

As the backbone of our energy system, electricity grids are critical for the clean energy transition. Europe has the most interconnected and resilient

electricity grid in the world bringing electricity to consumers every minute, hour and day of the year. However, for the EU to bring renewable electricity to its consumers and empower them to produce it, electricity grids need to develop further and faster. In the next seven years, we should double our cross-border transmission infrastructure.

An accelerated energy transition requires a shift towards a **decentralised**, **digitalised**, **integrated and flexible system**, with the expansion and upgrade of both the transmission and distribution grids. Investing in grids today will help to reduce greenhouse gas emissions and energy costs for

consumers: cross-border energy infrastructure projects can decrease generation costs by €9 billion annually until 2040.



93 GW of cross-border transmission capacity currently in Europe

An additional **23 GW** being incorporated by 2025, a **further 64 GW** is **needed by 2030**



40% of Europe's distribution grids are over 40 years old

Connection requests at distribution level increased on average by **19%** in a single year in 2021



Rapid implementation of the **85 electricity transmission, storage and smart grid cross- border projects** included in the 2023 PCI list is key

In this decade alone, **€584 billion in investments** are necessary for the electricity grids, with a substantial part needed in distribution grids



A grids action plan to address the missing links of the clean energy transition



Accelerating the implementation of **Projects of Common Interest** through political steering, reinforced monitoring and more project proposals



Improving the long-term planning of grids to accommodate more renewables and electrified demand in the energy system



Introducing **regulatory incentives** through anticipatory investments and offshore cross-border cost sharing



Incentivising a **better usage of the grids** with enhanced transparency and improved network tariffs for more smart grids network efficiency and innovative technologies



Improving **access to finance** by increasing visibility on EU funding programmes for smart grids and modernisation of distribution grids



Stimulating **faster permitting** for grids deployment by providing technical support for authorities and guidance on **better engaging stakeholders and communities**



Improving **grid supply chains** by harmonising industry manufacturing requirements

