

HANWORTH BATTERY

Frequently Asked Questions



GENERAL

What is being proposed?

Enervest is pursuing development approval for a 1.2 gigawatt (GW) battery energy storage system (BESS) located approximately 5km east of Bannaby, 20km east of Taralga and 60km north of Goulburn.

What is a BESS? Why is it needed?

A battery energy storage system (BESS) is a utility-scale battery. It acts like a sponge to absorb excess energy (such as renewable wind and solar energy) during the day, for discharge in peak periods of high demand when solar or wind may not be available. As coal plants close, the grid needs fast dispatchable energy to help balance generation and load, and BESS are the cheapest and most reliable way to do this.

Is the Proposal part of the proposed HumeLink project?

No, the Hanworth Battery is completely independent of the proposed HumeLink project. The Hanworth Battery is proposing to connect to the Bannaby substation at the 330 kV (southern) site, whereas the HumeLink project proposes to connect at the 500 kV (northern) site. The BESS would not require HumeLink to be constructed in order to operate.

What is the Proposal's status?

The Hanworth BESS is in the beginning phase of a state significant development (SSD) application pathway and is currently compiling a Scoping Report. Once submitted, the secretary's environmental assessment requirements (SEARs) will be issued, outlining the technical assessments required for the Environmental Impact Statement (EIS) stage of the development.

Who approves the Proposal?

As a state-significant Proposal, the proposal will be reviewed by the NSW Department of Planning Housing and Infrastructure (DPHI). The NSW DPHI will review the Proposal based on the Scoping Report, Environmental Impact Statement (EIS), and community and agency feedback received during the exhibition period.

Why was the site chosen?

Careful consideration is needed to select the most appropriate sites for battery installations. Proximity to substations, the current land use, potential for environmental impacts and proximity to local residents are all reviewed and form part of the decision-making process when selecting sites. Enervest are of the view that this site has great potential when assessing these considerations.

Who is Enervest?

Enervest is an Australian-owned and operated company specialising in energy storage projects. Enervest was founded in 2008 and provides engineering and operational services for Australia's decarbonisation journey. Enervest has a national presence, working alongside local communities and industry partners to develop projects that provide an overall positive impact on both the environment and the community.



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SOCIAL AND ECONOMIC

How will Enervest work with First Nations groups?

Enervest's co-founder and COO has Indigenous heritage with the Barramattagul people of the Dharug Nation. Enervest seeks to protect and conserve Aboriginal cultural heritage by carrying out the appropriate site investigations and due diligence. Project teams will also engage with the Traditional Owners early, and we plan to work together to deliver the project with mutual benefits.

How long will construction take? How will construction traffic and road impacts be managed?

During the anticipated 24-month total construction period, construction vehicles would range from light vehicles to 26m B-Doubles. Light vehicles would arrive during AM/PM peaks with heavy vehicle deliveries to be spaced out during the day. Once operational, there will be minimal traffic produced as a result of the Proposal. Road and traffic impacts will be investigated within EIS assessments, and traffic management plans will be developed before construction.

How many jobs will be created by the construction of the Proposal?

Employment opportunities will be available with a range of skills required such as civil construction, landscaping, labour hire, surveying, quarries, steel fabricators, general contractors, lighting and electrical contractors, crane operators, security contractors, hydrological consulting, traffic management, geotechnical contractors, construction site / HSE equipment installers, and more.

Construction will boost local employment opportunities and contracted work, which will increase movement through local towns. This will deliver an economic boost to the region through spending in ancillary services such as accommodation, food, and local goods and services.

Apart from job creation, what other benefits will the community receive?

Engaging with the local community is essential to us and ensures that our Proposal offers mutually beneficial economic and social outcomes. We will be continuing to engage and update all stakeholders on the Proposal and will use information gathered to develop the most appropriate community benefit programs, looking to foster positive outcomes for the local community.

Benefits will also include potential road or intersection upgrades, increased income within the local community through increased revenue to ancillary services such as food and accommodation, the use of local service providers such as surveyors and landscapers, and the stabilisation of the national electricity network.



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How many jobs will be available during the construction and operation of the Proposal?

Approximately 150 full-time equivalent (FTE) jobs will be required during peak construction periods, and up to 6 FTE permanent roles are likely to be required for the operation of the Proposal.

How can local businesses or individuals get involved?

Enervest encourages local individuals or businesses who wish to be involved in the project to contact Enervest to arrange a meeting. Contact us through the methods outlined above, or by submitting a request through the 'get in touch' section of our website: <https://enervest.com.au/project/hanworth-battery/>

How can I provide feedback?

Feedback from the community is integral to the development of the Proposal. You can complete the community feedback survey at <https://www.surveymonkey.com/r/hanworthbattery>, or by scanning the QR code to the right.

