SOURCE™

SUNLIGHT + AIR = WATER

6th Water Arabia Conference

Vision 2030

"We will seek to safeguard our environment by promoting the optimal use of our water resources and by utilizing […] **renewable water**."

Challenge

To produce drinking water that:

- **tastes** good
- doesn’t rely on **single-use plastic**
- **Renewable energy** powered

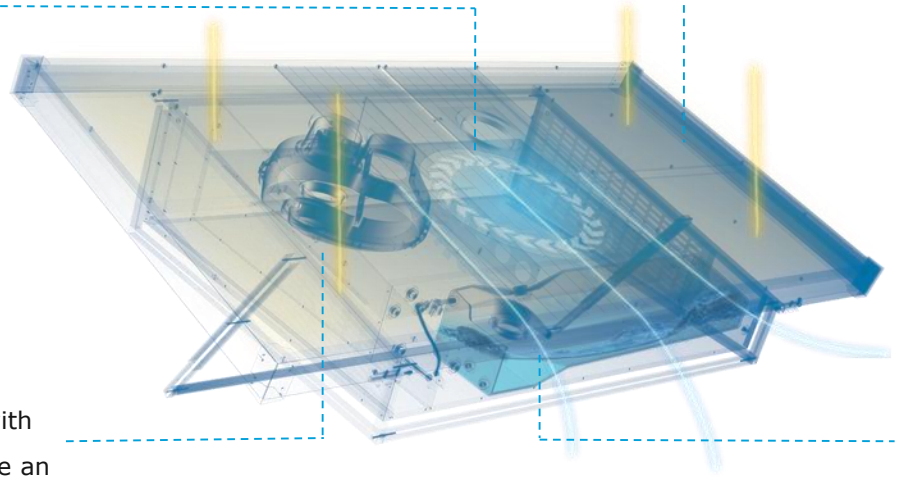
Solution: SOURCE

- water made from **sunlight + air**
- Premium **taste & quality**
- 100% **off-grid**
- 100% **solar powered**

How Does SOURCE Work?

1

Using solar PV, SOURCE takes in ambient air via fans & collects water vapor from that air onto a hygroscopic material



2

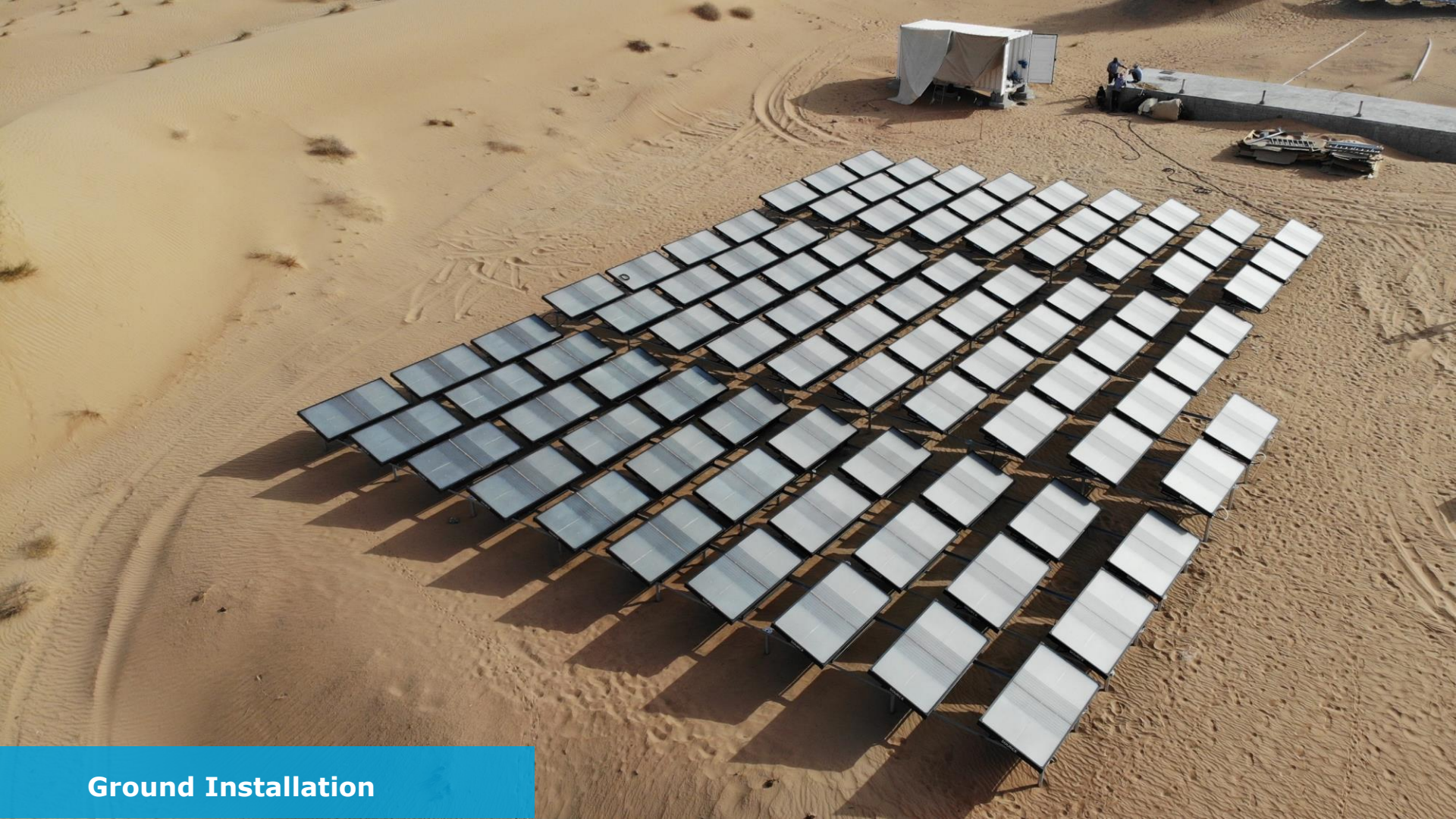
With heat from the sun, SOURCE converts water vapor collected into liquid water, made pure

