







Mission Innovation Online Event May 13th, 2020









Innovation Lab act4.energy – main objectives

- Creation of a frame work to accelerate social transformation processes, by including research, economy, politics, administration and civil society
- Development of innovative energy-management services (identification and activation of energy-flexibility potentials)
- Systematic integration of end-users (Co-Creation process)
- Creation of innovation-ecosystems (Open Innovation)
- Development of a scalable rural model region











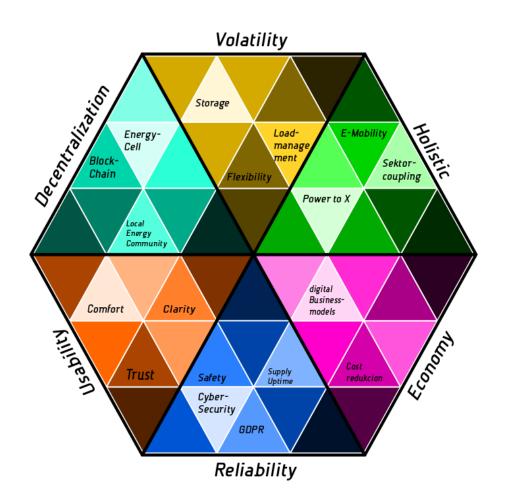






Working towards the Energy Transition the 6 act4.energy challenges

- Volatility
- Decentralization
- Economic
- Holistic
- Usability
- Reliability



Energie, Mobilität,









Energy Communities: Key goals and duties currently being worked on at act4.energy:



- Cooperative renewable energy generation (electric and thermal)
- ☐ Cooperative self consumption (peer to peer trading)
- ☐ Energy Islands, Black-out prevention
- Cooperative investment and financing
- ☐ Digital supply and demand response systems (flexibility aggregation)











Energy Communities: Key goals and duties currently being worked on at act4.energy:

Energy Communities "on balance"

Citizen Energy Communities

for electric energy only

mostly peer-to-peer business models

Local Energy Communities

Renewable Energy Communities

all renewable energy forms

deep technical integration of participants

utilization of flexibilities, sector coupling, ...



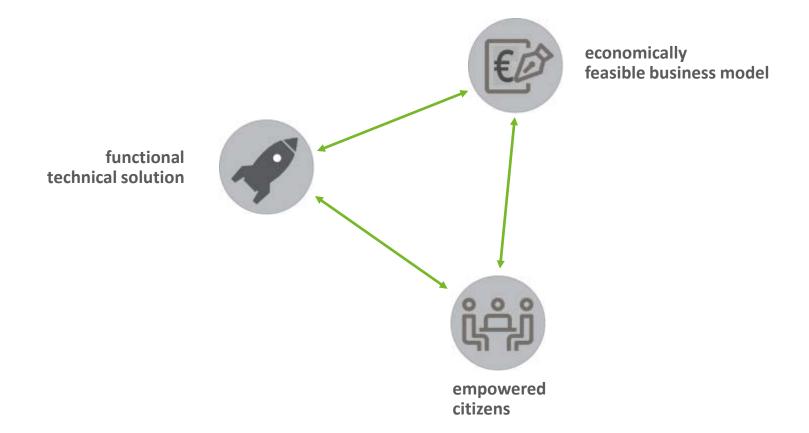








Energy Communities: Key factors for successful implementation





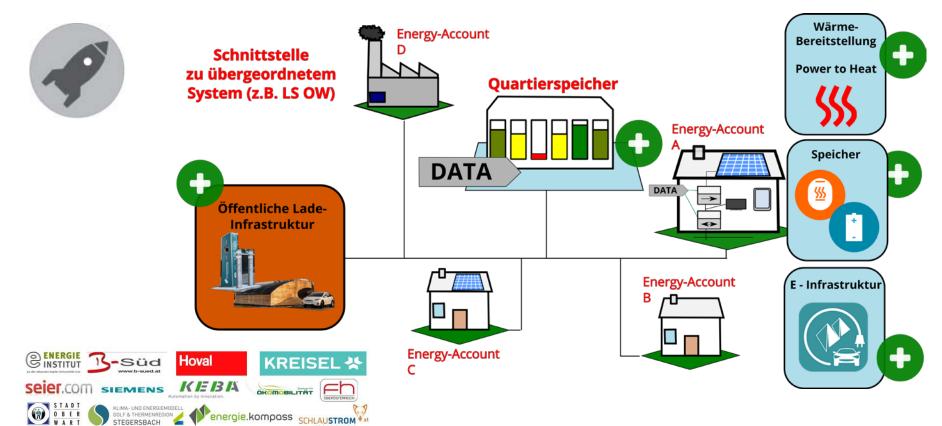








Goal: formation of storage clusters (i.e. Energy Communities) to exploit, bundle and market micro - flexibilities



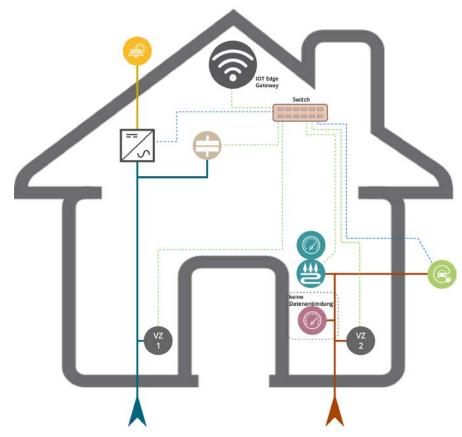














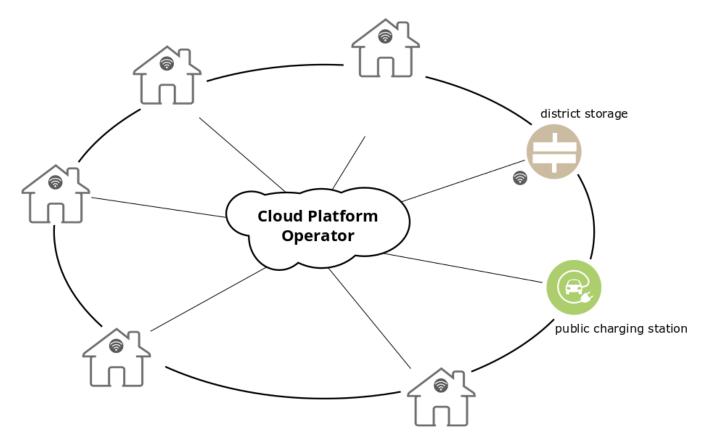
























- Marketing of the bundled flexibilities
- Energy Account

























Information

Communication

Cooperation







Goal: formation of storage clusters (i.e. Energy Communities) to exploit, bundle and market micro - flexibilities

- technical development is finalized
- Pilot household is implemented and running
- Additional participants are being added in Q2/2020
- Operation, data acquisition and analysis until Q3/2021











Other Energy Community projects within Innovation Lab act4.energy:

SonnWende+ (Stadt der Zukunft)

focus on blockchain solutions for energy communities

CLUE (ERA-Net)

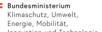
focus on integration of E-Mobility

2 Horizon 2020 projects to be started in Q3/2020

focus on replicability, solution templating, citizen empowerment

ENCHANT - Horizon 2020 consortium

















Thank you for your attention!

