## **International Climate Initiative**

## Climate Partnerships with the Private Sector: Solar powered waste water treatment plants for hotels in Brazil

In the north-east of Brazil approximately 27% of all Brazilians live, but the region accounts for only 13.5% of the GDP and is much less developed than the south of the country. The region, which is extremely dry and sun-drenched, is one of the poorest and most backward in Brazil and is dominated by (subsistence) agriculture and food production. Due to the year-round tropical climate, scenic charms and comparatively short travel times to Europe, the tourism sector is the most important industry and employer of the region.

Currently, less than 10% of the municipal sewage water is processed and recycled in the northeast of Brazil. Only just over 20% of the sewage is collected over a sewer network, with losses of more than 40%. As a result, untreated wastewater flows into the subsurface, the receiving water and thus also into the sea, causing accumulating environmental pollution and health hazards for residents and tourists alike. It has been shown that a more extensive waste water treatment could reduce the cases of gastrointestinal diseases by up to 25%. The current situation is detrimental to the tourism sector in the long term and thus, also to the fragile economy of the region.

The project's objective is to reduce the environmental impact of municipal wastewater and to improve the health situation in the north-east of Brazil. To meet the project's objective the market penetration of small solar-powered waste water treatment plants is promoted through a market analysis, adaptation of the technology to the target region and the demonstration of the facility at a suitable hotel.

The project is financed by the International Climate Protection Initiative of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) and will be implemented by the Technology Transfer Initiative (TTI) and Ökoservice GmbH in cooperation with external experts from the Institute for Settlement Water Engineering, Water Quality and Waste Management (ISWA) at the University of Stuttgart.

Country:	Brazil
Implementation:	DEG - Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne
Private sector partner:	TTI – Technologie-Transfer-Initiative GmbH (Universität Stuttgart), ÖKOSERVICE Gesellschaft für Umweltanalytik und Kläranlagenbetreung mbH
Total project costs:	379,984 €
BMUB-funding:	189,612 €
Project duration:	01/2017 – 11/2018

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