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Energy Management

The example of the Audi e-tron
The Hager philosophy

EEBus Webinar

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01

Audi e-tron
Smart charging

AUDI e-tron

Datasheet



Charging power AC : 11 kW or 22 kW (Option) – CCS Combo

Charging power DC : up to 150 kW

Batterie capacity = 95 kWh – Range (WLTP) = 417 km

265 kW power and 561 Nm torque

0-100 km/h = 6.6 s



A flawless integration of the car in the electric landscape

The target for Audi

A flawless integration of the electric car in the building and the electric network.

Sustainable, CO2 free and economic charging.



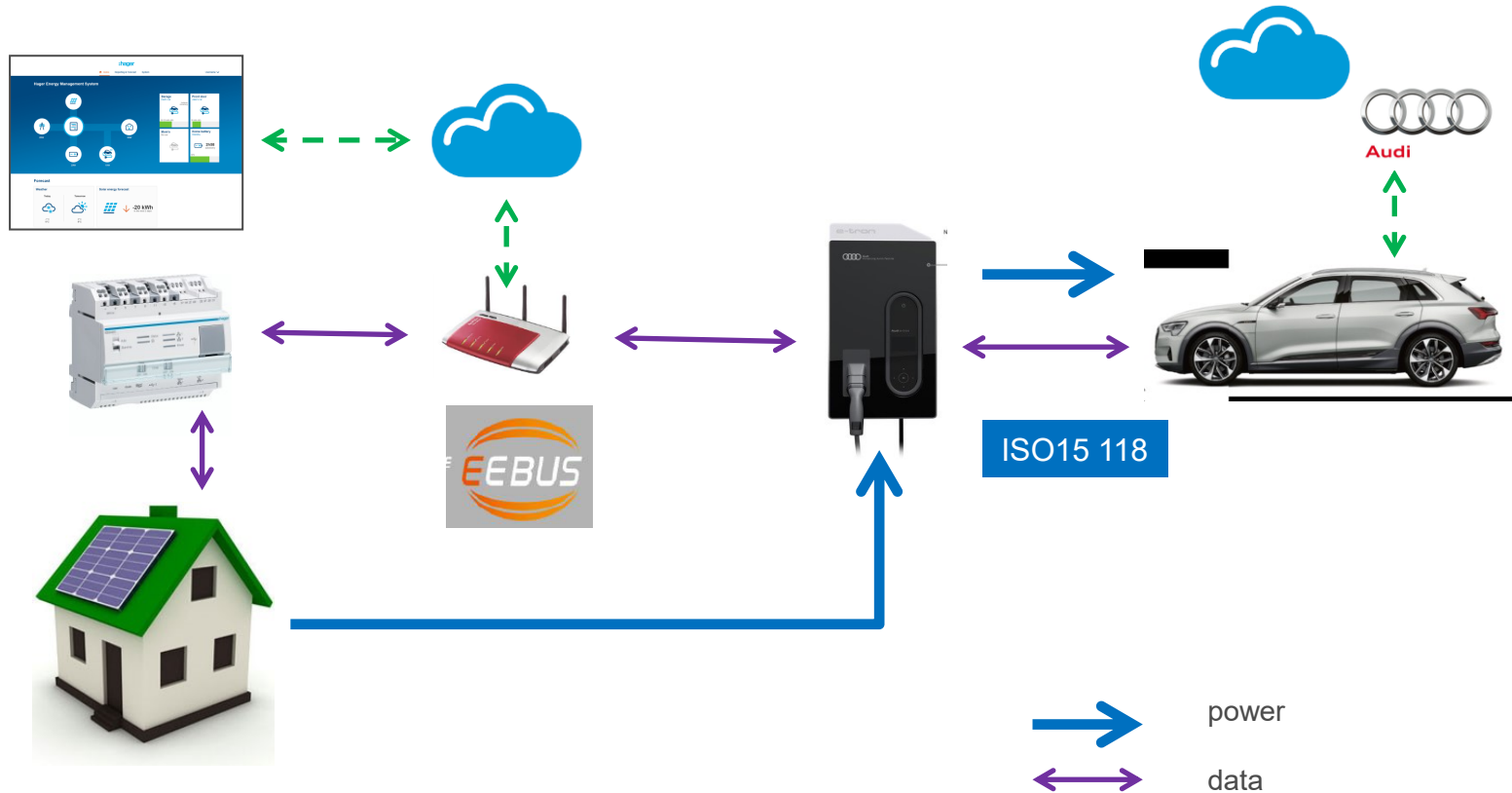
Collaboration between car and building

Audi and Hager develop a system creating value for the user



= intelligent charging

flow: AUDI Wallbox + HEMS/EMC using EEBus Concept

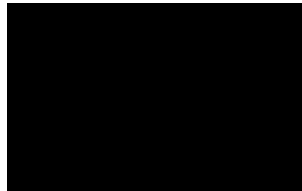


flow: AUDI wallbox + HEMS/EMC using EEBus

3 functions

EEBus charging functions:

