flexQgrid.
The grid of the future becomes real.

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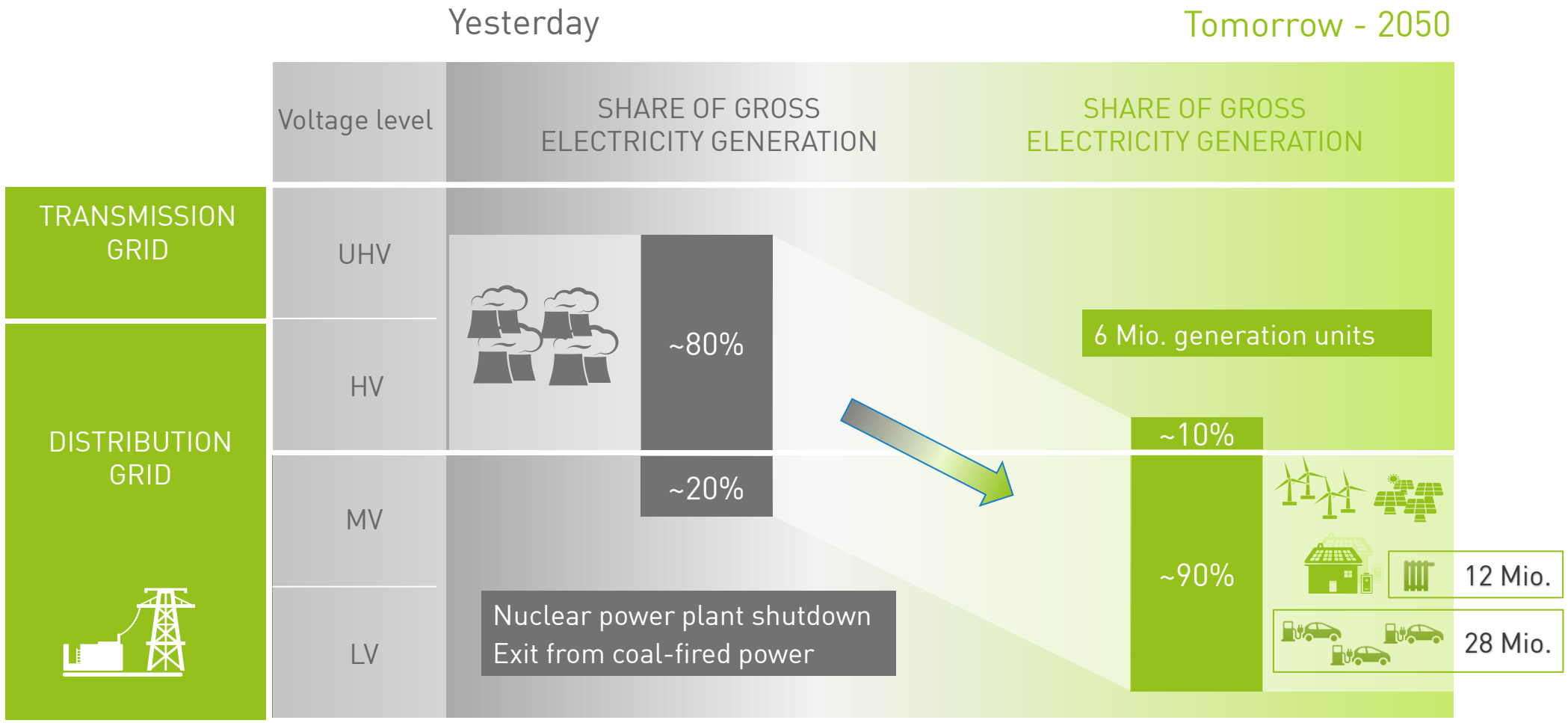
