



Renewable Energy

Renewable energy is produced using natural resources that are constantly replaced and never run out – such as solar, wind, and water.

Renewable energy technologies allow us to effectively capture or harness this energy and turn it into electricity. Examples of renewable energy technologies include solar and wind farms, and hydropower initiatives.

As Australia transitions away from ageing coal and gas thermal power, we will need to build a range of renewable power generation facilities and transmission networks. This change will not be easy and will require coordination and investment from government and industry.

The question remains: how do we maximise Australia's abundance of renewable energy resources in a reliable, sustainable, and affordable manner that meets both our step towards net-zero ambitions and future market needs?

Pumped hydro energy storage is a mature technology that has been used for many years across the world. Its ability to provide clean and reliable energy quickly makes pumped hydro a perfect complement to other renewable energy sources, such as wind and sun.

The **Oven Mountain Pumped Hydro Energy Storage** project is an '**off river**' or '**closed loop**' system. This means that once the Lower Reservoir is filled, the same water is reused over and over to generate electricity. Pumped Hydro is considered storage because of its ability to recharge by going into 'pumping mode'.

Pumped hydro also 'stabilises' the grid by making it more resilient to disturbances such as line trips and generator failures. In this way, pumped hydro allows more renewables to be installed on the grid than would be the case without pumped hydro.

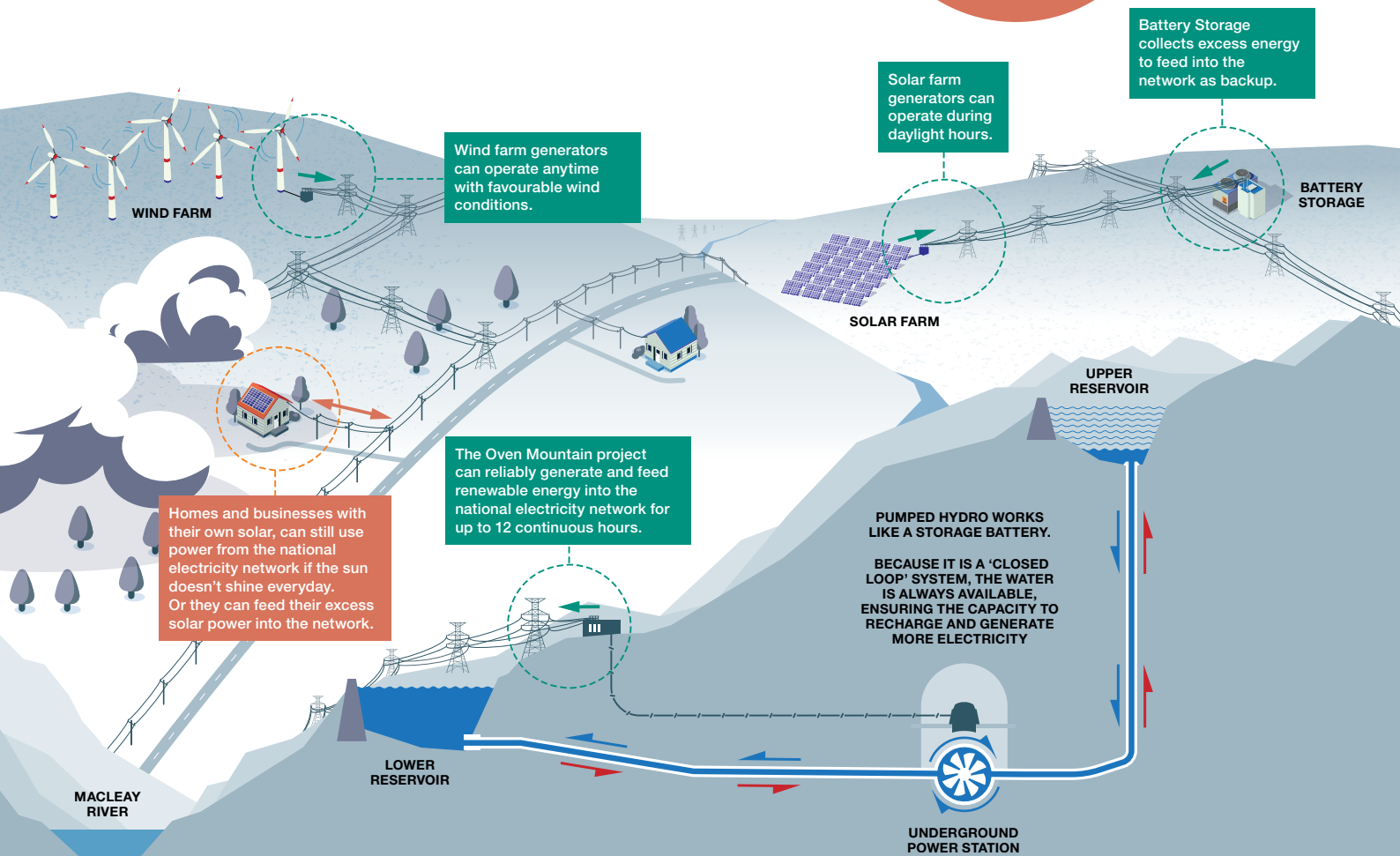
The Oven Mountain project will play an integral role in the transition towards greater renewable energy sources, providing much needed long-duration storage (over 8 hours) and dispatchable generation when it is needed most. This means more clean, reliable, and renewable energy across NSW.

Who gets to use the power?

All the electricity generated in NSW by coal, gas, hydro, wind, solar, and other sources is fed into the national electricity network. This is often referred to as **'the grid'**, which supplies end users across NSW with electricity via power transmission lines.

How much power produced by each generator is determined by consumer demand and generator capacity. Consumer demand is often referred to as **'peak'** when demand is high or **'off peak'** when demand is low. Consumer demand influences electricity prices.

Your town is not directly connected to the electricity generator down the road.



To find out more about the **Owen Mountain Pumped Hydro Energy Storage** project, or to sign up for our mailing list visit: www.ompshydro.com

You can also contact the team at: info@ompshydro.com or on 1800 518 194



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