

Urban Storage Cluster Südburgenland – Living-Lab-Test Stegersbach and Oberwart



WIR SCHAFFEN
IHRE INDIVIDUELLE
ENERGIELÖSUNG

Andreas Stecker | 20 March 2018



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WIR REALISIEREN
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INNOVATIONSLABOR

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| Eine Initiative von Andreas Schneemann



AGENDA

- Introduction
 - Initial Situation
 - Project objectives
 - Main part
 - Location
 - System description
 - Final part
 - Planned results
 - Innovation laboratory
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INITIAL SITUATION

- Project in the Austrian Research Promotion Agency's Smart Cities initiative (8. Call Smart Cities Demo 2016)

- Collaborative partners

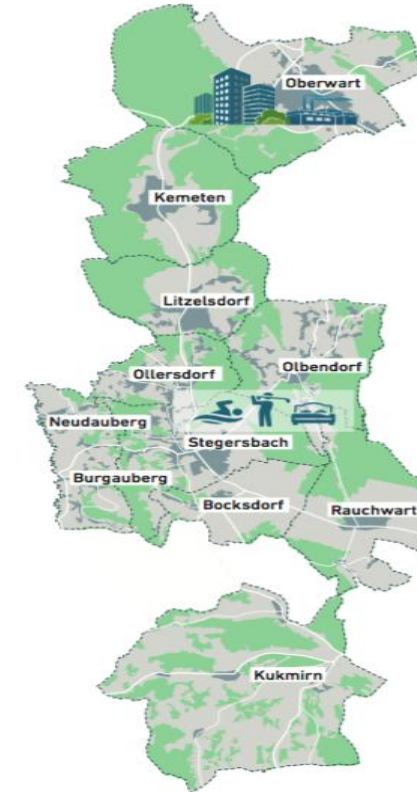
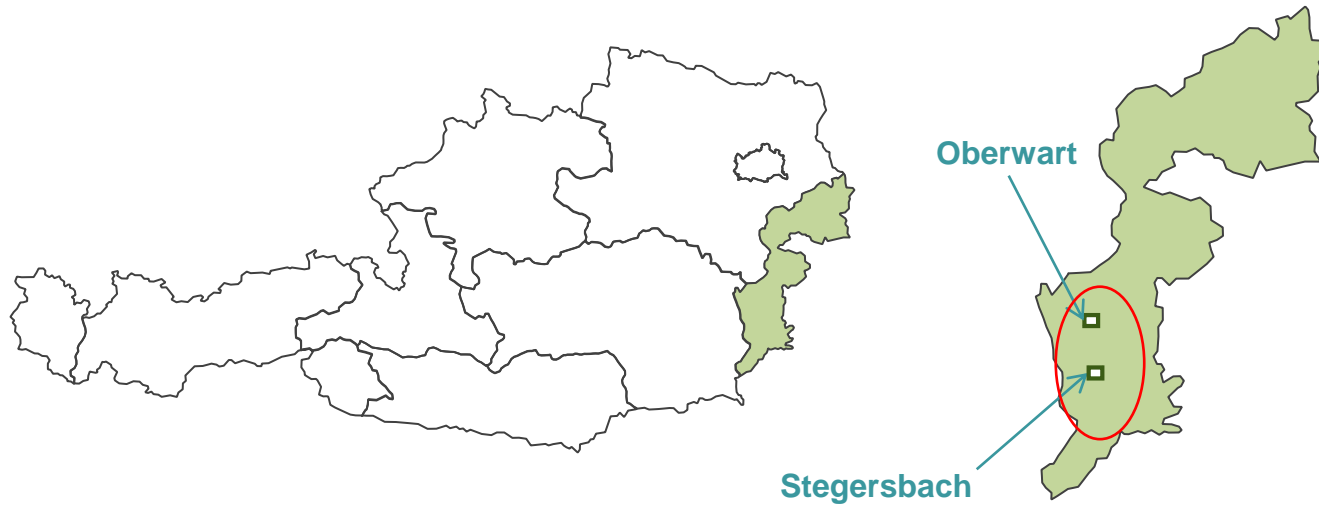


- New types of consumers (“prosumers”) enter the market of the low voltage net
- The precursory project Loadshift Oberwart showed that there are huge potentials of energy flexibilities in the section of non-time-based consumer
- The project Urban Storage Cluster Südburgenland follows the approach to arrange these energy flexibilities in clusters in order to maximize the usage of local provided renewable energies and to ensure the possibility to trade these services

