



ELECTRIC VEHICLES

A CHANCE – NO RISK

FOR THE ELECTRIC

ENERGY SUPPLY



ENIO - THE COMPANY

- Specialist in charging station Management
 - technical management, payment, billing, energy management, user administration
- Customers all over Europe
 - STRABAG
 - Deutsche Telekom
 - Comfortcharge
 - ASFINAG
 - EDEKA
 - GEWISS
- HQ Vienna
- Technology leader in energy Management

FRITZ VOGEL

founder, partner - f.vogel@enio.at



KEY FACTS TO UNDERSTAND ENERGY IN E-MOBILITY

average km per day and car

~40 km/day

Source: Eurostat

average power consumption per car

7 kWh/day

average range per battery load new EV

5 to 8 days

Techday insight e-mobility

MEB Plattform: Elektrischer Antriebsstrang

MEB platform: Electric drive train

09/19

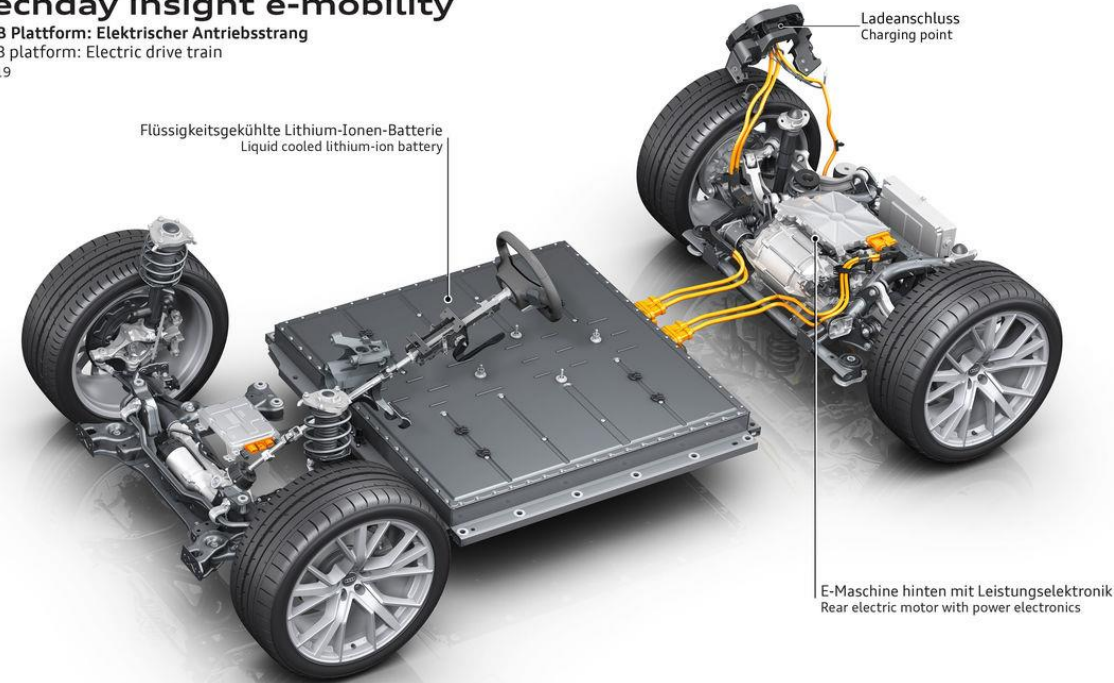


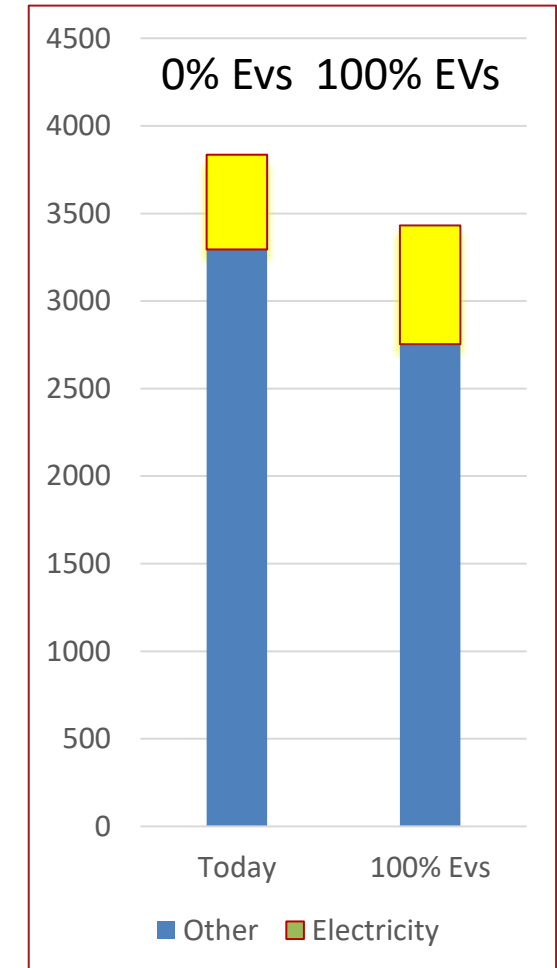
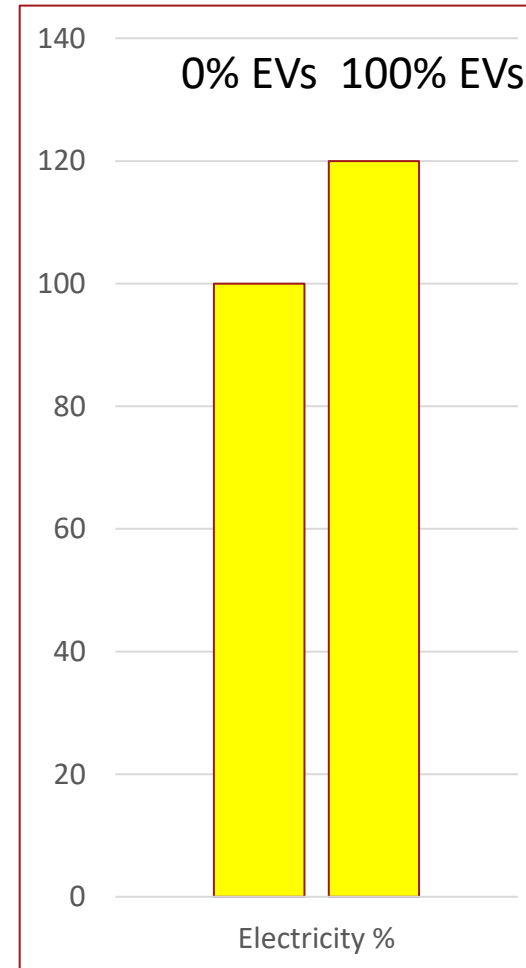
Foto AUDI

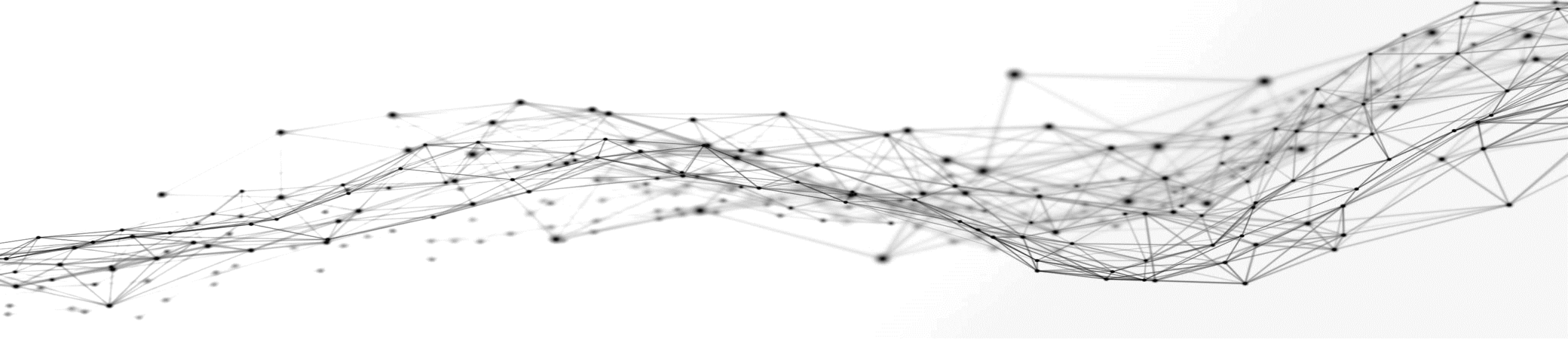
THE FLEET DEMAND – PASSENGER CARS (EXAMPLE GERMANY)