For more information, to provide feedback, and to receive Proposal updates contact us at:

Email: hanworth@enervest.com.au

Phone: (02) 7229 1981

Website: <https://enervest.com.au/project/hanworth-battery/>



DESIGN CONSIDERATIONS

What does a BESS look like?

BESS's are container-like modular systems that are configured based on site and capacity obligations and can be compared to shipping container-like objects. As technology improves, the systems are becoming increasingly efficient and more compact. Currently BESS units are approximately 6m long, 2.5m wide and 3-3.5m high. Associated Switchroom buildings and the sub-station could up to 7m high in places.



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Will there be any visual impact?

Given its location, it is anticipated that the BESS will have minimal visual impact. The EIS consists of independent technical assessments, and visual impact will be assessed as part of this. Enervest is committed to working closely with the local community to address any concerns and encourages the community to approach them with any issues that may arise.

Will I be able to hear the BESS?

Like all large-scale developments, BESS facilities may generate noise, from the cooling fans that regulate the operating temperature of the battery. Studies to assess noise levels will be undertaken in the EIS phase of the Proposal and will indicate the impact this may have on the area and outline clear mitigation recommendations. Operational noise levels would be monitored and in line with EPA and government guidelines.

How will power supply be affected in the local area? Will there be outages during construction?

There will be no outages expected during the construction phase. Once the BESS is built and operational, it will help to increase the grid stability.

How long is the Proposal's lifespan? What will happen with the BESS once it reaches its end of life?

The lifespan of a BESS can be up to 40 years, with units progressively replaced or upgraded as they are assessed. Once the BESS reaches its end of life, it will be determined if it will be decommissioned, which would involve the components being disposed of and recycled at the appropriate facilities. The decommissioning process is an important part of the development application process, and requirements will be set out within contracts with the landowner and the approvals process.



ENVIRONMENTAL

Is the site affected by flooding?

Assessments are ongoing to determine if the site is flood-prone. In the unlikely event of stormwater flooding, where water may pool from heavy rainfall events, BESS infrastructure is expected to remain stable. Detailed stormwater management plans will ensure the BESS development works into the current contours of the landscape and does not create run-off that is detrimental to the environment. Stormwater bunds may be incorporated into the design to contain & control flood waters in 1-in-100-year events.



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Do batteries increase fire risk?

The Proposal will not increase the risk of bushfires in the area. Management Plans are produced before construction and will include a Fire Management Plan to address the management of any potential fires in construction, operations and decommissioning. The design and installation of the battery system are in accordance with relevant Australian standards and fire safety and emergency services guidelines and will be installed in line with the manufacturer's requirements.

To mitigate potential fire risk from batteries the following steps are undertaken:

- The BESS has protection to avoid overcurrent or any electrical faults that can cause fire
- the plant facility will have a 24/7 Battery Management System (BMS) to monitor any change in battery cell temperature, gas or humidity and to detect smoke or fire within the battery infrastructure
- water tanks, water pipeline systems, and fire extinguishing tools will be installed on-site
- inclusion of an asset protection zone (APZ) around the BESS
- consultation of the NSW Rural Fire Service during the EIS planning stage.

Are BESS' safe? Do they emit radiation?

BESS' are safe and do not emit radiation. The battery is designed to prevent liquid leakage and will not cause hazardous chemical leakage to the surrounding environment. Additionally, security fencing will be erected to prevent unauthorised access and only qualified personal will be able to access the BESS equipment area.

What about electromagnetic fields (EMF)?

The use of electricity in daily life exposes us to low-frequency electromagnetic fields (EMF) and are not considered a risk to human health (NSW Government 2022). EMF from a BESS are typically less than household appliances and are not distinguishable from background levels at site boundary.

Your kitchen stove has an EMF range of 2-30 milligauss (mG) and your hairdryer 1-70mG. Standing at the edge of a transmission powerline easement would be in the range of 10-50mG, and under a transmission powerline 20-200mG. The current international standard for human exposure to limit EMF is 2000mG (NSW Government 2022).

Do BESS developments impact native flora and fauna?

Compared to energy generation projects, BESS sites typically have very low environmental impact as their compact design enables great integration with the existing environment. During the planning stages, Enervest will be commissioning biodiversity surveys (along with other studies such as Cultural heritage & hydrology) to ensure that the Proposal maintains as much of the existing characteristics of the site as possible. The site has already been profiled and some preliminary no-go zones have already been established based on the species present.

Enervest is committed to minimising impacts on native flora and fauna during both the construction and operation phases. During these phases, management plans will be developed to ensure this compliance is maintained. Where required, Enervest will look to incorporate the planting of native vegetation for screening purposes and to enhance positive biodiversity outcomes.

