

The Power & Potential of REZ

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Renewable Energy Zones are areas identified as having abundant renewable energy resources - primarily solar, wind, or pumped hydro - suitable for building large-scale renewable energy generating stations and transmission capacity. REZs are important because they diversify Australia's energy profile away from fossil fuels, lower energy costs through economies of scale, and reduce pollution by generating clean energy without greenhouse gas emissions. In 2020, renewables accounted for 24% of Australia's electricity generation while coal still powered 54%, highlighting the need for structured renewable expansion. REZs support this transition by concentrating infrastructure investment where resources are strongest.

Publication context: This article reflects its publication date. Market prices, program rules, reporting duties and deadlines may have changed. Confirm current official guidance before making a decision.

Effectively pulling away from coal-based power will require the strategic introduction of new energy sources to the nationwide electricity grid. Clean energy sources like solar and wind are becoming more prevalent in the energy mix. Photovoltaic (PV) solar generation has experienced a 42% increase since 2018, and renewable energy sources accounted for 24% of Australia's electricity generation in 2020.

Even with these positive trends, coal still powers 54% of Australia's electricity generation. As plans to phase out coal-fired plants continue, an increase to install more dispatchable energy is required to meet Australia's energy demand. REZs are poised to be the power stations of the future. They will usher in an era of clean energy as Australia looks to fulfil its Paris Climate Agreement commitments and contribute towards the fight against climate change.

What are Renewable Energy Zones? (REZ)

Renewable Energy Zones, also known as REZ, are areas identified as having an abundance of renewable energy resource - mostly solar, wind, or pumped hydro - and therefore suitable areas to build out large-scale renewable energy generating stations and transmission capacity to deliver clean, reliable, and cost-effective energy to homes and businesses.

How REZ Will Benefit Australian Environment & Economy

Renewable Energy Zones provide a range of economic and environmental benefits. With the overload of interest towards REZ development, states can be selective when choosing developers, making sure to best align environmental consciousness with the economic development of local and statewide economies.

Diversify energy profile - The majority of Australia's transportation and industry is powered by fossil fuels. Under national efforts to curb this trend, there are plans to retire a number of coal-fired power plants in the upcoming decade. Introducing large-scale wind, solar, and hydro projects enable a healthy diversification of clean and reliable energy sources that can power Australia towards a carbon-free society.

Lower energy costs - The large-scale deployment of renewable energy infrastructure enables REZ developers to take advantage of economies of scale. With relatively low operating costs, once up and running, Renewable Energy Zones will deliver lower wholesale electricity prices resulting in lower energy bills for end-users.

Reduce pollution - One of the hallmark benefits of renewable energy sources, like solar, wind and hydro, is their capacity to generate clean energy. Generating power from renewable energy or other naturally occurring energy does not emit greenhouse gases into the atmosphere, unlike burning coal or natural gas.

Support local economy -Renewable Energy Zones will bring significant economic development to local economies. New South Wales REZ generating stations have fixed costs that guarantee interconnectivity to transmission lines. A portion of these access fees is set to go directly to local communities, anticipated to bring a cool \$265 million to host communities by 2042.

Various states are making local economic development a priority for their REZ buildout plans. The NSW pilot REZ in Central-West Orana is anticipated to support 3,900 construction jobs at its peak. The pilot program and the New England REZ together will support 1,700 long-term jobs.

Substantial Buzz Around REZ

The growing consensus that human activity is indeed a driving factor of climate change has led governments, businesses, and consumers looking to take greater control of their energy generation and be part of the solution.

Several Australian states have substantial buzz around REZ projects capable of delivering significant amounts of clean, reliable energy.

New South Wales

The incredible response to registration of interest (ROI) for the first proposed New South Wales (NSW) REZ in Central-West Orana has put the state in the driver's seat, allowing it to select developers that are best suited to enrich local communities and to plan for even larger projects for its other 4 proposed REZ in New England, South-West, Hunter-Central Coast, and Illawarra.

