

The German Power Grid* 2025

The German Power Grid reaches ***5.1 times** from the Earth to the Moon. Or ***48.6 times** around the Equator of the Earth... The length of the German Power Grid has increased by an average of only **0.49% per year** since 2020.

⚡ Electric circuit distances in Germany in km

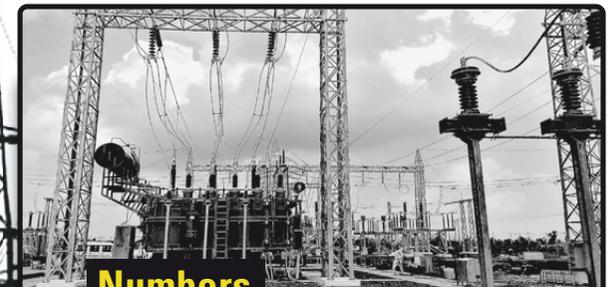
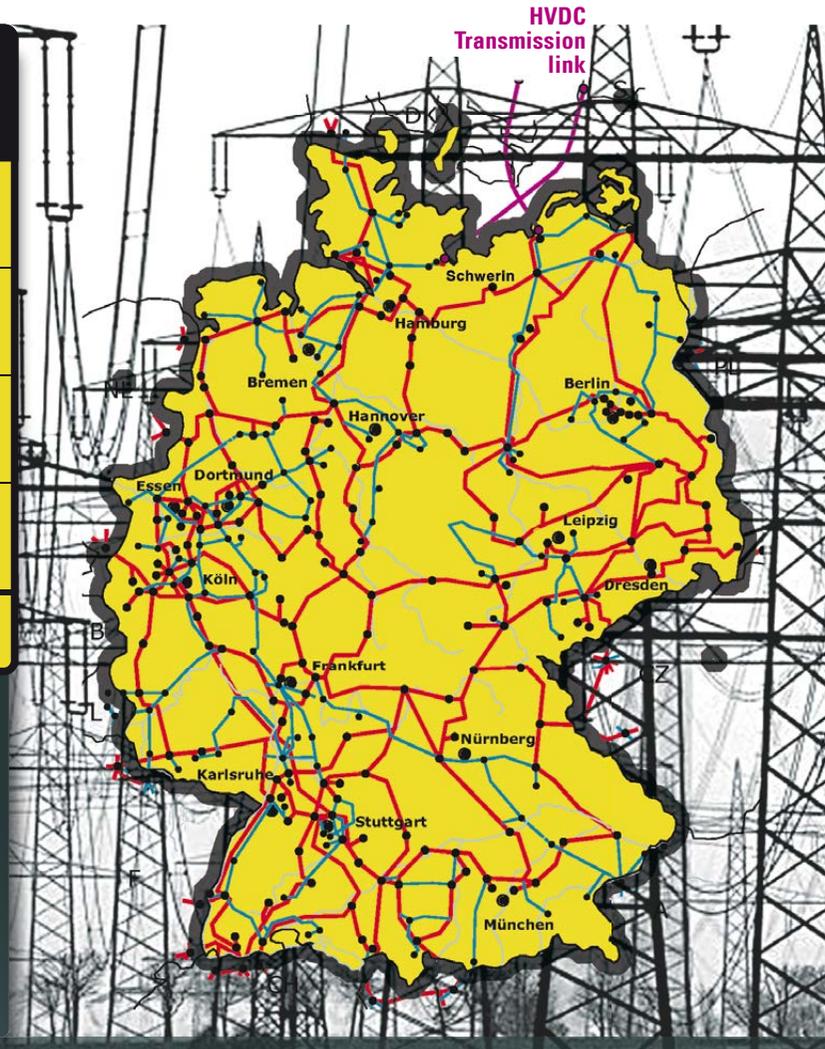
⚡ **Extra-high-voltage** 39.000
[220 and 380 Kilovolt]

⚡ **High voltage** 110.000
[> 60 to < 220 Kilovolt]

⚡ **Medium voltage** 550.000
[6 to ≤ 60 Kilovolt]

⚡ **Low voltage** 1.250.000
[0,4 Kilovolt]

Total: ***1.949.000**



⚡ Numbers of substations/transformers

⚡ **Extra-high-voltage⁽¹⁾** 1.100
[220 and 380 Kilovolt]

⚡ **High voltage⁽¹⁾** 7.500
[> 60 bis < 220 Kilovolt]

⚡ **Medium voltage⁽²⁾** over 600.000
[6 bis ≤ 60 Kilovolt]

Total: **610.000 – 635.000**

1) Current data from 2024 provided by the Bundesnetzagentur and grid operators such as MITNETZ STROM.

2) No exact figures are available due to modernization (retrofit), decentralized expansion, and the large number of stakeholders.

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› Data-Source: BDEW.de, Status: 2024/2025; Bundesnetzagentur.de; Energie.de; Bundesregierung.de, „Netzausbau ...“; Elektronikpraxis.de, mitnetz-strom.de

› First released: 2007; latest Update: March 2026