



SOLAR WATER
SOLUTIONS

Affordable clean water with just the sun

Proposal for the Caribbean Clean Water Company
1102 Venetian West Nassau Bahamas
24 September 2021



SOLAR WATER SOLUTIONS

Solar Water Solutions (SWS)

- SWS is a technology provider of the most cost-effective, battery-less solar powered desalination system for mid-range capacities (150 – 1,000 m³/d).
- Units can provide attractive IRRs (approx 30%+)* due to ultra-low operating costs.

Selected references

140+ locations internationally!

Port of Hanko, Finland, 2016, SolarRO SW

Abu Dhabi, UAE, 2017, SolarRO SW

Kitui, Kenya, 2018, SolarRO BW

Leikosaari Island, Finland, 2018, SolarRO BW

Turkana, Kenya, 2019, SolarRO BW

UNAM Campus, Namibia, 2019, SolarRO SW

Riverside location, Vietnam, 2019, SolarRO BW

The Baltic Sea archipelago, Scandinavia 2019-2020, over 120 SolarRO MINI units for private villas.

Nzokani, Kenya, 2020, SolarRO BW

Bali, Indonesia, 2020, SolarRO SW

200 units to be installed in E. Africa

All systems operational!

* IRR is dependent on local electricity price for hybrid modes (solar and grid or solar and generator)

SOLAR WATER SOLUTIONS

Solar Water Solutions awarded in TIME's 2020 Best Inventions list

Our patented ANVS[®] (adaptive nozzle valve system) technology was selected as a special mention in TIME's Best Inventions of 2020.

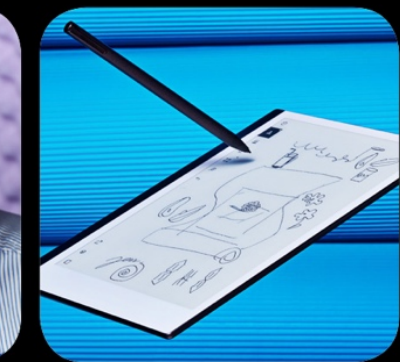
With this recognition, we are honored to continue taking action to achieve sustainable development goals by 2030.

ANVS[®] technology is the heart of our water purification system, enabling the most energy-efficient way to produce clean water with just the sun.

