

SYNERG-E

Local Storage Solutions and Synergies for European Transport and Energy Infrastructure

SYNERG-E Event, 15.03.2018

Jan Cupal
VERBUND
Project Coordinator



Co-financed by the European Union
Connecting Europe Facility

96 % production from renewable sources

approx. 3,000 employees

approx. 392,000 residential customers –
market leader in the industrial customer segment

127 hydro power plants

No. 1 in climate change mitigation
among European power supply companies

Austria's leading electricity company

strategic focus on Austria and Germany

first green bond in German-speaking Europe

51 % owned by the Republic of Austria

largest hydro power producer in Bavaria

Austria-wide charging infrastructure
for electric vehicles

more than 2,000 apprentices trained
in the past 60 years

energy related products and services

social responsibility: € 1.8 million support for
„VERBUND-Stromhilfefonds“ of Caritas
since 2009

environmental management – top-10-position of 160
energy companies analysed by oekom research

environmental measures -
€ 280 millions to be invested until 2025

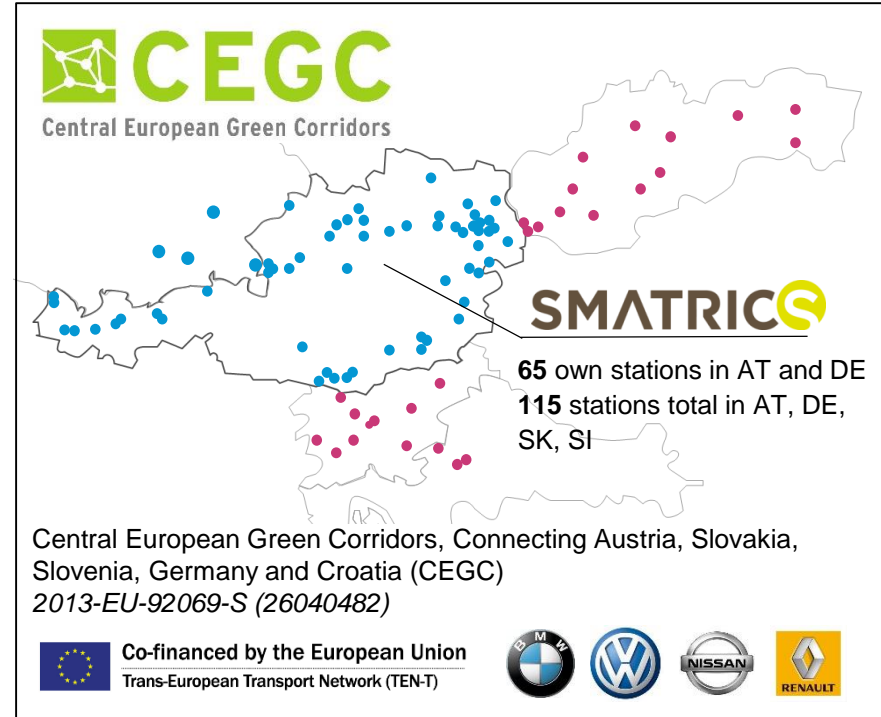
VERBUND has been working with TEN-T / CEF funding for Innovation since 2011

