



SOLAR WATER
SOLUTIONS



The most resource-efficient water purification system

Iran – Finland Drinking Water Treatment webinar
14 February 2022

SOLAR WATER SOLUTIONS



About Solar Water Solutions

Established in Finland 2015, the company aims to fill the need for affordable and sustainable drinking and irrigation water in rural areas.

Solar Water Solutions serves customers through partner networks already in Australia, Indonesia, Kenya, Oceania and Scandinavia.

Listed with a special mention on the TIME's Best Inventions of 2020, Solar Water Solutions' technology enables the use of solar energy directly from PV panels in reverse osmosis system without any batteries or energy storage.

Our unique ANVS® valve system keeps the pressure constant regardless of the feed water inflow fluctuations bringing energy and resource efficiency savings in off-grid desalination.

Why Solar Water Solutions?

1

SOLAR OFF-GRID

Desalination powered by just the sun in off-grid, or unstable grid locations

2

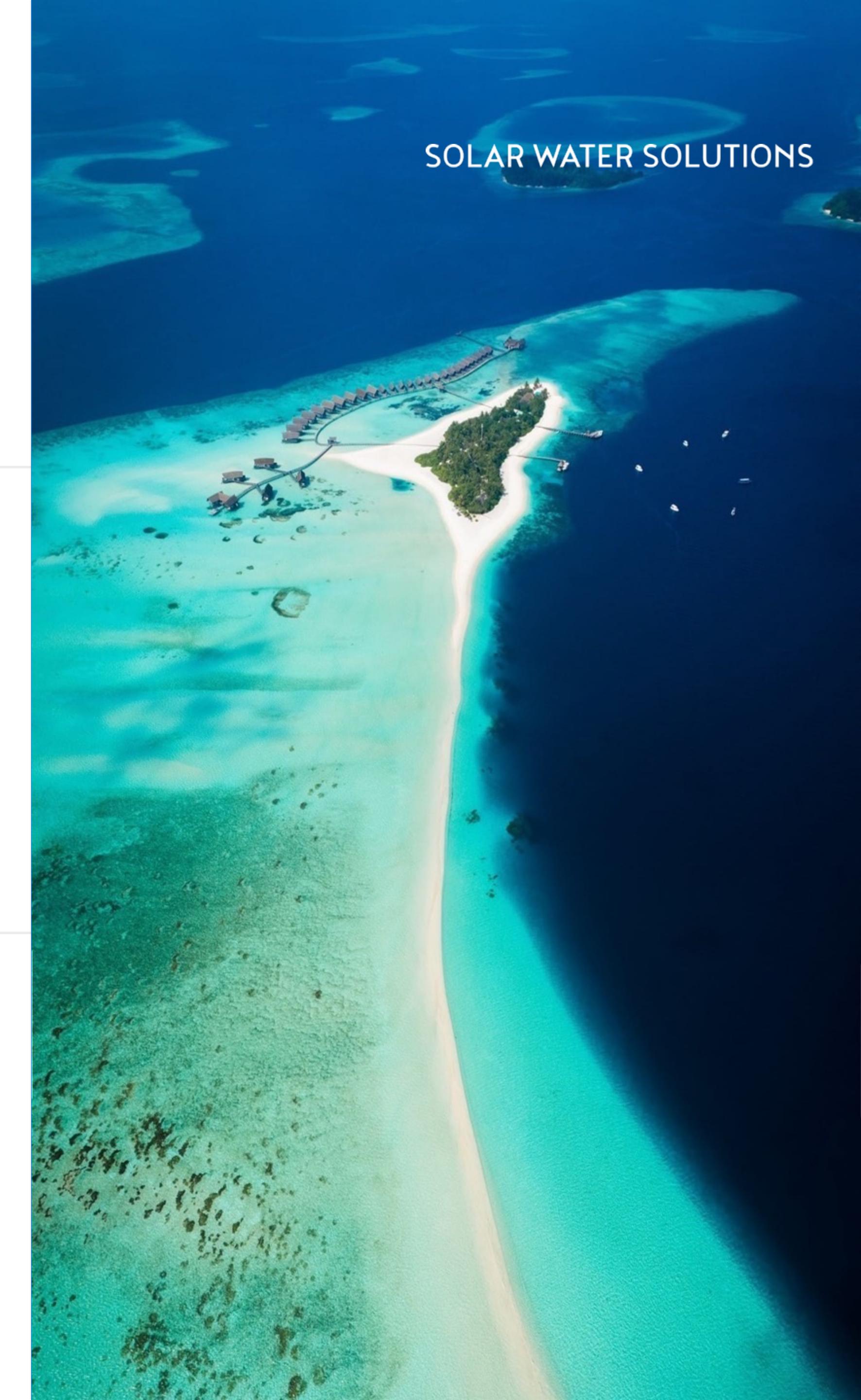
SUPERIOR EFFICIENCY

ANVS® technology brings new energy efficiency savings of 50%, and increases the recovery rate to a whole new level of up to 95%