DOUBLE ISSUE

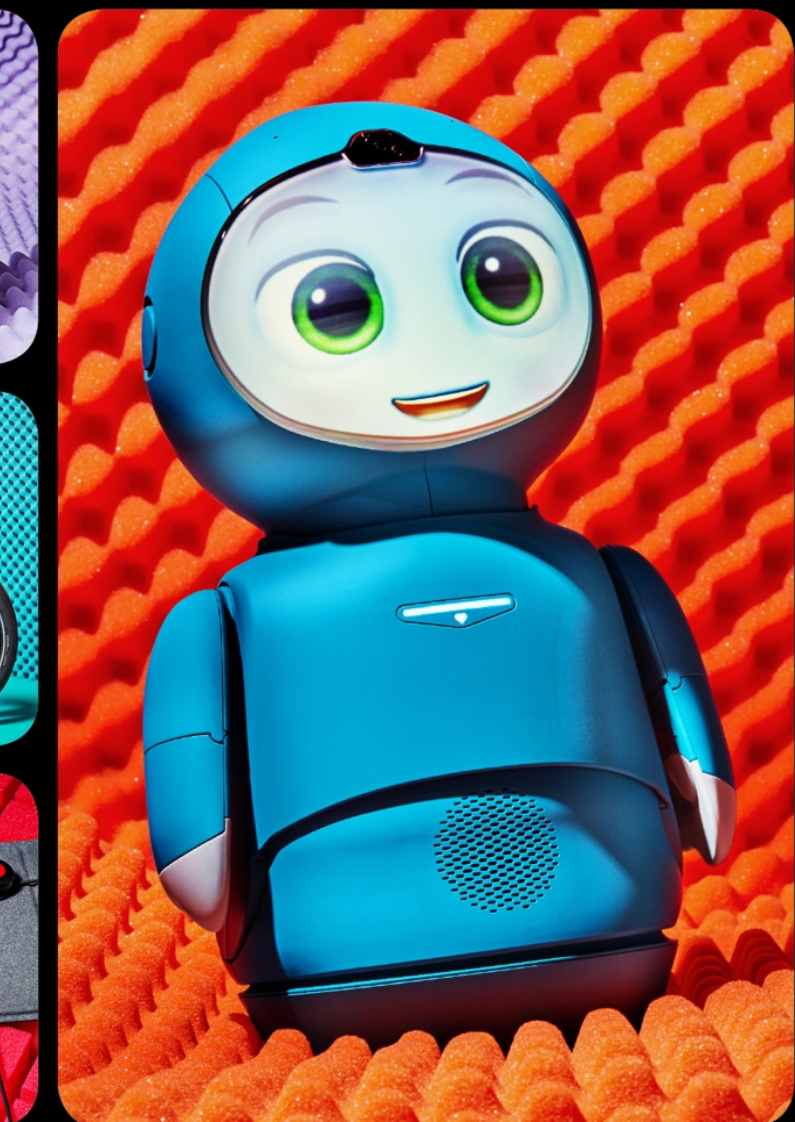
NOV. 30 / DEC. 7, 2020

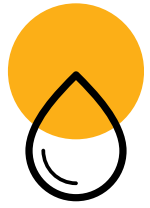
TIME



THE BEST INVENTIONS OF 2020

100 INNOVATIONS CHANGING HOW WE LIVE





Key benefits

1

Energy consumption and amount of PV panels reduced by 50% due to the