15 YEARS OF entsoe
ELECTRIFYING EUROPE

Interconnected network of Continental Europe 2024

(as of 20/11/2024)

0 50 100 200 300 400 Kilometers

Scale: 1:2.500.000

NORTH SEA
BALTIC SEA
ATLANTIC OCEAN
ADRIATIC SEA
BLACK SEA
CASPIAN SEA
MEDITERRANEAN SEA

NORWAY
SWEDEN
ESTONIA
LATVIA
LITHUANIA
DENMARK
IRELAND
NORTHERN IRELAND
GREAT BRITAIN
RUSSIA
BELARUS
KAZAKHSTAN
THE NETHERLANDS
POLAND
GERMANY
BELGIUM
UKRAINE
CZECHIA
SLOVAKIA
MOLDOVA
FRANCE
SWITZERLAND
AUSTRIA
HUNGARY
ROMANIA
SLOVENIA
CROATIA
BOSNIA HERZEGOVINA
SERBIA
BULGARIA
GEORGIA
AZERBAIJAN
ARMENIA
IRAN
SAN MARINO
MONACO
ITALY
KOSOVO
THE REPUBLIC OF NORTH MACEDONIA
MONTENEGRO
ALBANIA
GREECE
TURKIYE*
PORTUGAL
SPAIN
ANDORRA
SYRIA
IRAQ
CYPRUS
LEBANON
ISRAEL AND PA*
* Palestinian Authority
JORDAN
SAUDI ARABIA
MOROCCO
ALGERIA
TUNISIA
MALTA

Lines and cables
Different voltages (colours)
- 750 kV transmission line
- 500 kV transmission line
- 380/330 kV transmission line
- 300-220 kV transmission line
- 220 kV transmission line
- 132-150 kV transmission line
- DC line

Different types (for all voltages) under operation
- Overhead line
- Double circuit
- Double circuit with 1 circuit mounted
- x 3 circuits

Additional information for all lines and voltages
- under construction (optional)
- Underground (for onshore lines and cables)

Other elements
- Convertor line
- Phase-shifter, under construction
- Substation, under construction
- Convertor
- Convertor Thyristor Back-to-back
- Substations + Power Plants

Power plants
Symbols for under operation and under construction
- (01) Biogas
- (02) Biomass
- (03) Coal-derived gas
- (04) Coal-fired gas
- (05) Fossil fuel
- (06) Fossil gas
- (07) Fossil oil
- (08) Fossil oil shale
- (09) Hard coal
- (10) Hydro marine
- (11) Hydro mixed pump storage
- (12) Hydro pure pump storage
- (13) Hydro run-of-river
- (14) Hydro run-of-river & pondage
- (15) Mixed fuels
- (16) Nuclear
- (17) Oil shale
- (18) Other fossil fuels
- (19) Other non-fossil fuels
- (20) Solar
- (21) Solar photovoltaic
- (22) Solar thermal
- (23) Waste
- (24) Waste (non-renewable)
- (25) Wind offshore
- (26) Wind onshore

NGC threshold in MW

Power systems
- ENTSO-E members
- Other power systems

Source of information
- ENTSO-E members and Observer members: European Network of Transmission System Operators for Electricity
- Med-TSO members: Mediterranean Transmission System Operators
- Russia: System Operators of the UPS of Russia

Information compiled under the responsibility of the Data Expert Group.

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