

FAQs – Battery Energy Storage Systems (BESS)

What are Battery Energy Storage Systems?

Battery Energy Storage Systems (BESS) are large devices that can store and release energy on demand to support the delivery of electricity across Victoria. A BESS gathers energy from the electricity network powered by different sources, such as wind and solar, and stores it in rechargeable batteries for later use. When high demand events impact the network, such as hot days in summer, these batteries release this stored energy for homes and businesses to use.

How much electricity can they generate / deliver?

- They don't *generate* electricity like a power plant – they store and discharge.
- For example, the **Victorian Big Battery** has a power output of **300 MW** and stores **450 MWh**.
- The **Melbourne Renewable Energy Hub (MR-Hub)** Stage A is huge: ~600 MW / 1,600 MWh according to open electricity dispatch data.

Can you provide a translation of how many homes could be powered by these batteries?

- For example, the **Victorian Big Battery** has a power output of **300 MW** and stores **450 MWh**. (Simple figure that translates to homeowners) 1 MWh powers about 750 homes (average of between 500 and 1000) for 1 hour.
- The **Melbourne Renewable Energy Hub (MR-Hub)** Stage A is huge: ~600 MW / 1,600 MWh according to open electricity dispatch data, providing 1 hour of electricity for 1.2 million homes.
- According to the Victorian Government: **12 large-scale (utility-scale) BESS have been commissioned**, plus three more nearing commissioning. Total output capacity ~1,028 MW; storage capacity > 1.7 GWh, capable of providing 1 hour's worth of power for 1.275 million homes.

How many big batteries in Victoria, and how many planned?

- According to the Victorian Government: **12 large-scale (utility-scale) BESS have been commissioned**, plus three more nearing commissioning. Total output capacity ~1,028 MW; storage capacity > 1.7 GWh.
- In addition: **13 more under construction**, and **46 batteries have development approval**.
- Some major planned / approved projects: Joel Joel BESS (350 MW) was approved under the Victorian Government's accelerated planning process.
- A 1.8 GWh BESS by Birdwood Energy is being fast-tracked via the state's Development Facilitation Program.

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Where in Baw Baw Shire?

- There are **two current proposals** in Baw Baw:
 1. **Shady Creek** (Darnum–Shady Creek Rd) — proposed by Samsung C&T Renewable Energy, 200 MW / 800 MWh.
 2. **Yarragon North** (Yarragon–Shady Creek Rd) — Zebre / ZEN Energy proposal.
- According to Baw Baw Shire Council: neither of these sits within the proposed **Gippsland Renewable Energy Zone**.

A third BESS has been announced for Trafalgar East by ib vogt in Rowells Road

. Little is known about its size and location yet but is expected to be similar in size to the other two.

A much smaller BESS was established in Longwarry three years ago at 2–6 Drouin Road in Longwarry. It is operated by GRD (Gransolar) using E22 battery technology, supporting AusNet's network. It is much smaller than the others planned for BBSC. Formal consultation was conducted some years aback but there was no oversight by Council's planning as it was sent through directly from the State's planning authority.

What is a renewable energy zone?

Renewable energy zones are areas identified as the best places to host wind and solar projects and batteries for storage.

In designing these areas, the Government has considered community and industry feedback as well as information about cultural heritage, existing uses of land, and quality of wind and solar energy in the region.

Victoria's proposed renewable energy zones

The [2025 Victorian Transmission Plan](#) has identified 6 proposed renewable energy zones.

It also includes a shoreline zone in Gippsland designed specifically to locate infrastructure such as underground cables that will connect offshore wind farms to the grid.

