

An aerial photograph of a residential neighborhood with a large solar farm in the foreground. A white network diagram with four nodes and connecting lines is overlaid on the image. A green speech bubble in the top left contains the text 'Connecting PV Prosumers and DSOs: how can we make benefit BOTH?'.

Connecting PV Prosumers and DSOs:  
how can we make benefit BOTH?

Ruud Berndsen, 10 March 2020

allliander

# Alliander: a Dutch energy-network company



- Customers: 5.7 million
- Availability of energy: 99.99%
- Installed smart meters: 1.6 million
- Customers feeding energy to the grid: 144,200
- Employees: 5,755
- Employee satisfaction 70%
- Revenue: € 1.7 billion
- Investments: € 666 million



# Key movements

- Energy supply becomes more decentralised: production and exchange at a more local level
- Digitalisation of society and the energy system
- Renewable energy and strong electrification, moving away from fossil sources of energy
- In 2019, Alliander laid 38% more cables, and connected 48% more solar panels and 39% more EV charging stations, while also installing nearly 1 million smart meters.

# Congestion on the electricity grid



- No transport available
- Very limited transport available
- Limited transport available
- Transport available

# How do we manage this challenge?



## Increase investments

- In 2020 Alliander will invest EUR 882 million, mainly in the grid



## Short term solutions

- Flexmarkets
- Flexnet
- Congestion management
- Non-redundant configurations
- Dynamic supply adjustment



## Long term solutions

- Conversion into hydrogen
- Storage
- Stimulate self-consumption

# Solutions that may help prosumers and DSOs?

- Stimulate that locally produced energy is consumed locally as much as possible.
- Develop neutral platforms that facilitate P2P energy-trading (see Port of Amsterdam as an example).
- Define a EU-wide framework for stimulating Citizen Energy Communities.
- Enhance public-private partnership in innovative business-models for storage, smart inverting, energy-sharing and others .