Soaring Demand

After decades of flat or declining electricity demand, the United States is in the midst of a boom in power use. Recent government data shows that power consumption nationwide is set to increase by at least 38 gigawatts between now and 2028. This trend would ordinarily be great news for the power industry. But government policies aimed at shutting down fossil-fuel-based generation, more extreme weather and years-long delays in permitting and siting for new transmission lines are turning this power boon into a capacity crisis. Here are the primary demand drivers:

Electrification

Electric vehicle adoption, electrification of home heating and industrial electrification are expected to increase overall U.S. energy consumption by 1% per year through 2026.



Forecast 852 GW

Data Centers

Driven by explosions in artificial intelligence, cryptocurrency and cloud computing, total U.S. data center load is projected to increase by 65% by 2050.



Economic Growth

Residential power consumption is expected to increase by 14% to 22% through 2050 due to increases in population and steady economic growth.

65%

Manufacturing Growth/Onshoring

New, expanding and "onshored/reshored" manufacturing capacity driven by federal incentives is expected to increase industrial demand by 13,000 GWh per year.

Key products: EVs, batteries, semiconductors, solar power components

Total Demand

Analysts predicted in 2023 that U.S. peak demand will increase by at least 38 GW over the next four years, nearly double the growth rate predicted in 2022.