SMATRICS – E-Mobility Infrastructure & Services

- Shareholders VERBUND, OMV, Siemens

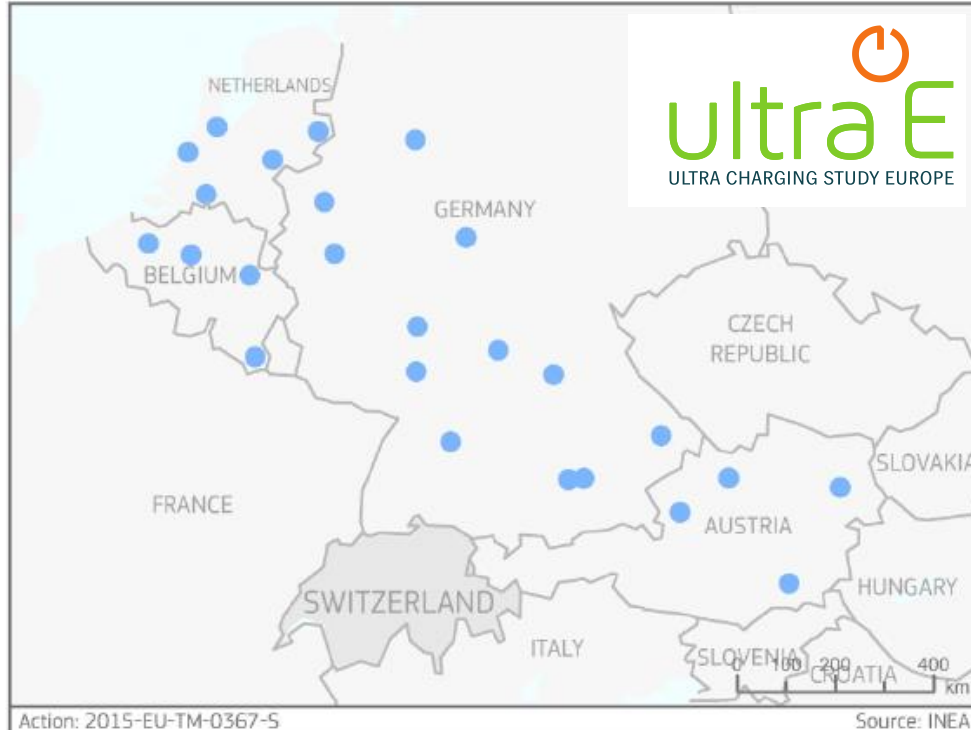
TEN-T / CEF funded Studies

- 2011/12: First Study on E-Mobility Infrastructure in *Greening European Transport Infrastructure*
- 2014/15: 115 Fast Chargers (50 kW) deployed in Study *Central European Green Corridors*
- 2017/18: Closing of Gaps with 20 Fast Chargers (50 kW) in Study *EVA+*
- 2017/18: First step towards Ultra Charging (350 kW) in Study *ULTRA-E*
- 2018/19: Integration of Storage in Study *SYNERG-E*



Project ULTRA-E: Ultra-Fast Charging Corridor from Brussels to Vienna with 25 stations

