

The Victorian Big Battery: Fact Sheet

Victoria will install Australia's largest lithium-ion battery to modernise the state's electricity grid, support new renewable energy capacity and improve the reliability of power supply in the face of increasingly hot summers.

What it does

The Victorian Big Battery will play two important roles in our electricity system, offering flexibility that no other technology can provide.

First, **it will increase the power flow through the Victoria-New South Wales Interconnector (VNI).**

Victoria is part of the National Electricity Market (NEM), which is an interconnected system that runs the length of the eastern seaboard. Electricity flows across state borders via interconnectors.

VNI is a particularly important source of power during the hot summer months, as the days of peak energy demand can differ in each state.

While our state is a net exporter of energy, the Victorian Big Battery will allow Victoria to draw an additional 250 megawatts from New South Wales over the VNI in periods of peak demand between November and March each year. This additional capacity will increase the reliability of our electricity supply.

Second, **the battery will provide crucial energy storage.**

The battery will be able to charge during the day when renewable energy is cheap and abundant, and then dispatch that energy when it is needed. This is in addition to the other valuable services that a grid-scale battery can provide to the electricity market.



Batteries can respond to short-term market demands more rapidly and more cheaply than other technologies, such as gas. This will lower overall system costs.

Increasing reliability

With climate change driving summer temperatures higher, peak demand for electricity is increasing while the state's ageing coal-fired generators are increasingly prone to failure. At the same time, our grid is at risk of extreme weather events such as bushfires. This creates a risk of a high impact, low probability event where a coal-fired generator fails on a very hot day or powerlines fail, leading to load shedding.

By enabling additional flows along the VNI integrated with local storage capacity, the Victorian Big Battery acts as cost-effective insurance against a high impact, low probability event.

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Net price benefits for Victorians

The cost of the service provided by the Victorian Big Battery will be incorporated into retail electricity bills. However, the additional capacity supplied by the battery will lower wholesale prices, resulting in net electricity bill savings for households and businesses.

Overall, the project will deliver \$2.40 of benefits for every \$1 spent

Support for renewables

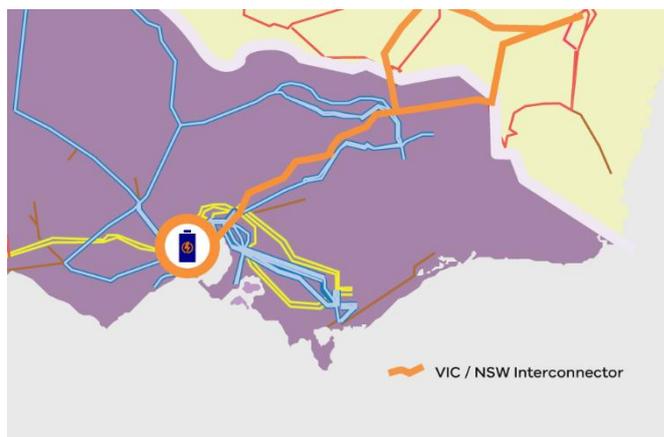
Cutting-edge battery technology will help Victoria achieve its 50% renewable energy target by 2030.

Batteries are a perfect complement to renewables. They soak up electricity during the day when renewables are generating power cheaply, and then discharge when required.

Batteries are particularly effective at controlling frequency in the system. Batteries provide this service more rapidly and cheaply than any other technology, lowering system costs.

Local benefits

The Victorian Big Battery will be installed at the Moorabool Terminal Station, just outside of Geelong. The battery will create over 80 jobs during construction and 6 ongoing jobs. The project will also bring forward over \$200 million in capital investment.



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