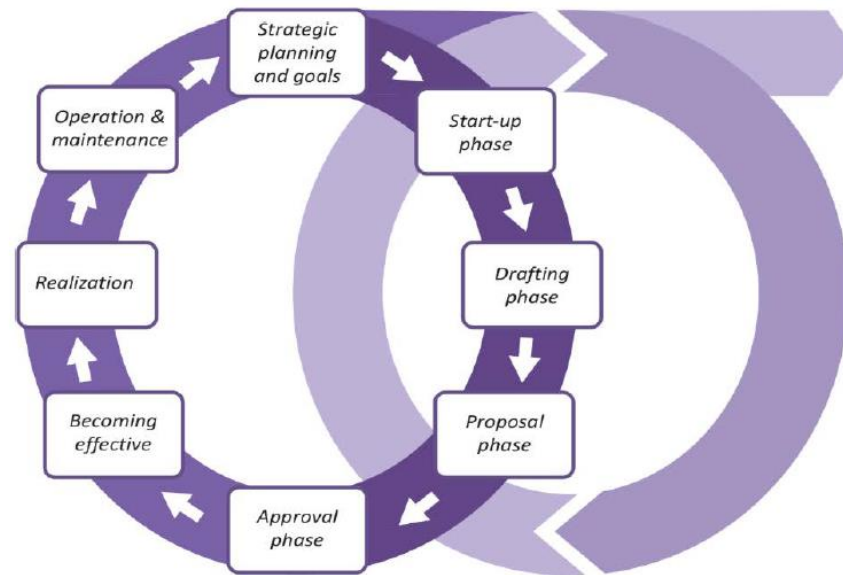
- ▶ Co-creation model for sustainable and smart urban areas (12/2021-12/2022)
 - The model is developed through co-creative methods between different stakeholders (Design Sprints, other type of workshops, questionnaires)
 - How to create new kinds of urban districts that are both smart and sustainable together?
 - How can new services, spaces, practices related to sustainability and smartness be designed as part of a larger area/district? Area as a system.
- ▶ A work in progress, toolbox being built here:
 - ▶ www.co-creatingsparcs.fi
 - ▶ Launch webinar: 30.11.2022 08:30-11:00

"How to plan and design new urban areas between different stakeholders, and take sustainable and smart city solutions into account in different stages of the development of an area?"





Kera area as a case example for the model development



Conclusion

- ▶ Engagement: smart city themes and the SPARCS project
 - ▶ Stakeholders: Multiple views and covered thematic fields (urban planning, technological solution development and implementation, service design)
 - ▶ Complexity increases
 - ▶ Citizen engagement: Technologically oriented subject matter-- > contextualizing, bringing to everyday life and experience
- ▶ Two-way dialogue: co-creation/co-development/co-implementation
- ▶ Towards sustainable (i.e. long lasting) urban transformation

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