

# The Wholesale Electricity Market

Western Australia's Wholesale Electricity Market (WEM) enables the buying and selling of wholesale electricity from the state's main power grid, the South West Interconnected System (SWIS).

Every five minutes, AEMO matches electricity production with forecast consumption to maintain a reliable electricity supply and a secure grid.

On 1 October 2023, the new WEM was launched with capabilities to support Western Australia's energy transition.

Following extensive reforms, the new WEM lays the foundations for the SWIS to run on growing levels of renewables while maintaining a secure and reliable electricity system.



## SWIS RECORDS

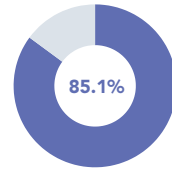
**Maximum demand record** **4,486 MW** (20 Jan 2025)

**Minimum demand record** **511 MW** (10 Nov 2024)

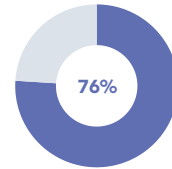


Driven by mild weather and high rooftop solar generation, which reduces demand for energy from the grid.

**Renewable contribution record**  
17 November 2024

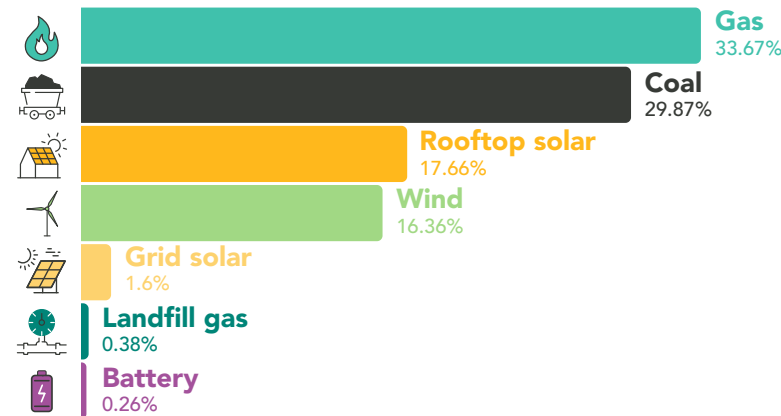


**Rooftop solar contribution record**  
25 September 2023



## The generation mix

Annual generation by fuel type from 1 July 2023 - 30 June 2024



## SWIS facts



As one of the world's largest isolated grids, the SWIS comprises about 7,650 km of transmission and 97,000 km of distribution powerlines, owned and operated by Western Power.



Supplies electricity from about 70 registered generation facilities to 1.2 million homes and businesses.



Approximately 17.8 TWh of energy is traded and used annually through the SWIS.



Collectively, rooftop solar is the largest generator in the SWIS. It is currently installed in more than one-in-three households.



## WA's energy transition

A decade ago, 90% of electricity through the SWIS was supplied by burning coal and gas.

Today, wind and solar generation account for around a third of our annual electricity supply, peaking at about 85.1%, at times.

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](https://aemo.com.au/about/who-we-are)