+20% ELECTRICAL ENERGY

slightly different numbers per country

- 9% TOTAL ENERGY DEMAND





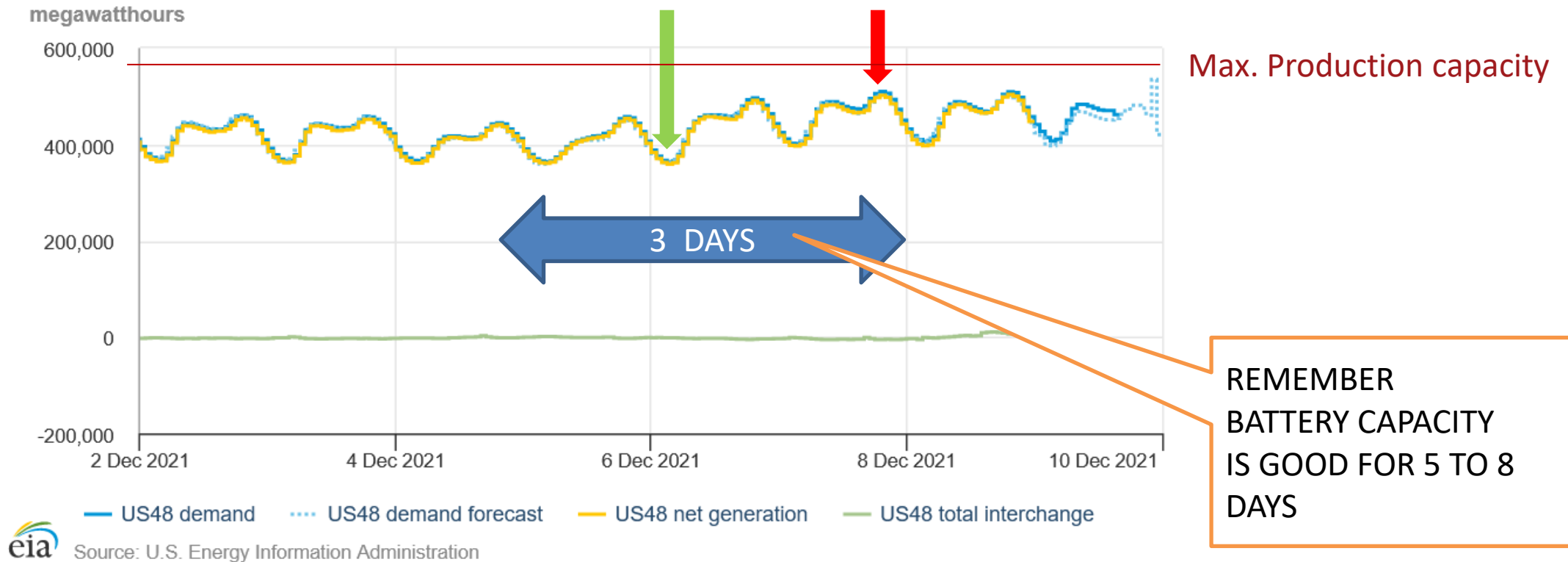
+20% Electric Energy! Will we need 20% more power plants?