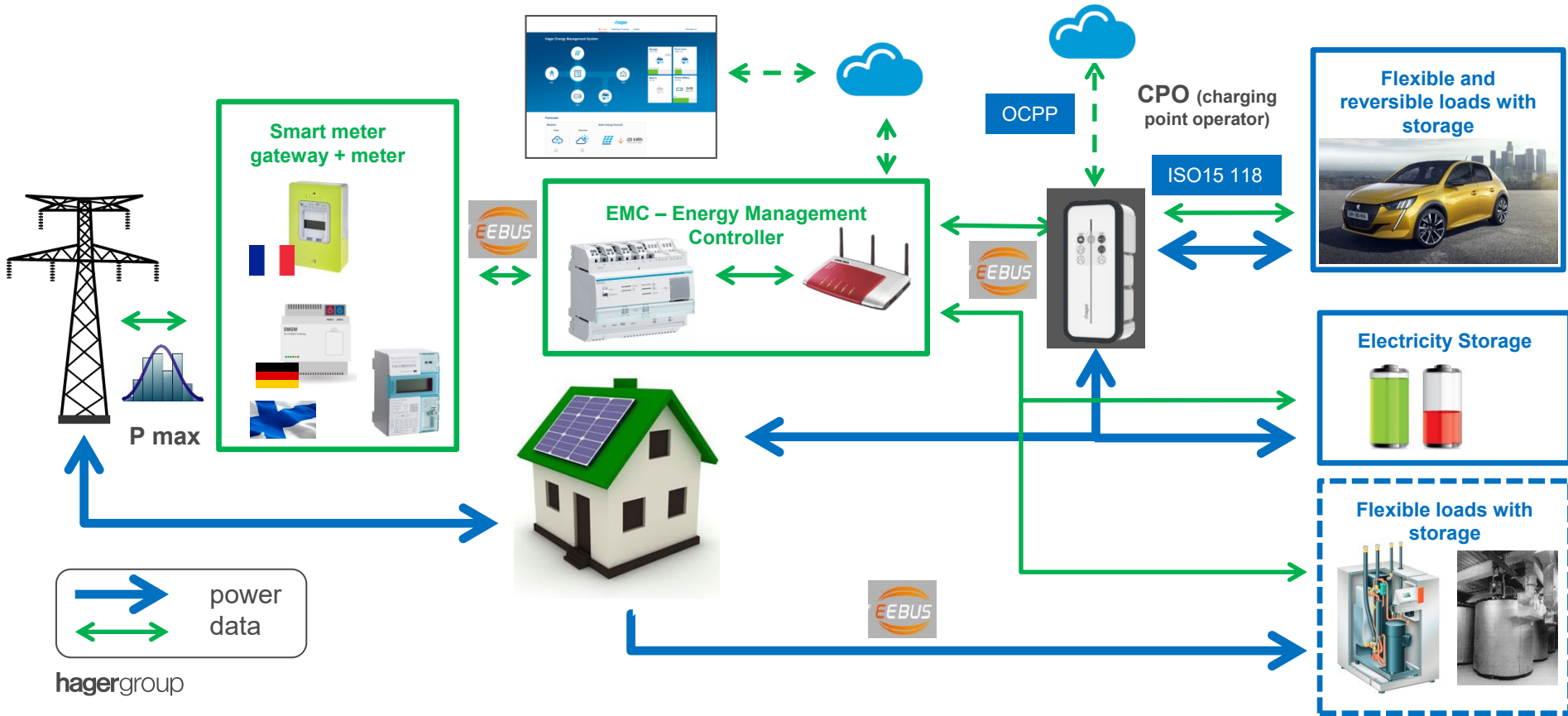
1. Black out avoidance (overload protection)
2. PV first
3. Coordinated charging (forecast, dynamic tariffs)



02 Energy Management Vision of Hager

Flexible agent model via EEBus

Local optimization (prosumer) and services to grid (flexumer)



Flexible agent model

How it works

The HEMS/EMC controls directly the storage system.

Electric car, heat pump or cooling system (HVAC) are not controlled directly but get recommendations about:

- black out risk
- grid tariff (high or low)
- PV production

and in the future:

- origin of electricity (CO₂ intensity)
- P max (power limitation)
- dynamic and feed in tariff (V2X...)

and define by themselves their charging plan giving feedback to the EMC.



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**Thank you
for your attention!**

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