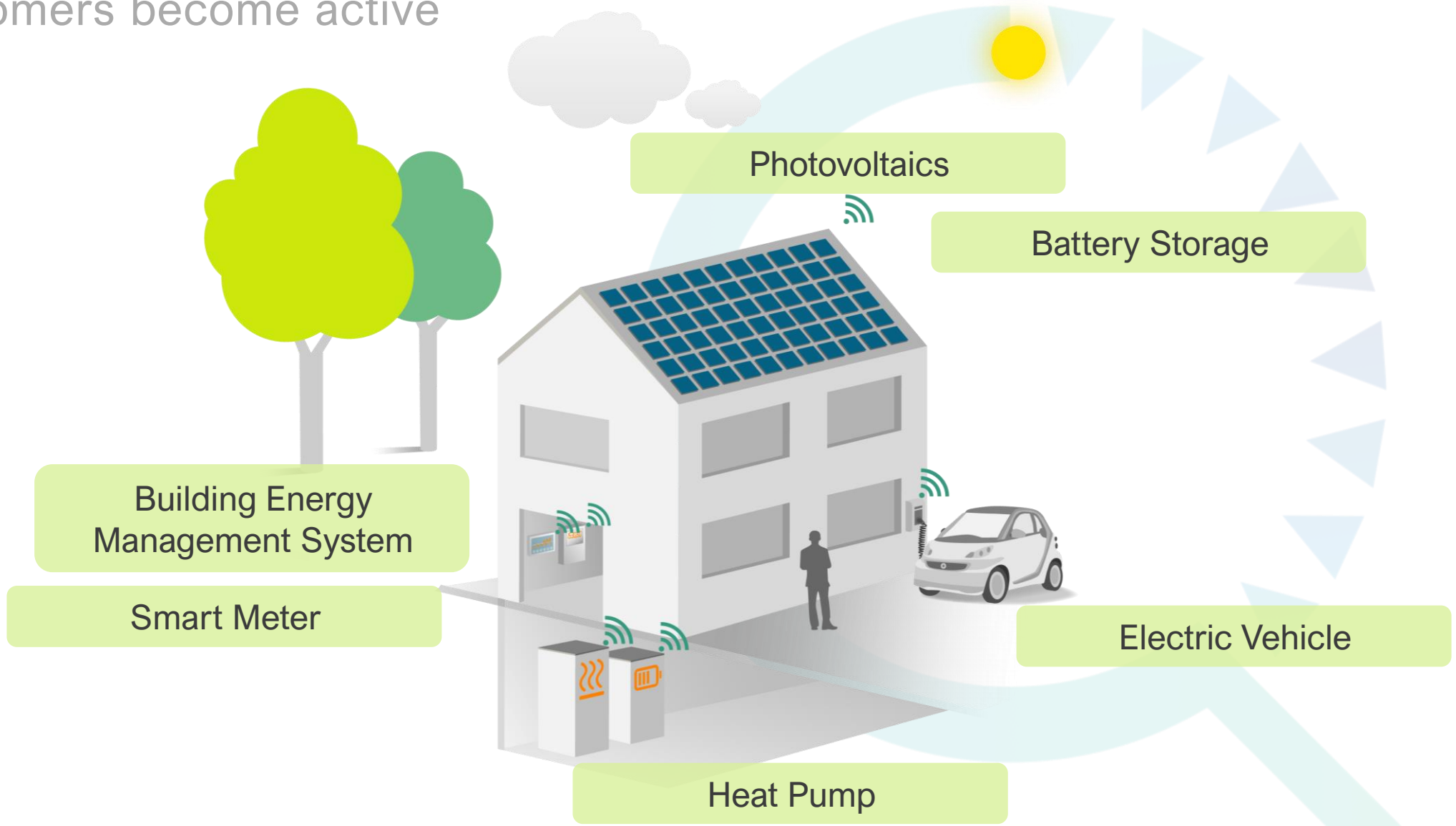
Gefördert durch:
Bundesministerium für Wirtschaft und Energie
aufgrund eines Beschlusses des Deutschen Bundestages

