

Changing Energy Market

June 2022: Australia's energy market is in transition. Cleaner, renewable sources of energy are being developed to mitigate the impacts of climate change and meet electricity 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) 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.*

The draft 2022 ISP is in development and forecasts the most likely scenario is that the NEM will need 135 GW of solar, 70 GW of wind and 45 GW of storage by 2050. This is triple the previous forecasts for renewable energy capacity and means the NEM will require nine times the utility-scale variable renewable energy capacity that it has now.

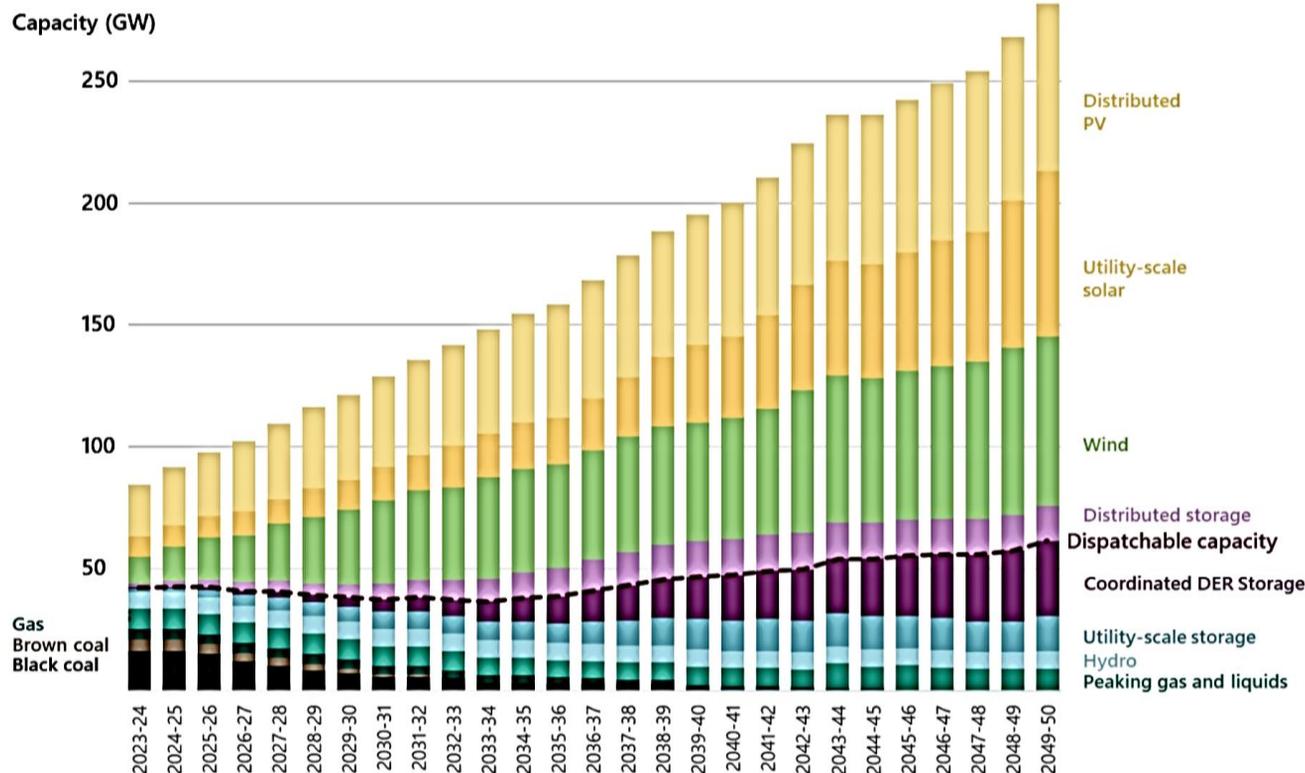
To facilitate the transition governments have set renewable energy targets and AEMO has identified optimal renewable energy zones with high-quality renewable energy resources and proximity to existing or planned network infrastructure.

“ Tasmania is the renewable energy powerhouse of Australia. Our renewable energy resources and expertise in developing renewable energy is a 21st century competitive advantage. Tasmania is blessed with natural assets, we have world leading water and wind resources. By seizing Tasmania's immense potential, renewable energy can grow our economy, attract investment, create jobs and support Australia's transition to renewable supply. ”

Hon Guy Barnett MP
Minister for Energy and Renewables

Minister's foreword,
Tasmanian Renewable Energy
Action Plan

Figure 1 Forecast NEM capacity to 2050, Step Change scenario, with transmission



Source: AEMO 2021, Draft 2022 Integrated System Plan

Tasmania is blessed with renewable energy resources. The state has a distinct competitive advantage in the growing renewable energy economy. It is uniquely placed to take advantage of this opportunity, particularly for wind and storage.

Tasmania has achieved 100% self-sufficiency in renewable energy generation and the Tasmanian Government has set a world-leading renewable energy target of 200% renewable energy generation by 2040.

Meeting the Tasmanian Renewable Energy Target (TRET) will require harnessing Tasmania's considerable renewable energy potential.

AEMO has identified three candidate Renewable Energy Zones (REZ) in Tasmania: T1 North East, T2 North West and T3 Midlands (see graph below).

The Tasmanian Government has established Renewables, Climate Change and Future Industries Tasmania (ReCFIT) to advise it on the state's strategic direction on climate change, renewable energy growth and emissions reduction to help shape Tasmania's future while maintaining a secure, sustainable, and affordable energy system.

To grow Tasmania's renewable energy sector sustainably over the next 20 years, the Government has set out its vision and suite of actions in the *Tasmanian Renewable Energy Action Plan*, the *Tasmanian Renewable Hydrogen Action Plan* and the *Renewable Energy Coordination Framework*. More details on these are available online from the ReCFIT website: <https://recfit.tas.gov.au/renewables>.

More information

Scan QR codes for direct links

Australian Energy Market Operator
- aemo.com.au



The National Electricity Market
Fact Sheet (PDF)



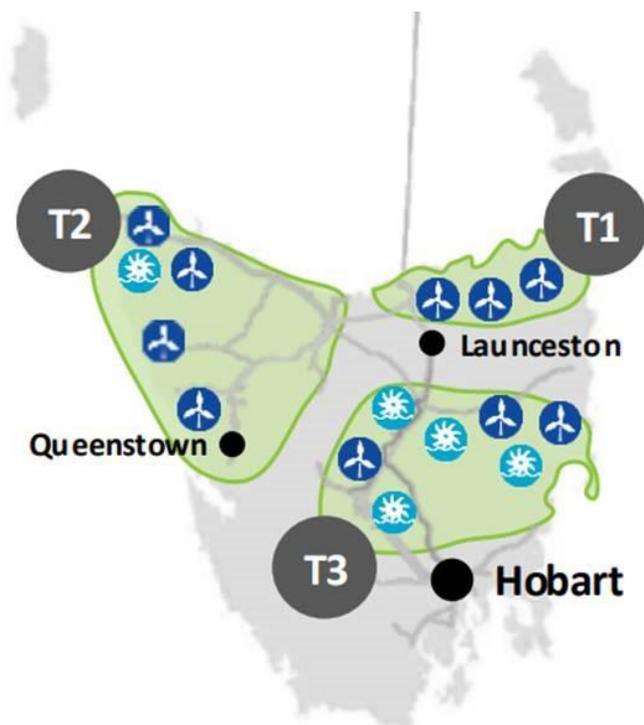
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Tasmanian Government,
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Action Plan (PDF)



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Source: https://recfit.tas.gov.au/renewables/renewable_energy_zones