PROJECT OBJECTIVES

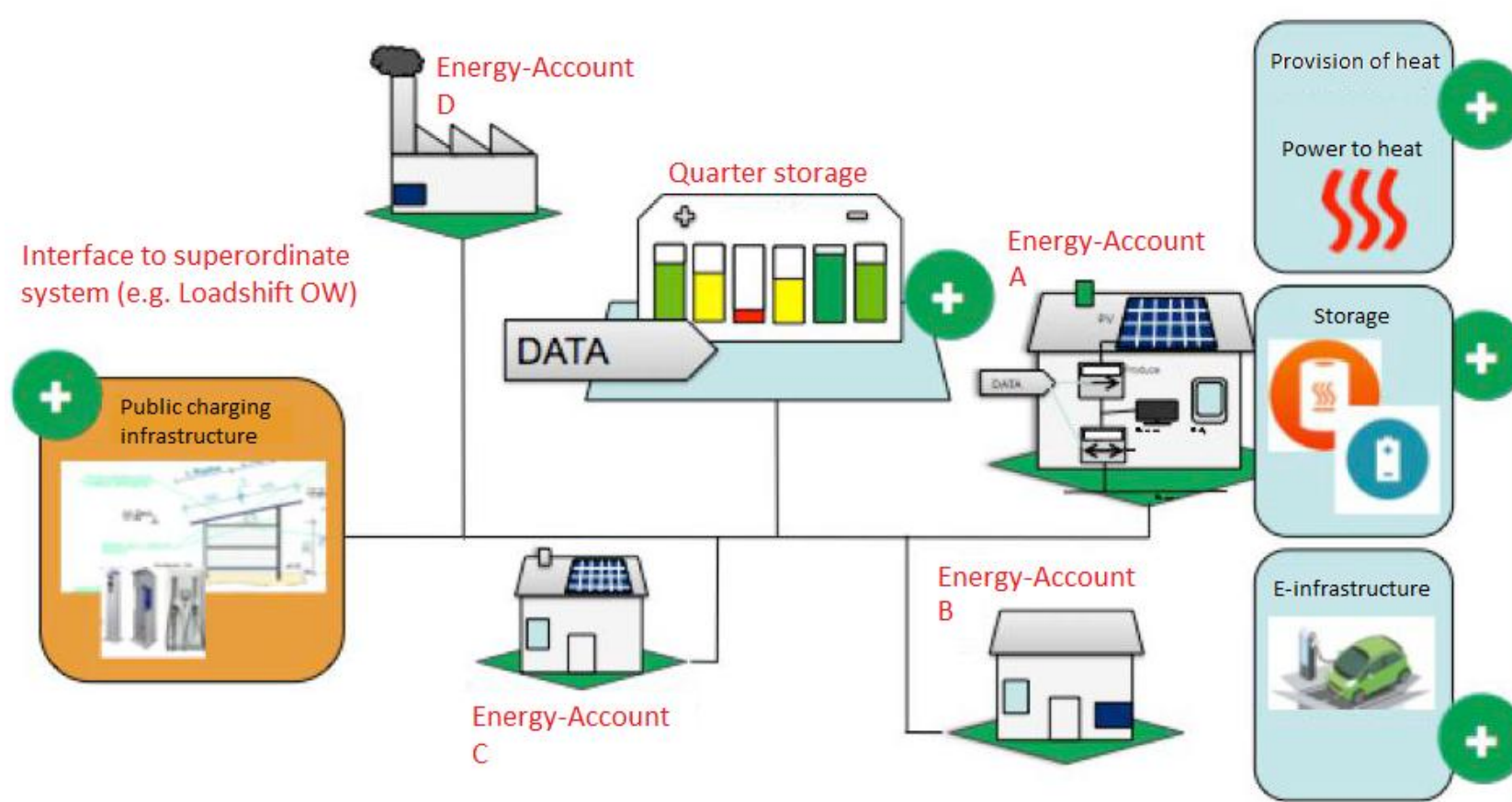
- The development and realization of an living-lab test bed of a storage-based holistic (consumer-, building-, storage-, charging station across) energy management system to handle and to market small energy flexibilities
 - Implementation of electric quarter storage system and single storage systems (accumulators, thermal storages in combination with heat pumps and mobile storages)
 - To establish a visual user interface
- To demonstrate the application of the invented energy account
 - To activate and to market the non-time-based consumer energy flexibilities
 - Efficient use of local excess energy
 - Creating incentives for the change to e-mobility

