
Boosting flexibility in distribution grids

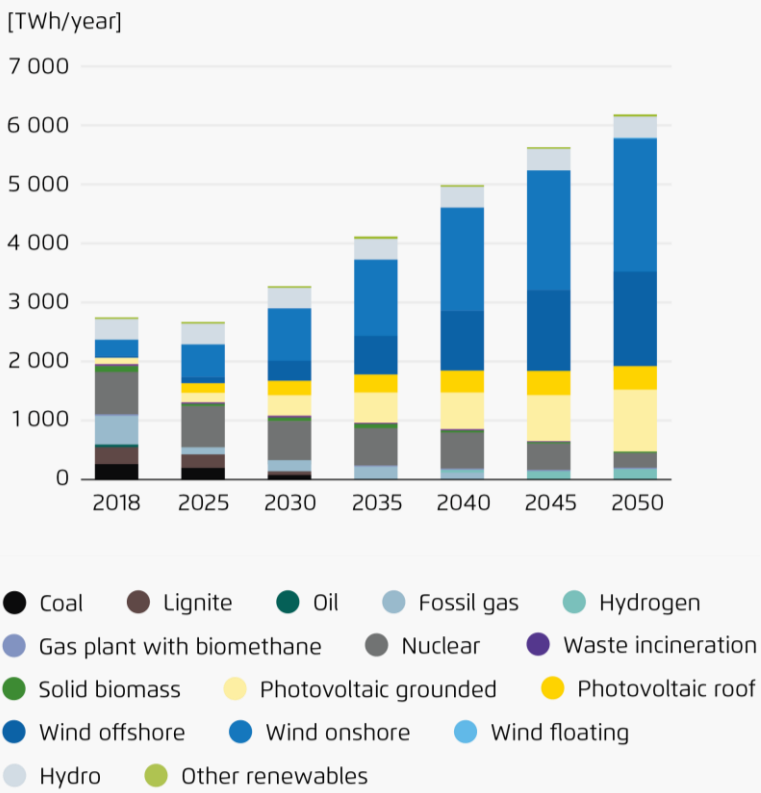
Introduction

Alexander Dusolt

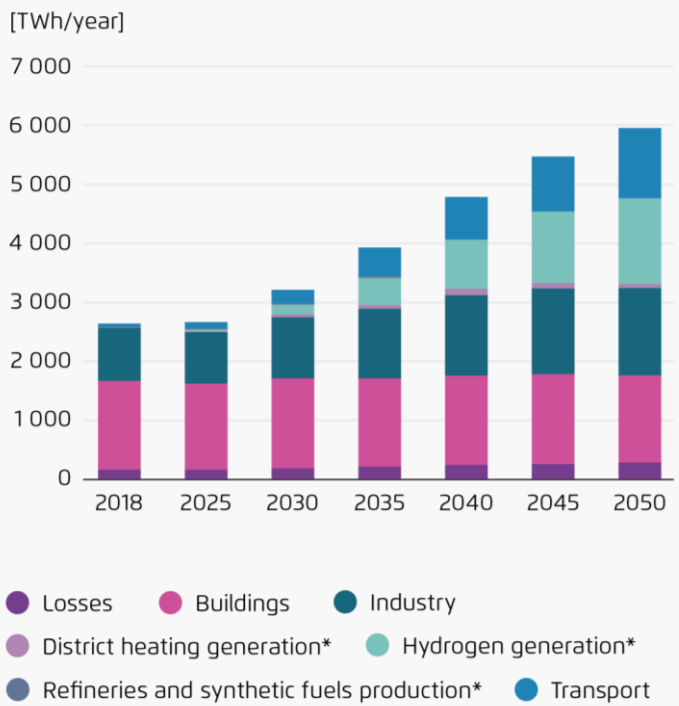
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Increasing volumes of generation and demand will be connected to distribution grids by 2050

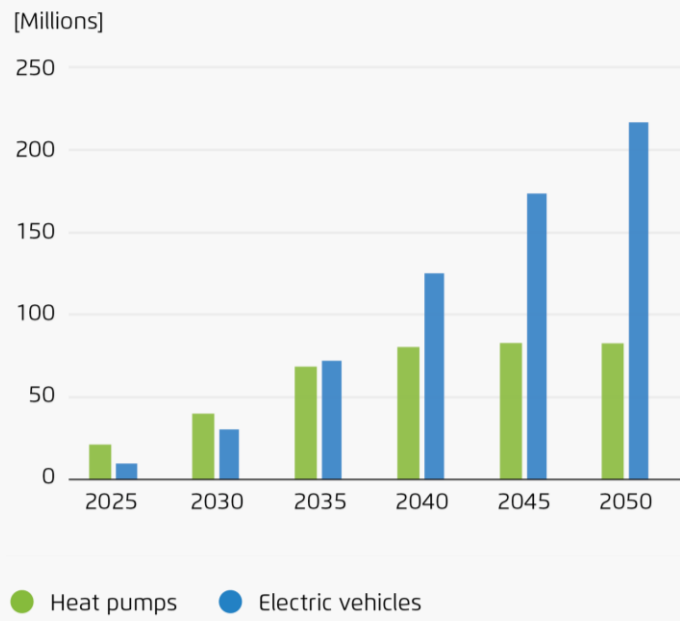
Electricity supply



Electricity demand



Heat pumps and electric vehicles



Selected EU level actions to promote flexibility in distribution grids

Revision of the Electricity Regulation and Directive

- TSOs & DSOs shall publish maps with available capacities for new (flexible) connections,
- Governments shall develop indicative national objectives for non-fossil flexibility
- NRAs shall report on flexibility needs
- NRAs may introduce performance targets to increase overall system efficiency
- Tariffs may provide locational investment signals
- Tariff methodologies shall enable TSOs and DSOs to offer flexible connection agreements

EU grid action plan

- TSOs shall assess flexibility needs of the energy systems when planning transmission networks
- EU DSO entity shall map distribution network development plans
- ACER shall recommend best practice for the promotion of smart grids and network efficiency through tariff design

National Energy and Climate Plans

Network Code Demand Response

JRC DSO observatory

ACER's report on electricity tariffs

ACER's Market Monitoring Report

Boosting flexibility in distribution grids

Introducing panel discussion

Alexander Dusolt
10 April 2024

Boosting flexibility – Introducing panel discussion

- 1** Congestions in distribution grids increasingly hinder the integration of renewable electricity generation and the switch to electric appliances, thereby putting the climate and renewable targets at risk.
- 2** Assessing the available and future flexibility potential in distribution grids and improved grid observability can help identifying the most suitable congestion management solutions tailored to the needs of the system.
- 3** Dynamic non-firm grid connection agreements can quickly relieve congested grid elements and activate significant amounts of flexibility.
- 4** Dynamic time of use tariffs can help activating larger volumes of flexibility including from households and allow for automated and targeted solutions to relieve grid constraints.

Thank you

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