

Solar Desalination

Harvesting water from the sun



Our Perspective

AES' s vision towards the future

AES' s vision towards solar desalination

Water scarcity is a real problem facing humanity future. Our aim is to make water affordable to all humans without relying on non-renewable energy sources. Desalinate the water the way nature do it.

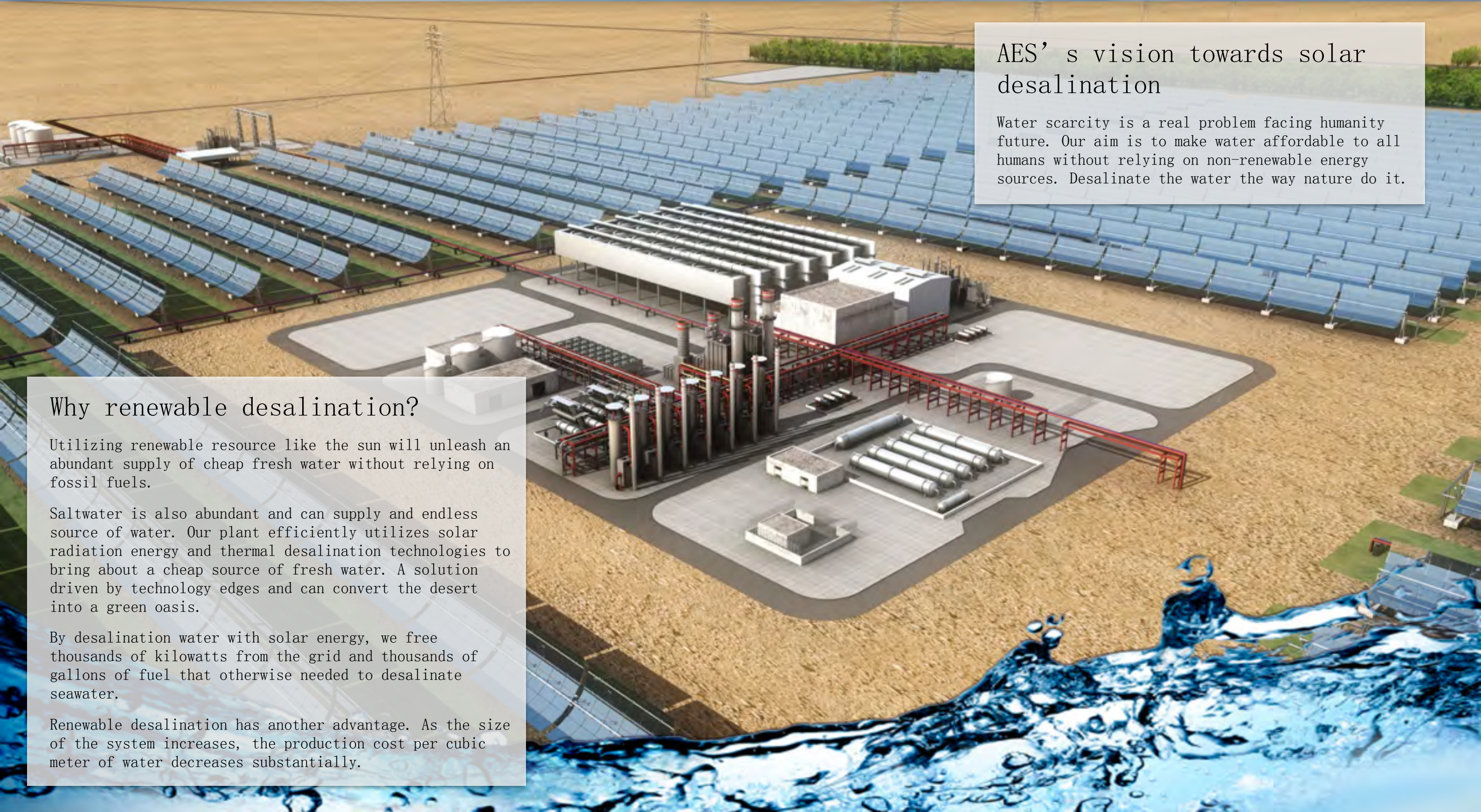
Why renewable desalination?

