The Snowy Scheme water cycle Water cycle





The water cycle

The water cycle is a continuous path that all water follows as it moves around Earth in different states. Without this process continually happening there would be no life on Earth.

i Did you know?

snowy hydro

The sun has been driving the water cycle constantly for billions of years over and over again. You could be using water that a dinosaur drank!

The water cycle is also known as the hydrologic, or hydrological cycle - the continuous movement of water on, above and below the surface of Earth.



The water cycle

DID YOU KNOW? Water is the only substance that can be found in the three states: solid, liquid and gas.



When the sun's rays warm the oceans, lakes, reservoirs and rivers, the water turns to gas (vapourises) - **evaporation**



Water vapour cools in the sky and forms water droplets - **condensation**



The tiny water droplets come together to form clouds and grow bigger and bigger. When the clouds get too heavy, the snow, hail or rain falls to the ground - **precipitation**





When spring arrives, melting snow and rain combine, adding to the runoff - spring melt

The sun heats up and the water cycle starts all over again

Generating renewable electricity - the Snowy Hydro water cycle

- The sun causes water to evaporate and rise up into the sky
- The water droplets condense and form clouds
- Snow and rain fall as precipitation
- Spring melt occurs, resulting in runoff
- The runoff flows to streams and rivers and is captured and stored in lakes and reservoirs
- It travels through a complex network of dams, tunnels, aqueducts and penstocks
- It continues its journey through one or more of our nine power stations and 33 turbines to generate renewable hydroelectricity
- Snowy Hydro operates the Snowy Scheme to first meet its water release obligations and then to maximise electricity market opportunities within the constraints imposed by the Snowy Water Licence
- The electricity travels to a transmission station, to move along power lines to meet the demand for power use by homes and businesses
- Released water into the Murray and Murrumbidgee rivers supports agriculture in New South Wales, Victoria and South Australia
- Snowy Hydro is required to make environmental releases into the Snowy River below Jindabyne Dam and into
 Murrumbidgee River below Tantangara Dam
- The sun shines and the water cycle starts all over again





