

The National Electricity Market

The National Electricity Market (NEM) is one of the world's longest interconnected power systems located on Australia's east coast – comprising about 40,000 km of transmission lines and cables, which transport electricity to more than 85% of Australia's population.

AEMO operates the NEM. This includes the power system, matching supply and demand in real-time, and the wholesale electricity market.

The market involves the buying and selling of the lowest-cost wholesale electricity and energy-related services.

This wholesale electricity is scheduled for dispatch at five-minute intervals and transported to homes and businesses across the NEM.

Western Australia and the Northern Territory are not connected to the NEM.



NEM facts

Commenced as a wholesale electricity market in December 1998.

Nearly 650 registered participants rely on the NEM, including generators, network owners, retailers, and large energy users.

In FY25, approximately 200 terawatt hours of electricity exceeding \$25 billion in value was traded and supplied through the NEM.

NEM records

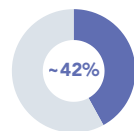
Maximum demand record **35,796 MW** (29 Jan 2009)

Minimum demand record **10,073 MW** (26 Oct 2024)

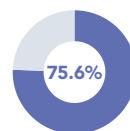


Driven by periods of high rooftop solar generation and mild temperatures, which reduce demand for energy from the grid.

Average
annual renewable contribution



Instantaneous
renewable contribution record
6 November 2024



Generation capacity

By fuel type in FY25

Rooftop solar 26% | 23,902 MW

Black coal 17.9% | 16,435 MW

Wind 14.3% | 13,092 MW

Gas 13.2% | 12,080 MW

Grid solar 11.2% | 10,281 MW

Hydro 8.7% | 8,027 MW

Brown coal 5.2% | 4,820 MW

Battery storage 2.9% | 2,633 MW

Biomass 0.4% | 400 MW

Other 0.2% | 152 MW

Generation supply mix

By fuel type in FY25

Black coal 39.5%

Brown coal 14%

Wind 14.3%

Rooftop solar 12.8%

Grid solar 7.7%

Hydro 6.2%

Gas 5%

Battery storage 0.4%

Biomass 0.2%

About us: AEMO is the independent energy market and system operator and system planner for the National Electricity Market (NEM) and Western Australia's Wholesale Electricity Market (WEM). We are a not-for-profit company, with a membership of state and federal governments (60%) and energy industry members (40%).

More info:
aemo.com.au/about/who-we-are