

MAGALLO SMALL HYDROPOWER PLANT COLOMBIA

Generating clean energy, raising
environmental awareness, and protecting
local ecosystems



The Magallo Small Hydro Power (SHP) Plant provides power to the National Interconnected System, Colombia's main electricity network. The 5.7 kW-capacity powerplant generates enough clean energy each year to supply approximately 100,000 Colombian households.

The Context

Magallo is a small run-of-river hydropower plant located in the Municipality of Concordia in the southwest region of Antioquia, Colombia. Built in 1940 under the original name of Concordia Hydro Power Plant, the plant was renewed in 2015 to comply with the latest technological and environmental standards. Operations began in December 2016 under the new name, Magallo SHP.

The Project

The Magallo SHP Plant is an important milestone in Colombia's clean energy revolution. It transforms and delivers energy to Empresas Públicas de Medellín (EPM, a major Colombian utilities company) distribution network through a 44 kV and 6.5 km network that connects the Magallo SHP Substation with the Bolombolo Substation owned by EPM. In doing so, it achieves its objective of leveraging Concordia's high power generation potential in a sustainable way.

The Benefits

Not only does the Magallo SHP Plant reduce greenhouse gas emissions and Colombia's dependence on fossil fuels – its run-of-river design has very little environmental impact, as the plant does not have a reservoir. Jobs for the local community have been created, and the project runs socio-environmental programs such as delivering ecological stations to rural schools, promoting reforestation, protecting local water basins, and training residents in the Municipality of Concordia on correct waste separation.

Not only does Magallo Small Hydropower generate clean electricity – the project also protects local ecosystems and water basins

Official name

Magallo SHP Plant, run-of-the-river hydropower project in Concordia, Antioquia, Colombia

Operation start date

December 22, 2016

Total installed capacity

5.7 kW

Estimated annual electricity generation

27.4 GWh/year

Quality assurance and verification

In accordance with the I-REC Code

Transparency

I-RECs published in the I-REC Registry

Report

Meets the criteria of the Scope 2 Guide of the GHG Protocol



12
employees

trained, strengthening the capacities of local communities



27,400
MWh

generated on average annually, providing clean energy to Colombian households



300,000
USD

invested in electricity transmission infrastructure, contributing to the stability of the national interconnected system



8,800
tCO₂e

mitigated on average per year, by offering an alternative energy solution to burning fossil fuels

For more information on the UN Sustainable Development Goals, please visit: <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

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