



Smart Grids Plus

ERA-Net

Scoping Workshop, Malmö 2015

**Managing electricity self consumption with ICT to
meet the needs of people and grid operators**

David Lillienberg, E.ON *e-on*

BACKGROUND



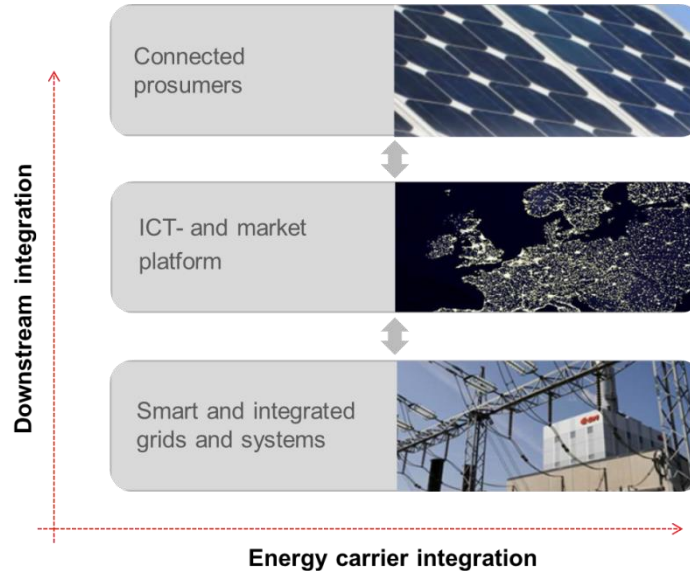
- David Lillienberg, Project Manager Sustainable City, E.ON
- Professional experience: **E.ON** (Sweden/Germany) and **LCG Consulting** (US/France)
- Academic experience: Master of Science degrees from **Chalmers University** and **Ecole des Mines de Paris**

RELEVANT PROJECTS

- **FINESCE**, EU project under FP7: Workpackage leader, Hyllie trial (Future Internet Capabilities/ICT and Energy Management)
- **Hyllie Smart Grid**: Project Manager (Smart grid, Smart home, Storage, E-Mobility, PPP)



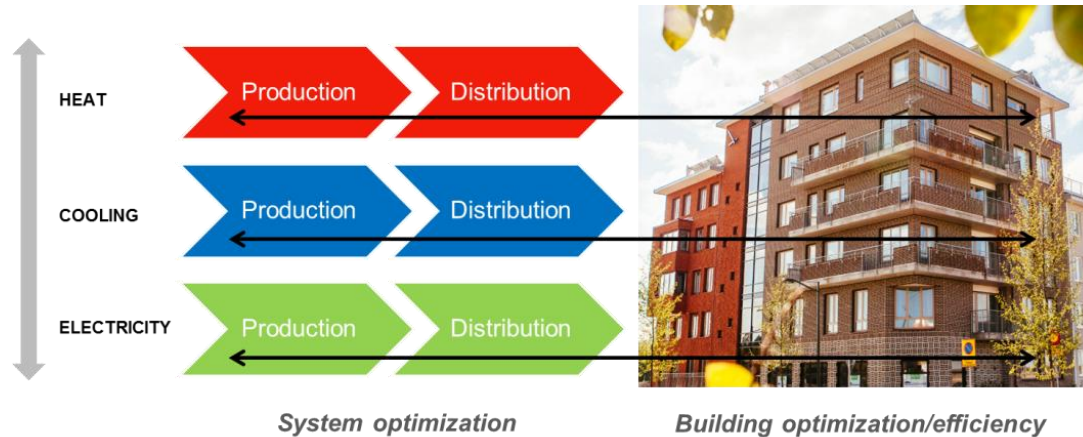
GENERAL APPROACH TOWARDS INTEGRATED, DIGITAL AND COMPLEX AGENDA...



...which could be partly inline with a Holistic Model for the Future Energy System (2.1)

RELEVANT SCENARIO FOR PROPOSED RESEARCH

Buildings as dynamic parts of the energy system with customer engagement and storage



USE CASE FOR EXPECTED RESULTS

Managing different kinds of Buildings as Intelligent Objects on Grids (2.5 & 2.6)

- Incentive structures for active customers/buildings?
- Embedded technologies as local “gateways” for distributed intelligence and integration & combination of various services?
- Disaggregation for new services and customer/building control?
- Integration of sensor technologies and meters for control and comfort?
- Demand response standard(s), across energy carriers, for Europe?

USE CASE FOR EXPECTED RESULTS

Operating Distributed Storage to Balance Fluctuating Generation and Consumption (2.3)

- Storage as a service?

Other

- Open API's and Open Data?
- More research and demonstration with focus on business and market models (in combination with technical pilots)?



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