flexQgrid

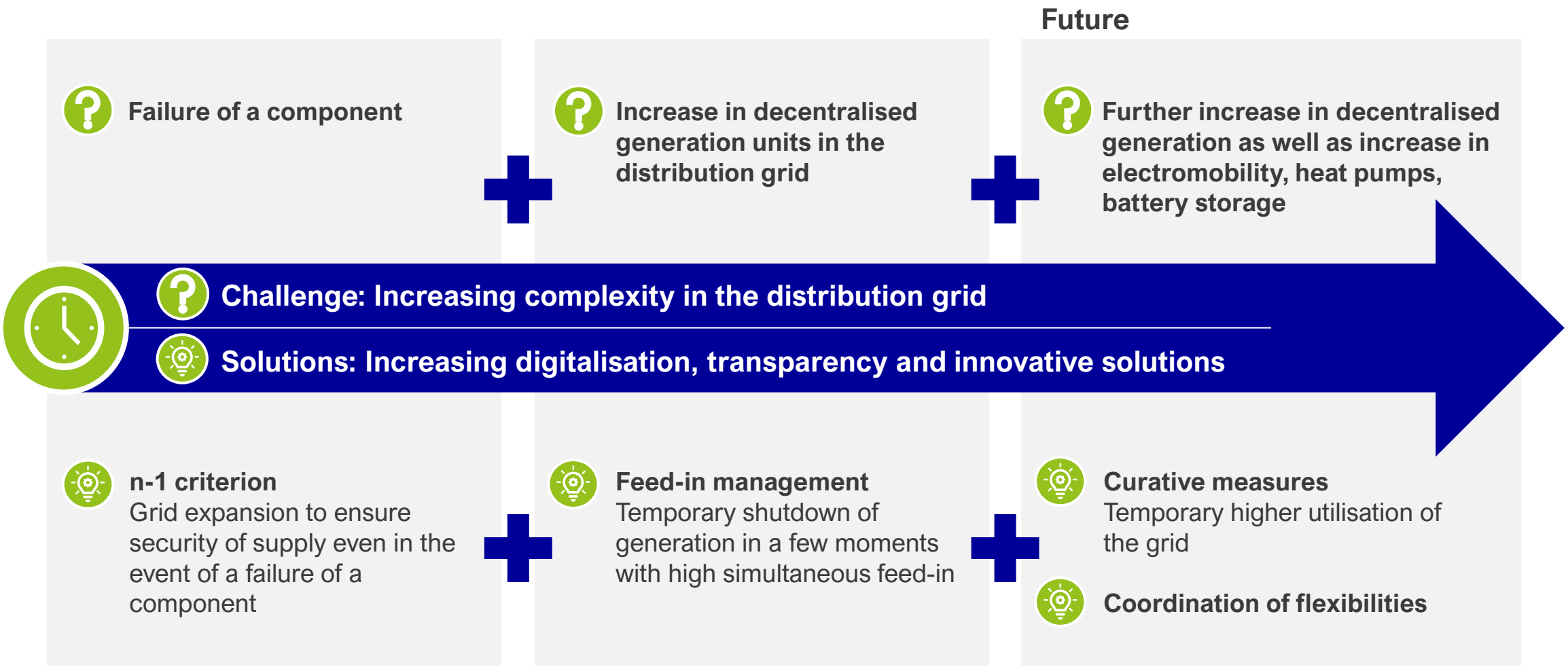
Transition of the energy system
Distribution grid in focus



