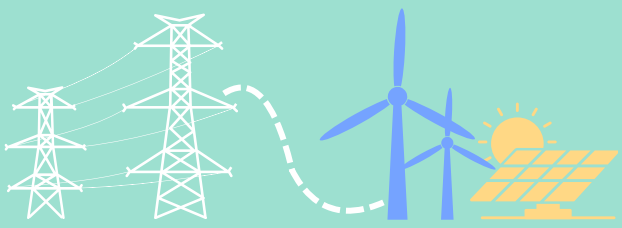
ACER
European Union Agency for the Cooperation of Energy Regulators

MAKING FULL USE OF THE EU ELECTRICITY GRID

2025 MONITORING REPORT - ELECTRICITY

EU grid allows cheap electricity to flow across borders to where it is most needed.

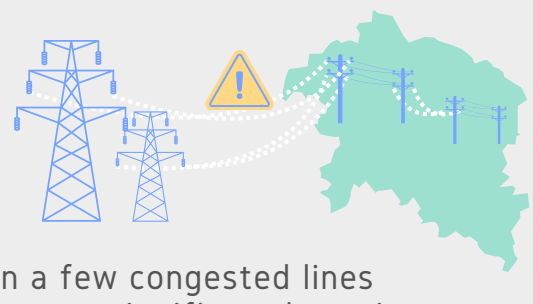


Increasing cross-zonal trade facilitates renewable integration and protects consumers from price spikes.

70%

is the amount of transmission capacity (on every line of cross-zonal relevance) that EU electricity transmission system operators (TSOs) must make available for electricity trading with neighbours by end-2025.

WHY? So that domestic electricity flows are not prioritised over cross-border trade.



Even a few congested lines can cause significant harm in reducing cross-zonal trade.

54% was the average capacity that Core region TSOs made available (in 2024) on their most congested lines.

Growing grid congestion, sometimes worsened by internal trading in other bidding zones (loop flows), puts the end-2025 deadline for reaching 70% at risk.

€4.3 billion

was the cost of relieving congestion in 2024 on 60 TWh of remedial actions (comparable to Austria's annual electricity consumption).

€580 million

in welfare gains could have been unlocked in 2024 if EU's Core region TSOs had fully implemented the 70% rule.

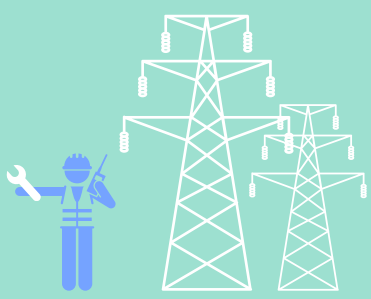
147 of the most severe price spikes could have been potentially avoided in South-East Europe in summer 2024, if 70% capacity had been offered.

HOW TO MAXIMISE CROSS-ZONAL CAPACITIES?

EU Member States face tough trade-offs:

1 TSOs should quickly increase network capacity through innovative grid technologies and building new lines.

2 TSOs should better operate the networks, e.g. through more coordinated congestion management or smarter maintenance planning.



3 Changing the bidding zone configuration would increase 'natural' levels of capacity to trade with neighbours and ease grid congestion, as shown by the pan-EU bidding zone review.