NO!

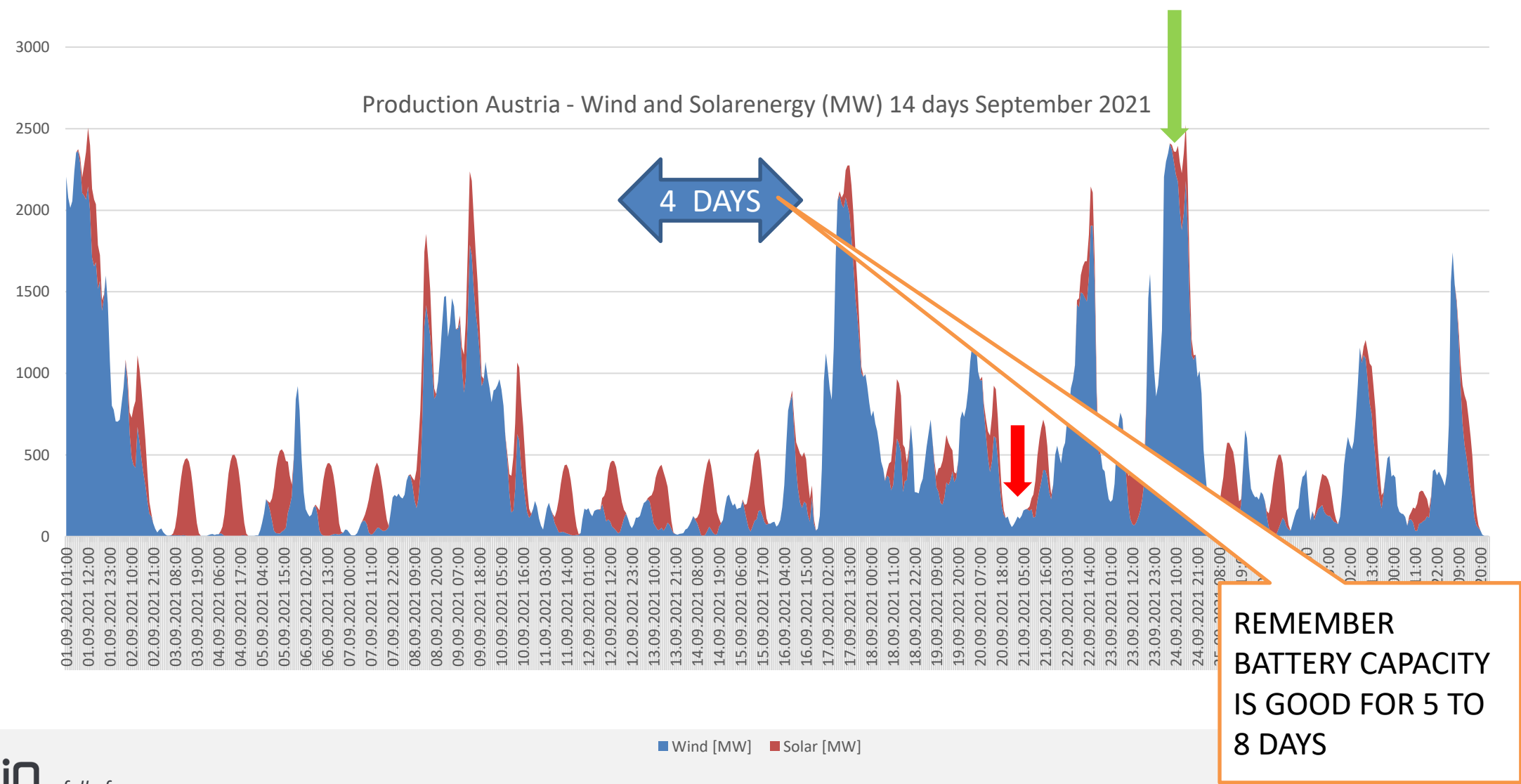
If we charge the right way

1. CHARGE WHEN HOUSEHOLD AND INDUSTRY DON'T NEED ELECTRIC POWER

U.S. electricity overview (demand, forecast demand, net generation, and total interchange) 12/2/2021 – 12/9/2021, Eastern Time

