



Role of DSOs in the energy transition process

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Traditional actors in the electric power grid



Generation



Medium and Low Voltage



High Voltage



Supply



Consumers

E.DSO Members in Europe



- | | | |
|---|--|---|
|  <p>Austria Energienetze Steiermark Netz Niederösterreich</p> |  <p>Greece HEDNO</p> |  <p>Portugal E-Redes</p> |
|  <p>Belgium Fluvius ORES</p> |  <p>Ireland ESB Networks</p> |  <p>Slovenia SODO</p> |
|  <p>Cyprus Electricity Authority of Cyprus</p> |  <p>Italy Areti Unareti</p> |  <p>Spain E-Redes I-DE UFD Viesgo</p> |
|  <p>Czech Republic ČEZ Distribuce PREdistribuce</p> |  <p>Latvia Sadales tīkls</p> |  <p>Ukraine D.TEK GRIDS DSO(E)</p> |
|  <p>Germany E.ON EWE Netz Netze BW</p> |  <p>Lithuania ESO</p> |  <p>United Kingdom NIE Networks</p> |
|  <p>Finland Caruna</p> |  <p>Netherlands Alliander Enexis Netbeheer Nederland STEDIN</p> | |
|  <p>France Enedis</p> |  <p>Poland Enea Operator Energa Operator PGE Dystrybcja PKP Energetyka</p> | |

General challenges to DSOs

01

Modernise
smart meter
deployment

02

Enhance grid
stability

03

Increase
resilience

04

Enhance data
management

05

Improve
cybersecurity

See Monitor Deloitte, 2020: [Connecting the dots: Distribution grid investment to power the energy transition.](#)

Novel factors with the Energy Transition



Uncertainties at three levels:

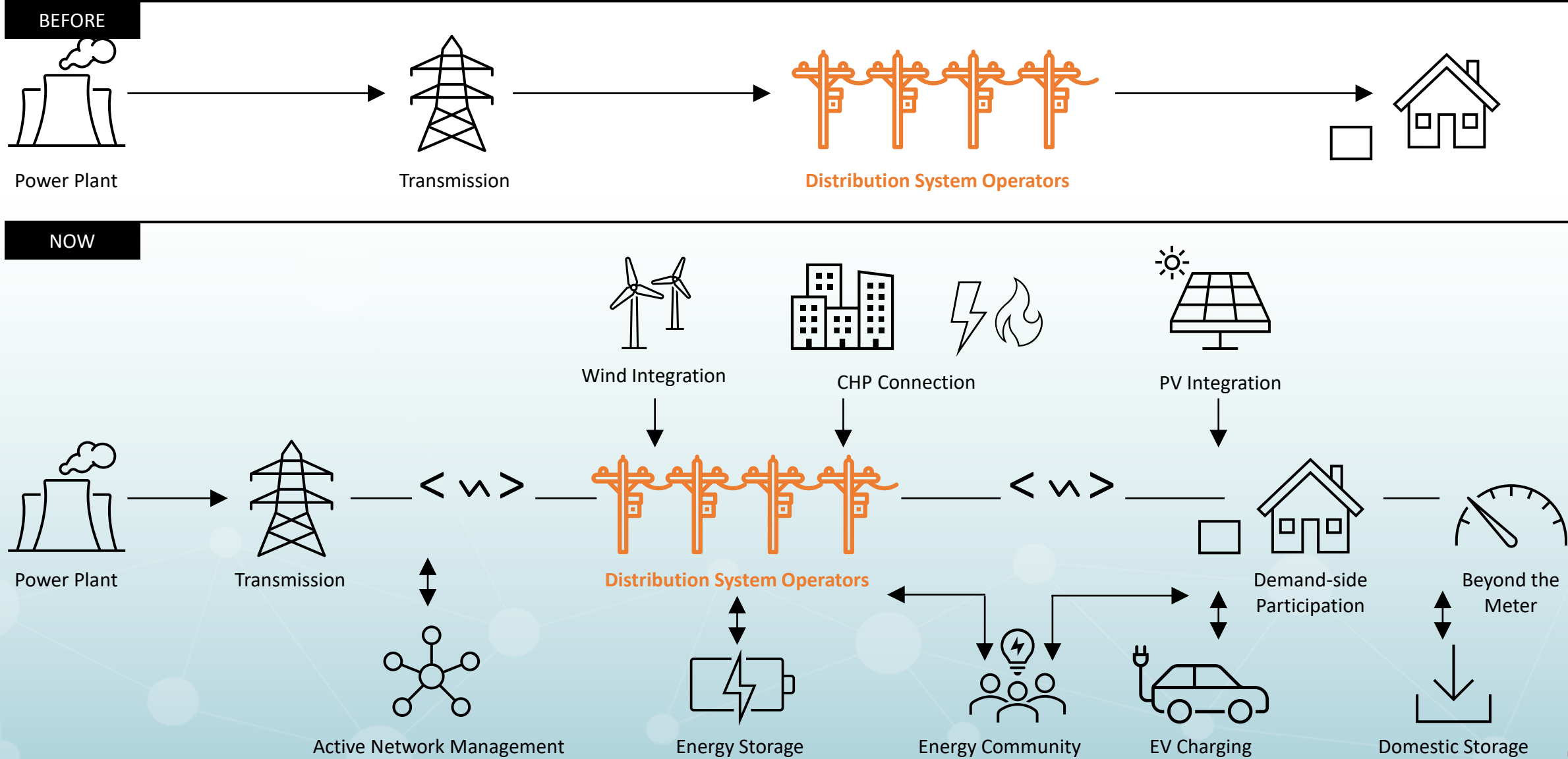
Variable generation (e.g., DER),
Increasing peak loads (see DSF), and
Utilization of storage (e.g., EVs, aggregators).



Distribution grids are:

Base for electrification,
Connecting points for about 70% of RES,
Enablers of flexibility (generation, load, storage),
Key to facilitate customer participation in the
Energy Transition.

Energy transition: A network perspective



Priorities to shape Smarter Grids



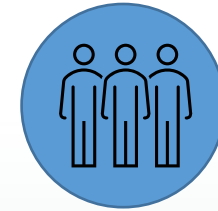
Educate stakeholders on the evolution of the energy sector and effectively communicate policy tasks.



Establish DSOs as **neutral facilitators of the energy transition**. Improve regulatory environments for distribution networks in the EU.



Promote and support **open innovation and forward-looking regulation**. E.DSO is the “go-to-point” for insights on distribution grids in Europe.



Place **citizens and customers at the heart**. Building constructive dialogue and strategic alliances with other interest groups.

European Distribution System Operators



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