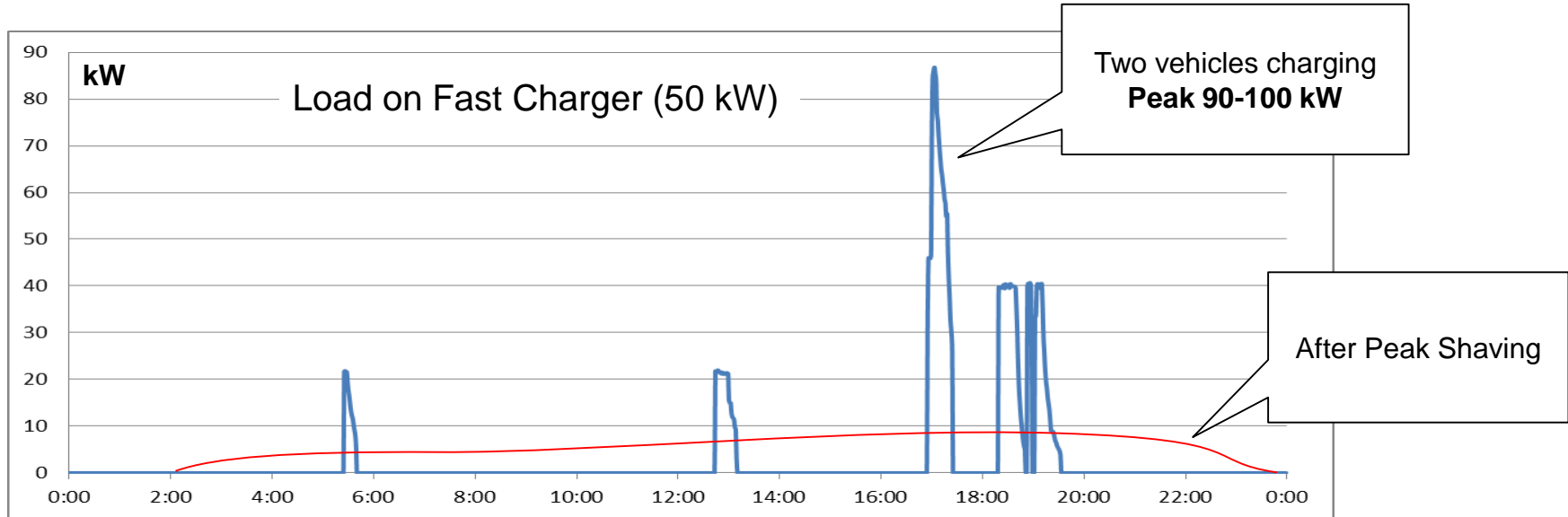
SYNERG-E
managed batteries



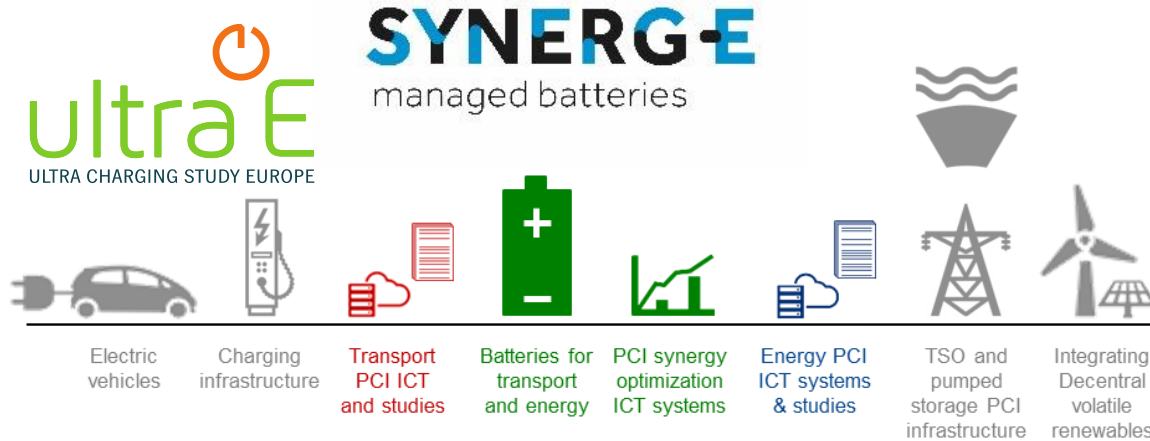
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Ultra-High Power Charging leads to increased Demand on the Electricity Grid

Experience from 50 kW fast chargers show that load on the grids comes with very high peaks and no load between charging events. Based on grid access tariffs this also places a burden on fast charging business cases.



SYNERG-E: 10 stationary batteries at Ultra Charging stations as part of CEF funded project SYNERG-E

