

DSOs united in diversity

Enablers of the energy transition



42.5% EU's Renewable Energy target by 2030¹
23% of RES in the EU in 2022²



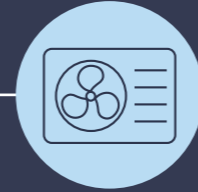
70% RES to be connected to DSO grid by 2030

30M Electric Vehicles expected by 2030³
8.6M EVs on the EU roads in 2024⁴

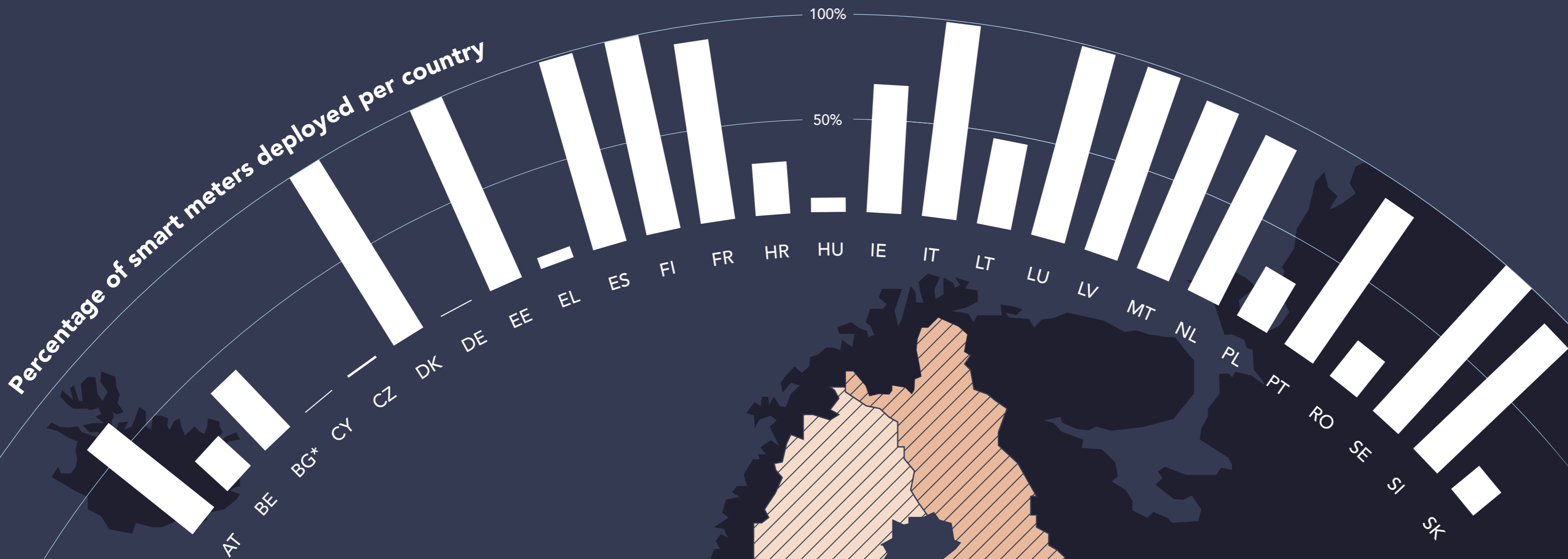


85% of the EV charging happening at home

10M heat pumps expected by 2027⁵
19.7M heat pumps installed in 2022⁶



Most heat pumps to be connected to the DSO grid



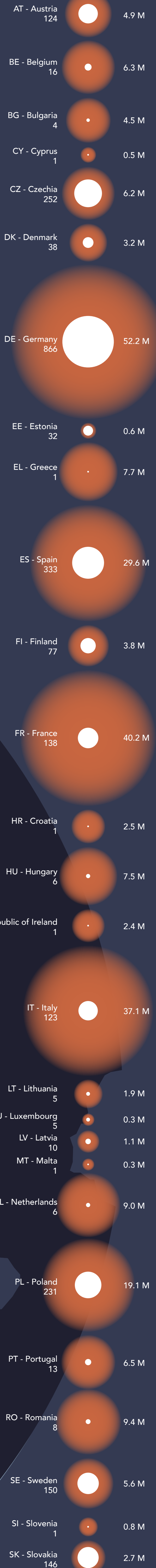
Concentration of electricity DSOs

- Very high**
One DSO company
- High**
One dominant DSO (more than 80% of distributed power) and several local DSOs
- Medium**
A mix of DSOs, with the three largest accounting for more than 60% of distributed power
- Low**
Mainly small, local DSOs. The three largest DSOs usually deliver less than 50% of distributed power

Length of the electricity distribution grid

- 10 000 - 200 000 km
- 200 000 - 1 000 000 km
- 1 000 000 - 2 500 000 km

Country Number of DSOs | 1M connected customers



Who are the enablers of the energy transition?



With 830 Distribution System Operators (DSOs) of all sizes and shapes, from all EU Member States, connecting over 250 million customers, DSO Entity acts as a platform of expertise and knowledge for all electricity DSOs in Europe.

DSO Entity was formally established in June 2021 with a legal mandate under the Electricity Market Regulation (2019/943/EU) to promote the completion and functioning of the internal market and help drive Europe's energy transition.

We work with +200 experts to develop the technical rules for the functioning of the electricity system in close cooperation with ENTSO-E to support the delivery of the European energy and climate objectives.

Poster's data:

- National datasets have been collected by DSO Entity's Country Expert Group and relate to electricity DSOs in the European Union.
- Concentration of electricity DSOs taken from Eurelectric, "Grids for Speed Report", 2024. Available online.
- * Please note the percentage displayed for the roll-out of smart meters in Bulgaria is an estimate and refers, in the absence of legal definition of smart meter functionalities, to meters supporting smart metering.

Sources

- 1 Directive (EU) 2023/2413 of 18 October 2023, amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652.
- 2 Eurostat, Share of renewable energy sources in the EU's gross final energy consumption in 2022. Available online.
- 3 Communication COM/2020/789 of 9 December 2020 from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "Sustainable and Smart Mobility Strategy – putting European transport on track for the future".
- 4 European Alternative Fuels Observatory, total of Battery Electric Vehicles and Plug-in Hybrid Electric Vehicles fleets in 2024. Available online.
- 5 Communication COM/2022/230 of 18 May 2022 from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, "REPowerEU Plan".
- 6 European Heat Pump Association (2023), "European Heat Pump Market Statistics Report 2023". Available online.