



ESG Insights

October Focus: Renewable Energy This Week, WN 42: Australasia

- *Australia met its Renewable Energy Target of a minimum of 20% of electricity to be generated from renewable sources in September 2019, a year ahead of its own 2020 deadline*
- *The Australian renewable energy market is projected to grow at a CAGR of +8.0% between 2020-2025*
- *The renewable energy space in the Australasian region presents a host of attractive opportunities for investors*

OVERVIEW

2019 was a year of records for Australia's renewable energy sector. The successful completion of 34 large-scale projects led to a 2.2GW increase in the country's renewable energy capacity, representing US\$4.3 billion in investment and generating over 4,000 new jobs. Renewable energy made up 24% of Australia's total electricity generation in 2019. Currently, the strongest renewable sectors in the country are hydroelectricity, wind and solar energy. With an additional 837MW of capacity across eight new wind farms, the wind sector is Australia's leading clean energy source, accounting for 35% of total renewable energy produced, followed by hydro power at 25.7%. Solar energy accounts for almost two-thirds of new capacity, with the highest number of systems installed since the solar boom in 2012. Australia's most remarkable achievement in 2019 was hitting its Renewable Energy Target ("RET"), a government scheme which aimed for a minimum of 20% of the country's electricity to be generated from renewable sources, a year ahead of its 2020 deadline.

In 2019, New Zealand ranked third in the OECD for renewable electricity generation. Clean energy sources were responsible for 82.4% of the country's total electricity generation, over half of which was produced by hydro power. New Zealand's most abundant renewable energy source is geothermal energy, from its many volcanic areas, faults, and tectonic features. Geothermal energy is the clean energy resource that contributes most to the country's total primary energy supply ("TPES").

CASE STUDY

In Australia, of the eight new wind farms commissioned in 2019, the largest was AGL Energy and Powering Australian Renewables' 199MW Silverton Wind Farm situated on the Barrier Ranges in New South Wales. The Silverton Wind Farm is a US\$450 million energy project and the seventh-largest wind farm in Australia. It produces around 780,000MWh of renewable energy annually, which can power over 137,000 average Australian homes, saving 655,000 tonnes of carbon dioxide (CO₂) emissions - the equivalent of taking 192,000 cars off the road each year. The farm comprises 58 wind turbines with a hub height of 110 metres and rotors spanning 130 metres, constructed and commissioned with maximum output at night-time. The wind farm is expected to increase Gross Regional Product by over US\$700 million during the lifetime of the project.

The remarkable achievements of Australia's renewable energy industry in 2020 place the country in an excellent position to further accelerate its renewable energy transition in 2021 and beyond. Australia is expected to add around 25GW of renewable capacity with the majority coming from wind and solar sources during 2020-2025, with a forecast Compound Annual Growth Rate ("CAGR") of over 8%.

OPPORTUNITY

In recent years, a combination of factors: government policy incentives, high wholesale electricity prices and reduced costs of clean energy production, has driven a significant investment increase in Australia's renewable energy sector. The country is seeing an immense pipeline of large-scale renewable energy projects that are being funded increasingly by overseas financing. However, with additional private sector investment in large-scale renewables still required, various funds will play an important role in the Australian clean energy space in the next few years. The renewables space is attractive to investors not only for stable, long-term returns, but also for the opportunity to diversify their portfolios with clean, green assets. Investors' growing awareness of the macroeconomic and financial stability risks posed by climate change is likely to continue boosting investment in renewable energy.