



RENEWABLE ENERGY IN AUSTRALIA

Energy storage

In September 2016, there was a state-wide blackout in South Australia. Incredibly, the whole state was without power for a period of time. The cause was damage to electricity transmission lines during a terrible storm, and the event led to a nation-wide discussion about how we can secure energy supplies so it wouldn't happen again.

Since then, energy storage technology is rapidly developing and may be the answer to unpredictable energy supply, particularly from renewable sources. For example, in summer when the most amount of solar power is produced, the batteries can store excess supply to be used in the cooler, cloudier months of winter.

There are small and large scale methods of storage:



- **Home storage batteries**

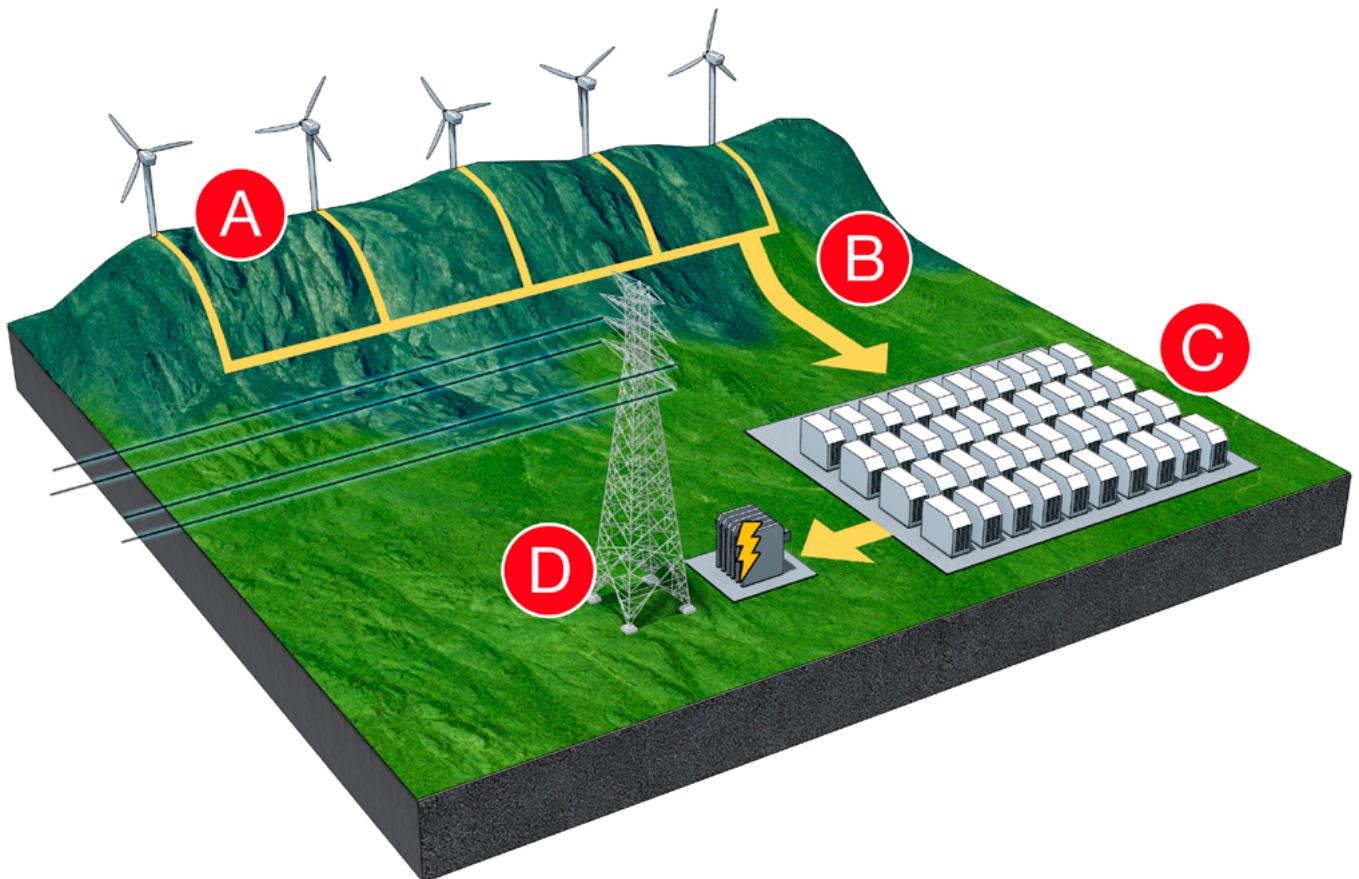
It is now possible to purchase batteries that can be connected to solar panels. These batteries store electricity generated from solar panels and hold enough to run a household for a day or two.

- **Large scale batteries**

Large scale batteries work very much like the household batteries, just on a 'larger scale'. They store huge amounts of electricity that can be fed into the grid when needed during high demand or disaster events such as the 2016 blackout.



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Energy storage in action

- A. Energy is produced by a Renewable Energy source.
- B. The current flows down cables to charge an array of batteries.
- C. The batteries can store the energy produced for times when conditions are less favourable.
- D. During storms or in times of blackout the energy from the batteries is fed into the power network supplying electricity to homes and businesses.