Kenya: the Olkaria geothermal plant ::: Solutions for a stable climate :::

Posted on September 14, 2005

The Olkaria II plant in Kenya's Rift Valley, inaugurated in March 2004, is the first geothermal power station in Africa. It generates electricity by pumping water down to volcanic hot areas and using the steam that produces to drive turbines.

The Olkaria II plant in Kenya's Rift Valley, inaugurated in March 2004, is the first geothermal power station in Africa. It generates electricity by pumping water down to volcanic hot areas and using the steam that produces to drive turbines.

Funded by the World Bank and the state-owned KenGen electricity company, Olkaria II involved the construction of an integrated steamfield and power plant with a capacity of 70 MW.

Kenya has a potential 2000 MW of geothermal energy in the Rift Valley. This could replace oil-based power plants in the country's current development plans, according to World Bank country director, Makhtar Diop.

Diop reaffirmed the World Bank's support for geothermal energy as a clean source of electric power, adding that electric power development was "crucial in reducing poverty."

A huge milestone for African geothermal

KenGen is the leading electric power generation company in Kenya, producing about 80% of the

country's electricity.

The company uses various sources to generate electricity including hydro, geothermal, thermal and wind.

"By developing geothermal energy, Kenya will not only have clean power, but also save on foreign exchange," according to KenGen managing director Edward Njoroge.

Kenyan diesel power plants use imported fuel oil.

Olkaria project manager, Darryl Judkins, said it was "a huge milestone" for geothermal energy in Africa in general and for Kenya in particular.

"The power station is modern, reliable, well integrated with the National Park in which it sits, and it is earning good revenue," he said.

Olkaria has also become a tourist attraction in itself, boosting revenue for the Kenya Wildlife Service.

Olkaria I began to be commissioned in 1981, with three 15 MW machines.



The Olkaria plant in Kenya's Rift Valley