

# OLKARIA 3

## OLKARIA 3 EXPANSION PROJECT 15 MW GEOTHERMAL POWER PLANT



*Renewables*



Olkaria Geothermal Project is situated within Hell's Gate National Park 120KM from Nairobi, Kenya.

The country hopes to derive 29% of its energy from geothermal sources by 2030 (from 15% as of 2015). This is essential to providing low-cost, and especially stable energy supply because hydro-electric plants have been subject to droughts.

In line with this strategy, geothermal capacity in Kenya doubled between 2013 and 2015, and the Kenyan Government estimates that energy costs have been reduced by 30% because of the development of geothermal resources. Our teams' expertise and experience have enabled the mechanical and piping installations work including air cooler condenser, turbine and generator, motive fluid tank, firefighting systems, steam gathering piping installations, insulation works and modification of early generation plant and existing plant ties ins.

Now completed, the returns of the project to Kenya have been substantial. According to a report by Climate Policy Initiative, Olkaria III provides electricity at a 13% lower cost than comparable projects in Kenya. This same report estimates that the Olkaria III project has caused a reduction of 3% to 4% in carbon emissions from the Kenyan energy sector by replacing fossil fuels with geothermal energy.

### PROJECT SUMMARY



**Client:**  
ORMAT TECHNOLOGIES INC.



**Engineer:**  
ORMAT TECHNOLOGIES INC.



**Contractor:**  
CSI ENERGY GROUP



**Contract Value:**  
USD 2.15 MILLION



**Duration:**  
NOVEMBER 2017 to  
APRIL 2018