

STRATFORD RENEWABLE ENERGY HUB

Fact Sheet
December 2022

Yancoal Australia Ltd is currently investigating diversification opportunities, including investment in other energy related projects, to create a sustainable long-term business. The Stratford Mining Complex has been identified as an ideal location to establish a renewable energy hub post-mining. This beneficial post-mining land use has the potential to provide continued investment to the Gloucester Valley.

■ EXISTING MINING OPERATIONS

The Stratford Mining Complex is an existing open cut coal mining complex located 95 kilometres north of Newcastle in the Gloucester Valley. It began operating in 1995 and is now scheduled to finish in 2024 and closure planning has commenced.

■ PROPOSED PROJECT

The proposed Stratford Renewable Energy Hub (SREH) includes a:

- **Pumped Hydro Energy Storage** (3600MW hrs over a 12 hour cycle)
- **Solar Farm Facility** (330MW initial capacity)

The SREH would be developed on and adjacent to the Stratford Mining Complex on Yancoal-owned land. The centrepiece of the SREH is the Pumped Hydro Energy Storage which would utilise the mine's existing dams and water stocks as a lower reservoir and backup water supply and storage.

The Pumped Hydro Energy Storage would provide on-demand, dispatchable power into the grid at peak times or when the energy generated by other renewable energy sources is unavailable.

The "behind the meter" Solar Farm Facility would provide a portion of the energy to recharge the Pumped Hydro during daylight hours when there is excess renewable electricity already in the grid.

■ CURRENT STATUS

Yancoal has completed a Pre-Feasibility Study and commenced the following:

- a Feasibility Study;
- baseline environmental studies; and
- stakeholder engagement.

■ STRATEGIC CONTEXT

Pumped Hydro Energy Storage has been endorsed by Government as one of the most effective and reliable forms of long duration energy storage which will be required to balance the growing supply of intermittent renewable energy sources following the staged closure of coal-fired power stations across the country.

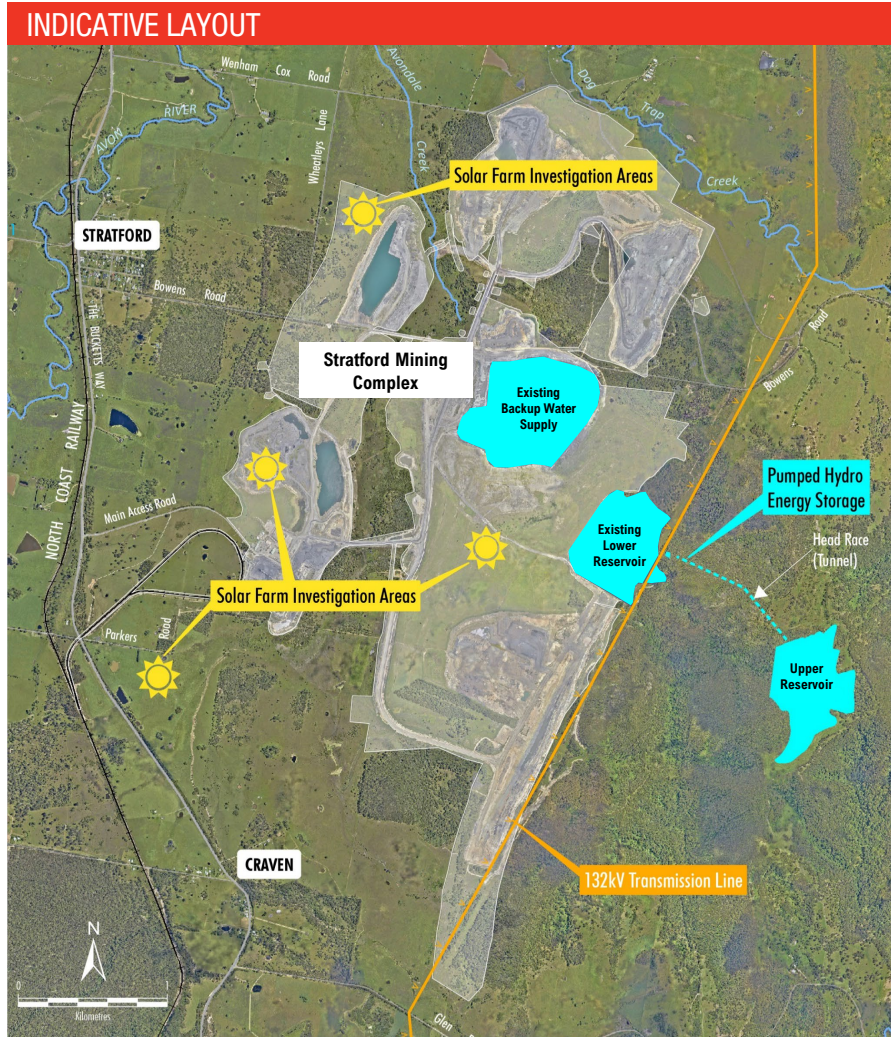
The SREH would help NSW meet its targets to replace 5GW of coal-fired electricity by 2030 and build 2GW of new long duration storage by 2030.