Changes within the
Customers become active

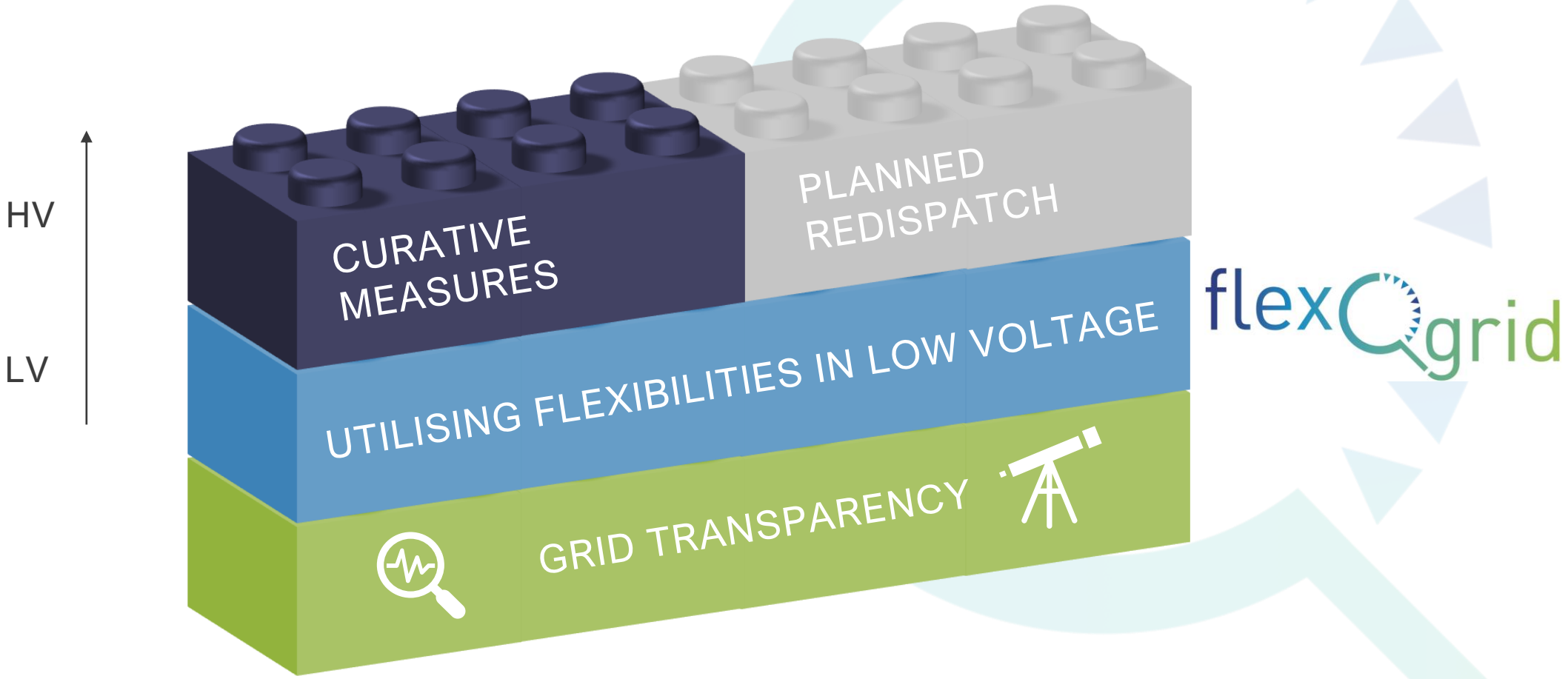


Solutions to ensure security of supply



Future grid control

System change requires many building blocks



Using flexible units in low voltage grids

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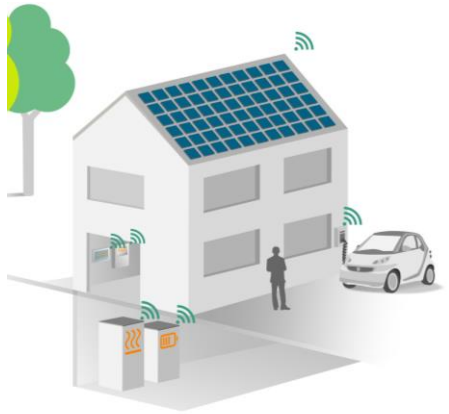
BACKGROUND

- Increase in electromobility and heating power systems
- Increasing number of photovoltaic systems and battery storage systems

→ Prerequisite for the grid of the future: coordination of flexibilities also in low voltage



Supported by:
Federal Ministry for Economic Affairs and Energy
on the basis of a decision by the German Bundestag

OUR GOALS AND MISSION

Enabling **energy system transformation** and maximizing the use of renewable energies

