

Big need for more electricity generation after two decades with unchanged capacity

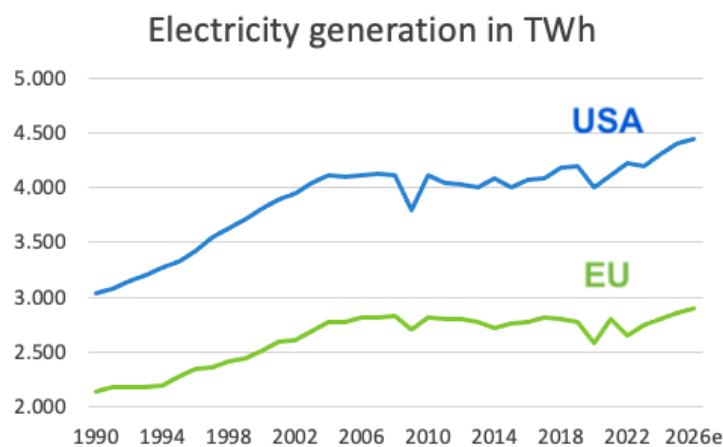
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Electricity generation equipment to stay in high demand

Electricity generation capacity has been flat for two decades...

Looking at electricity generation capacity in the EU and the U.S. (chart below), it's striking that total production capacity has remained largely flat from the mid-2000s through the following two decades.



Over this period, the energy mix underwent a major transformation: coal was phased out due to its unsustainable pollution profile, and Germany began phasing out nuclear power after the 2011 Fukushima incident in Japan.

In the EU, solar and wind power largely replaced coal and nuclear, while in the U.S., natural gas gained share alongside growing contributions from solar and wind.

Electric vehicles (EVs) and AI data centers are driving a sharp increase in electricity demand. In earlier projections, I estimated annual electricity demand growth at around 2%. However, updated forecasts now point to approximately 4% annual growth over the next 15-20 years.



This trend supports medium-term demand for solar and wind power, as well as longer-term demand for natural gas and nuclear energy into the 2030s