Utilizing renewable resource like the sun will unleash an abundant supply of cheap fresh water without relying on fossil fuels.

Saltwater is also abundant and can supply an endless source of water. Our plant efficiently utilizes solar radiation energy and thermal desalination technologies to bring about a cheap source of fresh water. A solution driven by technology edges and can convert the desert into a green oasis.

By desalination water with solar energy, we free thousands of kilowatts from the grid and thousands of gallons of fuel that otherwise needed to desalinate seawater.

Renewable desalination has another advantage. As the size of the system increases, the production cost per cubic meter of water decreases substantially.



Unique Design

New approach to an old problem

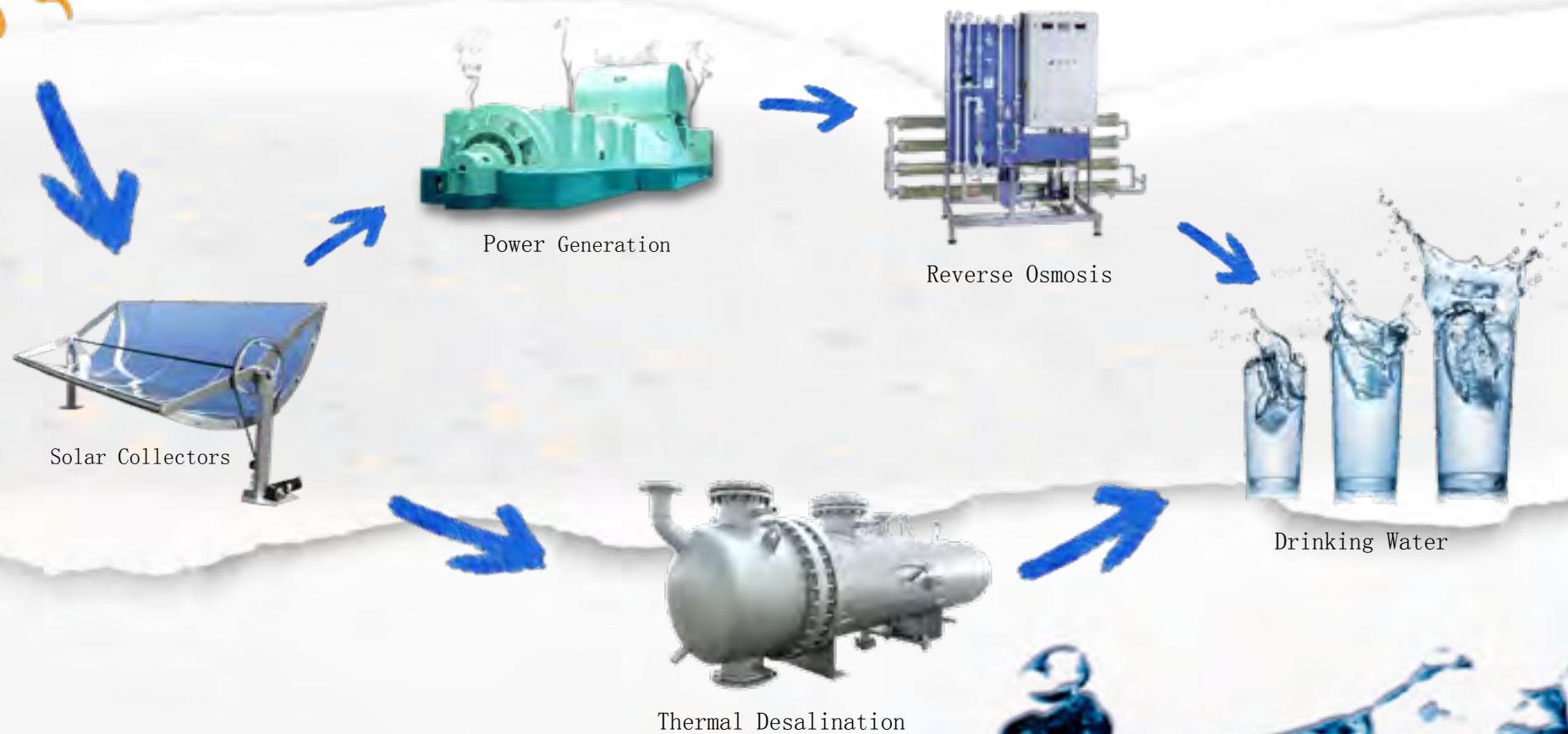


Our design is unique

Our system does not use electrical energy like Reverse Osmosis desalination. It uses thermal desalination with multi-effect distillation. So it is possible with our technology to recover substantial amount of fresh water from brackish water approaching 90% recovery.

The brine resulting is very concentrated with salts reaching 20% salts content.

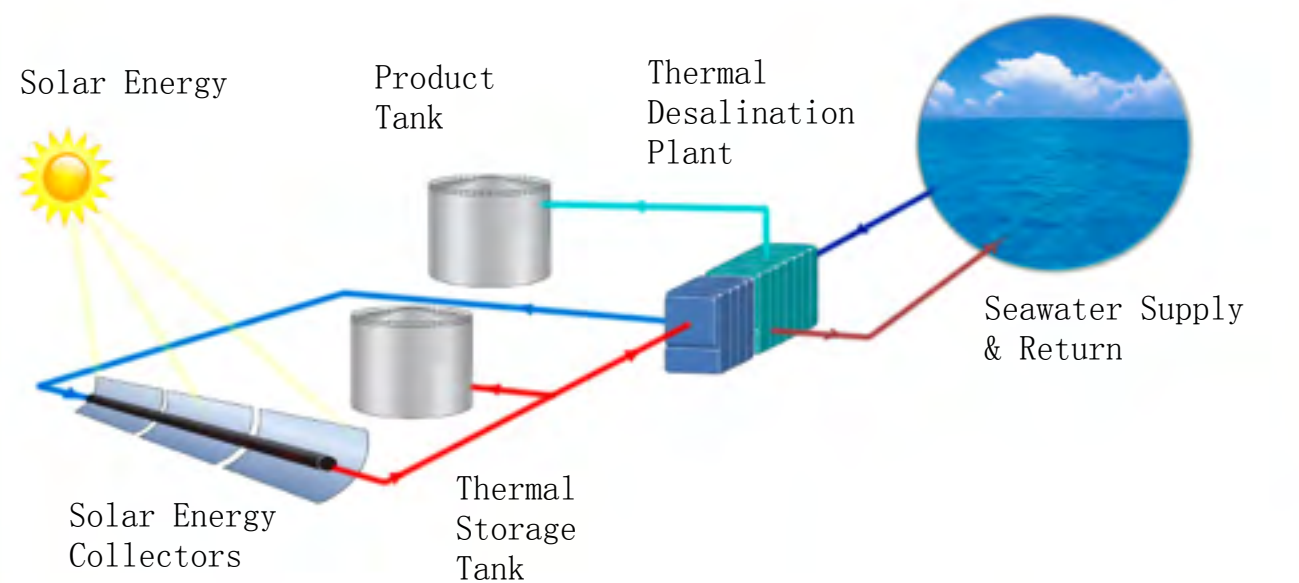
The system can recycle back the water and create a closed loop with minimal fresh water intake.