Integrate all decentralized systems while maintaining **safe grid operation**

considering **all components** (grid control to units in households)

integrate all **energy industry perspectives**

test in **real grid operation** in cooperation with citizens

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An intelligent solution for the challenges …

… we develop in the project flexQgrid

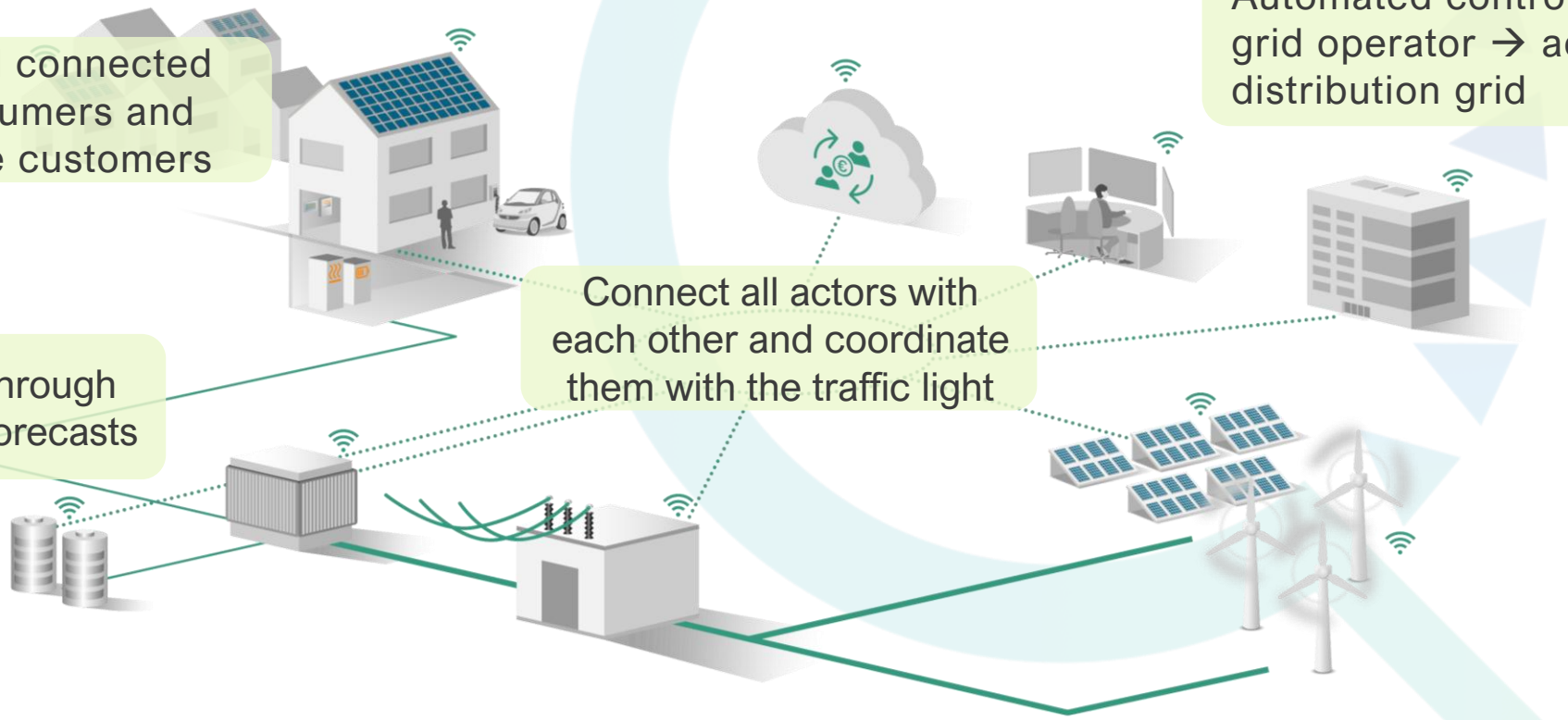
Coordinate systems with each other,
so that congestion do not occur in the first place and the grid is used optimally.