AN IDEAL LOCATION

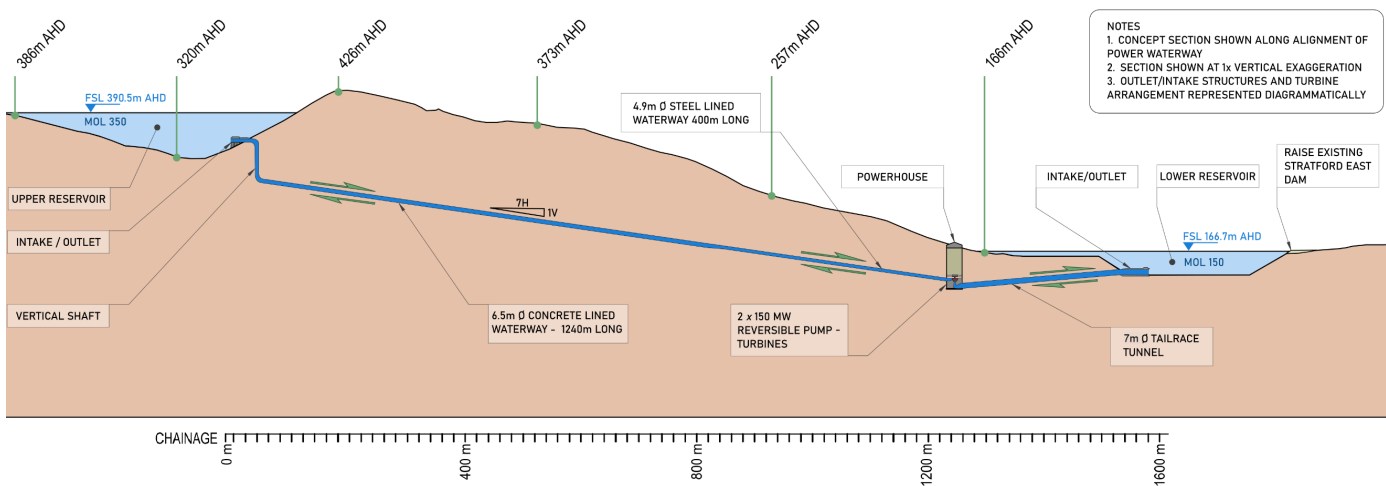
The Stratford Mining Complex's proximity to existing electricity transmission infrastructure and demand centres, its expansive landholding and the topography make it an ideal location for a renewable energy hub.

PROJECT BENEFITS

- Aligns with Government objectives to decarbonise the electricity network and promote private investment in large-scale renewable energy projects to deliver reliable and affordable electricity to households and businesses
- Provides long duration energy storage to deliver dispatchable power at times of high demand and low supply
- Provides enough renewable energy equivalent to the daily energy consumption of 140,000 to 180,000 households
- Provides an opportunity to beneficially re-use part of the land after the cessation of coal mining in 2024
- Generates investment in the Gloucester Valley
- Further potential to expand the SREH to include other renewable energy sources



PUMPED HYDRO ENERGY STORAGE CONCEPT



If you would like further information on the proposed Project, please do not hesitate to contact us.