

Accelerating Australia’s net zero journey: The Melbourne Renewable Energy Hub

The project epitomises how public and private organisations can partner to further the nation’s energy transition.



Few countries can claim they have the potential to power the world. And even fewer could claim to do so via low-carbon sources. But according to one estimate, Australia could potentially generate enough renewable electricity to power the globe eight times over, mostly through wind and solar energy. However, the intermittency of renewable energy generation sources, and the limitations of existing power infrastructure, mean that businesses and households cannot yet rely exclusively on them for their energy needs.

For Australia to meet its target of net zero by 2050, and its interim target of reducing emissions by 43 per cent from 2005 levels by 2030, the challenge of supply variability must be overcome. Currently, Australia’s primary energy mix is dominated by fossil fuels: the nation’s Department of Climate Change, Energy, the Environment and Water reports that oil, coal and gas together comprised 91.1 per cent of energy consumption in 2022, while renewables accounted for just 8.9 per cent.

Battery Energy Storage System (BESS) technology is one solution to the intermittent nature of solar and wind power – the technology captures energy generated at a specific time, stores it for several hours for instance, and then discharges this energy at a later time; it is particularly useful with renewable power sources, like solar, that generate between a specific time window, yet are needed at

a later point in time. However, until recently, discharge times for most battery systems have been limited to an hour or so. In addition, as a new technology, gaining access to project financing to support deployment has also proved difficult.

So, when the SEC, a Victorian government-owned renewable energy company, chose to partner with Equis Australia (Equis) to build the ambitious Melbourne Renewable Energy Hub (MREH), the nation entered a new chapter in its pursuit of net zero.

A project of state-wide significance
Eager to play its part in Australia’s energy transition, the Victorian State Government has set ambitious renewable energy targets: 65 per cent by 2030, and 95 per cent by 2035. To help achieve this, it revived the state-owned SEC in 2023 with the goal of providing Victorians with renewable, affordable and reliable energy – an ambition that the MREH is expected to make a significant contribution towards.

Located near the suburb of Melton, west of Melbourne’s Central Business District, MREH is one of the world’s biggest BESS projects and the largest in Asia Pacific. When fully built in 2025, MREH will be able to provide 1.6 gigawatt hours (GWh) of energy storage. This is enough to power up to 200,000 homes during peak periods.

MREH will be used to store the energy for when we most need it, thereby reducing

variability in energy supply and improving overall grid stability. Key to this is Tesla’s Megapack 2XL battery technology, part of which can store energy for up to four hours before discharging it into the grid. MREH can charge through the day, and discharge during peak evening hours.

Financing gaps
The first stage of MREH comprises three segments: MREH A1, MREH A2, and MREH A3 – each with a generation capacity of 200MW. To fund the third segment, project owners Equis and the SEC chose to tap into the debt market through project financing to enable them to allocate more capital towards future renewables projects.

Prior to MREH’s success however, many BESS and renewable energy projects in Australia were unable to reach financial close. Most of those that received the green light were fully equity funded. As such, project owners seeking alternative forms of capital faced a tough challenge. Furthermore, 2023 was a lean year for renewable energy project financing in Australia. This was due to a multitude of factors including higher input costs, higher base rates, and congested supply chains, among others.

To increase its chances of accessing project financing, the project needed to prove its bankability at a time when there were also unfavourable market conditions. It also required a banking partner that could understand its potential, look beyond near-term hurdles, and lend accordingly.

Leveraging long-standing relationships
Even before the project’s inception, Standard Chartered had a long-standing relationship with Equis’ parent, Equis Group; one which spanned multiple geographies and extended across multiple products. The bank currently manages Equis Asia’s cash accounts in Singapore, and supported Equis with their offshore wind pursuits in Victoria through an initial letter of support.

Having offered competitive pricing, Standard Chartered acted as lead arranger for the project finance loan extended to MREH A3, supported by other lenders. The landmark transaction is the first financial close of a four-hour BESS in Australia’s National Energy Market and will support activities including the procurement and construction of the BESS’ components; civil and electrical works; and connection to the

electricity grid. In addition, Standard Chartered helped support the project through adjacent services, including taking an allocation of the hedging portion that another lending group was not able to take. Given the state of the global economy and Australia’s economic landscape at the time, it was particularly important for the project to be hedged against potential interest rate rises.

Making progress towards renewable energy for all
The project is significant beyond its size and discharge capabilities. “The transaction marks Standard Chartered’s first standalone BESS project with a state-owned off-taker. It is the largest non-recourse debt financing package raised for an Australian grid-scale battery system, and provides a template for how such projects can be financed domestically and across the world,” said Jacob

Berman, CEO and Head of Client Coverage, Australia at Standard Chartered.

MREH will help shape Australia’s renewable energy agenda and boost the nation’s pursuit of net zero by supporting three separate Victorian Renewable Energy Zones, which the Victorian Government has identified as the areas with the greatest potential for renewable energy generation. It should also help stabilise energy prices for customers, through its fixed-rate connection service agreement.

Moreover, MREH has pioneered an effective collaboration to encourage private-sector investment: the project successfully demonstrates that governments and industry can work together to fund, build and develop the critical infrastructure required to support Australia’s energy transition.

“MREH’s success is in its strategic partnerships. SEC’s involvement secured the project’s delivery – enabling construction to begin immediately and supporting one of the project’s battery components to double in size.



“Standard Chartered’s prior relationship with Equis and strong track record in transacting Asian renewable deals, ensured the bank’s lead role in the project.



“The high-quality project exemplifies how public and private organisations can partner to further the energy transition, both in Australia and internationally, and critically underscores the importance of innovation and partnerships in realising net zero.