Click through to learn more about each zone:

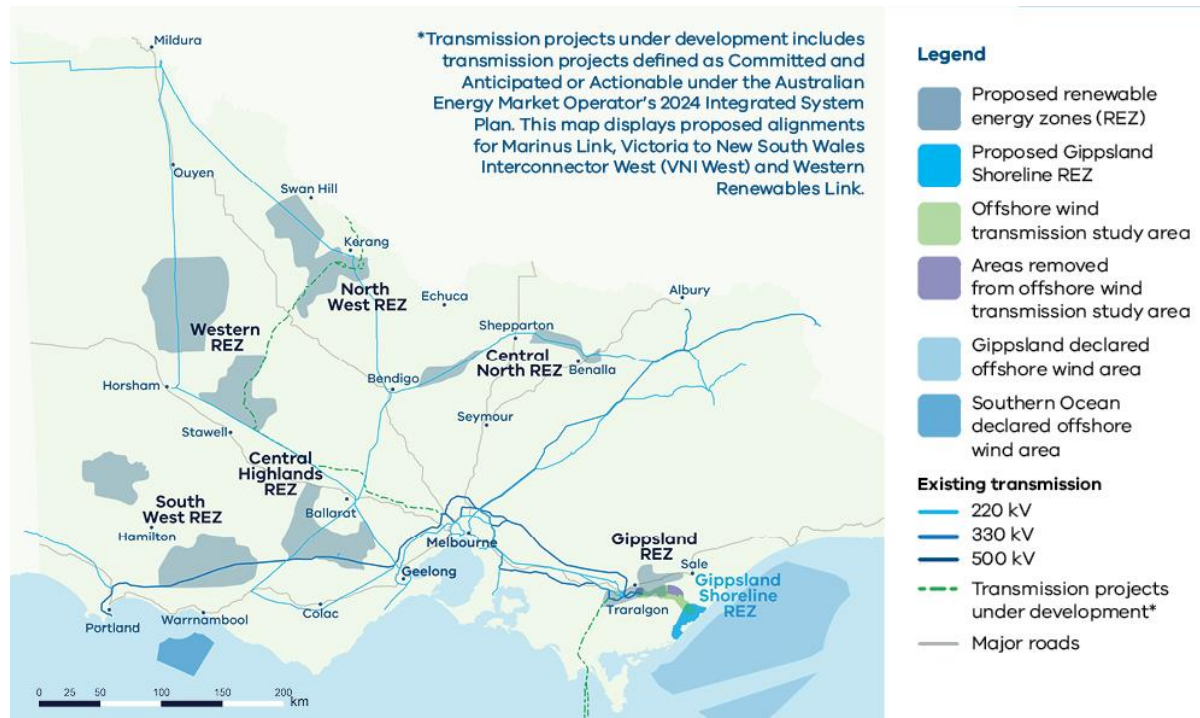
1. [South West](#)
2. [Central Highlands](#)
3. [Western](#)
4. [North West](#)
5. [Central North](#)

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6. Gippsland

Gippsland Shoreline Renewable Energy Zone, for offshore wind connections

Map of proposed renewable energy zones



Who approves these large batteries?

- Many large BESS proposals go through **Ministerial permit** via the Minister for Planning. [Planning](#)
- There's also a fast-track / Development Facilitation Program (DFP) that the Victorian Government uses to accelerate “critical” projects. [invest.vic.gov.au+2Renew Economy+2](#)
- Local planning may or may not be heavily involved, depending on the pathway. Legal analysis shows that in Victoria, some BESS permits are determined by the local council, but others go directly to ministerial level. [dentons.com](#)

What role do local governments have?

- Local governments (e.g., Baw Baw Shire Council) can raise concerns, host community consultation, write to state government and developers. Baw Baw Council has done just that. [Baw Baw Shire Council+1](#)
- But crucially, some planning approvals can bypass the local council if they go via the minister or fast-track, limiting the council’s direct power. [dentons.com+1](#)

When / how does public consultation happen?

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For renewable energy zones: according to VicGrid / Energy Victoria, there will be 6 weeks of public consultation before REZs are formally declared. [Energy](#)

- For specific battery projects, community consultation depends on the planning process. But: community groups in Baw Baw have already raised concern that consultation has been weak or too late. [The Warragul and Drouin Gazette+1](#)

Are community concerns taken seriously?

