Understanding the role of storage



What is energy storage?

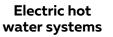
Energy storage is how we save electricity for later use. As we switch to renewable sources like solar and wind power, we need energy storage to capture the energy when it's available to make sure we have power when the sun isn't shining, and the wind isn't blowing.

Whilst batteries are what most people think of, there are lots of ways to store energy including:











Pumped hydro

Understanding peak demand and why we need storage

Peak demand happens when lots of people are using electricity at the same time. It's often when we come home from work or school and start cooking dinner, turn on the tv and devices, or use the heater or air conditioning. It's like rush hour for electricity.



Added pressure

With lots of people needing power at the same time, there's extra pressure on the electricity grid to supply it. This increase in demand means the grid needs to work harder to deliver enough power to everyone at the same time.





To keep up with peak demand and maintain a reliable supply, networks need to invest in infrastructure. These upgrades or additions cost money, which are funded through everyone's electricity bills. So, over time, as peak demand grows this can lead to higher electricity prices.



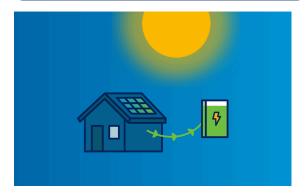


When lots of people use electricity at the same time, the strain on the grid increases the risk of power outages and blackouts. That's why we need smarter ways to manage energy use.





How storage makes a difference



During the day, energy storage systems, like batteries, store extra solar energy that isn't being used.



In the evening, stored energy is released to help meet demand, reducing pressure on the grid and flattening the peak in electricity use.

While batteries are a common and effective form of energy storage, they're not the only option. Other technologies like electric vehicles and even electric water heaters all help to soak up energy and shift demand to support the grid.

How can you help if you don't have storage?

The good news is that even if you don't have an energy storage system, there are ways you can still help reduce peak demand. Here are some tips on how you can get started.



Getting the most out of your solar

Use appliances like dishwashers, washing machines, and pool pumps during the day, when solar energy is plentiful.



Optimising your electricity usage

Shifting your usage to off-peak times helps balance the load on the grid, and if you're on time-of-use pricing, you could save money too.



Energy Storage as a Service (ESaaS)

Not everyone can install a battery, but if you live near an Ausgrid community battery, you may be able to benefit through a retail ESaaS offer.

To learn more, visit ausgrid.com.au/ESaaS



Did you know?

Everyday actions, like running the dishwasher later at night or early in the day, using a timer for your air conditioner, or not using too many appliances during peak hours can help ease pressure on the grid. When lots of households shift just a little, it can make a big difference.



