

# How does the National Electricity Market work?

The majority of electricity in Australia is generated, bought, sold and transported in real time via the National Electricity Market (NEM), which covers the east coast of Australia, including South Australia and Tasmania.

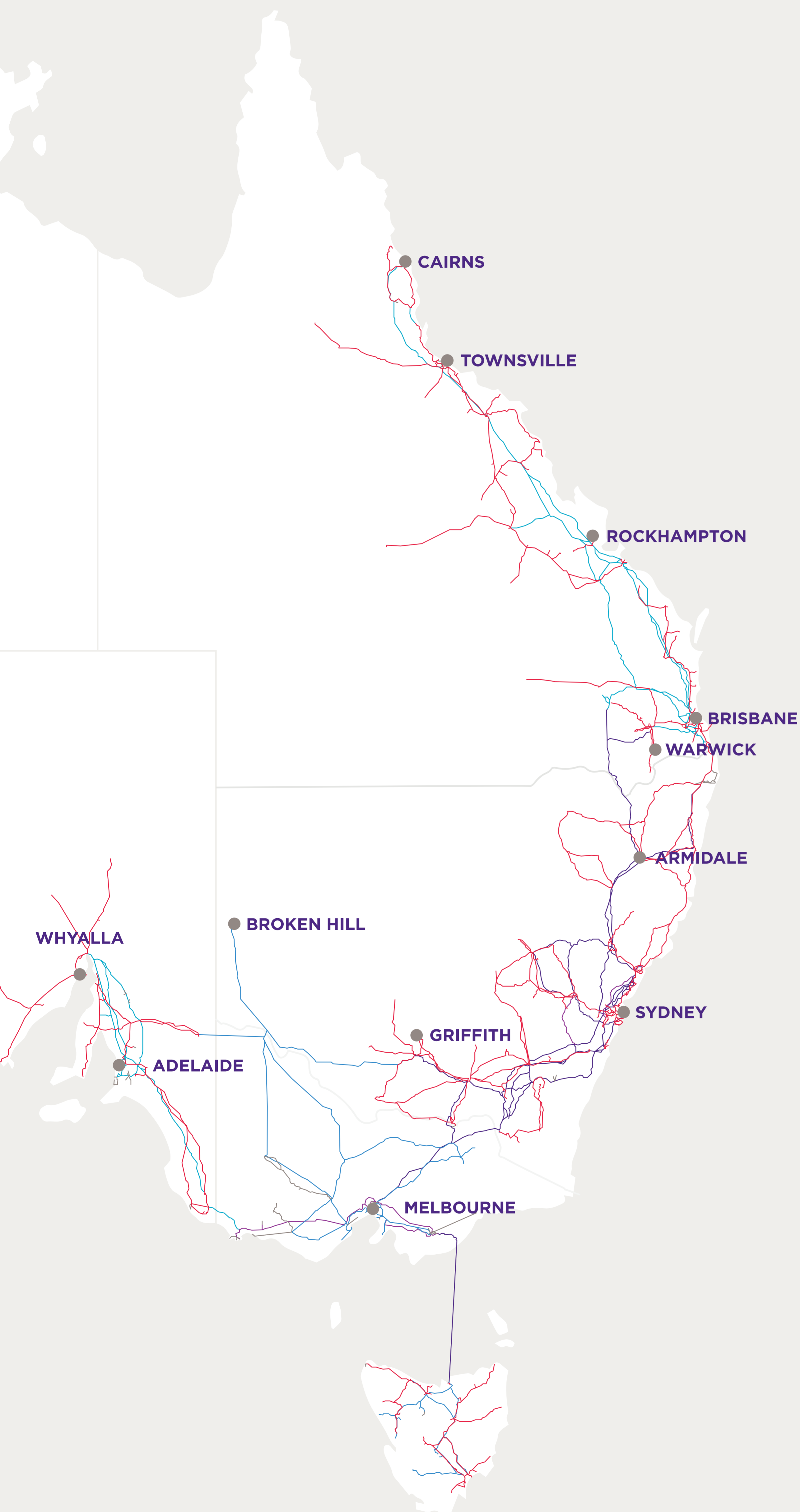
The NEM is one of the largest interconnected electricity systems in the world. It covers around 40,000 km of transmission lines and cables, supplying around 9 million individual customers. This delivers around 80% of all electricity consumed in Australia.

High voltage transmission lines transport the electricity from generators to electricity distributors (like Ergon Energy), who then deliver it to homes and businesses on lower voltage 'poles and wires'.

The NEM is a wholesale financial market that facilitates the exchange of electricity between energy generators and large energy consumers and retailers. Retailers purchase electricity from the NEM to resell to end users.

Because the supply and demand for electricity must be balanced in real time, the price of electricity in each state in the NEM changes every five minutes. This spot price is an important price signal for energy generators and large energy users.

Energy generated at the Warwick Solar Farm is sold into the NEM, and energy used at UQ's sites is purchased from the NEM directly by UQ. This enables UQ to 'offset' the energy used by its sites with energy generated by the Warwick Solar Farm, even though they are not directly connected.



## Transmission Lines

- 66 kV
- 132/110 kV
- 220 kV
- 275 kV
- 330 kV
- 500 kV



40,000 km  
Of transmission lines covered



9 million  
Individual customers supplied



80%  
Of consumed electricity in Australia