patented mechanical ANVS® /ERD (energy recovery) system.

2

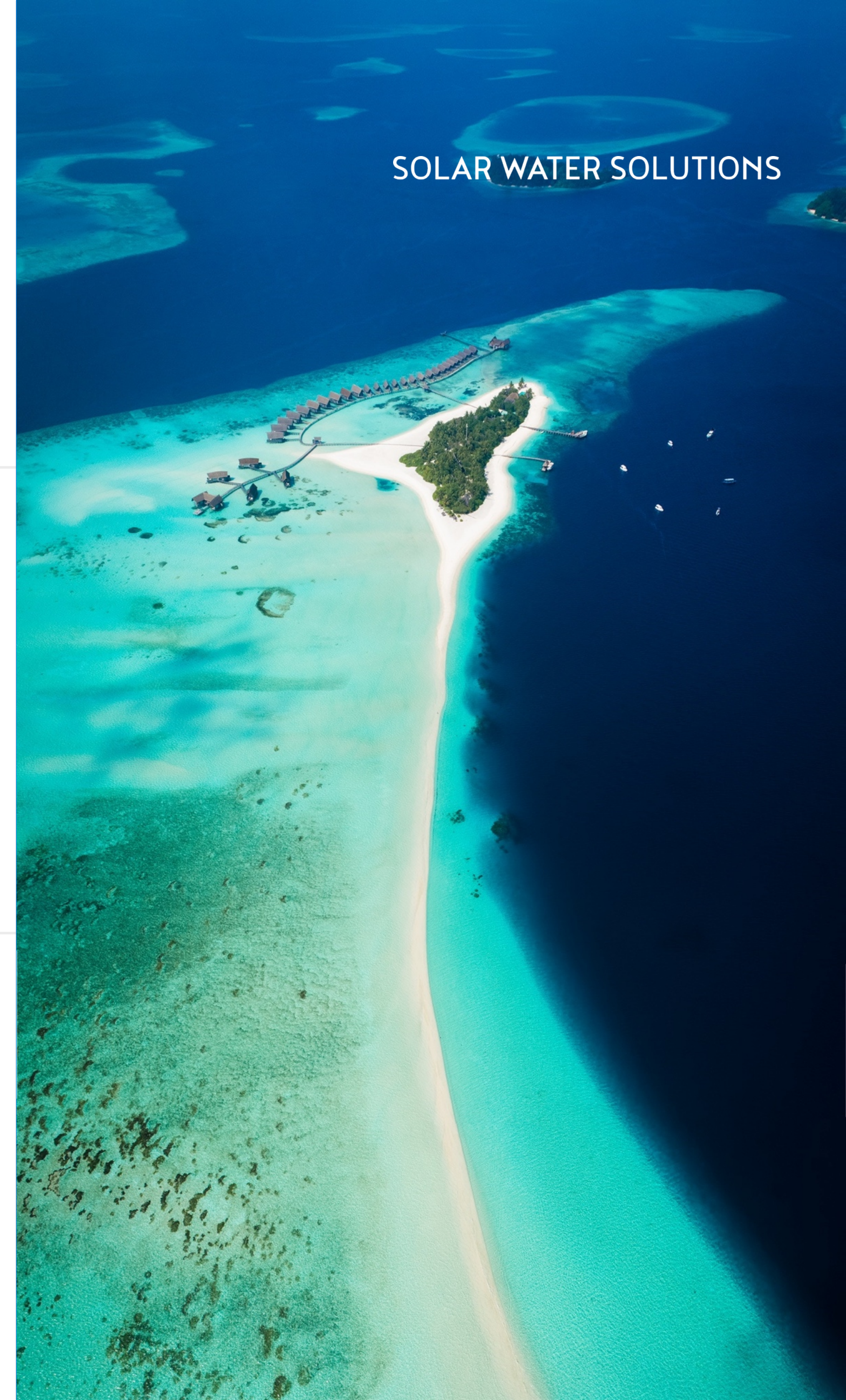
During the daily solar hours the power is taken directly from PV panels – no batteries or energy storage are needed. During the non-solar hours, power can come from the grid or a generator.

