



Barron Gorge Hydro

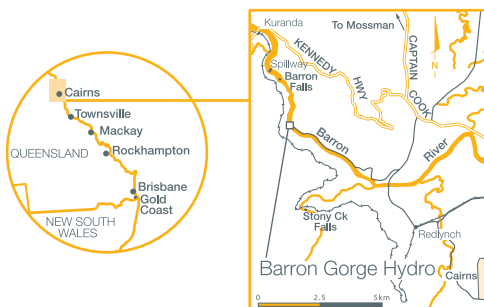
about stanwell

Stanwell Corporation Limited (Stanwell) is a diversified energy company. We own coal, gas and water assets which we use to generate electricity for the National Electricity Market (NEM), we sell electricity directly to industry customers and we trade in gas and coal.

With a generation capacity of more than 4000 megawatts, Stanwell is the largest electricity generator in Queensland. The business is able to help supply Queensland's energy needs through coal, gas and hydro-electric generation at seven geographically dispersed sites.

statistics

Capacity	66 MW (two units)
Greenhouse gas savings	260,000 tonnes per year
Powered equivalent	660,000 light bulbs
Commissioned	1963



About the power station

Barron Gorge Hydro, located 20 kilometres north west of Cairns in Far North Queensland and commissioned in 1963, generates clean, green electricity which is sold into the National Electricity Market.

In 2003, Stanwell developed a \$29 million strategic plan to extend the life of Barron Gorge Hydro to 2055.

Phase One of this plan was completed in 2006 and included a mid-life refit, including upgrading the majority of the originally installed electrical plant. This was the largest project undertaken at the power station since its construction.

Phase Two included the refurbishment of both of the hydro's generators. The Unit 1 generator rewind was completed in 2010 and Unit 2 work was completed in 2011.

This refurbishment improved the reliability and efficiency of the generating units and increased the maximum electrical output capacity of Barron Gorge Hydro by 10 per cent.

Water supply

Barron Gorge Hydro sources water from the Barron River to produce electricity before releasing the water back into the river. Kuranda Weir acts as a regulating pool for the hydro. If required, additional water can be obtained from Tinaroo Dam on the Atherton Tablelands.

Environment

Hydro-electric generation (using the energy of moving water to drive the generators) is one of the cleanest and most efficient methods of producing electricity.

Barron Gorge Hydro does not emit any greenhouse gases and is an accredited green generator.

It returns all the water it uses back to the Barron River in exactly the same pristine condition in which it entered the power station.

The power station is in the Wet Tropics World Heritage Area and must meet strict environmental standards.

Community

Stanwell takes an active role in the local community, supporting initiatives that promote regional development and education.