



GivePower's solar-powered desalination farm | Photo source [GivePower](#)

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## SOLAR-POWERED WATER FARM OPENS IN KENYA



SCIENCE

### An NGO has developed a solar power desalination plant that can provide affordable drinking water

**Spotted:** The people living in the Kenyan fishing village of Kiunga have been forced to drink, cook and bathe in contaminated, brackish water for years. Last year, NGO GivePower installed a solar water farm in the village. The desalination system now provides clean water to all of the village's 3500 residents, at a cost of around \$20 per person.

Kiunga's location along the coast makes it an ideal site for the desalination farm. Housed in 20-foot shipping containers, it is portable, and its solar panels produce 50 kilowatts of energy – enough to power two water pumps. Seawater is then channelled through a filtration system to produce around 75,000 litres of drinkable water every day.

The solar water farm is capable of producing a higher quality of water than most ground well systems, without depleting the water table. This makes the system more sustainable and environmentally-friendly. The village previously relied on the same water used by the animals, which was often contaminated by parasites. Access to clean water has also reduced the levels of illness in the village.

GivePower has previously focused on developing solar-powered energy systems for schools, and clinics in developing countries. It is now working to develop additional locations for the desalination plants.

As global warming continues to gain pace, tackling water scarcity is becoming increasingly vital. Springwise has seen a number of innovations aimed at producing fresh-water sustainably. These include low-energy condensers to make water out of thin air and a novel way to use data to improve [water management](#).

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## **Takeaway:**

According to the World Health Organisation, around one in three people around the globe lack access to safely managed drinking water, and around 144 million drink untreated surface water. Desalination normally requires a lot of energy, which makes it expensive. GivePower's solar-powered plants, however, lower this cost considerably. While not practical everywhere, they may offer a way for many communities to access clean, affordable fresh-water.