3

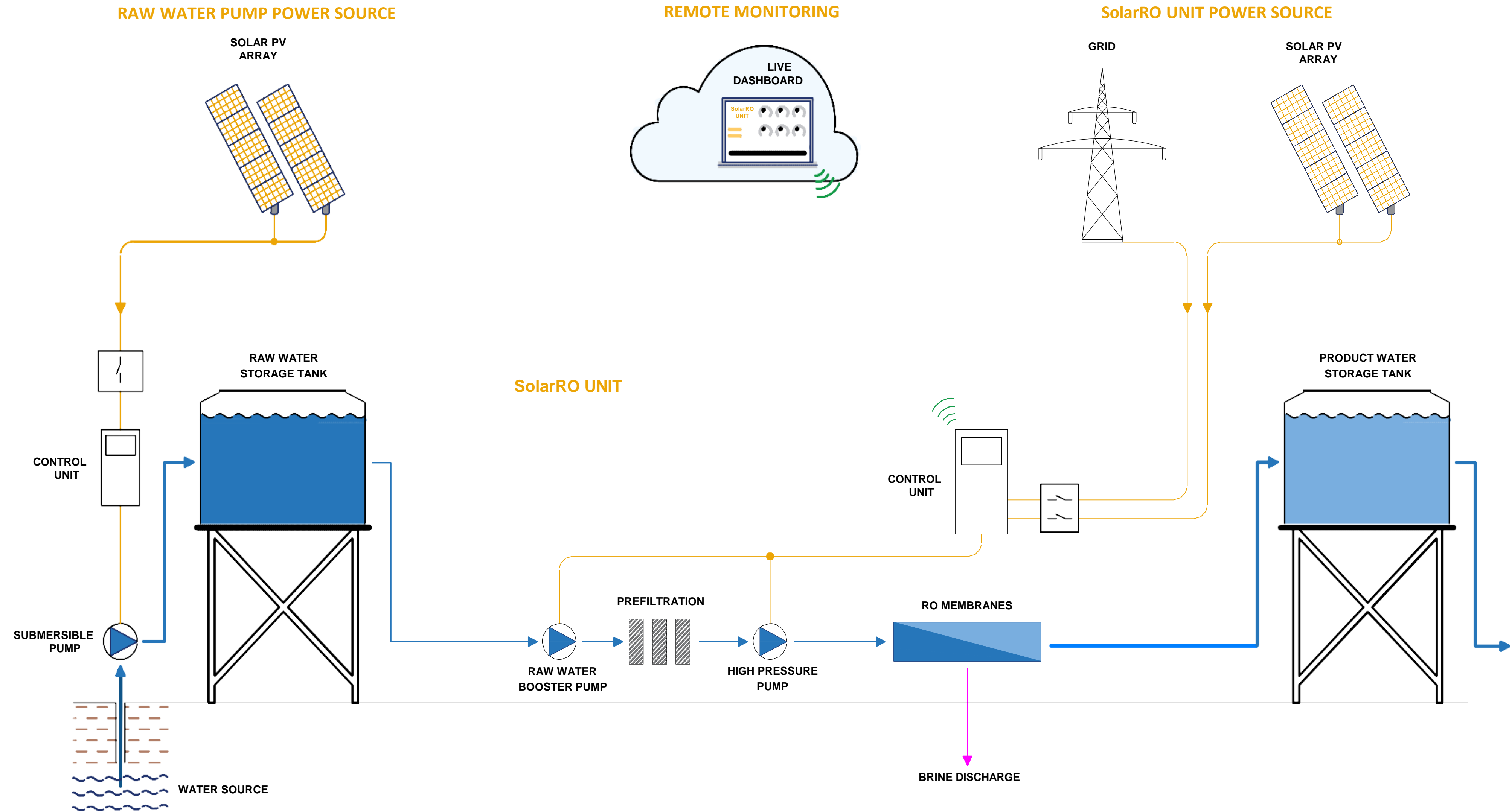
Water recovery rate is greater than 90% (whereas competitors can generate only 60-70% clean water)