Controllable and connected producers, consumers and storage → active customers

Automated control by the grid operator → active distribution grid

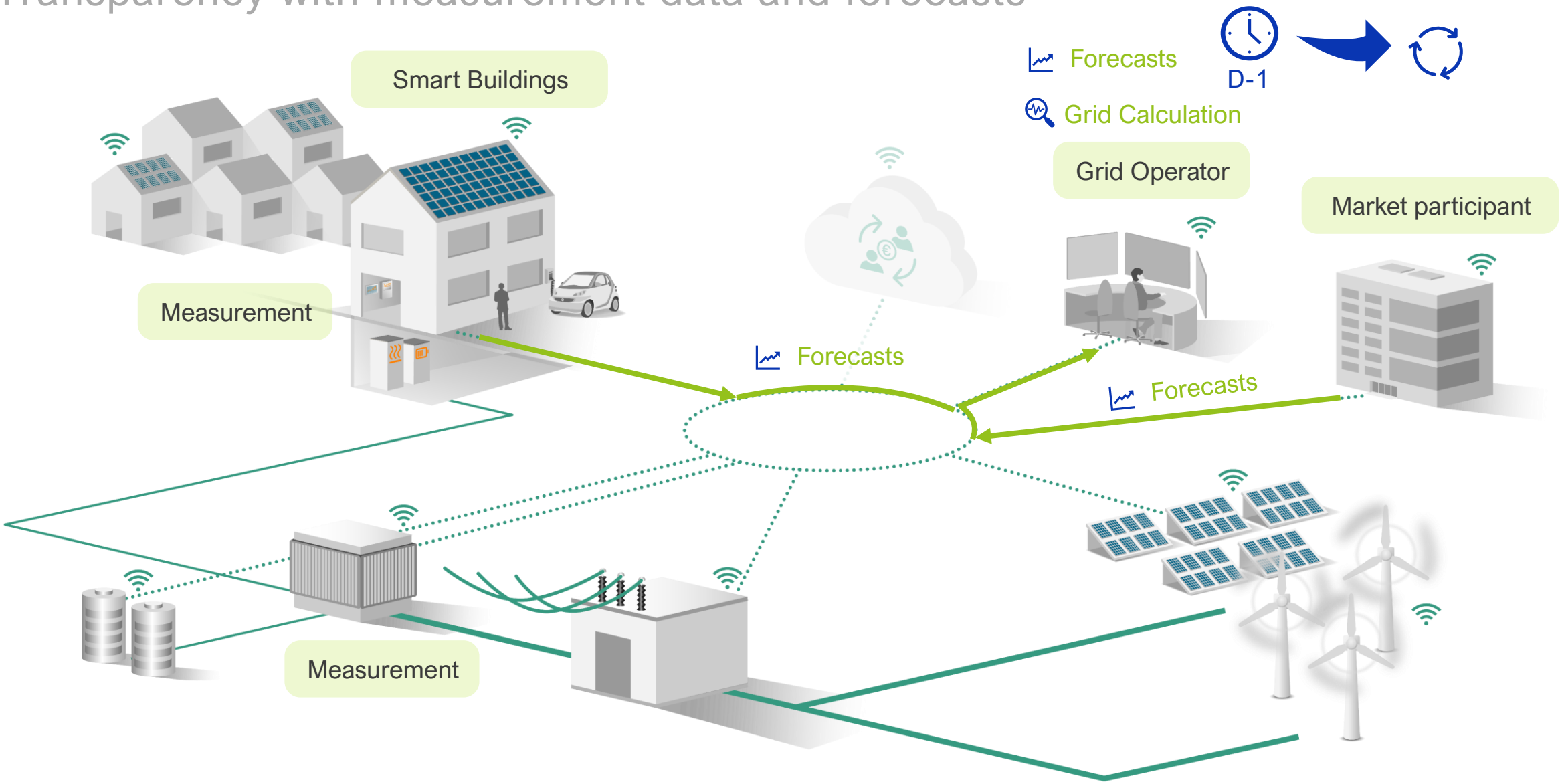
Connect all actors with each other and coordinate them with the traffic light

