

Fact sheet

Why we need Stubbo Solar

The Stubbo Solar and Battery project is a 400-megawatt renewable energy project that was granted development consent in June 2021 by the NSW Government's Department of Planning and Environment. The project is located 10 kilometres north of the historic mining town of Gulgong, in the Mid-Western Regional Council Local Government Area.

- Stubbo Solar will help Australia transition to net zero carbon emissions, delivering low-cost renewable energy and jobs for the Central-West Orana region of New South Wales.
- The project includes a 200 MWh battery energy storage system (BESS), meaning the project can dispatch electricity when it is most needed during peak hours, and provide important grid stability services.
- The project will generate enough renewable energy to power 185,000 average Australian homes per year and contribute to Australia's domestic and international commitments of renewable energy development, including NSW's target of 50% renewable energy by 2030.
- The project will be developed across a 1,250-hectare site of cleared grazing land and will include rows of solar panels, electrical infrastructure such as inverters, a substation, cables and the battery system, access roads and other association infrastructure such as storage and maintenance facilities.

At a glance

Construction commencing **2023**



Up to **400** jobs during peak construction



Up to **10** operational jobs for 25 years



Employ and Buy **LOCAL** commitment



Installed capacity of up to **400 MW**

Offset **4.3M**



tonnes of CO₂ emissions over the life of the project

Power **185,000**

average Australian homes each year



Contribute to NSW Target of **50%** renewable energy by 2030



Shared benefits through **COMMUNITY** benefit funding

Renewable Energy Zones (REZs)

The NSW Government is in the development phase for the State's first Renewable Energy Zone (REZ) in the Central-West Orana region. The Central-West Orana REZ is approximately 20,000 square kilometres centred by Dubbo and Dunedoo, on the land of the Wiradjuri, Wailwan and Kamilaroi people.

Five REZs have been identified in New South Wales, based on their potential to deliver additional clean energy to the National Electricity Market and support the transition away from coal-fired generation.

These locations also benefit from existing energy resources such as sun and wind and have established grid infrastructure close by. The Stubbo Solar project is located within the Central West-Orana REZ, and will connect into the existing 330kV transmission network. ACEN Australia will play an important role in achieving the objectives of the CWO REZ. We will also provide significant economic stimulus to the region through construction jobs and associated flow-on benefits. For more information on the Central-West Orana REZ, visit www.energyco.nsw.gov.au



Source: NSW Government's Renewable Energy Action Plan (2013), Electricity Strategy (2019) and the Electricity Infrastructure Roadmap (2020)

FOR MORE INFORMATION:

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Timeline and Approvals

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the project can dispatch electricity when it is most needed during peak hours, and provide important grid stability services.

Once construction is complete, Stubbo Solar will be operational for up to 25 years, and provide enough clean renewable energy to power more than 185,000

average Australian homes.

A rigorous operations and maintenance regime will be followed to ensure the efficient, safe and reliable operation of the site. We are committed to our long-term responsibilities in the communities where our projects are located.

Project lifecycle



**Phase 1
DEVELOPMENT**
Complete

2019

Technical, environmental, cultural, social and economic assessments to inform approvals and permitting



**Phase 2
CONSTRUCTION**
2 years

2023

Construction of solar project and associated infrastructure



**Phase 3
OPERATIONS**
25+ years

2025

Stubbo Solar operational and generating renewable energy

ACEN Australia

ACEN Australia is the platform representing ACEN's renewable energy assets in Australia. It includes several solar, wind, battery, pumped hydro and energy storage projects across New South Wales, Tasmania, Victoria and South Australia in development and construction.

Our aim is to provide low cost, clean electricity in a socially and environmentally responsible way, using innovative technology solutions.

ACEN

ACEN is the listed energy platform of the Ayala Group. The company has ~3,800 MW of attributable capacity in the Philippines, Vietnam, Indonesia, India, and Australia. The company's renewable share of capacity is at 87%, among the highest in the region. ACEN's aspiration is to be the largest listed renewables platform in Southeast Asia, with a goal of reaching 5,000 MW of renewables capacity by 2025. Commitment to achieve net-zero greenhouse gas emissions by 2050.

ACEN has been a partner of UPC Renewables in Australia since 2018. In 2021, ACEN began a transaction to eventually own 100% of UPC\AC Renewables by early 2023; with this transaction, the company is now called ACEN Australia. This marks a strategic pivot for ACEN as it embarks on its first wholly owned development and operations platform outside of the Philippines.

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Solar Technology

Stubbo Solar will utilise solar photovoltaic (PV) panels similar to those used on rooftops around Australia. The PV panels are arranged in rows spaced several metres apart, on a single axis tracking system. The solar panels will follow or 'track' the movement of the sun through the day.

Based on preliminary designs, Stubbo Solar will involve



Arrays of PV modules, including inverters and an underground cable network

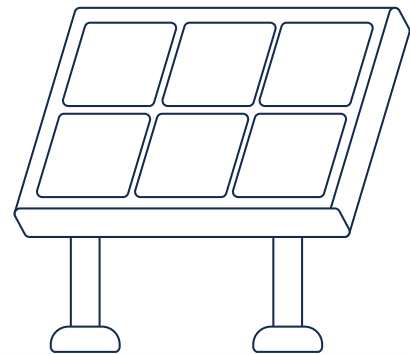
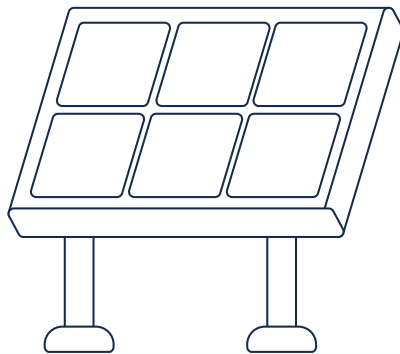
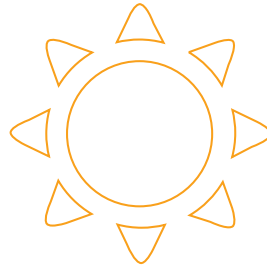


An on-site dedicated substation will connect the solar project to the electricity transmission network, as well as access points from the local road network and internal access tracks




Stock-proof security fencing around each of the solar fields to enable safe grazing for livestock such as sheep

ACEN Australia is proposing battery energy storage systems as part of its technical studies. Solar combined with battery storage will form a major component of Australia's mix of future energy generation.




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