

**Submission
No 76**

INQUIRY INTO BENEFICIAL AND PRODUCTIVE POST- MINING LAND USE

Organisation: ZEN Energy
Date Received: 27 August 2024

Learn more about the project on our website and sign-up for our newsletter for updates.



SCAN ME

HAVE A QUESTION?



You can contact our team via email on wsph@zenenergy.com.au

SOMETHING URGENT?



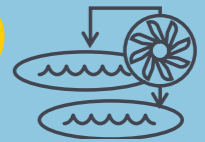
You can speak to a member of our team by calling 1300 936 466

ZEN Energy would like to acknowledge the Gundungurra people, the Traditional Custodians of the land and waters on which this project is proposed. In our work, we recognise the importance of Country – not just as a place, but how it also maintains community, family, kin, lore and language. We pay our respects to Elders past, present and emerging.

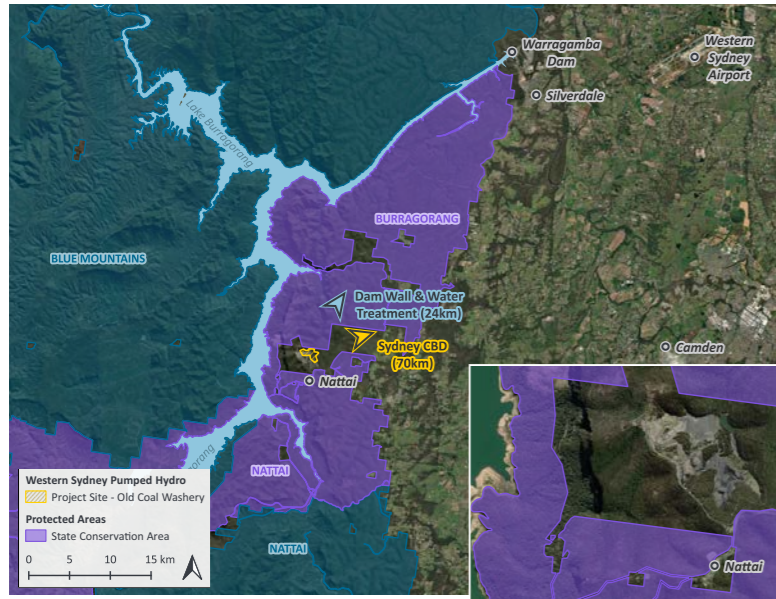
LET'S TALK ABOUT THE PROPOSED:

WESTERN SYDNEY PUMPED HYDRO

ZENENERGY PROJECT



From a coal mining past to a clean energy future.



THE PROPOSED WESTERN SYDNEY PUMPED HYDRO PROJECT

Australian-owned ZEN Energy has been selected by WaterNSW to assess the feasibility of building the Western Sydney Pumped Hydro project at the former Burragorang Valley Coal Washery site in Nattai.

If built, Western Sydney Pumped Hydro will harness the power of water to **generate and store 1000 Megawatts (1 Gigawatt) of renewable energy to supply 500,000 homes and businesses with on demand electricity for 8 continuous hours**. Lake Burragorang, on Gundungarra Country, already serves Sydneysiders with clean drinking water, but could soon be a source of clean energy as well.

It's very early days and over the next year further studies are necessary to establish if the project is feasible. This will involve numerous studies, field investigations and design - all vital for planning assessment and approvals. This project will only then be built if there's a genuine partnership with the community and other important stakeholders. We will be in touch again soon to start having those conversations about what this project could and should involve.

The project will be almost entirely underground and contained within cleared, degraded land. Lake Burragorang will be connected to an upper reservoir through tunnels and an underground power station. Tunnels and the upper reservoir will be lined to protect water quality. Pumped hydro technology is a 'closed loop system', meaning that water will be cycled between the two reservoirs and no water is lost. Water security for Sydney is ensured and there is no disruption to WaterNSW's management of Lake Burragorang.

