



## PUBLIC-PRIVATE PARTNERSHIPS BRIEFS

## Kenya: Olkaria III Geothermal



## Overview

In Kenya, where only 25 percent of the population has access to electricity, the World Bank Group is supporting the government's Least Cost Power Development Plan, which calls for an increase in the number of independent power producers (IPPs) and a more diversified energy mix. The program benefits from a combination of guarantees from the Multilateral Investment Guarantee Agency (MIGA), guarantees from the International Development Association (IDA), and financing from the International Finance Corporation (IFC). These instruments are playing an important role in increasing investor confidence and mobilizing the long-term financing needed to construct power plants.

This series showcases how the World Bank Group supports the development and implementation of public-private partnerships. This support comes in the form of public sector loans, private sector finance, sector and transaction advice, guarantees, and output-based aid.

## Background

The Kenyan government's plan called for a series of thermal and renewable IPPs to replace the expensive, diesel-fired rental power plants currently in use. The first IPPs in the program will be heavy-fuel oil plants, but subsequent IPPs will use only low-carbon resources such as geothermal and wind, and the thermal plants will transition to peak-load operation. The challenge for the government was attracting investors and lenders to deliver the program in the absence of sovereign guarantees, which were not possible under an agreed-on International Monetary Fund program.

## Project Description

Olkaria III is located in the Olkaria geothermal field of the Rift Valley, 90 kilometers northwest of Nairobi, and is one of a series of geothermal developments. It is the only privately operated plant in the field. Olkaria I, II, and IV are owned by Kenya Electricity Generating Company (Kengen), a parastatal company owned 100 percent owned by the Government of Kenya.

The Olkaria III project involved the expansion of a base-load geothermal power plant. The plant came online with 8 megawatts in 2000—becoming the first privately funded and developed geothermal project in Africa. The plant has undergone several expansions, bringing the current total generation capacity of the complex to 110 MW with the completion of phase three in February 2014. Electricity generated by the plant is sold under a power purchase agreement with the national power transmission and distribution

utility—the Kenya Power & Lighting Company Limited.

The phase three expansion was financed with a \$310 million debt facility provided by the Overseas Private Investment Corporation (OPIC).

## World Bank Group Role

MIGA has been supporting the facility since 2000. The agency first provided a guarantee to Ormat Holding Corporation for its equity investment in OrPower 4, Inc., the project sponsor in 2000. Most recently, in 2011, MIGA issued a guarantee of \$99 million to Ormat Holding Corporation of the Cayman Islands for its equity investment in phase three. The guarantee is for a period of up to 15 years and covers the risks of transfer restriction, expropriation, and war and civil disturbance. This guarantee replaced the earlier MIGA guarantee covering investments into the first and second phases of the project.

## Outcomes

The Least Cost Power Development Plan is expected to move Kenya away from a historical reliance on hydropower for the bulk of its power generation, alleviating power shortages that have hampered economic growth in Kenya. The government goal is to triple the national electricity supply of dependable energy to 3,000 MW by 2018, with emphasis on the development of alternative power sources—especially geothermal. This project is a step in this direction.



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