

What is pumped hydro?

Energy storage technologies are an essential part of the future power system, and pumped hydro has an important role to play. Pumped hydro works like a large, rechargeable battery by using water, geography and the force of gravity.

Pumped hydro is a closed system that moves water between two (or more) reservoirs to generate energy. The reservoirs are constructed at different heights - usually an upper reservoir, and a lower reservoir.

The upper reservoir stores

water, ready to be released

when energy demand is high

Tunnels connect the reservoirs through an underground power station, which houses turbines.

When energy demand is high, water is released from the upper reservoir to the lower reservoir. The force of the water falling from the upper reservoir makes the turbines spin in the power station, which generates power.

This power makes its way from the power station into the electricity network, which is used by business and households.

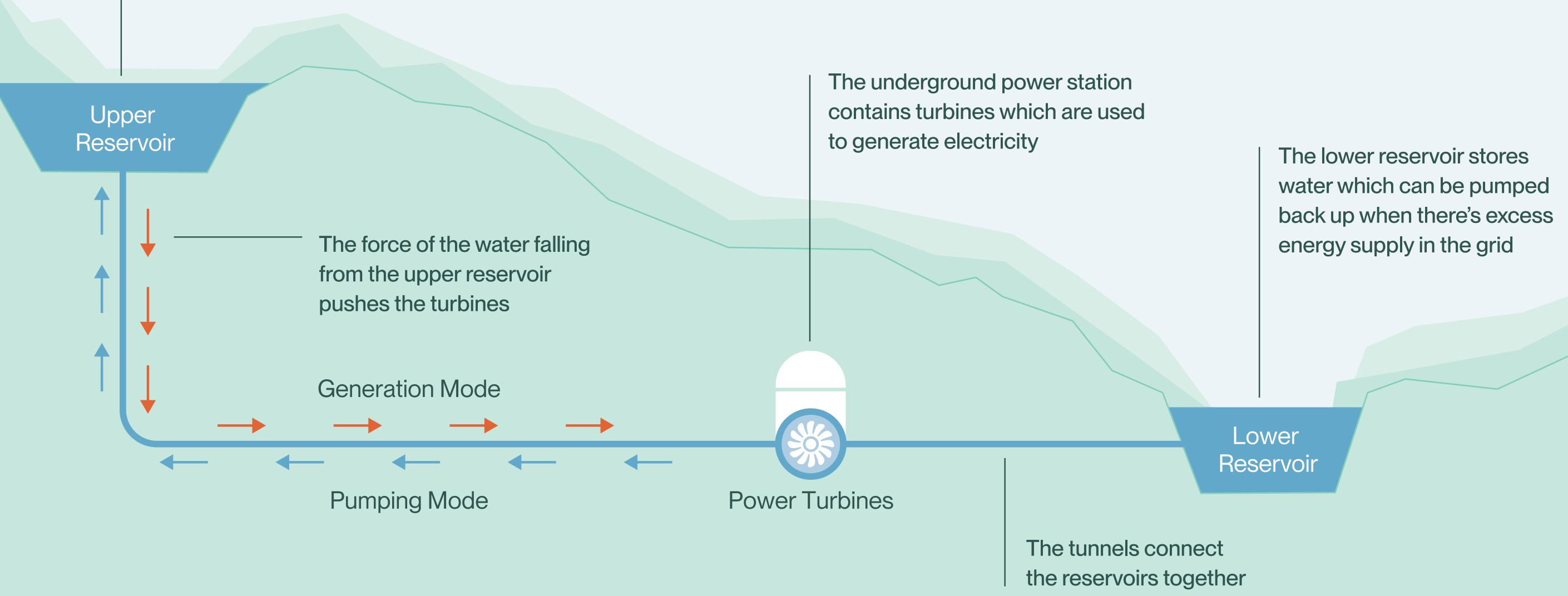
When energy demand is low, the water can be pumped back up to the upper reservoir, and the process can start again.

Pumped hydro is:

- Stable: it doesn't rely on weather to generate energy.
- Reliable: as it's the same water being used repeatedly, the same amount of power can be generated.

Did you know?

- Pumped hydro is a tried and tested technology used all over the world.
- Pumped hydro is a giant battery, as it can store energy (in the form of water) for when it's needed.
- Pumped hydro works with other renewable energy sources.



To find out more

To find out more information on pumped hydro scan the QR code or visit qldhydro.com.au

