



## **ENERGY FOR LIFE BEST PRACTICE PROJECT**

System / Location Water Power system / Brazil Water pump station - Pousada do Parque









The Pousada do Parque is a lodge for ecotourism in the national park Chapada dos Guimarães, state of Mato Grosso, Brazil, some 85 km from the Cuiaba city airport. The lodge supplies itself with bio-food and is connected to the national energy grid. During the year 2000, as to supply the lodge with water year round, the owner installed a water wheel that pumps-up the water over a distance of 1.8 km to 3 water storage tanks located approximately 120 meters above the water caption point. The 3 tanks have a total capacity of 40,000 litres, thus there is a secure supply of water for showers, toilets, kitchen, domestic animals, etc., the water is not appropriate for drinking. During the dry season (May to December) the water wheel pumps between 200 and 500 litres per hour, according to the season.



**Planning, Installation, Financing, Operator** Oswaldo Murard, Owner. Pousada do Parque Chapada dos Guimaraes, MG, postal code: 70.761-680 www.pousadadoparque.com.br

## PROJECT DATA SHEET

Year of installation	2000
Type of installation	Water wheel
Type of energy produced	Water power
Geographical position	15 26.671S; 55 49.512W
Location	Chapada dos Guimaraes, Mato Grosso, Brazil
Storage size	40,000 litres
Power of installation	200 - 500 litres per hour
Use of energy produced	To operate a water pump for the supply of water for shower, toilet, kitchen, domestic animals , etc.
Type of financing	Own investment
Hybrid installation investment cost	5,400 USD
System costs	0.04 USD per litre avg.
Income generated from water power installation	Savings on purchase of electricity from the nation grid
Maintenance cost	Few hours per month for cleaning
Grid electricity savings	52,280 kWh per year
Environmental gain	12,699 kg CO $_2$ eq. per year
Number of beneficiaries	Owner, 7 hotel workers, over 800 hotel guests
Presence of renewable energy country programme	Yes

