



The future happens here

Project FAQ

Gnarwarre BESS

1. General

1.1 What is being built?

FRV is developing a Battery Energy Storage System (BESS) at Gnarwarre. A BESS is a facility that utilises batteries to store electrical energy for later use. It includes batteries, power conversion systems, and control systems. BESS facilities help stabilise the electrical grid by integrating with renewable energy sources, producing additional supply during peak demand, and providing back-up power. BESS facilities play a key role in the transition to a more sustainable energy system.

The Gnarwarre BESS project will have a total anticipated discharge capacity of 250 Megawatts (MW) and a storage capacity of 500 Megawatt hours (MWh). The batteries will be stored within purpose-built containers and (together with site features such as internal roads, control offices, and landscaping, will occupy an area of approximately 7 hectares. The battery is also supported by a substation and switching station, allowing direct connection to the overhead transmission line.

1.2 What are the key technologies?

The project will use lithium-ion batteries, a common choice due to their high energy density, efficiency, and cost-effectiveness. Storage containers will be outfitted with the latest control systems and thermal management systems for accurate monitoring and emergency response.

1.3 When will construction commence and how long will it take?

Works are expected to occur in Q3 2025 and complete in approximately Q4 2027. Construction would range between site preparatory works, delivery of plant and equipment, assembly, and testing and commissioning. Intensive works (delivery of containerized batteries and oversized-overmass plant and equipment) would only occur over a period of a few weeks.

1.4 Why Gnarwarre?

The site was selected due to its features, location, and place within the electricity grid. The site is in close distance to the 200 kV Terang Terminal to Moorabool Terminal transmission line.

1.5 Who is FRV?

FRV is a global developer of renewable energy solutions. FRV is headquartered in Spain but has a local office in Sydney. FRV is an experienced developer, having constructed and operates several renewable energy facilities.

FRV has initiated and constructed several projects in Australia and Victoria. These projects include the Winton Solar Farm and Terang BESS.

1.6 Who will operate the BESS facility?

FRV will operate the BESS. Our approach is to develop, own, and operate our facilities for the long-term. FRV has sold assets in the past, but our core business model is to retain assets as this provides us with a sustainable return on investment and ensures we manage the running of our assets directly. For us, it is important that our assets are operated responsibly and perform well over their lifetime.

1.7 How long will the BESS facility operate for?

The project is expected to operate for 30 years. After this time, the site will be rehabilitated and returned to its original use (grazing and cropping) subject to landowner agreements.

2. Environment

2.1 What are the potential environmental impacts?

The project has been designed (both in terms of design and construction methods) to minimise the potential for impacts the surrounding natural environment. The potential environmental impacts associated with the Gnarwarre BESS projects are known and mitigation measures have been implemented to control said impacts during construction and operation. These impacts include:

- **Fire risk:** BESS infrastructure is equipped to monitor, respond to, and control fires. These include HVAC systems, fire sensors, and fire suppression systems. In addition, the facility has been designed with appropriate separation distancing to minimise the spread of fires and allow for fire fighting plant and equipment to manoeuvre around the site.
- **Surface water flows and flooding:** The project has been designed to integrate with the existing stormwater regime with suitable capacity for capture and discharge to eliminate the potential for the migration of flood impacts.
- **Traffic:** Peak traffic movements will occur during construction. A traffic management plan has been developed in consultation with Surf Coast Shire Council to ensure that construction traffic is appropriately managed. FRV and its contractors will use major highways and main roads and schedule for traffic movements to occur outside of peak hours to avoid unnecessary traffic.

2.2 What are the potential local community impacts?

- BESS projects function to enhance the energy resilience and reliability of an energy grid. BESS projects support renewable energy generation sources allowing for more sustainable, cleaner, cost-effective energy solutions for the community.
- BESS projects positively impact local employment, creative direct and indirect jobs during construction and contributing to permanent jobs once in operation.
- **Property values:** BESS facilities typically do not impact property values negatively as facilities are compact and integrate with surrounding transmission infrastructure and can be adequately treated through design and vegetative screening.

3. Risks

3.1 What happens in the event of a fire?

FRV takes every precaution in the planning, design, construction and operation to ensure that BESS facilities are built to Australian Bushfire standards including those guideline requirements specified by the Country Fire Authority. This includes standards to help prevent fires in the unlikely event they occur and fire emergency reaction.

3.2 Does the BESS facility pose a threat in the locality?

A series of specialist environmental and engineering assessments have been undertaken and inform our mitigation measures with regards to potential hazards, risks, including fire, flooding, storms and extreme winds. The results of the project-specific assessments have been incorporated into the facility's design and guide ongoing management methods and procedures.

4. Contacting FRV

4.1 How can I get in touch with the FRV project team?

We invite all community members to get in touch with us and let us know their thoughts or input on how we can best deliver our projects and initiatives so we can continue to have a sustainable and positive impact on the community.