System Advantages

Special Features

Typical Solar Desalination Plant



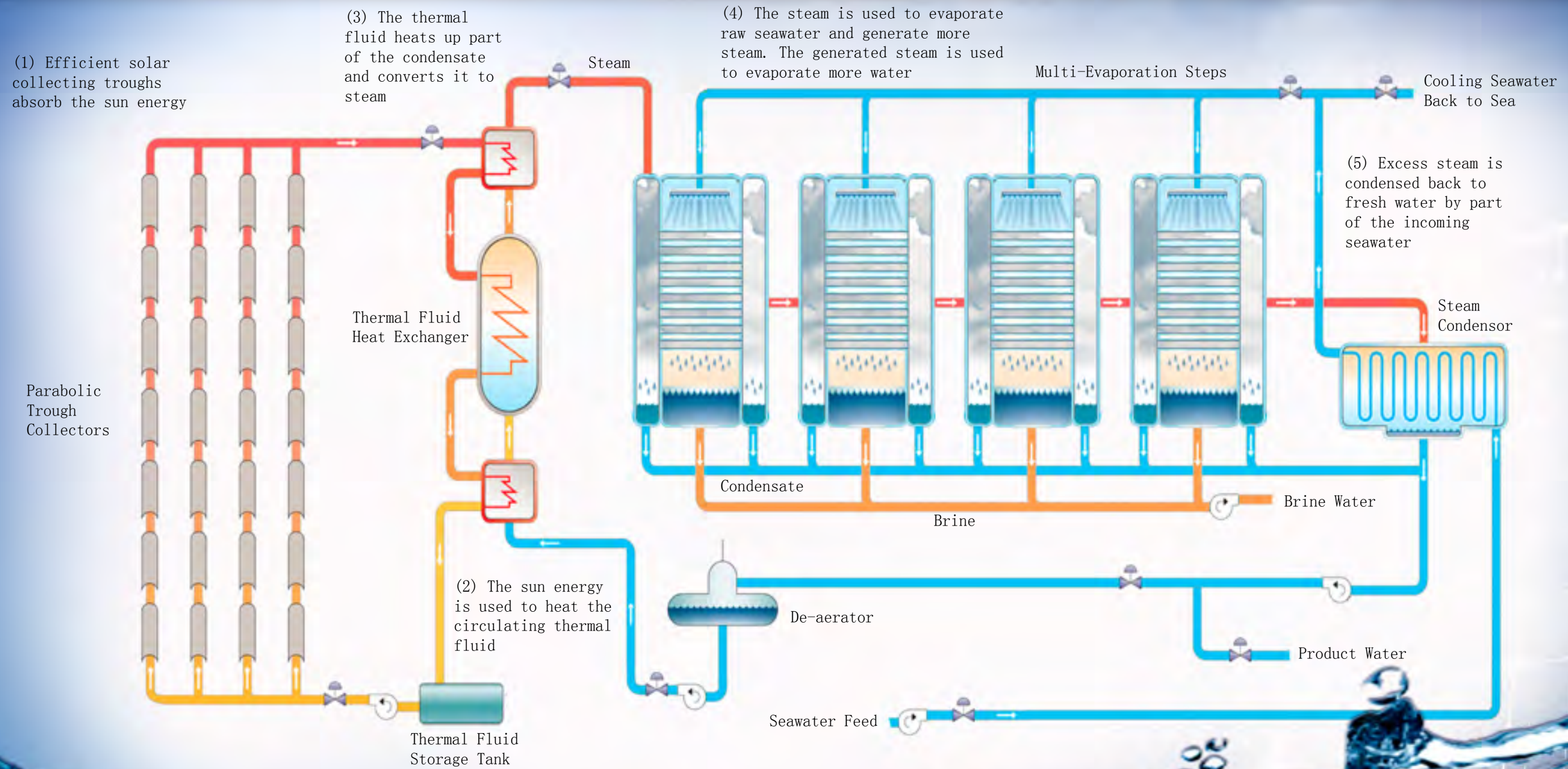
Full Utilization of energy

Advantages of our system

- Very cost effective
- Can utilize almost all types of raw water, seawater, brackish water, well water, and industrial wastewater.
- Very energy efficient, utilizes free solar energy
- Can be modified to produce very low amount of reject water or even zero discharge
- Low requirement of infrastructure
- Modular design can be expanded to large scale implementation

Block Diagram

Explanation of the process



Versatile Approach

We can adapt to your needs

Different ways to harvest energy from the sun

We are not limited to one way to obtain the most of the sun energy and use it to produce water.

