Renewable Energy Zones

The NSW Government’s Electricity Strategy and Electricity Infrastructure Roadmap set out a plan to deliver Renewable Energy Zones (REZ) in the State’s Central-West Orana, New England and South-West regions. This builds on the NSW Transmission Infrastructure Strategy and supports the implementation of the Australian Energy Market Operator’s Integrated System Plan. Further REZs will also be developed in the Hunter-Central Coast and Illawarra regions of NSW.

The REZs will play a vital role in delivering affordable energy generation to help replace the State’s existing power stations as they close over the coming decades. The REZs in the Central-West Orana, New England and South-West regions of NSW alone will unlock a significant pipeline of large-scale renewable energy and storage projects, while supporting up to $20.7 billion of private sector investment in our regions and an over 5,000 construction jobs at their peak.

What is a Renewable Energy Zone?

Renewable Energy Zones (REZs) are modern-day power stations. They combine renewable energy generation such as wind and solar, storage such as batteries, and high-voltage poles and wires to deliver energy to the homes, businesses and industries that need it.

By connecting multiple generators and storage in the same location, REZs capitalise on economies of scale to deliver cheap, reliable and clean electricity for NSW.

What are the benefits of Renewable Energy Zones?

The Renewable Energy Zones are expected to deliver multiple benefits for NSW, including:

• more reliable energy from significant amounts of new energy supply
• energy bill savings from reduced wholesale electricity costs
• emissions reduction from a cleaner energy sector
• community partnership from strategic planning and best practice engagement and benefit sharing.

Priority Renewable Energy Zones

The NSW Transmission Infrastructure Strategy, released in 2018, identified the Central-West Orana, New England and South West regions as priority locations for REZs.

These locations benefit from exceptional energy resources including wind, solar and hydro and are relatively close to existing grid infrastructure. They also have reduced environmental, heritage and land use constraints, and benefit from existing investment interest from the private-sector.

Importantly, these REZs do not preclude the development of energy projects in other parts of the State which may already have enough grid capacity to connect new projects.
Central-West Orana pilot REZ

The NSW Government is in the planning stage for the State's first pilot REZ in the Central-West Orana region around Dubbo and Wellington on the land of the Wiradjuri, Wailwan and Kamilaroi people.

The pilot REZ is expected to be shovel-ready by end 2022 and unlock up to 3,000 megawatts of new generation by the mid-2020’s, bringing an estimated $5.2 billion in private sector investment to the Central-West Orana region by 2030.

This is enough new capacity to power around 1.4 million homes. This REZ alone is expected to support 3,900 construction jobs at its peak.

The Central-West Orana region was chosen for the pilot because it benefits from relatively low build costs, a strong mix of energy resources, and significant existing investment and investor interest. The NSW Government has committed over $40 million to support its delivery.

In June 2020, 27,000 MW of new energy generation and storage projects responded to a registration of interest in the Central-West Orana region - nine times the amount required to deliver the REZ.

The importance of the Central-West Orana REZ was recognised in the Australian Energy Market Operator's 2020 Integrated System Plan as an 'actionable' transmission project. This means it is deemed a critical project to address cost, security and reliability issues across the entire National Electricity Market.

New England, South-West, Hunter-Central Coast and Illawarra REZs

The NSW Government is in the early stages of planning REZs in the New England, South-West, Hunter-Central Coast and Illawarra REZs.

These areas have some of the best natural energy resources, strong investor interest and are close to existing high voltage power lines.

The NSW Government has committed to investing $78.9 million to support the development of the New England REZ. Developing the New England, South-West, Hunter-Central Coast and Illawarra REZs will be complex, taking a number of years to design and build.

The NSW Government will engage closely with stakeholders on the delivery of these REZs.