

**ENVIRONMENTALLY SUSTAINABLE  
HYDRO POWER LOCATED IN  
FAR NORTH QUEENSLAND**

# Barron Gorge

## Hydro



### > About the project

Barron Gorge Hydro generates clean, green electricity and was commissioned in 1963. Its maximum capacity of 60 megawatts (MW) is bid into the national electricity market.

In 2003 Stanwell developed a \$28 million strategic plan to extend the life of Barron Gorge Hydro until 2055.

Phase one was completed in 2006 and included a mid-life refit, upgrading the majority of the originally installed electrical plant. This was the largest project undertaken at the power station since its original construction. Phase two of the program consists of the refurbishment of both the hydro's generators. Unit 1 generator refurbishment is planned for 2009, with Unit 2 to be completed in 2010. The generator refurbishment project will improve the reliability and efficiency of the generating units as well as increase the maximum electrical output capacity of Barron Gorge Hydro.

### > Water supply

On its way to the sea, the Barron River drains 1,900 square kilometres of the Atherton Tableland and descends more than 280 metres to the coastal plain. This water flows into Kuranda Weir, which has a capacity of 1,500 million litres and acts as a regulating pond for Barron Gorge Hydro. Additional water can be obtained for hydro generation from Tinaroo Dam, an irrigation storage dam on the Atherton Tableland, controlled by SunWater. Water from Tinaroo Dam flows approximately 80 kilometres before it reaches Kuranda Weir.

### > Environment

Hydro-electric generation (using the energy of moving water to drive generators) is one of the cleanest and most efficient methods of producing electricity. Barron Gorge Hydro does not emit any greenhouse gases and is one of only a few power generation facilities in Queensland able to supply green power. It operates within a certified ISO 14001 Environmental Management System and is an accredited green generator.

### > Community and tourism

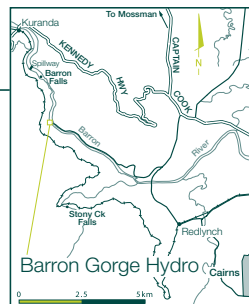
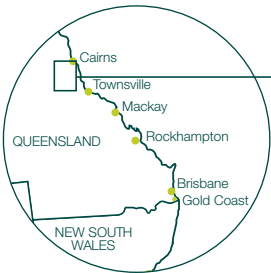
Barron Gorge Hydro plays an important role in supporting the tourism industry of Far North Queensland. It is one of Queensland's most-visited power stations, attracting approximately 15,000 visitors a year. The Barron Gorge Hydro Visitors Centre is open to the public seven days a week and provides information about the power station, Stanwell's other generating sites and surrounding area.

### About Stanwell

Stanwell is a Queensland Government owned corporation with an energy portfolio comprising coal and hydro facilities throughout Queensland. Currently, Stanwell trades more than 30 per cent of the State's electricity requirements.

### Statistics

Capacity	60 MW
Greenhouse Gas Savings	260,000 tonnes per year
Powered Equivalent	600,000 x 100 watt light bulbs
Commissioned	1963



Barron Gorge Hydro is located in the Wet Tropics World Heritage Area on the Barron River, 20 kilometres north-west of Cairns, in Far North Queensland.



# > How electricity is made at Barron Gorge Hydro

