

2nd *TISECAP* SUSTAINABILITY FORUM

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E-Power by ASFINAG: E-Charging implementation plan for Austria's motorways

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Status e-mobility on the ASFINAG-network



Charging stations in operation





Charging stations in operation



- 36 charging stations in operation at motorway service stations
- Average distance of about 62 km
- A total of approx. 220 charging points
- Charging power up to 360 kW
- Open access and interoperability
- 100% electricity from renewables



Charging stations in operation



Statistics for 2022

- In total, over 190,000 chargings (+87% compared to 2021, +420% compared to 2020)
- 16 chargings per location / 24h (fluctuation range: 4 to 50)
- An average of 27 kWh per charge
- Average charging time 44 min



Outlook on e-mobility





Forecast passenger cars



elebrating

Die PKW-Elektrifizierung in Österreich hat deutlich Fahrt aufgenommen – Bis 2030 werden 20% der PKW-Flotte vollelektrifiziert sein – Bis 2040 weiterer Anstieg auf 55%



Forecast trucks



OF Successful TOLL ROAD PROJECT

elebrating

Die ersten E-LKWs kommen bereits auf den Markt – In 2040 werden sie die dominierende Antriebsform für den Schwerlastverkehr in Österreich sein E-LKW Prognose Österreich (Fahrzeugklasse N2 und N3) bis 2040 E-LKW Flotte Österreich **BEV-Anteil an Gesamt-LKW Flotte** in tausend Einheiten in % - BEV Anteil LKWs Zugmaschinen 100% 50 +8% 43 80% 40 35 +19% 60% 30 25 22 40% 20 +40% +1 765% 20% 10 0% 0 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2018 2019 2020 2021 2022 2023 2024 **2025** 2026 2027 BEV-Anteil 2,2% 11% 42% 66% 76% Neuzulassungen **BEV-Anteil** 0.3% 3% 38% 59% 16% Gesamt-LKW Flotte x 3,7

Forecast power supply





2040: estimated energy demand of 2.000 GWh/year

Outlook e-mobility for cars



Political/legal requirements:

- 1,500 car charging points by 2030
- AFIR: EU Regulation for the development of charging infrastructure

High demands on the number and equipment of charging stations:

- Ad hoc charging without discrimination
- Payment by credit/debit cards
- Billing according to kWh, price labeling
- Roofing, lighting
- Separated charging stations for cars and trucks/buses



From 2024/25, most manufacturers will produce electric trucks From 2025, megawatt charging technology will be available (charging with 1,000 kW)

Long distance e-trucks are already being produced

Reservation system for truck charging will be required \rightarrow no loss of time for the carriers

• Truck fast charging: For charging in between, with high outputs (up to 1,000 kW)

• Overnight charging: during the night's rest, low charging power (approx. 100 kW)

Outlook e-mobility for trucks

- Differentiation is necessary:
- Target: 1,300 charging points for heavy goods vehicles by 2035



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E-Charging at ASFINAG rest areas





E-Charging at ASFINAG rest areas



60 rest areas in operation by ASFINAG

Goal: e-charging stations at all rest areas by 2030

- Car charging with at least 150 kW
- Truck fast charging with at least 350 kW
- Overnight truck charging with at least 100 kW

Construction and operation of the e-charging stations will be published for tender

Grid connection will be provided by ASFINAG



ASFINAG pilot projects "rest area of the future"

Rest area "Roggendorf" (A1, Lower Austria)

- E-charging for cars and trucks
- Extended customer services (catering, common areas, etc.)
- Solar power plant
- Commissioning 2024

Truck stop "Hausruck" (A8, Upper Austria)

- Space saving convoy parking
- E-charging for trucks
- Solar power plant
- Vending machine area (drinks, snacks and washing machines)
- Commissioning 2024







THANK YOU!

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