LOCATION

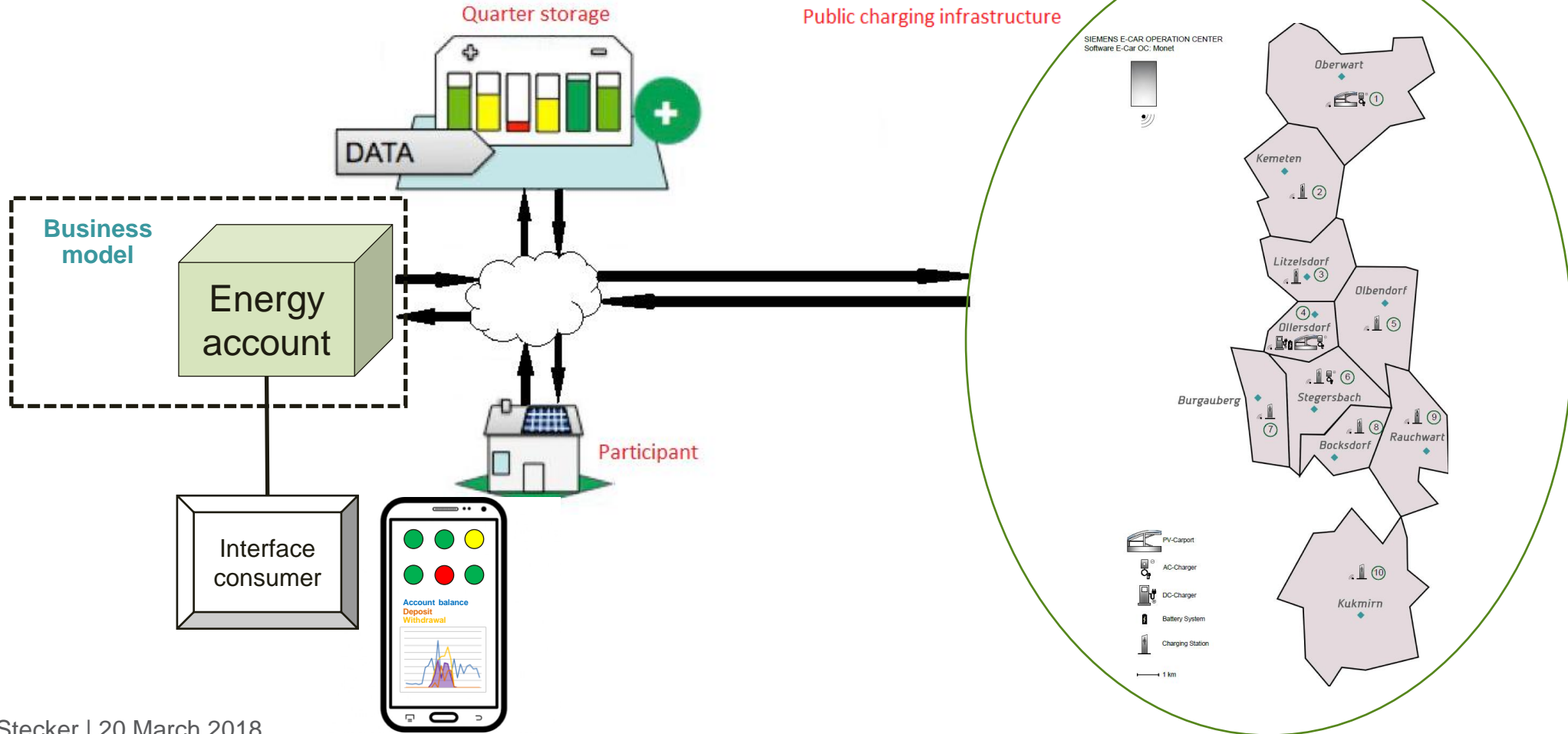


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SYSTEM DESCRIPTION



SYSTEM DESCRIPTION



PLANNED RESULTS

- Feasible solutions concerning the handling and the marketing of energy flexibilities
- Representation of the relevant frame conditions and the realization data of quarter storages
- Development of a subscriber-specific standard for cluster participants
- Developed / adapted, tested and verified components and software systems
- Established interface to superordinate system
- Development of the visual interface for the consumer (consumer interface)
- Judicial aspects, business and public participant models
- Informed, experimental recorded statements / concerning experiences / barriers / factors of success / potentials / usability as well as recommended actions and conclusions by active cluster-participants

INNOVATION LABORATORY



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- Access to infrastructure for testing in real life environment
- Co-creation and open innovation processes
- Regional simulation and development by innovation
- Learn- & demonstration space
- Consulting & coaching

THANK YOU FOR YOUR ATTENTION !



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