



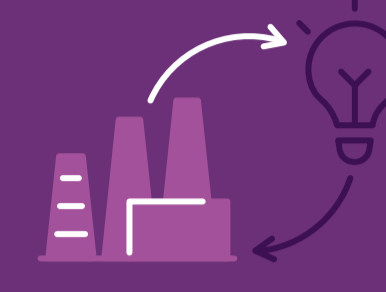
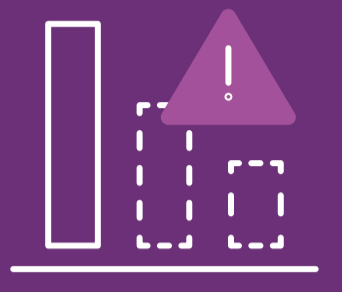
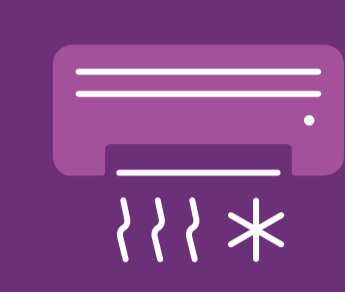
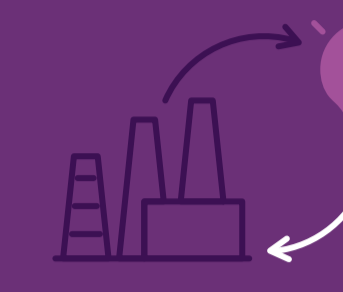
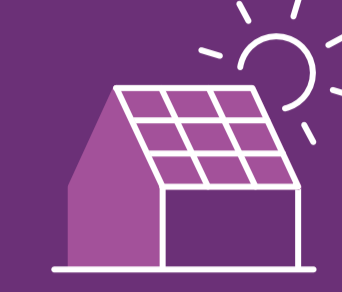





2024

Wholesale Electricity Market (WEM) Electricity Statement of Opportunities (ESOO)



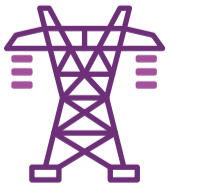
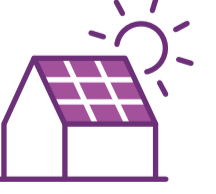
A 10-year outlook of electricity demand, supply, and opportunities for investment to ensure a secure and reliable electricity supply for the SWIS.

[Read the full report here](#)

Key findings: For the 10-year outlook period (2024-25 through to 2033-34)

 <p>Supply</p>	 <p>Investment required</p>	 <p>Consumption</p>	 <p>Peak demand</p>	 <p>Small-scale solar</p>
 <p>The near-term supply-demand outlook has improved significantly since the 2023 WEM ESOO.</p> <p>Supply and demand will largely be balanced between 2025 and 2027 as result of AEMO's procurements of new capacity.</p>	 <p>Investment in generation, storage, demand-side response and transmission is required from 2027-28 onwards.</p> <p>Continued investment is needed as electricity demand grows and aging coal plants retire.</p>	 <p>Electricity use supplied by the grid (excluding rooftop solar) is forecast to increase on average 4.6% annually.</p> <p>This growth is driven by economic and population growth, along with the expected electrification of homes, businesses, industry and transport.</p>	 <p>Peak demand is forecast to grow on average 3.7% annually.</p> <p>Rising peak demand aligns with the factors driving operational consumption. Peak demands during summer and winter are converging.</p> <p>A new peak demand record was set in the SWIS in February 2024 during heatwave conditions.</p>	 <p>Small-scale solar, or distributed photovoltaic (DPV), uptake is expected to continue with about 6.5 gigawatts (GW) of capacity to be installed in the SWIS by 2033-34.</p> <p>Underpinning this growth are expected cost reductions and relatively short payback periods.</p>

SWIS fast facts

 <p>The SWIS supplies electricity to approximately 1.2 million WA households and businesses.</p>	 <p>Small-scale solar installations continue to be popular in the SWIS with around 40% of households hosting solar PV (nearing 3 GW of installed capacity).</p>
 <p>The SWIS covers 260,000 km – comprising 7,700 km of transmission and 93,350 km of distribution powerlines.</p>	 <p>A minimum demand record was reached in September 2023 when 76% of total demand in the SWIS was met by rooftop solar.</p>

The WEM ESOO identifies the capacity to be procured through the WEM's Reserve Capacity Mechanism around 2 years ahead of time.

In addition, under the WEM Rules, AEMO can use the Supplementary Reserve Capacity (SRC) and Non-Co-optimised Essential System Services (NCESS) mechanisms to support power system security and reliability.

AEMO has procured more than 1,000 MW of capacity to-date via the **NCESS** mechanism to help manage peak and minimum demand risks from 2024-26. AEMO has identified a residual need for the 2024-25 summer and is planning to address this through SRC.