

Rwanda opens pioneering methane electricity plant

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A methane extraction platform seen from the Kivu Lake in Gisenyi, Rwanda on April 17, 2016

Rwanda formally opened a unique methane power plant Monday with hopes that it will one day provide 60 percent of the country's electricity, according to its operator.

The generation station on Lake Kivu in Rwanda's west will also help

reduce the risk of a potentially catastrophic natural disaster should the lake's vast quantities of methane and [carbon dioxide](#) be disturbed by an earthquake.

President Paul Kagame joined managers from the state-run Rwanda Energy Group (REG) for the opening ceremony of the \$200 million (145 million euros) "KivuWatt" project, REG manager Augusta Mutoni told AFP.

US-based power company ContourGlobal started construction of the plant located in Kibuye, close to the border with the Democratic Republic of Congo, after the government ran a successful pilot that produced about two megawatts (MW) of electricity from the methane in the lake.

The Kibuye plant has produced 26 MW since December.

The pioneering new system uses a floating platform 13 kilometres (eight miles) off the shoreline that employs a vacuum to suck up methane from 300 metres below the waterline instead of using drilling as with traditional methane extraction projects.

Methane is then separated from water and carbon dioxide (CO₂) and shipped to the shore via an underwater pipeline while excess CO₂ is pumped back into the [lake](#).

ContourGlobal hopes to build three more platforms at Kibuye by 2018 or 2019 which will increase the capacity of the "KivuWatt" project by 100 MW, a major boost to Rwanda's current nationwide production capacity of just 160 MW.

Lake Kivu, along with Cameroon's Lake Nyos and Lake Monoun, is one of three lakes in the world to have dangerously high concentrations of

gasses like [methane](#) that if released suddenly could cause a disastrous explosion, after which waves of CO₂ could suffocate people and livestock.

In 1984, an eruption killed 37 people around Lake Monoun, then in 1986 a similar disaster at Lake Nyos claimed more than 1,700 lives.

The "KivuWatt" scheme was largely financed by private capital, though some 45 percent of the funding came in the form of loans from international development institutions.

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