Central-West Orana, the pilot REZ, is planned to start construction at the end of 2022 and is set to deliver 3 GW of energy by the mid-2020s, enough electricity to power roughly 1.4 million homes.

The New England site is slated to be the largest REZ in NSW, with a projected capacity of 8 GW - enough juice to power 3.5 million homes. Infrastructure buildout is being strategically designed to offer the flexibility of exporting excess energy to neighbouring state Queensland.

Victoria

Half of Victoria's carbon emissions come from electricity generation, making the establishment of REZs and buildout of clean energy generation stations critical to its climate action plan. Victoria has defined six areas for REZs with a keen eye towards advancing development on the western three sites in Murray River, Western Victoria, and South-West. The Victorian government has committed \$540 million towards REZ infrastructure development and the formation of a coordinating body, VicGrid.

Victoria has already given out a Registration of Interest, and contracts for REZ projects should be cemented by the first quarter of 2022.

Queensland

Queensland has established three Renewable Energy Zones - Northern, Central, and Southern. Throughout development phase, Queensland REZ received significant levels of interest from prospective developers: 72 projects registered their interest in the Southern REZ; 67 projects registered interest for Central REZ; 53 projects registered for Northern REZ.

Queensland has already begun construction on the Northern REZ with the start of the Kaban Green Power Hub, a 157 MW wind farm with connected 100 MW battery. Kaban Green Power Hub is projected to be operational in 2023.

Queensland has been actively engaging with the community in 2021 to align stakeholder interests and make sure that priority alignment exists to maximize economic production and community benefits while the state works toward its goal of 50% renewables by 2030.

The interest in developing Renewable Energy Zones highlights the impressive investment potential for these projects. While these projects have generated significant interest and investment opportunities, the development will not happen overnight. Strategic development of both energy generation and grid transmission has to be coordinated in order to safely and reliably deliver power from these renewable energy generating stations to the homes and businesses in need. It's also important that the communities most impacted by this new development are included in the process and see the economic and labour benefits of hosting the renewable energy stations.

Renewable Energy Zones present an exciting future for Australia as states embrace the transition to clean energy and embark on a journey to drastically change the energy landscape from one beholden to coal to one empowered by clean, renewable power.

Scheme and certificate context

Before using a certificate or grant figure, confirm the current scheme method, eligible activity, effective date, evidence requirements, price date and registration or application process.

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What are Renewable Energy Zones (REZ) and why are they important for Australia's energy transition?

Renewable Energy Zones are areas identified as having abundant renewable energy resources—primarily solar, wind, or pumped hydro—suitable for building large-scale renewable energy generating stations and transmission capacity. REZs are important because they diversify Australia's energy profile away from fossil fuels, lower energy costs through economies of scale, and reduce pollution by generating clean energy without greenhouse gas emissions. In 2020, renewables accounted for 24% of Australia's electricity generation while coal still powered 54%, highlighting the need for structured renewable expansion. REZs support this transition by concentrating infrastructure investment where resources are strongest.

How do New South Wales and Victoria differ in their Renewable Energy Zone development approaches?

New South Wales has adopted a pilot-then-expand strategy, beginning with the Central-West Orana REZ (3 GW capacity, supporting 3,900 construction jobs at peak) and the larger New England REZ (8 GW, designed to power 3.5 million homes with flexible export capability to Queensland). NSW directs access-fee revenue to host communities, anticipated to deliver around \$265 million by 2042. Victoria has taken a different approach, defining six REZ areas with priority development on western sites in Murray River, Western Victoria, and South-West. Victoria committed \$540 million to REZ infrastructure and established VicGrid as a coordinating body, with contracts for REZ projects expected by early 2022. Both states use infrastructure planning to integrate renewable generation with transmission.

What economic benefits do Renewable Energy Zones provide to local communities and the broader economy?

