

Chalumbin Wind Farm

Changing Energy Market

September 2021

Australia needs new sources of electricity and the national energy market is in transition. Cleaner, renewable sources of energy are being developed to mitigate the impacts of climate change and meet national energy demand as coal-fired power stations reach the end of their operational lives and are retired over the next two decades.

Whole-of-system planning for Australia's energy transition is managed by the Australian Energy Market Operator (AEMO) through its Integrated System Plan (ISP). The ISP sets out a roadmap for the efficient development of the National Electricity Market (NEM) over the next 20 years with the objective to: *maximise value to end consumers by designing the lowest cost, secure and reliable energy system capable of meeting any emissions trajectory determined by policy makers at an acceptable level of risk.*

AEMO forecasts that Australia requires 26-50 Gigawatts (GW) of new grid-scale renewables over the next 20 years and most of that new capacity is expected to come from solar and wind (optimal balance of 55/45) supported by storage. To facilitate the transition governments have set renewable energy targets and AEMO has identified optimal renewable energy zones with high-quality renewable energy resources and proximity to existing or planned network infrastructure.

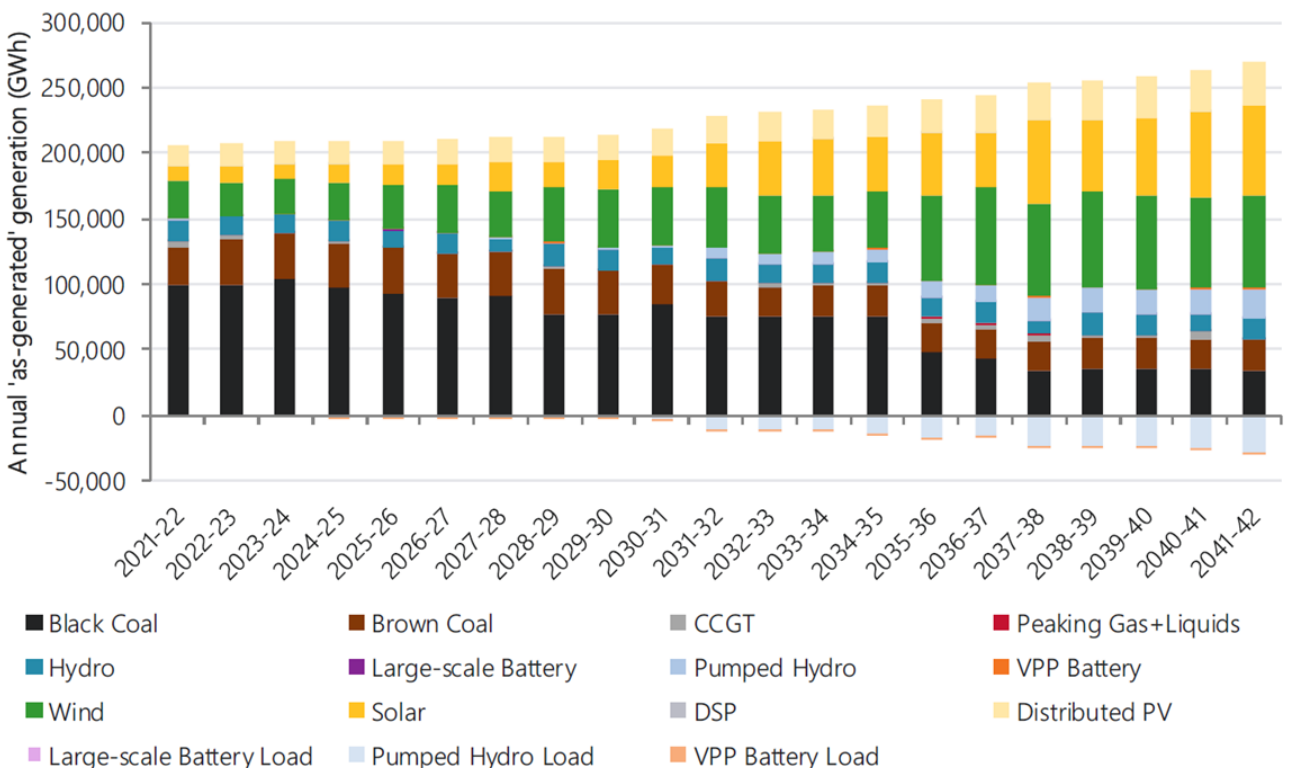
“ An affordable, reliable energy supply underpins our economic recovery, and today is further proof renewables is playing a central role.

For the fourth year in a row, Queensland's renewable revolution is driving power prices down across the state.”

