

Gin Gin Battery Frequently Asked Questions

Question 1: Will the battery catch fire?

Answer: There are minimal risks associated with the battery during normal operations due to the many safeguards used in the design of the battery facility and the safety features of the equipment.

Iberdrola Australia will use batteries that have passed the highest level of safety certification (UL 9540A) and are designed to be one of the safest battery storage products of its kind. In the unlikely scenario that a fire was to occur, this certification provides assurances that the fire event would be contained. What that means is, it would not spread to the whole site—only a very limited number of equipment cells would be impacted.

Some of the control measures for fire proposed to be used by the Gin Gin Battery include:

- 1. **Battery container is rated IP66** to withstand high water pressure and is UL 9540A certified to ensure fires do not spread within the battery.
- 2. **Monitoring system:** each battery container has several monitoring systems to ensure 24/7 surveillance of issues, if one system fails, there are backup systems designed for robust management.
- 3. **Separation distances:** the battery has container separation distances to reduce the risk of battery fire spread between battery units.
- 4. **Bushfire Asset Protection Zones:** in accordance with our bushfire expert recommendations, Asset Protection Zones will be incorporated. These ensure if a bushfire is in the local region, it has a low risk of reaching the battery. See our <u>Bushfire Management Plan</u> for more details (https://www.iberdrola.com.au/our-assets/development-assets/gin-gin-battery).
- 5. **Fire self-suppression system:** in the event of a fire, **no water** is to be put on the battery. The units contain self-suppression systems to effectively burn out the fire from within as opposed to needing to be put out externally with water.

Iberdrola Australia identifies that the key risk of a fire event is someone mistakenly using water to put out a fire. We proactively work with the communities and local emergency responders to keep them informed on the system, its design and what to do in a fire.

Iberdrola Australia has briefed the Auxiliary Fire Service Captains for the area and will continue to work closely with them including detailed meetings at the facility and working together on our Emergency Response Plan.







Question 2: Will a battery fire emit toxic fumes?

Answer: Fire events associated with a battery are extremely rare. The batteries being proposed have unit technology design that manages any unlikely event with limited environmental and community health impacts.

As with any utility infrastructure throughout Queensland, any gases released in a battery fire would be similar to those of a typical structure fire: hydrogen, carbon dioxide, carbon monoxide and methane.

Any hazardous material kept on site during construction or operation will be stored in accordance with the Environmental Protection Agency guidelines to minimise the risk of hazardous material leaving the site.

In the unlikely event of a fire, only trace amounts of acid gases are released. These gases, such as hydrogen fluoride, come from burning plastics, not battery cells. The concentrations are small enough that they are quickly diluted upon contact with the air, meaning there is no negative impact to air quality in the surrounding area.

A Preliminary Hazard Assessment has been prepared for the proposed Gin Gin Battery (https://www.iberdrola.com.au/ourassets/development-assets/gin-gin-battery).





Question 3: Is water used for battery fires?

Answer: No water is to be put on the battery modules in the event of a fire. To ensure this, Iberdrola Australia has briefed the regional Auxiliary Fire Service Captains and will continue to work with the Gin Gin Auxiliary Fire Service on the project's Emergency Response Plans both during construction and operations.

The design of the battery makes it difficult for water to come in contact with the enclosed battery cells. Although the risk of fire for any energy infrastructure is never zero, safety is Iberdrola Australia's top priority. We will continuously review, test and update our Emergency Response Plan requirements and procedures ahead of industry standards. Part of this continual assessment will involve robust assessment of the Asset Protection Zone and this integration into the Emergency Response Plan.







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Email the Project Team: ginginbattery@iberdrola.com.au



Call the Stakeholder Manager: 0455 290 965



Question 4: Will there be contamination from the lithium in the battery into nearby Lake Monduran?

Answer: The contamination risk from the Gin Gin Battery is not dissimilar to any other electricity utility sites in the surrounding area of Gin Gin and other Queensland regional areas. As with any infrastructure, the risk of incidents is never zero.

The lithium phosphate inside the battery is in a solid state. The only liquid within the battery is coolant, which circulates within and is completely contained. The container design has a protection mechanism in the form of a basin to ensure the coolant, if leaked, is fully contained within the battery unit.

Lake Monduran is located 2-3km from the proposed Gin Gin Battery. This is a considerable distance from the battery and reduces the risk of any contaminants from the battery reaching the dam.

To safeguard the project further, in the event of potential contamination, the onsite stormwater basin can be used to collect any liquids for testing and management. Iberdrola Australia will monitor the site and battery systems 24/7, 365 days per year to ensure rapid response in the unlikely event of incident.

Question 5: Will bushfires destroy the battery?

Answer: Bushfire is a risk to any asset and Iberdrola Australia is acutely aware of the bushfire potential in regional Queensland. A <u>Bushfire Management Plan</u> (https://www.iberdrola.com.au/our-assets/development-assets/gin-gin-battery) has been prepared for the Gin Gin Battery which details the assessment of bushfire risk. This assessment considers the amount and type of vegetation and associated fuel loads.

The report recommends the project implements an "Asset Protection Zone" which is an area around the facility that remains cleared of vegetation for the life of the asset. The project has included these recommendations to ensure the safety of the battery, the community and the environment.



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Question 6: What about the water stored on site for firefighting, as part of the Bushfire Management Plan?

