

An aerial photograph of a village built on a hillside. The houses have various roof colors, including red and grey, and many have solar panels installed. A prominent white church tower with a clock face is visible in the center. The background is a dense forest of green trees.

EWS
ElektrizitätsWerke
Schönau

Build the sustainable energy future together.

**The EWS Schönau
energy community showcase.**

About EWS



200,000 electricity and gas customers

operate **9** electricity grids around Schönau region

currently approx. **170** employees

cooperative
members **>7.000**

197 million € turnover in 2018

Our electricity supply goal



**Renewable Energy
Community**
of all cooperative members
and customers

Prosumers support the community



How is that supposed to work?

Prosumers support the community



By also
supplying each
other

Value of new technologies?



- Smart metering systems
- Energy management



- Secure data transfer
- Self-consumption
- Contribution to system stability

Our community showcase



27 participants

new small PV plants

battery storage

former FiT PV plants

agrophotovoltaics

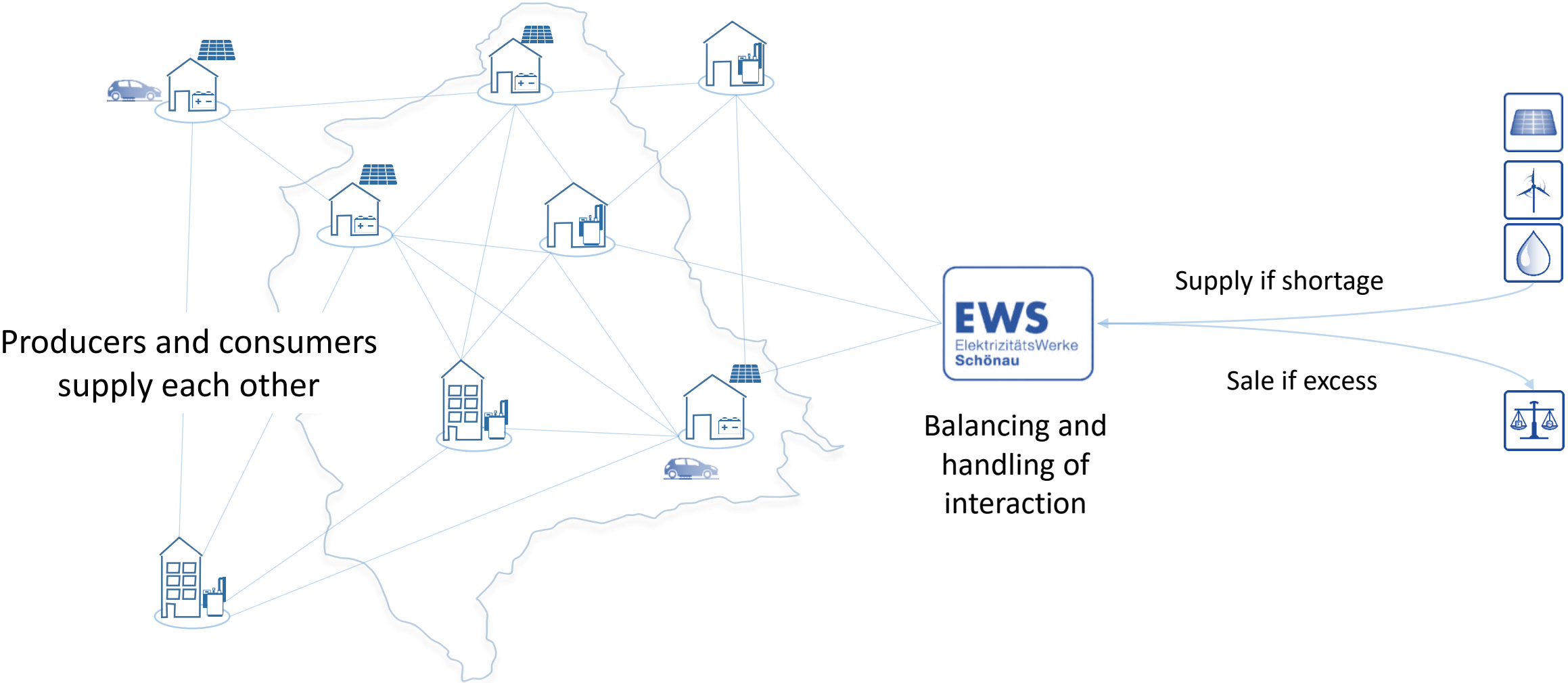
electric vehicles

fuel cells

micro CHP



Energy economic implementation



Producers and consumers supply each other

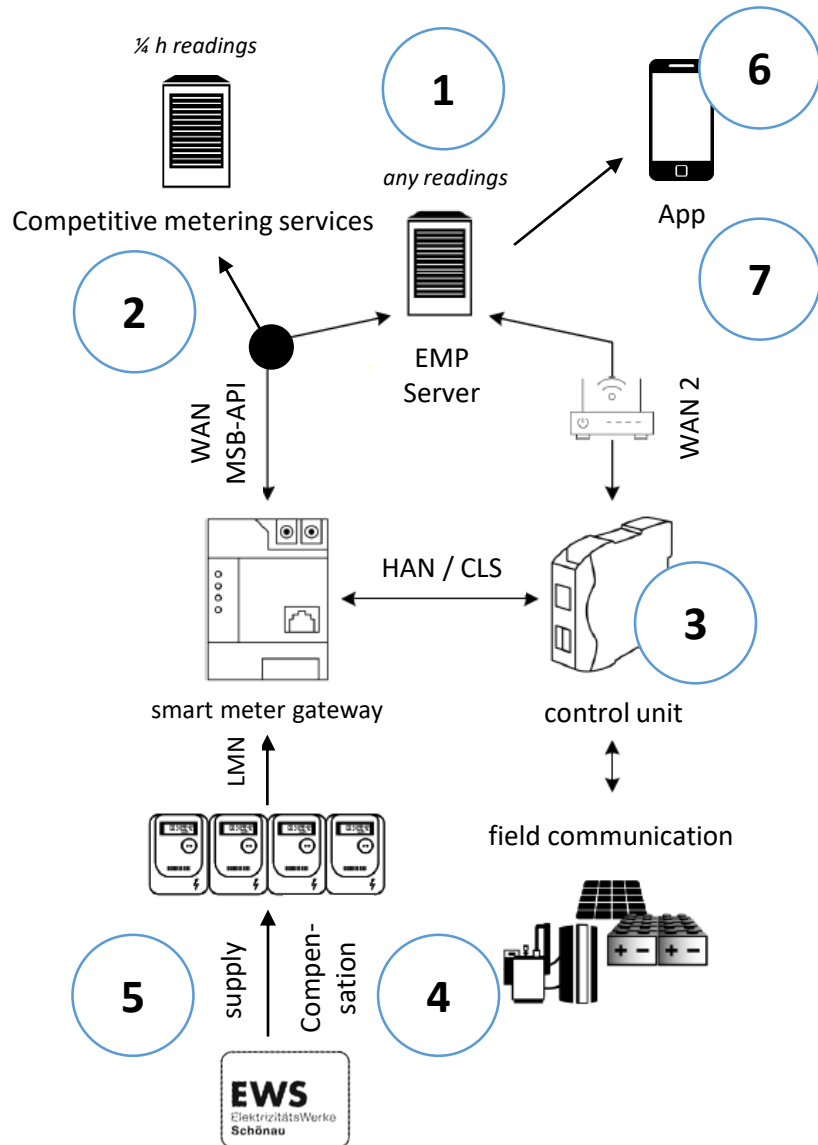
Balancing and handling of interaction

Supply if shortage

Sale if excess



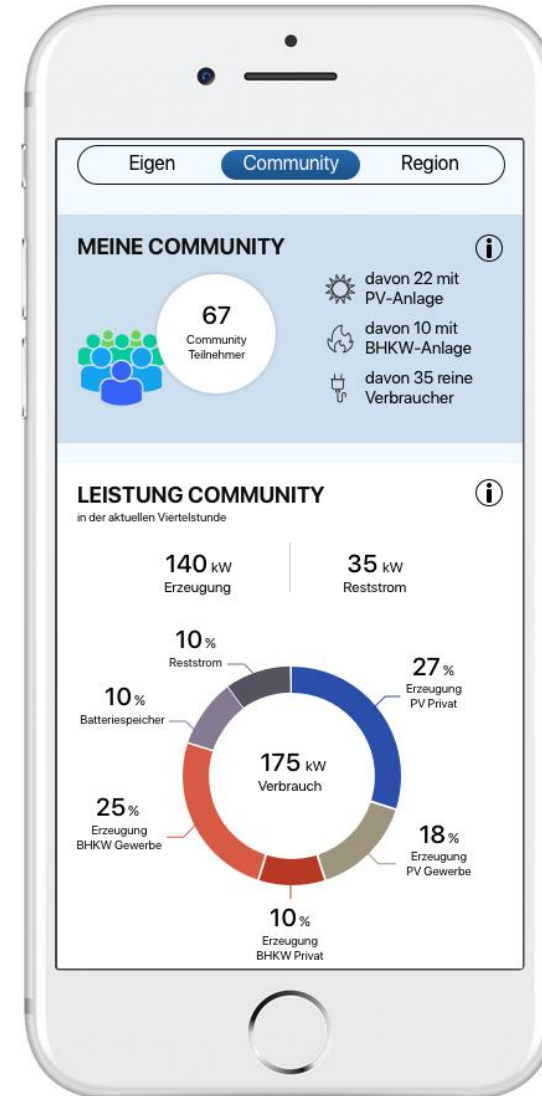
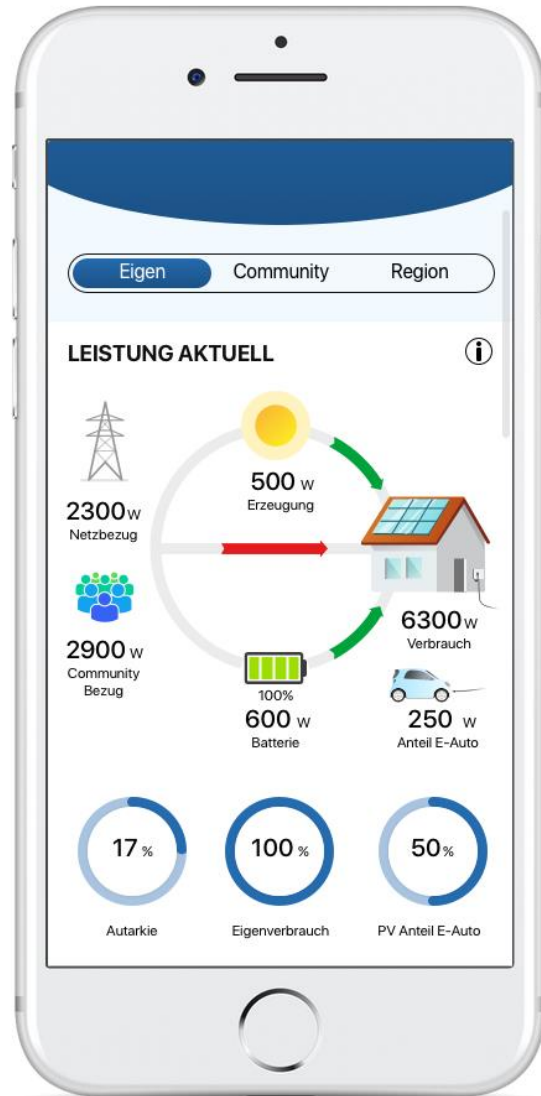
Technology and regulation



- ① Measurement, analytics and visualization of **high resolution data**
- ② Measurement, analytics and visualization of **quarter-hourly values**
- ③ **Connection and read out** of different assets (Electricity, heat und mobility)