REZs generate multiple economic benefits: access fees from generating stations are directed to host communities (NSW targeting \$265 million by 2042), large-scale construction creates temporary jobs (NSW Central-West Orana pilot alone supported 3,900 construction jobs at peak), and long-term permanent employment results from operations and maintenance (NSW's pilot and New England REZs together expected to support 1,700 long-term jobs). Infrastructure development and grid connection work also stimulate local supply chains. REZs reduce energy costs through economies of scale, making renewable electricity more affordable for businesses and households. For organisations evaluating energy efficiency or renewable procurement, REZ expansion creates opportunities for lower-cost renewable electricity supply through mechanisms like our moREnewable100 service.

What does Queensland's REZ program reveal about developer interest and construction readiness?

Queensland established three Renewable Energy Zones—Northern, Central, and Southern—attracting substantial developer interest: 72 projects registered for the Southern REZ, 67 for the Central REZ, and 53 for the Northern REZ during the development phase. This significant interest demonstrates market confidence in REZ viability and supply-chain readiness. Construction has already begun on the Northern REZ with the Kaban Green Power Hub, a 157 MW wind farm with integrated 100 MW battery storage, projected operational in 2023. Queensland aims for 50% renewables by 2030, using REZs as the vehicle for that transition. This activity indicates that renewable generation infrastructure is moving from planning to deployment, creating a potential supply of renewable energy certificates (STCs, LGCs, or REGOs) that organisations can procure to support renewable electricity claims.

How do Renewable Energy Zones relate to renewable energy certificate schemes and corporate sustainability claims?

REZs generate the large-scale renewable electricity that underpins renewable energy certificate creation and trading. Large-scale generation from REZs creates LGCs (Large-scale Generation Certificates) under Australia's Renewable Energy Target and REGOs (Renewable Electricity Guarantee of Origin) under the separate REGO scheme. Organisations making renewable electricity claims or pursuing RE100 commitments can procure certificates derived from REZ projects to support market-based Scope 2 accounting under GHG Protocol guidance. REZ expansion increases certificate supply and potentially improves price competition. Our moREnewable100 service helps clients procure renewable energy certificates without replacing existing electricity contracts, aligning with RE100 requirements. For businesses planning renewable electricity procurement, understanding REZ development timelines and capacity helps forecast certificate availability and plan long-term renewable energy strategies.

What infrastructure and transmission planning is involved in establishing Renewable Energy Zones?

REZ development requires coordinated planning of generation capacity, transmission infrastructure, and grid connection. New England REZ's 8 GW design includes strategic infrastructure planning to offer flexible export capability to neighbouring Queensland, demonstrating how transmission design enables broader market participation. Victoria established VicGrid as a coordinating body to manage REZ infrastructure development across six defined zones, supported by a \$540 million government commitment. This centralised coordination addresses the challenge of connecting distributed renewable generation to the national grid efficiently. For organisations evaluating long-term renewable energy procurement or electrification feasibility, REZ transmission planning is relevant because grid capacity and connection availability affect both renewable generation development and site-level electrification options. Our renewable heat assessment and electrification feasibility services consider electrical constraints as key inputs; REZ expansion improves electrical infrastructure capacity in

targeted regions.

How do Renewable Energy Zones complement energy efficiency and on-site renewable investments at the organisational level?

While REZs focus on large-scale, centrally coordinated renewable generation and transmission, organisations typically pursue a portfolio of energy strategies: efficiency improvements, on-site solar or storage, and procured renewable certificates. REZs increase the availability and competitive pricing of renewable energy certificates available for procurement, making market-based renewable electricity claims more economical. For water utilities and industrial facilities, REZ expansion creates a cleaner grid for purchased electricity while organisations implement their own generation and efficiency projects. We help clients navigate this portfolio approach through energy audits identifying efficiency opportunities, renewable heat assessments, on-site generation feasibility studies, and renewable certificate procurement advice. As REZ infrastructure develops and renewable generation becomes more abundant, the business case for corporate renewable electricity procurement improves, supporting organisations' transition pathways and emissions reporting obligations.