Answer: As per the <u>Bushfire Management Plan</u> (https://www.iberdrola.com.au/ourassets/development-assets/gin-gin-battery) that has been prepared for the Gin Gin Battery project, there is a requirement to build a 50kL water storage for the Operations & Maintenance facility. A separate 10kL water storage is also required as per the plan.

These design requirements form part of the proposed Gin Gin Battery project design.



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Question 7: Will there be significant vegetation impacts?

Answer: The Gin Gin Battery is situated on predominantly cleared land which is used for cattle grazing. The location of the project has been selected in an area free of vegetation to minimise impacts on the environment.

The project has undertaken several ecological surveys and the results are detailed in two reports. One report includes the local laws (Ecological Assessment Report) and the second report addresses the federally protected species (Environmental Protection Biodiversity Conservation [EPBC] Act Referral). If you would like to request a copy of these reports, please email the Gin Gin Battery Project Team at <u>ginginbattery@iberdrola.com.au</u>.

The EPBC Act Referral process involves a detailed review by the Australian Government on the avoidance, impacts and management measures proposed by the Gin Gin Battery project. The project received its approval under this process in January 2025.

The proposed extent of vegetation clearing was considered by expert ecologists and verified by the government to not have a significant residual impact on threatened and near threatened flora and fauna or migratory species.

During construction of the project, several management measures will be undertaken to protect any wildlife encountered. This includes a fauna spotter catcher who will be present during any vegetation clearing.

Question 8: Are batteries full of liquid?

Answer: There is no liquid in the battery equipment, apart from glycol. The lithium phosphate is in solid state. The liquid glycol is used within the cooling systems of the battery units. There is limited potential for leaks under normal operation.

Transformers within the proposed substation will contain oil, and will be bunded in accordance with Australian Standards, to prevent any potential oil discharge into the natural environment, particularly the adjoining waterway corridor.

It is important to remember, the battery design being proposed by Iberdrola Australia makes it very difficult for water to come in contact with the enclosed battery cells.









Question 9: Will the power in the battery be used by coal power plants?

Answer: The proposed Gin Gin Battery is designed for 2-4 hours of duration capacity at peak output and can operate for longer at lower outputs. The battery will be grid connected at the Powerlink substation (located approx. 1km of the proposed battery), see map below via the blue route. This connection will be an underground transmission cable and will enable the battery to charge from the grid, and export power.

At the Powerlink Substation, the power is distributed into the Queensland energy network where it is used by Queenslanders. The battery also helps to stabilise the network as it can react quickly to outages elsewhere.



Gin Gin Battery Facility - Project Site CRS: GDA2020 / MGA 2006 56 (EPSG: 7856) Drawn By: NC Date: 12/11/2024

Cadastre Boundaries _____ Existing 275kV Powerline _____ Existing 132kV Powerline _____

BESS
Dual Circuit 132kV Underground



Question 10: Is there a process for decommissioning the battery?

Answer: As the battery operator, Iberdrola Australia is responsible for decommissioning the battery. We need to prepare a Decommissioning Plan that is in accordance with the planning requirements.

The lifespan of a battery is currently 20 years. We expect many research and technological improvements in that time, to ensure we look at processes that support achieving 100% recyclability and designing out waste using recycling inputs.









Question 11: Will there be community benefits to Gin Gin?

Answer: Iberdrola Australia sponsors community projects that aim to make a positive difference in the areas of education, fire and police departments, sports clubs, art festivals and youth programs.

We aim to foster lasting relationships with community organisations by funding local initiatives and local not-for-profit organisations. Visit <u>Community Funds and Sponsorships</u> (https://www.iberdrola.com.au/for-communities/community-funds-and-sponsorships) for more information on application guidelines on our operating assets.

During construction of the battery, there will be community benefits grants and sponsorship opportunities for grass roots and local organisations.

It would be great to hear from any Gin Gin community and environmental groups who are interested in future community benefits. Please email the Project Team on <u>ginginbattery@iberdrola.com.au</u> or call the Stakeholder Manager on 0455 290 965.

For more information

Iberdrola Australia's <u>2023 Sustainability Report</u> (https://www.iberdrola.com.au/assets/9-ESG-Reports/Iberdrola-Australia-Sustainability-Reports/2023-Sustainability-Report.pdf) focuses on the following key areas: our people, our planet, our communities including First Nations communities, customers, supply chain and our regulators. The 2023 Sustainability Report outlines specific initiatives and targets to boost our positive impacts, and how we are currently tracking against these targets.

Another very informative and useful source of knowledge is the <u>Clean Energy Council</u> (https://cleanenergycouncil.org.au/). The Clean Energy Council has factsheets, reports and submissions to government that addresses many aspects of the renewable energy transition.

If you would like to contact someone from the proposed Gin Gin Battery Project Team, you can email <u>ginginbattery@iberdrola.com.au</u> or call the Stakeholder Manager on 0455 290 965.

Contact Us

If you have any questions about the project, feedback or would like to share your local knowledge we are available via the contact information below.



Visit our website: www.iberdrola.com.au



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Acknowledgement of Country

Iberdrola Australia acknowledges the Traditional Owners of Country throughout Australia and acknowledges their continuing connection to land, waters and community. We pay our respects to the people, the cultures and the Elders past and present.