- ④ **Purchase and reimbursement** of surplus electricity from prosumers
- ⑤ Delivery of electricity from prosumers to consumers **beyond national FiT's**
- ⑥ **Monitoring and control** of assets in apps
- ⑦ **Forecasting** for optimization reasons



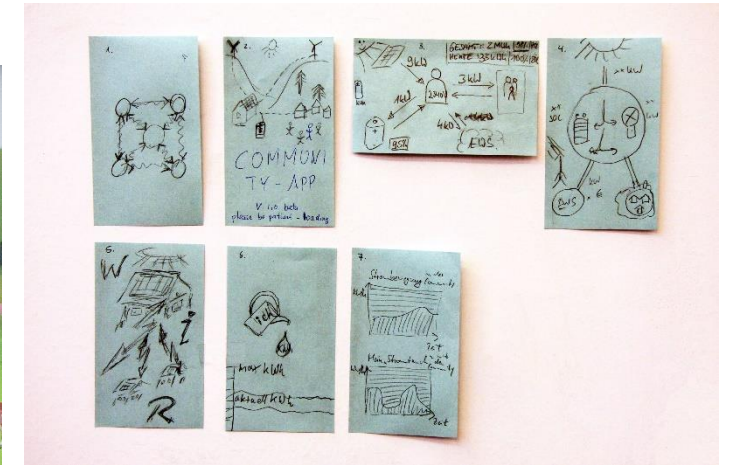
Visualization



Customer participation



Involvement



Engagement



Lessons learnt so far



- It's complex. Do it as simple as possible.
- Chance to continue to operate PV systems after FiT.
- Consumers support prosumers. Involve them to increase acceptance of sustainable energy.
- Inspire and involve people to build additional renewables.
- Involve communities and their participants in electricity markets (flexibility management).
- Provide regulatory incentives and reduce technical costs.

Thies Stillahn

EWS Elektrizitätswerke Schönau eG

t.stillahn@ews-schoenau.de

+49 7673 8885-371

Thank you!

