

Solar Water Desalination

Providing a Cost Efficient Process for Water Desalination & Purification using Solar Thermal Energy

Excessive costs, energy consumption make communities think twice about desalination as their solution. The only way desalination is a good option to solving the water crisis is if renewable energy is used, costs are lowered, and environmental protections are put in place for marine life.

Problem

Water shortage has created a big impact not only across industries but some of us have experience it firsthand impacting our daily lives.

How we solve it?

Creating a synergy between two great technologies like renewable energy and desalination to work together achieving a large-scale and viable solution.

Our Technology

We Integrate a multi-effect-distillation water treatment system to achieve high energy efficiency and 10% water extraction using high temperature solar thermal energy.

40%

of the world population affected by water scarcity¹

2.3B

people expected to be living in areas with severe waterstress by 2050²

500B

estimated total cost of water insecurity to the global economy³

55%

drop in globally available fresh water per capita since 1960⁴

¹ United Nations, (n.d.) Water. <http://www.un.org/en/sections/issues-depth/water/>

² OECD, 2012. Environmental Outlook to 2050: The Consequences of Inaction, OECD Publishing, Paris. <http://www.oecd.org/env/indicatorsmodelling-outlooks/oecd-environmental-outlook-1999155x.htm>

³ WWAP (United Nations World Water Assessment Programme), 2016. The United Nations World Water Development Report 2016: Water and Jobs. Paris, UNESCO. <http://unesdoc.unesco.org/images/0024/002439/243938e.pdf>

⁴ Calculated from FAO AQUASTAT (<http://www.fao.org/nr/water/aquastat/main/index.stm>) using Renewable internal freshwater resources per capita (cubic meters)