## **Brazil: Hydropower project**



## Clean energy generation on the Plotas River

## **Background**

Brazil is the largest economy in Latin America and is among the five largest developing countries in the world (BRICS). The country's population totals around 210 million people and is continuously growing. By 2035, Brazil's population will reach around 229 million people. The growth in economy and population has come hand in hand with a growth in energy demand and thus greenhouse gas emissions. The country is the 6th largest emitter of carbon emissions in the world. The majority of its carbon emissions come from unsustainable land-use, especially logging and forest clearing.

The amount of emissions Brazil emits will continue to rise as its population grows. In order to tackle this and meet energy demands in a sustainable way, it is important that the country harnesses its renewable resources. Hydropower, for example, is among the resources with the biggest potential for Brazil and much of this resource remains untapped.

## The project

Situated along the Plotas River between Anita Garibaldi and Pinhal da Serra, the project involves the diversion of river water towards a small dam. Three generators, each with a capacity of 236MW, are installed at the site. The project has a high generation capacity of 708MW. However, a comparatively small project reservoir is used for power generation.

Every year, the project will deliver 3,313 GWh of clean electricity to the national power grid. Based on average per capita power consumption in Brazil, this project alone is sufficient to sustainably meet the electricity demands of over 1.2 million Brazilians.

Project type: Renewable energy – Hydropower

Location States of Santa Catarina / Rio Grande do Sul, Brazil

Project start date: November 2005

Project standard:



UN Agenda 2030 goals















