



Capacity

30MW

Electricity generation

Est. 210 GWh pa

Carbon abatement

Up to 163,000 tonnes

Homes supplied equivalent

Up to 40,000 pa

Equivalent cars off the road

Est. 31,000 pa



The Ord River Hydro project in Western Australia

Ord River Hydro

The Ord River Hydro started operation in 1997 as Australia's largest non-government renewable energy project.

The Ord River Hydro Project achieves two key aims: it provides electricity to the Argyle Diamond Mine and the nearby towns of Kununurra and Wyndham and does so in an environmentally friendly way. Indeed, the Ord River Hydro Station has enabled renewable energy to become the sole source of electricity for the region. Better still; the project has set a host of benchmarks. To begin with, when it began generating power in 1997, it was the largest private sector renewable energy project completed in Australia and was the recipient of an Engineering Excellence award in 1996.

The project provides base-load power delivered via its own 132 kV transmission network and remains the largest generator of renewable energy in Western Australia, generating over 210 GWh of emission-free energy each year. Since it started operating, the project has contributed around AUD\$12 million in royalties to the State Government.

A hydro power station was first envisioned for the Ord River region in 1963 but due to agricultural difficulties

in the region, the right conditions didn't show themselves until 30 years later. When Pacific Hydro came across the project, it seemed a natural fit for a company that specialises in creating energy by natural means. The entire operation is underpinned by the colossal dam retaining the water of the Ord River.

Built in 1972, the dam created Lake Argyle which boasts some impressive stats of its own. The lake holds up to 18 times the volume of water of Sydney Harbour, has a catchment area of over 46,000 square kilometres, and is the largest body of fresh water in Australia. The lake is regularly refilled by the monsoonal rains and the area is home to abundant wild-life including 25,000 fresh-water crocodiles.

The Ord power system is supported by fully automatic, computer-based control systems, which address power system dynamics under all operating conditions and load demands.

The AUD\$75 million power plant produces more than 210GW hours of electricity per year, which are purchased by Western Power Corporation and the Argyle Diamond Mine. It is estimated that as many as 40,000 houses use the electricity created by the power station.