



The air flowing between the two layers is heated by the sun as it rises up to the top of the tent | Photo source [AQUA abib](#)

Innovation > Food & Drink > Solar-powered system turns salt water into drinking water

## SOLAR-POWERED SYSTEM TURNS SALT WATER INTO DRINKING WATER

 FOOD & DRINK

### The water treatment system uses solar energy to turn saltwater into fresh, drinking water and commercial salt

**Spotted:** Spanish engineering company Aqua Abib has created a system that uses solar energy to turn saltwater into potable water and commercial salt. It is the first commercial sustainable desalination system, according to the company.

The system, known as **SunAqua**, is designed to effectively use solar energy to heat saltwater until it evaporates. The clean water is produced from the condensation, while the leftover salt is collected separately for commercial use.

SunAqua consists of a **large tent-like structure**. The outside of the structure is covered by a transparent plastic layer on top and a black plastic layer on the bottom. The dual-layer system captures the heat of the sun three times more effectively than solar panels, according to the company.

The air flowing between the two layers is heated by the sun as it rises up to the top of the tent. It reaches a temperature of over 100 degrees Celsius, evaporating the seawater that is sprayed into the centre. Salt is collected from the evaporated water, which can be sold separately. The water vapour is condensed in the tent's central pipe, reverting to freshwater that can be treated to be used as drinking water.

Aqua Abib says single SunAqua unit has the potential to meet all water needs for 1,000 people or drinking water for over 2,500 people. The project, known as **Project SunAqua18**, is partially funded by European Union's Horizon 2020 research and innovation programme.

30th January 2020

Website: [aqua-abib.com](http://aqua-abib.com)

Contact: [twitter.com/aqua\\_abib](https://twitter.com/aqua_abib)

## Takeaway:

Today, one in nine people in the world lack access to safe water. Environmentalists predict the problem will get worse as the world's population grows. The Aqua Abib treatment system proposes a way to use the Earth's abundant saltwater resources to help avert a global crisis. If the system works as expected, it has the potential to provide easy-to-access water for communities with a minimum of infrastructure.

 [Infographic: Unsafe Water Kills More People Than Disasters and Conflict | Statista](#)

You will find more infographics at [Statista](#)