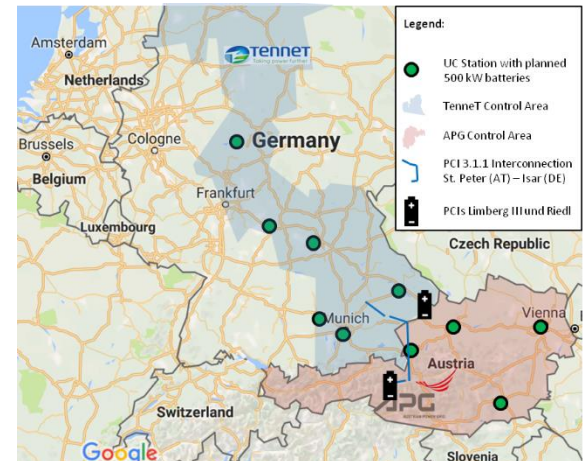


Facts

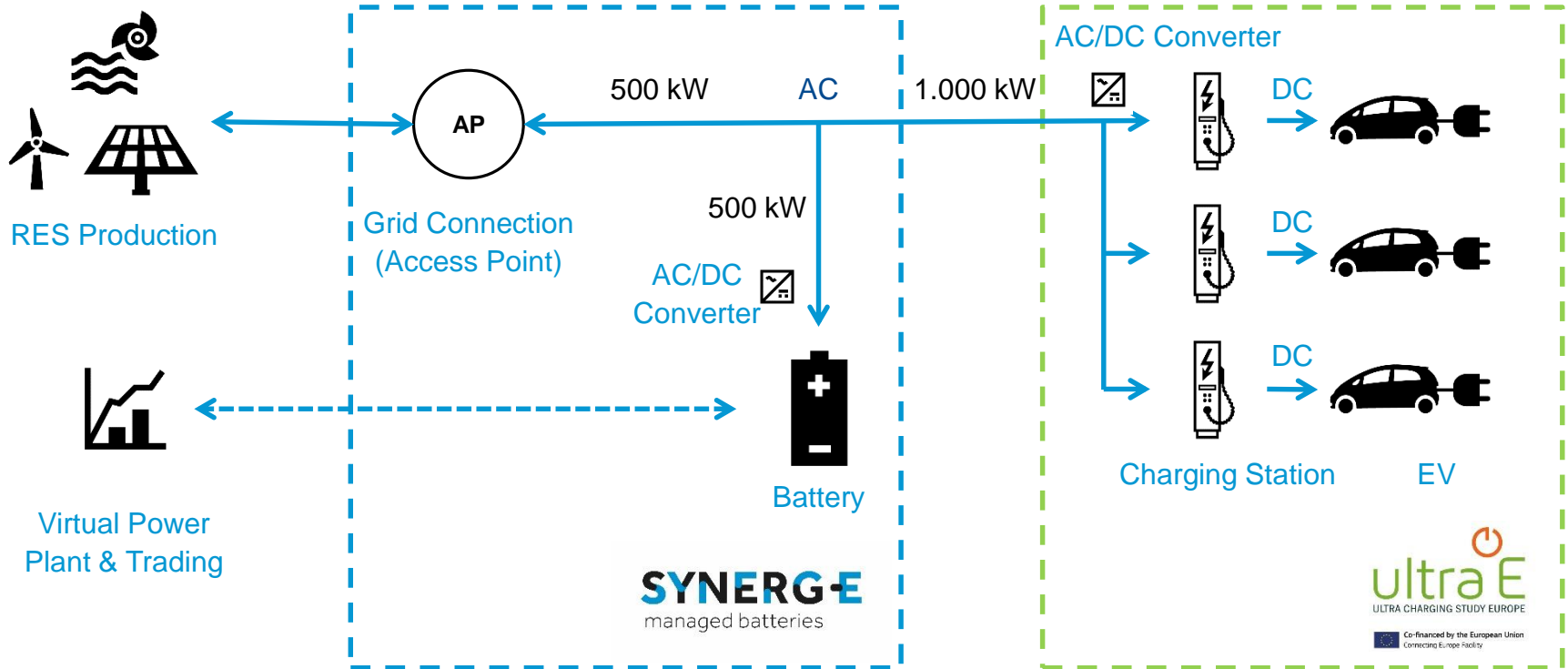
- € 8,7 Mio. EUR Costs, 60 % Funding
- Duration: 01.01.2017 - 31.12.2019
- Partner: allego gmbH

Stationary Batteries to connect Transport Infrastructure and Energy Infrastructure

- *Synergies with Utra Charging Stations:* More Power, reduced costs
- *Synergies with Electricity Infrastructure:* Flexibility from combination with hydro power; Reserve Energy for Transmission Grid



SYNERG-E: Local Stationary Buffer Storage Systems for Ultra-fast Charging Stations



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