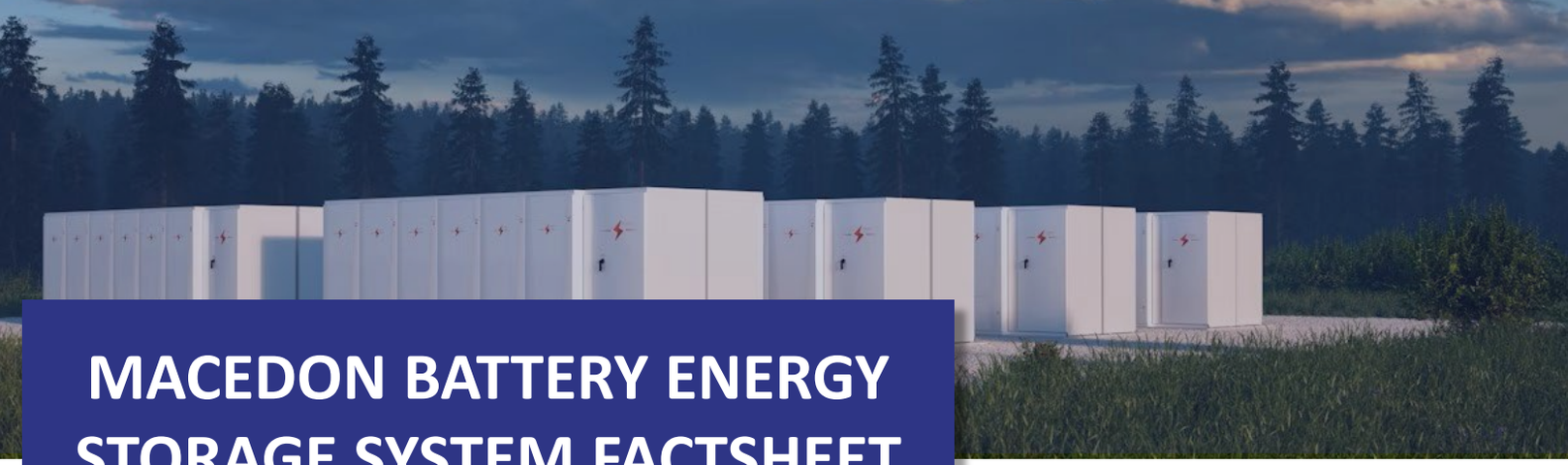


MACEDON BATTERY ENERGY STORAGE SYSTEM FACTSHEET

PROJECT LOCATION

Lot 2, Black Forest Drive, Macedon in Victoria. The site is bordered by Allison Lane to the north, Calder Freeway to the southwest and Macedon-Woodend road to the southeast. It lies adjacent to the Gisborne Substation next door which makes this location ideal for a battery system.

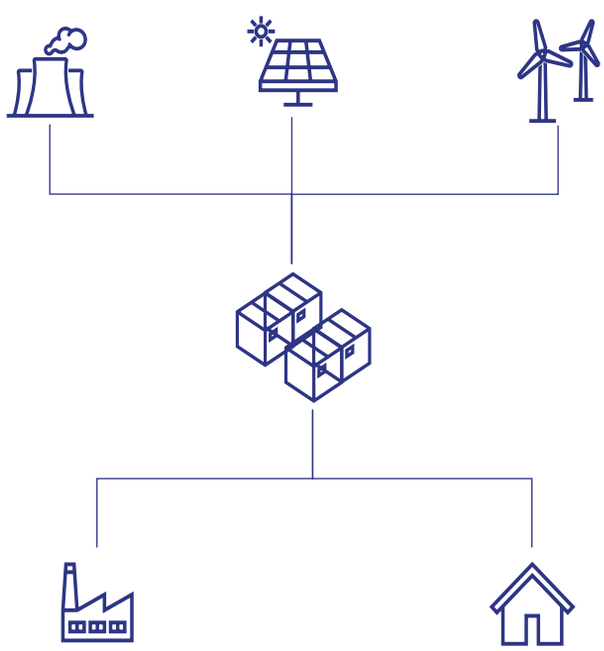
PROJECT CAPACITY

The Battery Energy Storage System (BESS) capacity is 100MW (megawatt) and has a duration of 4 hours, which means that BESS can deliver constant electricity output for 4 consecutive hours.

This is also equivalent to 128 twenty-foot battery containers and 32 inverter units. The total area required is estimated to be 4 hectares.

SYSTEM OPERATION

Please see the following diagram for the BESS's operations. The BESS will charge from excess solar and wind generation, as well as from the grid, during the less busy period, i.e. during the daytime. It will then discharge electricity back to the grid during peak demand, especially in the evening time to support local consumption. This helps to increase the consumption of renewable energy and keep electricity prices stable.



BESS's operation in the electricity network

KEY DATES

Construction date: Quarter 1, 2027.
Operation date: Quarter 2, 2028.

PROJECT DEVELOPER

South Energy is an Australian-owned, Melbourne-based renewable energy company that specializes in the development of renewable energy projects. To date, we have developed over **1GW** of renewable energy projects across Australia.

South Energy

DEVELOPMENT PROCESS

1

Site selection & due diligence

- Land identification, lease or purchase agreement
- Environmental & planning constraints check
- Early contact with CFA for fire safety input

2

Preliminary design and studies

- Concept layout and selection of technology
- Grid connection enquiry
- Specialist studies
- Community engagement

3

Planning permit submission

- Prepare and lodge a planning permit application with the Department of Transport & Planning (DTP)
- This application will include supporting documents such as planning report, environmental impact assessments, noise & traffic reports, fire & hazards study, etc.

4

DTP assessment & approval

- DTP runs the assessment and referral process
- Consultation with different authorities
- Public exhibition: community submissions
- Once all requirements are fulfilled, approval is granted

5

Grid connection & other secondary approvals

- Detailed grid connection study Negotiated connection agreement, performance standards and registration
- Obtain other secondary approvals such as building permits, road reserve works, wastewater treatment etc.

6

Financial close & construction

- Final investment decision.
- EPC contract engagement
- Commence construction and commission the project