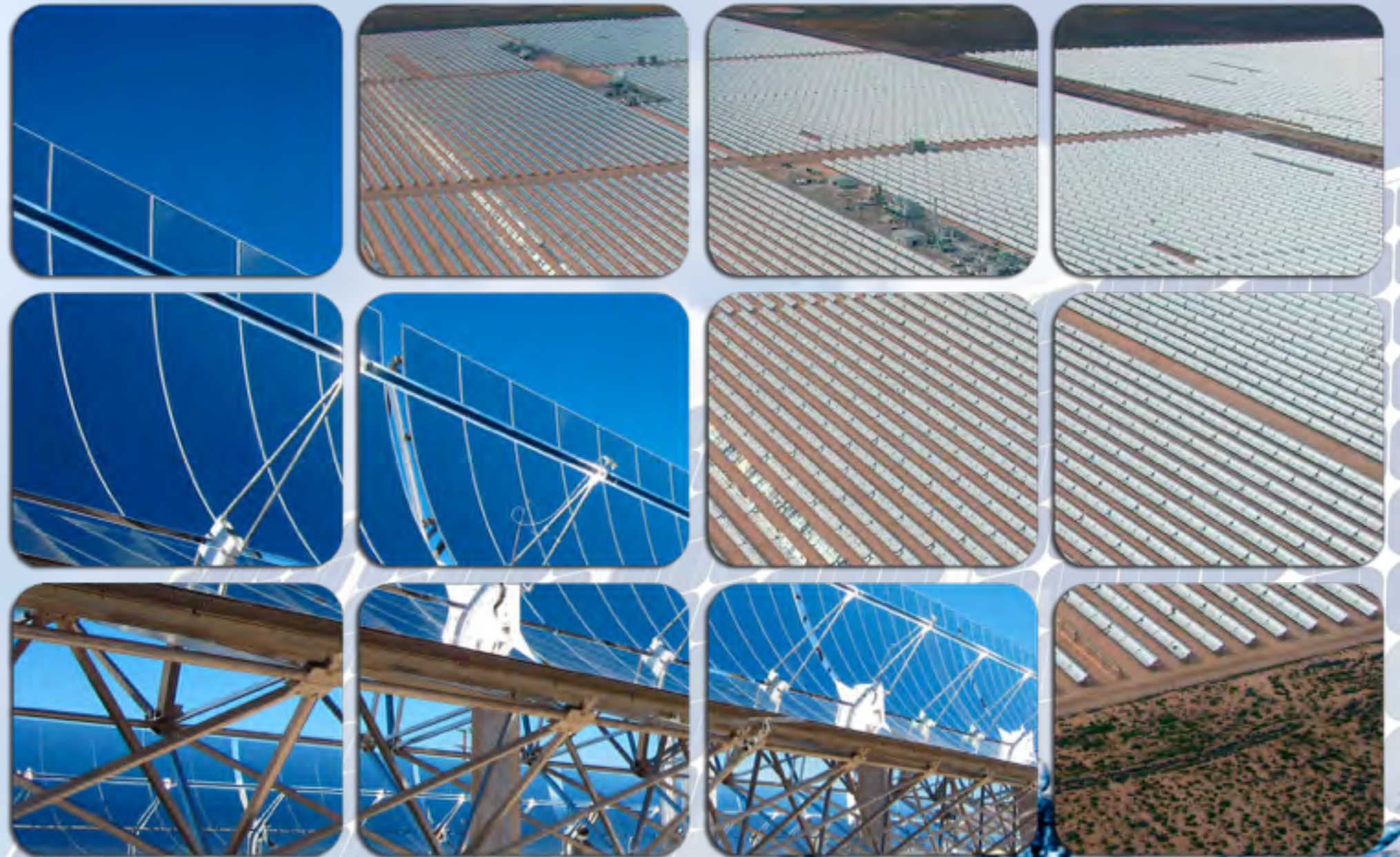
We can use:

A) Photovoltaic

B) Concentrated Solar Power

- Parabolic Troughs
- Solar Tower
- Fresnel Collection Panels

C) Solar Ponds



Depend on us

For a reliable solution

AES Approach

We always approach the problem from client perspectives.

Teams are dispatched to analyze the site and client situation. A proper solution is envisaged, and tailor-made to fit the client situation.

From inception to execution, AES is doing all in-house, relying on many years of hands-on experience in the business of desalination.

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