3

COST SAVINGS

Off-grid solar-powered water can be produced with even 0,5 €/m³



SOLAR WATER SOLUTIONS

Savings in energy and costs in off-grid desal

- **Lower CAPEX** by eliminating the need for energy storage investment (batteries)

Other solar-powered systems require batteries which increases CAPEX X2

- **Lower OPEX** by using renewable energy

OPEX savings 30–90%, CAPEX savings 50–70%



SOLAR WATER SOLUTIONS



Seawater and Brackish Water Products

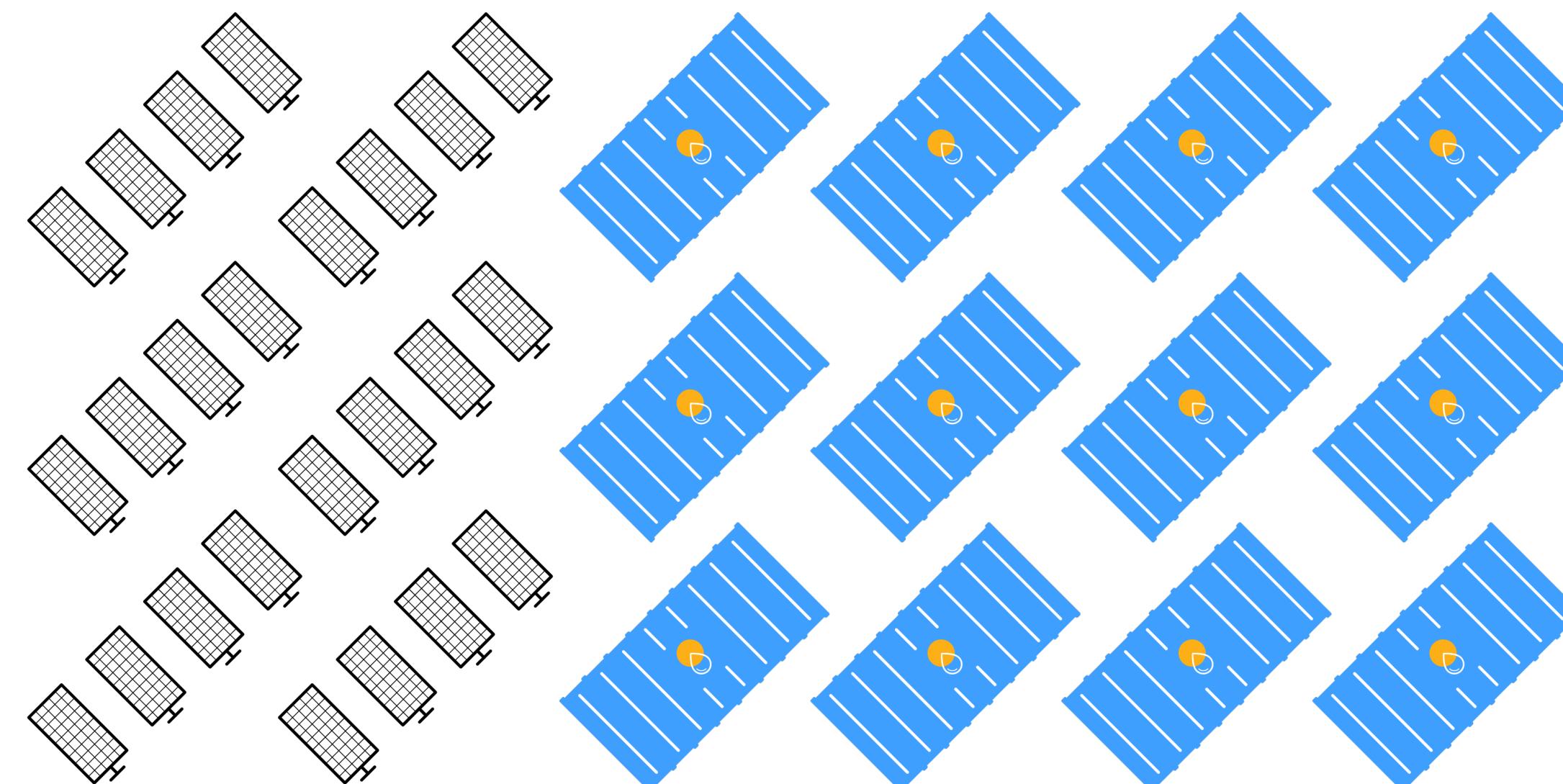
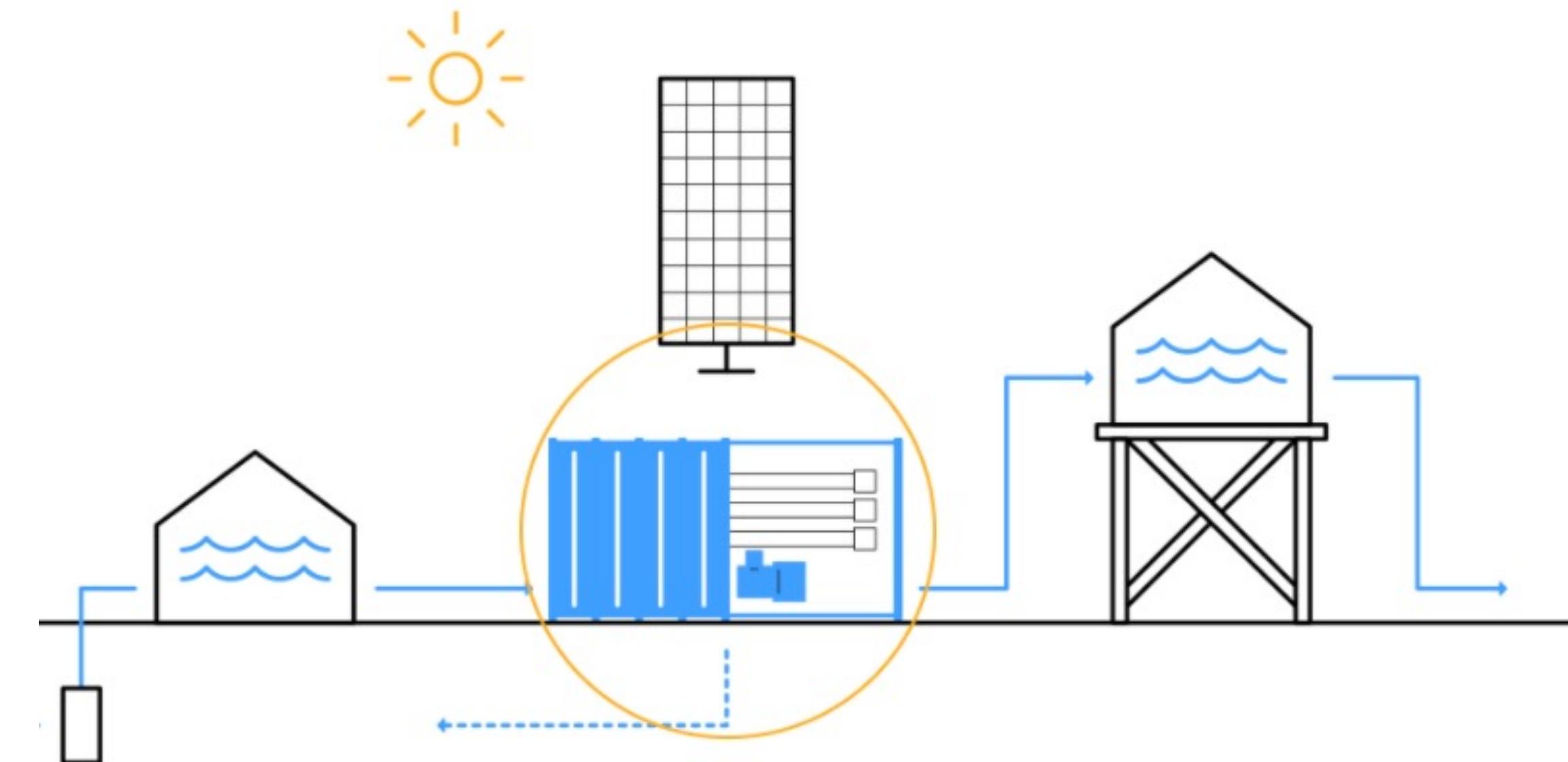
Containerized and on-a-trailer systems with capacities up to 1000 m³/day

- ✓ Direct solar run, no batteries needed
- ✓ Easy switch to grid/generator for non-solar hours
- ✓ Automatic operation, no on-site adjustments
- ✓ Pre-filters and RO membranes are easy to maintain
- ✓ Easy and quick installation, pre-installed pipe fittings
- ✓ Superior safety features with water TDS metering
- ✓ Excellent water quality meets highest WHO standards
- ✓ Robust, reliable components ensure optimum performance

Case Example: BWRO

A SCALABLE STAND-ALONE SOLUTION

- ✓ Equipped with ANVS® + water saving recirculation system
- ✓ Solar/ grid power
- ✓ This SolarRO 1000 BW unit's recovery rate for groundwater (TDS 2000 mg/L) is 90%
- ✓ Single example unit produces 43000 L/h
- ✓ Recommended power of pv-panels 120 kWp





SOLAR WATER
SOLUTIONS

**Thank you for your time.
Now, let's get started.**

Contact:
Toni Korttila, Head of Manufacturing
toni.korttila@solarwatersolutions.fi

