

Key assumptions for the future role of DSOs

- The second half-time of the "Energiewende" will take place in the cities
- The energy production will be decarbonised as well as more and more decentralised in DSO infrastructures
- In the new energy market DSOs will play a central role to guarantee a competitive and secure energy-supply
- Smart energy systems will increasingly be advanced by decentralised storage solutions - digitalisation and automation will be a critical success factor
- DSOs and TSOs across Europe have to find integral solutions for combining electricity, natural gas, heating systems as well as services

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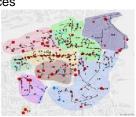
Renewable transition – flexibility facilitated by DSOs

- > Security of supply will be more and more promoted by DSOs
- → DSOs will be key enabler for new services and innovative retail products
 - installation, operation and maintenance services
 - o photovoltaic,
 - o E-mobility (vehicles and bikes)
 - $\,\circ\,$ storage solutions and
 - o micro wind

partially in cooperation with the local craft establishment

- "Wärmewende" design in an intelligent way following the "Dortmund Wärme 2.0" example
 - innovative local heating technologies in several linked clusters
 - virtual power plant (CHP) load management and control
 - promote power-to-heat technologies
 - integrate local heat storage solutions

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Welcome to the Energiewende