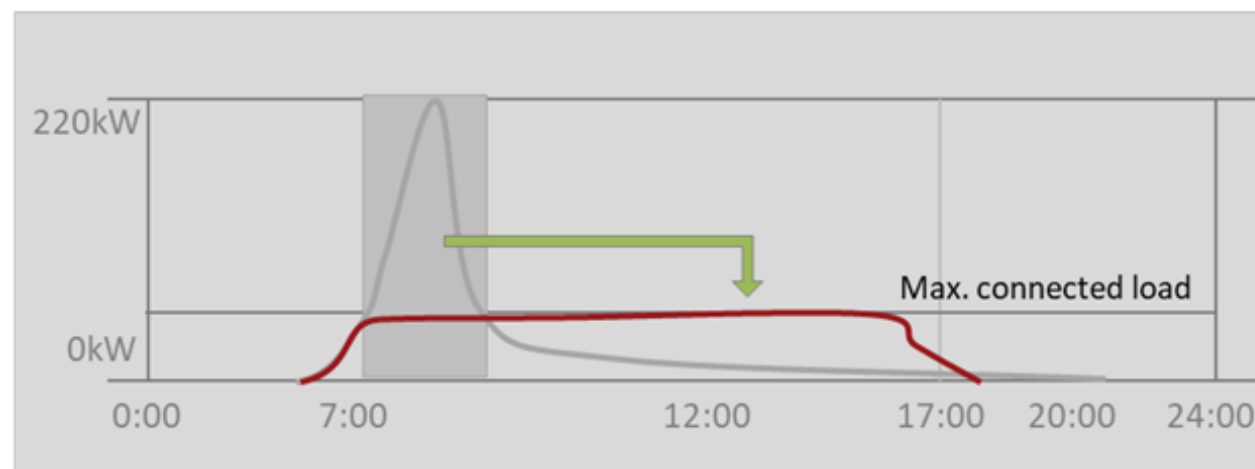
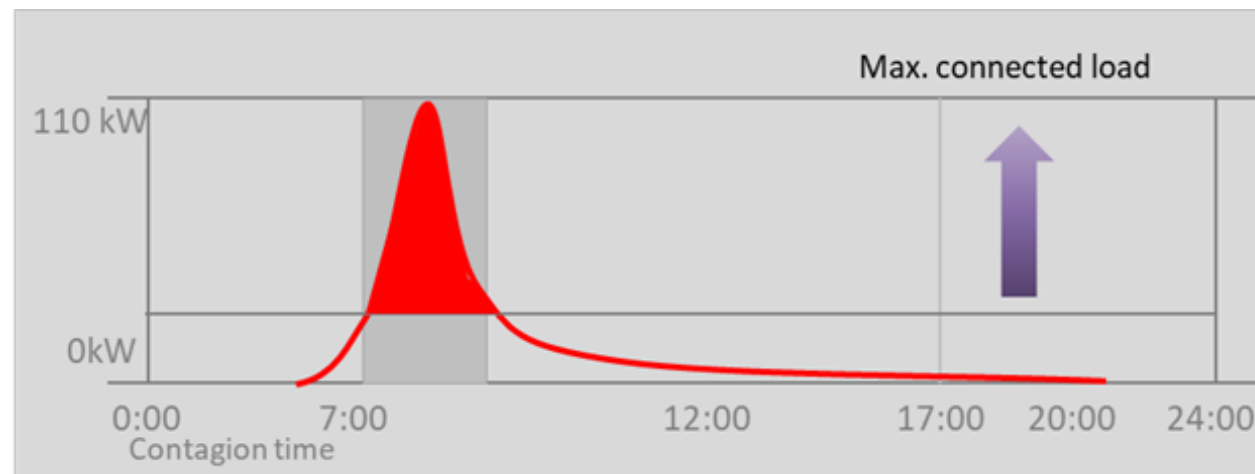
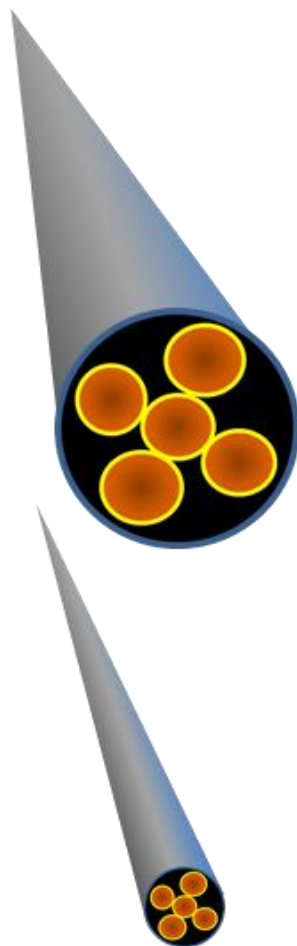