BUILDING ON THE PAST TO CREATE THE FUTURE

The project will be built over the former coal washery, which is undergoing remediation. This makes the site ideal for the project, minimising impacts on bushland and biodiversity and cultural heritage values.

ZEN will be responsible for further rehabilitating the site at Nattai and safeguarding the water quality of nearby Lake Burragorang.

The 'big water-driven battery' will be located 24km from Warragamba Dam, where drinking water filtration occurs.

Large capacity and large-scale 'firming' renewable energy projects such as Western Sydney Pumped Hydro will significantly contribute to the security and reliability of NSW's energy supply, aligning with the NSW Electricity Infrastructure Roadmap.

It's important to also know that the project:

- Will not interfere with water levels or cause flooding of the shoreline.
- Will not impact drinking water quality or deny Sydneysiders any water. Pumped Hydro technology is a 'closed-loop system'.
- Is not connected to the recent proposal to raise the dam wall.
- Will mitigate fire risks through improving fire trails and continue to be an important base for firefighters.

ZERO EMISSIONS NOW.

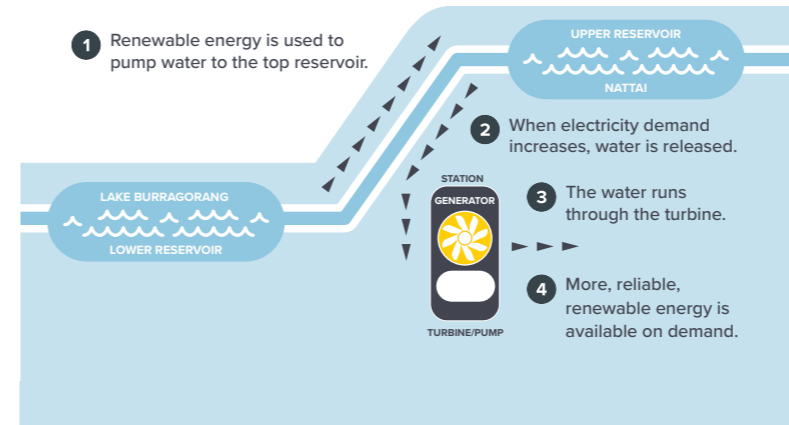
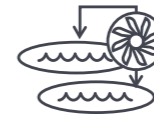
ZEN stands for Zero Emissions Now and is the first Australian energy company committed to science-based targets to limit global warming to 1.5°C.

This is the critical decade for action to achieve this science-based target and nothing less than an economy-wide transformation to 100% renewable energy is needed. But if we are going to keep the lights on, a reliable supply of clean energy is key.

Working in partnership with our customers, stakeholders, capital partners and the Australian community, ZEN is now delivering on its purpose to lead communities into the zero-carbon world.

WHAT IS PUMPED HYDRO?

ZEN ENERGY PROJECT HOW IT WORKS...



Pumped hydro is Australia's most mature and reliable renewable energy technology. By storing excess clean energy and making it available when the sun isn't shining and the wind stops blowing, Sydneysiders will have a huge amount of clean electricity available on demand for up to 8 continuous hours.

WHAT HAPPENS NEXT?

Developing a project like Western Sydney Pumped Hydro involves several stages over several years before it can be built. Over the next 12 months, further studies and early stage conversations with the local community will occur. **Please help us make this a project that you benefit from!**

All going well, construction could start in 2027, subject to community and stakeholder support, investigations and approvals. The project could then come online in 2031.



ZEN is partnering with long-time locals SADA Group. If built, Western Sydney Pumped Hydro will be key to keeping the lights on when the sun isn't shining and wind not blowing.



SCAN ME



8 HOURS

of continuous on-demand electricity - even in 1-in-100-year drought conditions



\$500,000 +

homes and businesses supplied with clean electricity on demand.



1500 JOBS

during construction and 80 ongoing operational jobs.



\$1 MILLION PER YEAR

Community Benefits Sharing Scheme co-designed to meet local needs and plans.