

# Battery energy storage system (BESS) safety

Phillip Island & Queenscliffe



## Delivering the right battery system for the community

Safety is the cornerstone of every decision made in selecting and installing the right Battery Energy Storage System (BESS).

### Why did we choose the EVO Power Flex Series?

This system aligns with internationally recognised safety protocols and its proven suitability for residential neighbourhoods. Its stable battery system was a decisive factor, offering consistent and reliable performance for homes and businesses.

Before choosing this system, we did extensive groundwork, conducted a detailed market review, technical evaluation and community focused

assessment to find a solution that not only meets performance expectations but also maintains the highest safety standards.

Safety considerations went beyond the technology itself. We also considered the physical placement of each system. Every site was carefully assessed against a comprehensive set of criteria, including:

- proximity to homes and permanent structures
- nearby vegetation and stored chemicals
- location of underground services and gas lines
- local planning overlays
- proximity to flammable materials.

## About the EVO Power Flex Series

- **Compliance with Australian electrical standards:** The 100 kW / 205 kWh Lithium Iron Phosphate (LFP) BESS units are installed in accordance with Australian regulations.
- **UL9540A certified:** Meets internationally recognised UL9540A standards, including rigorous testing for destruction and resistance to thermal runaway.
- **NFPA855 certified:** Complies with NFPA855 safety standards during installation and operation, particularly in residential and community settings.
- **Robust containment:** Battery cells are housed in individually separated modules within a durable IP55-rated steel cabinet.
- **Multi-layered failsafe design:** Includes a comprehensive fire suppression system featuring smart sensors and pressure-release panels that detect heat or smoke early and safely control internal pressure to prevent incidents from escalating.
- **24/7 monitoring:** Equipped with continuous digital monitoring and communications backup for real-time oversight and rapid response.



### **Is the BESS monitored for safety?**

Yes. The EVO Power system is remotely monitored 24/7. If any irregularities are detected, the system can be safely shut down until technicians arrive to investigate.

### **What happens in a fire or if it overheats?**

Each unit has an automatic fire suppression system that removes oxygen to prevent heat build-up. Even under extreme fault conditions, the Lithium Iron Phosphate (LFP) batteries are designed not to catch fire or experience thermal runaway.

### **Who receives updates during an emergency?**

Live updates are sent to a dedicated Mondo team who can then initiate a response with local contractors, CFA and the distribution network operator.

### **What safety features are built into the system?**

The system includes multiple layers of safety, including fire suppression, remote monitoring, and robust battery design to minimise risk.

### **Will the local CFA know what to do if they are called to site?**

Yes. We are working in close partnership with the CFA at both District Command and State levels to assess each site and develop detailed safety plans. This collaboration includes joint planning and tailored training to prepare local brigades for the specific systems installed.

Through this coordinated approach, the CFA will have clear guidance on battery locations and the appropriate response actions in the unlikely event of an incident.

### **Are BESS safe to manufacture and recycle?**

We selected a manufacturer with a long-term commitment to safety across the battery lifecycle, from production to end-of-life.

EVO Power complies with ISO 14001 Environmental Management Standards, which supports safe material sourcing and disposal.

Australia's battery recycling programmes are advancing rapidly and most battery components are recyclable.

Find out more:

[www.liviumcorp.com/battery-recycling](http://www.liviumcorp.com/battery-recycling)

[www.ecocycle.com.au](http://www.ecocycle.com.au)

For information on recycling e-waste, visit:

[www.sustainability.vic.gov.au/recycling-and-reducing-waste-at-home/recycling-at-home/e-waste](http://www.sustainability.vic.gov.au/recycling-and-reducing-waste-at-home/recycling-at-home/e-waste)

### **Are some batteries more vulnerable to incidents than others?**

Yes, some batteries are more prone to issues than others. For example, Nickel Manganese Cobalt (NMC) batteries—commonly used in older electric vehicles, mobile phones, and e-scooters—are more energy-dense but less stable, and have been involved in many reported fires.

### **What makes EVO Power's batteries safer?**

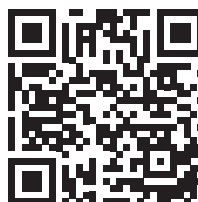
EVO Power uses Lithium Iron Phosphate (LFP) batteries, which are known for their stability. These batteries also feature advanced management systems that help detect and prevent faults early, enhancing overall safety.

## **Want to know more?**

For ongoing updates, go to  
**[mondo.com.au/PhillipsIsland](http://mondo.com.au/PhillipsIsland)**

For any questions, email Matthew Charles-Jones at  
**[community@mondo.com.au](mailto:community@mondo.com.au)**

To get involved in this project, go to  
**[totallyrenewablephillipsland.weebly.com](http://totallyrenewablephillipsland.weebly.com)**



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