Grid transparency through measurements and forecasts



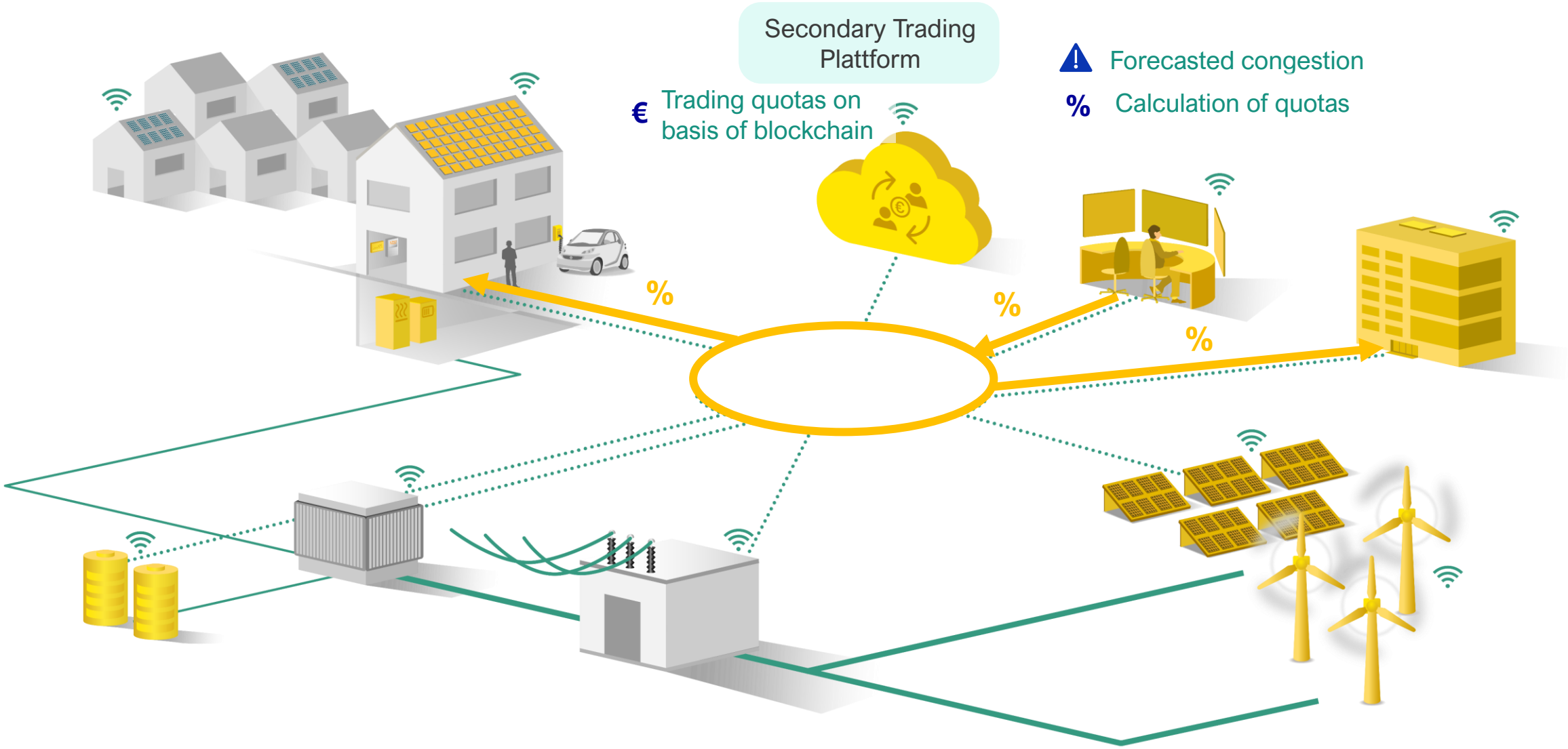
Green Traffic Light Phase

Transparency with measurement data and forecasts



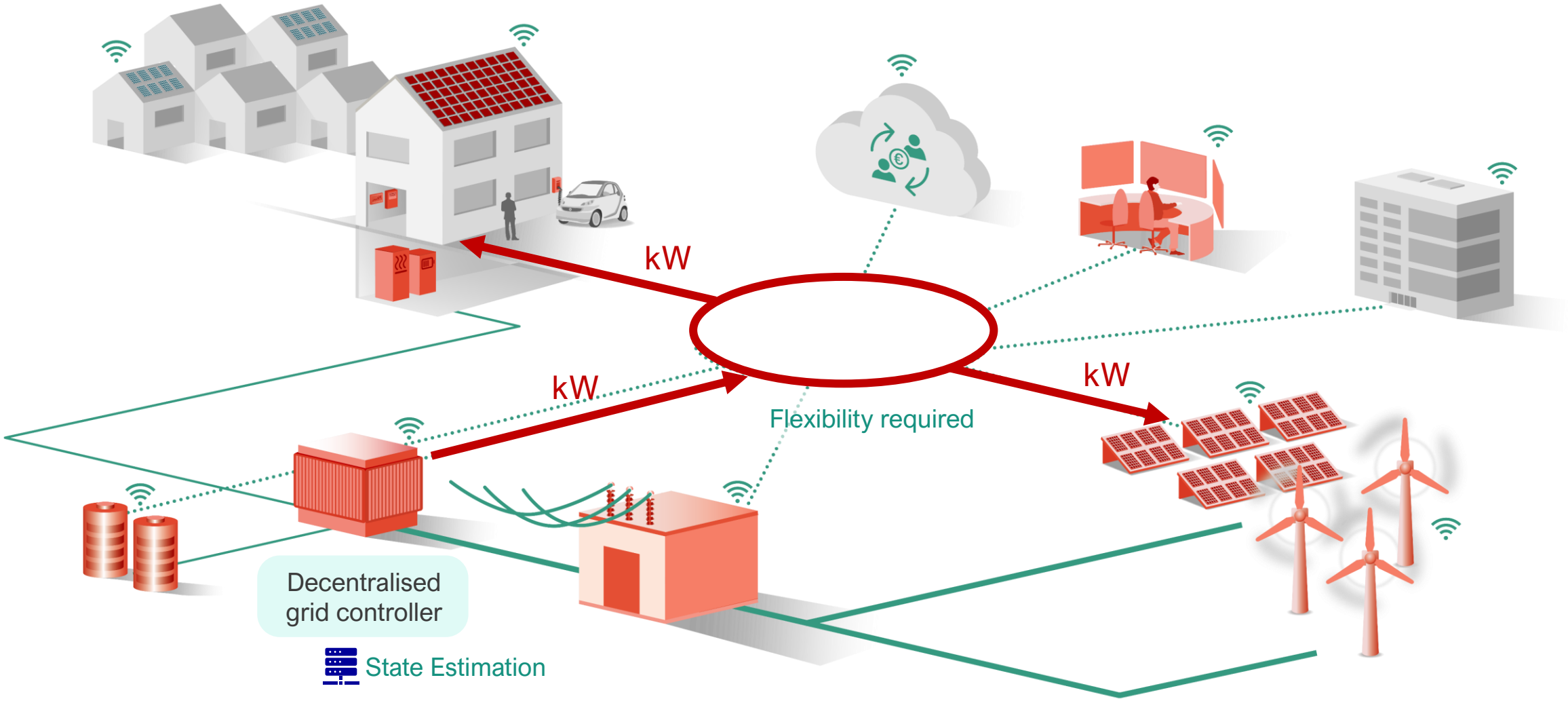
Yellow Traffic Light Phase

Avoiding congestions in advance



Red Traffic Light Phase

Targeted congestion management



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More Information:

www.flexqgrid.de