

U.S. Electricity: Generation, Capacity, and Sales

How power is produced, kept available, and delivered to customers in 2025.

UNITED STATES

U.S. electricity flows through a changing system

Generation, available capacity, and retail sales show different parts of the power system.

4.43 trillion

Utility generation

kWh generated in 2025.

GENERATION MIX

Three source groups supply the grid

Fossil fuels

Natural gas, coal, and petroleum generate power through combustion-based technologies.

[eia-1]

Nuclear energy

Nuclear fission produces heat for steam turbines that generate electricity.

[eia-1]

Renewable energy

Wind, water, sunlight, biomass, and geothermal heat use distinct conversion technologies.

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AVAILABLE POWER

Capacity measures potential, not annual output

The United States had 1,280,799 MW of utility-scale generating capacity at the end of 2025.

Grid operators call on generators as demand changes; plants do not run at full capacity every hour. Capacity shows what the system can supply under specified conditions.

[eia-2]

PORTFOLIO SHIFT

Wind and solar now shape generator operations

Wind and solar represented 17% of utility-scale generating capacity, up from 4% in 2010.

Their output depends on available wind and sunlight. Implication: flexible generators increasingly adjust output to balance the grid.

[eia-2]

CUSTOMER DEMAND

Retail sales capture most electricity consumption

U.S. retail electricity sales reached about 4,058 billion kWh in 2025.

Sales are lower than generation because transmission and distribution lose energy as heat, while some customers generate electricity for direct use.

[eia-2]

SOURCES

Evidence behind this story

Sources are inserted by Stanza from trusted records.

1. [Electricity in the United States \(Energy Explained\)](#)

2. [Electricity in the United States: generation, capacity, and sales \(Energy Explained\)](#)