2. CHARGE WHEN RENEWABLE ENERGY IS AVAILABLE



3. CHARGE WHEN GRID CAPACITY IS AVAILABLE – AVOID PEAKS

SAVE 90%
OF THE
COSTS
FOR GRID
CONNECTION
AND
COPPER



4. FORGET ABOUT ALL THOSE ADVICES

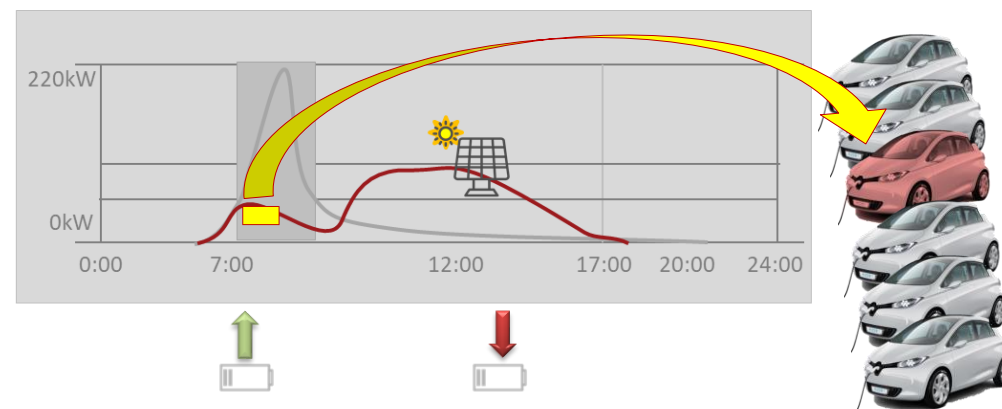
Just plug in
whenever you stay a
few hours at home
or at business

The ENIO Charging
station
management will do
the optimized
charging for you



5. IF YOU ARE IN A HURRY – PRESS THE PRIORITY BUTTON

- 98% of all daily trips are less than 100 km
(30 % of your battery capacity)
- So if you are in a hurry you will be 1 out of 50 with priority need
- Press the **Priority Button** and charge as fast as your charging station and your car can
(at your smart phone APP)



⚡ Main advantages of load and energy management by ENIO

- Manufacturer-independent
- Dynamic
- Phase-accurate
- Scalable

✓ Consideration of

- User demand
- Building loads, electric machines, etc.
- Local electricity production (PV, etc.)
- Power grid restrictions and demands
- Energy supply – production

🔗 Integration of stationary storage technologies

🎯 Overall goal

- Optimization of grid connection and energy costs as well as holistic integration of charging points into the energy sector