- There are real concerns: in Baw Baw, farmers worry about loss of high-quality farmland, property devaluation, fire risk, soil/water contamination, noise and light. [The Warragul and Drouin Gazette+1](#)
- Evidence suggests some decisions go ahead despite strong objections: e.g., the Dederang BESS was approved by the Planning Minister despite hundreds of objections. [ABC+1](#)
- That said, local governments are pushing: Baw Baw Council voted to demand more face-to-face consultation and to express strong concern. [Baw Baw Shire Council](#)

Have any projects been stopped due to community concerns?

- It's less common: many are being approved via the accelerated pathways. For example, the Dederang 400 MWh BESS was approved via fast track. [ABC+1](#)

Risks of BESS

Some key risks and concerns that communities raise, often valid and important:

1. **Fire / thermal runaway:** lithium batteries can fail and catch fire; once that happens, extinguishing is very difficult. [ABC+1](#)
2. **Noise:** cooling systems / inverters emit noise; not constant but can be noticeable. [The Warragul and Drouin Gazette](#)
3. **Contamination:** risk (perceived or real) of soil or groundwater contamination from battery chemicals / electrolytes. [Baw Baw Shire Council+1](#)
4. **Landscape / amenity:** visual impact, lighting (security lights), industrial character in rural / farming areas.
5. **Property values:** potential devaluation due to perceived risk, loss of amenity.
6. **Planning fairness / process:** concern that fast-track bypasses meaningful community input, or removes local oversight.
7. **Land-use conflict:** prime agricultural / high-quality farmland being used for industrial-scale infrastructure, possibly undermining food production.
8. Council is asking the State to implement clearer, more consistent safety and environmental standards.

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How long do these battery systems last?

The development phase takes approximately 1-2 years, this includes the planning application process. Construction takes around 18 months to 2 years. Once construction is complete, a BESS can operate for more than 20 years.

Does Council support renewable energy?

Yes. Council strongly supports renewable energy and recognises the essential role of battery storage in stabilising the electricity grid.

Our concern is **where** large-scale BESS facilities are being proposed – specifically on high-value, highly productive farmland.

Why is farmland the wrong place for industrial batteries?

- High-value farmland is a finite resource; once lost, it cannot be replaced.
- Industrial BESS facilities are more appropriately located on lower-value land, industrial land, or previously disturbed sites.
- Clustering multiple proposals in farming areas undermines food production and rural land use.

Is Council opposed to renewable energy projects?

No. Council supports clean-energy investment.

Our advocacy is focused on **responsible siting**, transparent consultation, and ensuring that agricultural land is protected.

What is Council doing?

- Writing to the Minister for Planning and Minister for Energy seeking stronger protections.
- Requesting clearer planning guidelines for the siting of BESS facilities.
- Raising community concerns about safety, farmland, noise and transparency.
- Monitoring emerging proposals and providing advice to affected residents.

What should residents do if approached by a BESS proponent?

Residents should:

- Request all information in writing.
- Notify Council of any approach.
- Seek independent advice if considering land access agreements.
- Ask proponents for details on safety, fire management, environmental impacts and community benefits.

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Why don't local government planning regulations always apply / have more power?

- Because some large BESS projects use state-level fast-track pathways (Development Facilitation Program), which allow ministers to approve projects, bypassing or limiting local planning assessment. [Renew Economy+1](#)
- Also, the planning pathways for “significant economic benefit” developments can go directly to the Minister for Planning. Baw Baw Council itself has said that such proposals “effectively remove local voices.” [Baw Baw Shire Council](#)
- There are legal / regulatory grey zones or tension: local zoning, overlays (bushfire, heritage) can be waived or overridden in some cases when the state determines something is a priority. [Parliament of Victoria](#)

Who to go to for more information at State Government

- Energy.Victoria / VicGrid: they manage the Renewable Energy Zones program. [Energy](#)
- **Department of Transport & Planning (Victoria)**: for planning permits, questions about ministerial planning permits, public consultation.
- **Minister for Planning**: currently responsible for some BESS permits via Ministerial Permits / Fast-track.
- **Your local MP / State MP**: raising concerns with them (e.g., Member for Narracan) can help. In fact, the Member for Narracan has a campaign form to “Help Protect Regional Farmland – Stop the proposed battery rollout in Baw Baw.” [waynefarnham.com.au](#)