

Lake Lyell Pumped Hydro Energy Storage Project

Concept Design FAQs



Design

Is the project feasible?

Yes. Our 12-months of feasibility studies have concluded the project is feasible and is needed to support NSW's clean energy transformation.

Is this a final design for the Lake Lyell Pumped Hydro Project?

No. This is our first full design for the Lake Lyell project to show all the project's main components and how they will fit together. This plan will guide ongoing environmental impact assessments and subsequent engineering design work and will be a crucial tool in our ongoing engagement with stakeholders and the community.

What further details can you provide at this time?

Now we have completed the full Concept Design we will be looking in more detail at how the project can be built and what will be the best approach to its construction. Further technical assessments will be completed over the coming months to also understand potential impacts and how these might be mitigated. This includes looking at impacts to local roads, impacts to the local environment and workforce requirements. Details of these studies will be shared with the community when we prepare and submit our Environmental Impact Statement (EIS).

How will the project deliver power to the grid? Will there be new transmission lines?

A benefit of this project is that it will utilise existing infrastructure including water and transmission lines. It will also avoid the need to construct new transmission infrastructure on private land.

What is the justification for the diversion of Farmers Creek?

The proposed diversion of Farmers Creek is one example of how we are looking to avoid ecological impacts through site sensitive design. Essentially, this diversion will ensure there is separation between the water intake infrastructure and the river channel that aquatic species are likely to use to travel up and down Farmers Creek.

Will the pumped hydro facility be noisy?

The facility will produce minimal noise and vibrations, as the turbines will be located underground and set within rock. Water intake and outlets will also produce little noise, as water flows will be controlled where entering and exiting the lake – avoiding the 'whooshing' sound of fast flowing water.

Why is the upper reservoir wall now bigger than anticipated?

The upper reservoir wall, while larger than originally planned, will have less of a visual impact as the structure will be built into the natural contours of the southern flank of Mount Walker. No elements of the upper reservoir will protrude above the existing ridgelines and no infrastructure will be visible from the township of Lithgow.

Will the community still be able to access Lake Lyell and Mt Walker?

We will maintain Lake Lyell as a public area for recreation and tourism, so people can continue to enjoy fishing, boating, 4WD, motorbiking, cycling and more. Mt Walker is private land and has not been generally accessible and this will continue for safety reasons during construction and operation of the project.

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When will construction start?

Construction is dependent on project approvals and is not expected to start until late 2025.

How long will construction take?

The construction period is anticipated to take between 3-4 years.

What local roads will be used during construction?

Sir Thomas Mitchell Drive and Magpie Hollow Road will be used for large loads and construction traffic noting we are seeking to reduce this traffic by using site sourced materials. Further technical assessments will be completed over the coming months to understand impacts to local roads and traffic flow. We understand the impact this will have for local residents and consultation with neighbours will be a key part of this process.

Environment

What impact will this project have on local species and ecosystems?

We are currently conducting detailed environmental impact assessments to understand potential impacts to local species and ecosystems. These studies will account for proposed site layout and design features detailed in the Concept Design.

What about Cultural Heritage impact?

Detailed cultural heritage assessments are a key part of our forward program to understand potential impacts to local indigenous sites or artefacts of cultural significance. We will also continue to consult with Traditional Owners as concept planning and assessments progress.

How will this impact water quality?

We do not anticipate the Lake Lyell project will result in significant changes to water quality. This will be one of the subjects we investigate in detail as part of the Environmental Impact Statement.

How much vegetation will be removed, and what will the project do to rehabilitate and/or offset the area?

Vegetation removal will be required to make way for new infrastructure. We are currently conducting detailed environmental impact assessments to understand potential impacts to vegetation, local species and ecosystems. These studies will inform vegetation removal and manage the impacts on flora and fauna. Some areas will be revegetated after construction.

Community consultation

Will community feedback be capable of influencing project outcomes?

Yes. Some elements of the design are fixed because they are informed by energy system requirements and environmental and geotechnical studies. However, community feedback will play a vital role in helping to shape management and mitigation measures such as possible impact reductions, our construction approach, rehabilitation and how the project might operate responsibly in the long-term.

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How can I have my say and provide feedback on the project? Where can I learn more about the project?

We welcome and encourage feedback on the project's Concept Design. Have your say by speaking to the friendly staff at the EnergyAustralia Project HQ, at our drop-in sessions or by email to community@energyaustralia.com.au. You will also find other useful resources at the HQ including more information on the design, fact sheets and other information about EnergyAustralia. You can also visit the project website – www.lakelyellpumpedhydro.com.au

What are you doing to ensure neighbours can have a say on this project?

EnergyAustralia acknowledges that a project of this size and scale will have varying impacts on residents and businesses neighbouring the project. As such, we are prioritising one-on-one engagement with neighbouring landowners to identify, and measure impacts specific to those properties.

What will you do to minimise visual amenity impacts?

In keeping with our work to reduce visual impacts, we have already made changes to the design, following consultation with the community and initial environmental studies. The new upper reservoir will not be seen from Lithgow or from most areas around Lake Lyell. The pump house and turbines will be located underground, and proposed infrastructure will be located away from camping, launching ramp, unrestricted lake waters and beach swimming areas.

Neighbours closer to the project are likely to see some aspects of the project – we are currently working with these residents to plan how impacts to their amenity can be addressed.

What's next?

What investigations are currently underway?

We are currently conducting on-the-ground surveys and field work, including surveys on local roads, geotechnical studies on Mt Walker and ecology and biodiversity field studies. Environmental assessments will continue during 2024.

What are the next steps for the project?

We will now move into detailed concept planning to further analyse technical, economic, environmental, and social aspects of the project. This information will be submitted as part of our Environmental Impact Statement (EIS). Public consultations and regulatory approvals continue to play an important part in this process.

We're here to help

If you have a question please don't hesitate to contact us. You can also keep updated by following us on Facebook at Lake Lyell Pumped Hydro Project.

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Supported by



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