The Honourable Mick de Brenni
Minister for Energy, Renewables
and Hydrogen

Media statement, 11 June 2021

Figure 6 Forecast annual generation to 2041-42, Central Scenario



Source: AEMO

Queensland has a renewable energy target of 50% renewable energy generation by 2030. About 20% of Queensland's electricity is currently generated by renewable sources and meeting the 2050 target will require harnessing the state's considerable renewable energy potential.

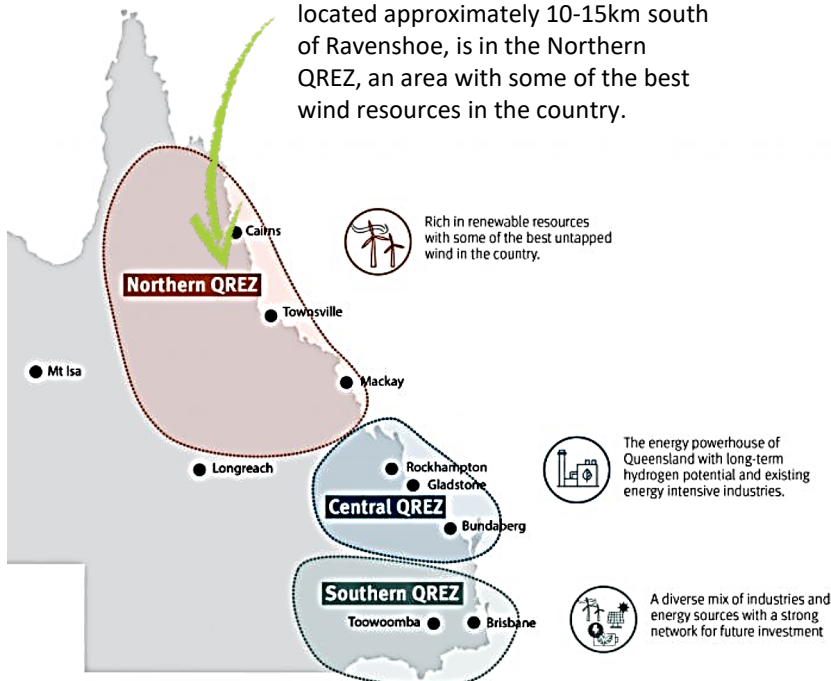
In 2017 the Queensland Government released its Powering Queensland Plan, setting out its strategy to guide the state through the short-term and long-term challenges facing Australia's energy markets.

AEMO has identified three renewable energy zones (REZ) in Queensland; Northern, Central and Southern (see below) and the Queensland Government has committed to establishing these areas by undertaking strategic network investments, streamlining the development of new renewable energy projects and working to match new and existing industrial energy demand with cheap, clean renewable energy.

The Queensland Government has committed \$386 million to its Powering North Queensland Plan to strengthen and diversify the North's energy supply and create a North Queensland clean energy hub, including \$150 million to develop transmission infrastructure in the North and North-west.

This includes a \$40 million upgrade to the transmission lines between Cairns and Townsville to support new projects in the north, unlock the world-class wind resources in the region and improve the security of energy supply to Cairns. In June 2021 the government also announced a \$2 billion investment in energy assets and the Queensland Renewable Energy and Hydrogen Jobs Fund as a critical part of the state's COVID-19 Economic Recovery Plan.

The Chalumbin Wind Farm site, located approximately 10-15km south of Ravenshoe, is in the Northern QREZ, an area with some of the best wind resources in the country.

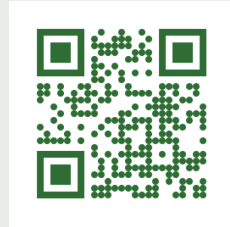


Source: epw.qld.gov.au/about/initiatives/renewable-energy-zones

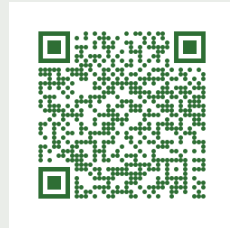
More information

Scan the QR codes for direct access

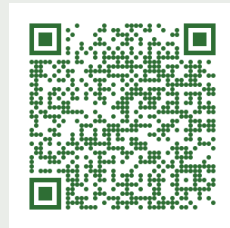
Australian Energy Market Operator
Website - aemo.com.au



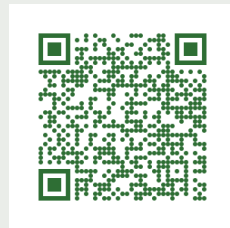
The National Electricity Market
Fact Sheet



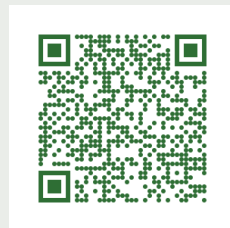
Powering North Queensland Plan
Fact Sheet



Northern QREZ
Fact Sheet



Northern QREZ
Frequently Asked Questions



For more information about Chalumbin Wind Farm visit chalumbinwindfarm.com.au

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