

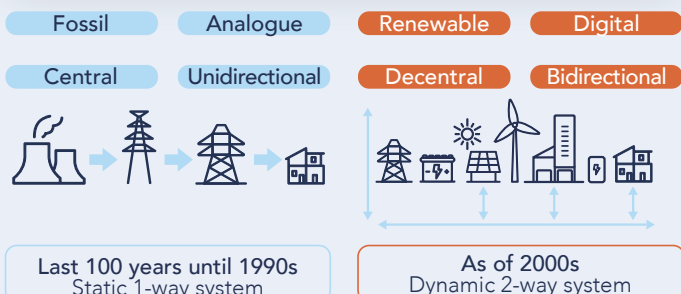
LET'S CONNECT

Facts & Figures on DSOs

What are DSOs ?

Regulated entities, responsible for operating and maintaining **medium- and low-voltage networks** *

Due to **decarbonisation and decentralisation** the role of DSOs has evolved from a passive actor into an **active system operator and key enabler of EU objectives**



What core tasks have DSOs ?

Connect customers (industry and households) to the grid and provide **active system management** (flexibility)

Neutral market facilitators thereby they **empower customers** (metering, billing, energy sharing)

Integrate **renewables and other decentralised resources (DER)** in the grid

*in some countries DSOs also operate high-voltage networks (>110kv)

Key figures about DSOs in the EU

**>250
Million**

connected customers
(households and industries).

>2.570

diverse DSOs in the EU.

**18 Million
kilometres**

of cable and infrastructure
of the EU's distribution
network and 4 million
distribution transformers.

**835
thousand**

direct and indirect jobs
in electricity distribution
in the EU and 2 million
additional workforce
needed if grid investments
pair up with demand.



About DSO Entity

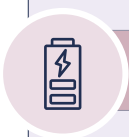
DSO Entity is a technical expert body mandated by the Electricity Market Regulation (2019/943/EU) to promote the functioning of the electricity market and to facilitate the energy transition. DSO Entity is representing more than **830 diverse electricity Distribution System Operators (DSOs)** connecting **250 million customers** to the electricity grid in 27 Member States. In line with the Regulation on the internal market for gases and hydrogen (EU 2024/1789) DSO Entity is currently **facilitating the integration of gas and hydrogen DSOs** into its structure.

Distribution level is key for achieving energy and climate targets



Connecting renewables

42.5% RES	target by 2030 – 70% connected to DSO grid.
A 46% to 67% increase	is expected in the share of renewables in the EU's power generation mix by 2030.
600 GW	of solar capacity by 2030 (already 338 GW of EU solar PV installed capacity installed in 2024 with 2/3 on rooftops – new annual record, i.e. connected to DSO grid).
3-4-fold increase	of connection requests for solar PV for DSOs from 2021-22: (+ 1400% Latvia; 750% Romania, 200% Poland, 160% Italy and Sweden).



Integrating the electrification of transport and heating and cooling systems

30 million EVs	expected by 2030 (from 10.3 million today), with 85% charging at home, i.e. DSOs.
10 million	more heat pumps by 2027 (from 19.7 million in 2022), with an estimated deployment of around 60 million heat pumps by 2030, i.e. primarily DSO grid.



Empowering active customers

> 9000	energy communities in 2024, involving more than 1.5 million citizens, DSOs as facilitators with IT-/data infrastructure.
> 40 GW	of self-consumption i.e. DSO grid.

Figures on the magnitude of the challenges

40%	of the distribution grid in the EU is older than 40 years.
> €400 billion	investments in 10 years are needed in distribution grids for expanding, smartening and renewing the network with an annual average investment challenge of €61 bn between 2030 and 2050.
3/4	of connections for heat pumps, EVs, RES, and low-carbon industries cannot be facilitated if investment stagnates.
60%	increase in electricity consumption is expected between 2023 and 2030.
30%	flexibility needs would equal 30% of total electrical EU demand in 2050 with already 24% in 2030.

Let's connect: [Facts & Figures on DSOs](#) | [List of references](#)