

## Signing of Japanese ODA Loan Agreement with Costa Rica: Supporting a geothermal power plant project to mitigate the effects of climate change

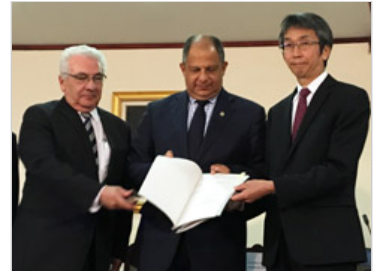
On June 20, the Japan International Cooperation Agency (JICA) signed a loan agreement with the Instituto Costarricense de Electricidad (ICE) in San José, the capital city of Costa Rica, to provide a Japanese ODA loan of up to 25.991 billion yen for the Borinquen I Geothermal Project (Guanacaste Geothermal Development Sector Loan).

Through the project, ICE will construct a geothermal power plant in the Borinquen district of Guanacaste Province in the northwest part of Costa Rica, strengthening the power supply with renewable energy to mitigate the effects of climate change, with the objective of contributing to sustainable development in Costa Rica. The loan funds will be allocated to public works for steam development and power plant construction, to the procurement of power generation and related equipment, and to consulting services (including preliminary and detailed design reviews, and bidding assistance).

With firm economic growth in Costa Rica in recent years, the demand for power is steadily increasing, and as even higher demand for power is predicted, the power generation capacity must be increased through new power source development. The power source composition in Costa Rica is hydro: 63 percent, thermal: 20 percent, geothermal: seven percent, wind: nine percent, other: one percent (according to a 2015 study by ICE). Although hydroelectric power is the largest renewable power source, due to the large fluctuation in rainfall between the rainy and dry seasons in Costa Rica, hydroelectric power has the drawback of reduced power generation during the dry season.

Unlike other major forms of renewable energy, geothermal power can provide a stable supply of power all year round, and it is regarded as a base load power source with which a reduction in greenhouse gases can be expected. As the first developing country to pledge to become carbon neutral,\* Costa Rica is pursuing power development centered on renewable energy under a basic policy for power sector development focused on the early mainstreaming of renewable energy to reach carbon neutrality by 2021.

In advance of this loan agreement, JICA, the Government of Costa Rica and ICE signed a cooperation agreement (C/A) on November 19, 2013, concerning the Guanacaste Geothermal Development Sector Loan covering multiple Japanese ODA loan projects with the object of constructing multiple geothermal power plants in Guanacaste Province. On August 18, 2014, a loan agreement for the Guanacaste Geothermal Development Sector Loan (Las Pailas II Geothermal Project) was signed, and the current project is the second sub-project to be implemented under the C/A. Through this project, JICA will assist in meeting the power demand and fighting climate change in Costa Rica which aims for both economic growth and environmental conservation.



signing ceremony

\* The concept of reducing the amount of carbon dioxide produced by humans to below the amount that is absorbed and then maintaining that balance.

### 1. Terms and Amount of Loan

Project title	Amount (million yen)	Annual interest rate (%)		Repayment period (years)	Grace period (years)	Procurement
		Project	Consulting services			
Borinquen I Geothermal Project (Guanacaste Geothermal Development Sector Loan)	25,991	0.6	0.01	40	10	General untied

### 2. Executing Agency

Instituto Costarricense de Electricidad  
Address: Apdo 10032-1000, San José, Costa Rica  
Phone: +506-220-7940, fax: +506-220-8233

### 3. Planned Implementation Schedule

- (1) Completion of project: January 2023 – when commercial operation begins
- (2) Consulting services (including preliminary and detailed design work): Contract scheduled for September 2017
- (3) Tender announcement of initial procurement package for international competitive bidding on project construction:  
Procurement package title: Equipment of Power Plant for ICB  
Planned release date: November 2018