SOLAR WATER SOLUTIONS

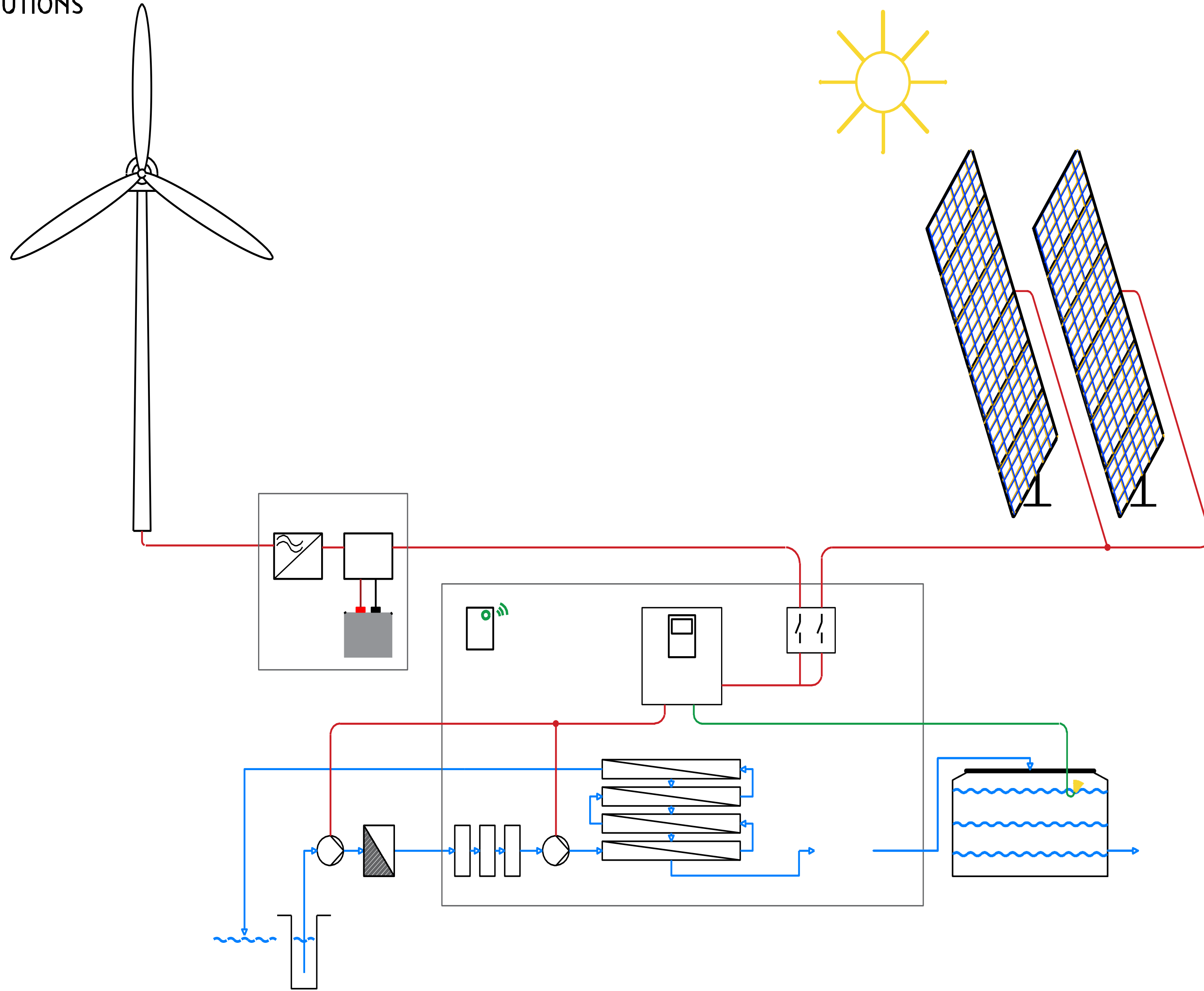


Solar Water Solution's Sample Set-Up



Power source can be changed from wind to solar

SOLAR WATER SOLUTIONS



INSTALLATION REFERENCES
STARTING UP Q1 2020

ECO-RESORT, LEMBONGAN
ECO-HOTEL, BALI
RURAL VILLAGE, KENYA



High-Quality Component Suppliers

Danfoss

ABB

 **MayTec**[®]

 **DOW**[®]

vacon

PURION[®]

xylem

WIKAI

Solar Water Solution's Financing Partners



Press Releases

CFM TO PARTNER WITH SWS TO SUPPORT DEVELOPMENT OF SOLAR-POWERED DESALINATION IN RURAL KENYA

December 2, 2020



Kenya seeks model for bankable solar desal

A Finnish company is set to roll out 200 decentralised solar desalination plants. It insists localised desal can be a commercial prospect.

Finnish solar desal company Solar Water Solutions has partnered with Dutch investment fund Climate Fund Managers (CFM) to finance and develop up to 200 desalination units in Kitui County in Kenya, enough to serve a population of 400,000 by 2023. The total invested by the pair will be €15 million.

Solar Water Solutions' off-grid units are powered by solar energy, without batteries. They will treat brackish water from boreholes, which consumers will be able to access through a "water ATM" using Kenya's ubiquitous mobile payment system M-Pesa. The units will each treat 10-13m³/d.



Antti Pohjola, Solar Water Solutions' CEO, said the deal was a breakthrough moment for the company. "We have been developing solar purification systems in Kenya since 2016 and this is the perfect match, with a partner who is also a developer," he told GWi. "CFM aren't just a passive investor; they have a wide range of expertise and experience in emerging markets. I think it ticks all the boxes so that we can have a successful project."

Although Solar Water Solutions has installed 140 units globally, most are located on small islands in Scandinavia. Its largest unit is a 3.5m³/hr SWRO unit in Namibia, and it has ten units already installed in Kenya.

Under the agreement, Climate Investor Two (CI2), CFM's investment fund, will provide 75% of the up-front investment, which will be complemented by in-kind contributions from Solar Water Solutions and early-stage funding from the Dutch Fund for Climate and Development.

The partners will first run a pilot phase with five to ten units. The main goal will be to establish a sustainable business model for the project. All revenue will be generated through water sales, and so identifying a viable tariff will be key (production costs for Solar Water Solutions can go under \$1.00/m³). The going rate for a 20L jerrycan of untreated raw water in the region is KES5-30 (\$0.04-0.26, the equivalent of \$2.25-13.00/m³), although bottled water costs several times more.



Confidential

SOLAR WATER SOLUTIONS

We support our local partners with:

- Technically advanced engineering team
- Regular training locally
- Installation start-up service
- Remote monitoring
- Sales, and marketing
- ISO certified processes ensuring high ESG quality, quick delivery, and easy service.



CASE NAMIBIA: THE SOLAR-RO SYSTEM UP-AND-RUNNING AT THE NAMIBIA UNIVERSITY CAMPUS, PRODUCING CLEAN WATER FROM THE ATLANTIC OCEAN., POWERED BY SOLAR.



SOLAR WATER
SOLUTIONS

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

cara.tobin@solarwatersolutions.com

Solar Water Solutions
Keilaranta 1, FI-01250, Espoo, Finland

