



The Big-S Pumped Hydro Energy Storage Project



PROJECT ANNOUNCEMENT • June 2024

About the Project

- The Big-S Pumped Hydro Energy Storage (PHES) Project is a proposed renewable energy project located at Molesworth, Victoria – approximately 120km from Melbourne, adjacent to the Ovens Murray Renewable Energy Zone.
- The Project has a planned generating capacity of 400 megawatts of hydroelectricity with 10 hours of storage duration at full output (4 GWh total storage).
- The project is expected to commence construction in late 2028 and last for circa 4 years, delivering significant economic benefits to the local region.



Q2 2032

Indicative start date for commercial operations



4 GWh

Maximum energy storage capacity (400MW x 10 hours)



11 Mt CO2

Potential reduction of emissions using the plant

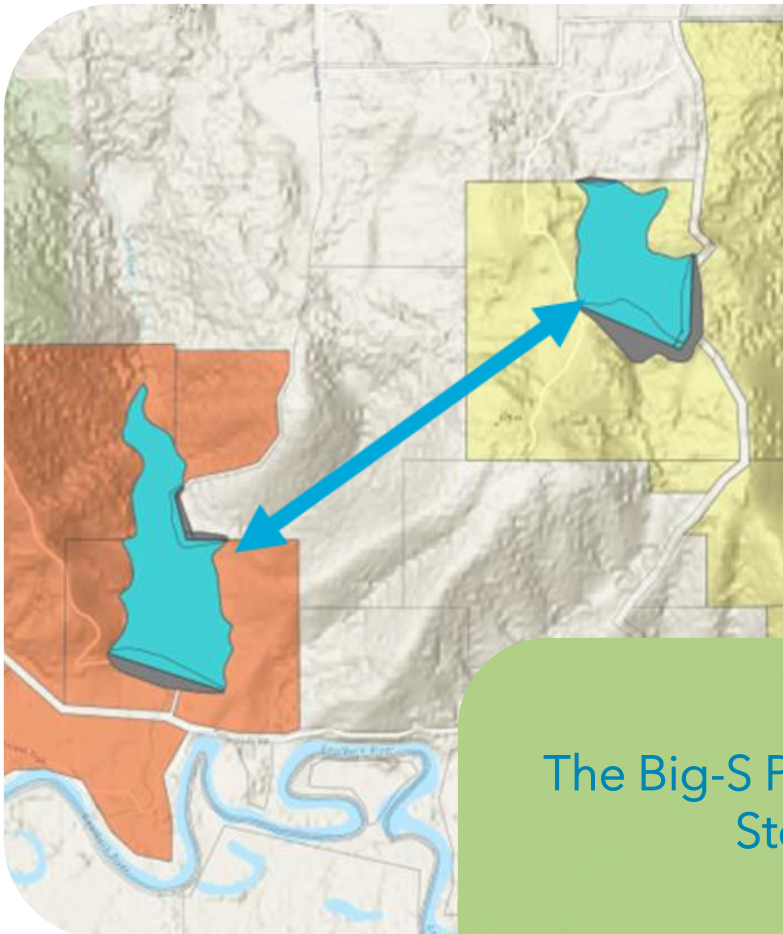
Introducing the Big-S

The Big-S PHES project, located on the Switzerland Range near Molesworth, Victoria, represents a compact closed-loop pumped storage system to substantially increase energy storage capabilities in Victoria.

As one of the most cost-effective projects globally, it stands to significantly firm up local grid requirements, providing support to the region's growing renewable energy and Victorian grid. The project will deliver substantial economic benefits, both during its construction phase and throughout its operation, by stabilising power prices and contributing to the economic resilience of Victoria.

Project Status

- The Project has completed the Concept Study and initial environmental assessment.
- Grid connection and water access investigations have been made, to ensure viable alternatives are available.
- The plan for initial geotechnical investigation and Bankable Feasibility Study is being developed.



The Big-S Pumped Hydro Energy Storage Project

About the Big-S

The Project utilises two valley dams to form the upper and lower reservoirs. At its core, the underground power station complex, equipped with two 200 MW fixed-speed reversible Francis pump-turbine units, aims for a 400 MW generation capacity.

Water sustainability is a key focus, with the project's water requirements to be provided via the Goulburn River, which is directly alongside the lower storage. The water trading scheme on the river ensures a reliable and environmentally sustainable approach to its initial and then modest ongoing operational water needs.

Grid connectivity is secured with several viable options to join the 330kV Ausnet network, demonstrating the project's integration into the existing energy grid. Shared infrastructure with other renewable projects is also a consideration.