3

The pure water is mineralized with magnesium & calcium to achieve an ideal taste profile

4

Sensors in each Hydropanel array monitor & optimize the water to maintain quality



Ground Installation

Rooftop Installation

Water Quality

World Class Quality Standards

Balanced pH of 8 and tested against 139 parameters to meet and exceed quality standards for drinking water across the world

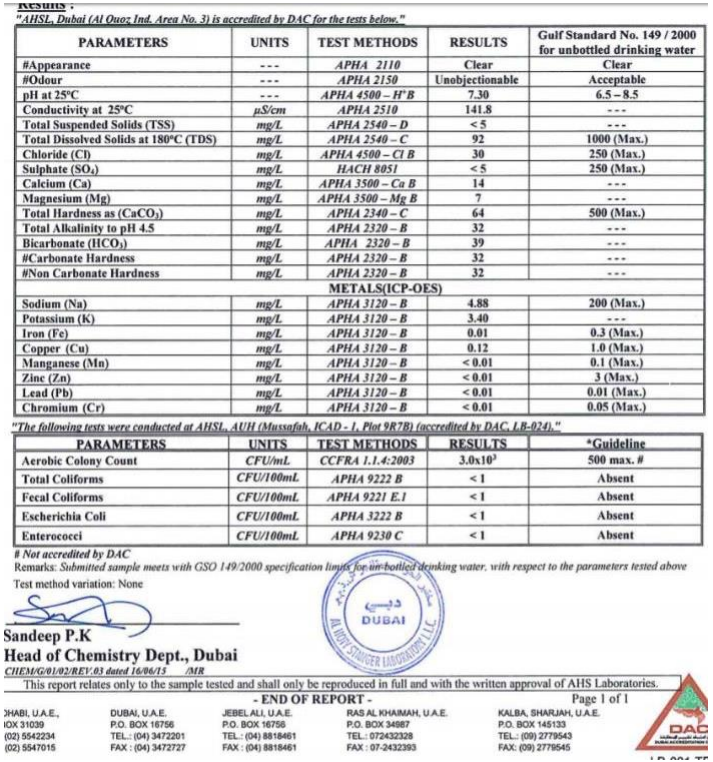
Always Protected

Made pure from the start and protected from contamination through integrated ozonation

Taste Profile

Calcium	20ppm
Magnesium	10ppm
pH	8

* These are targeted concentrations and pH that can vary slightly but will not vary materially.



Results :

"AHSL, Dubai (Al Quoz Ind. Area No. 3) is accredited by DAC for the tests below."

PARAMETERS	UNITS	TEST METHODS	RESULTS	Gulf Standard No. 149 / 2000 for unbottled drinking water
#Appearance	---	*APHA 2110*	Clear	Clear
#Odour	---	*APHA 2150*	Unobjectionable	Acceptable
pH at 25°C	---	*APHA 4500 – H⁺ B*	7.30	6.5 – 8.5
Conductivity at 25°C	*µS/cm*	*APHA 2510*	141.8	---
Total Suspended Solids (TSS)	*mg/L*	*APHA 2540 – D*	< 5	---
Total Dissolved Solids at 180°C (TDS)	*mg/L*	*APHA 2540 – C*	92	1000 (Max.)
Chloride (Cl)	*mg/L*	*APHA 4500 – Cl B*	30	250 (Max.)
Sulphate (SO_4)	*mg/L*	*HACH 8051*	< 5	250 (Max.)
Calcium (Ca)	*mg/L*	*APHA 3500 – Ca B*	14	---
Magnesium (Mg)	*mg/L*	*APHA 3500 – Mg B*	7	---
Total Hardness as ($CaCO_3$)	*mg/L*	*APHA 2340 – C*	64	500 (Max.)
Total Alkalinity to pH 4.5	*mg/L*	*APHA 2320 – B*	32	---
Bicarbonate (HCO_3)	*mg/L*	*APHA 2320 – B*	39	---
#Carbonate Hardness	*mg/L*	*APHA 2320 – B*	32	---
#Non Carbonate Hardness	*mg/L*	*APHA 2320 – B*	32	---
METALS(ICP-OES)				
Sodium (Na)	*mg/L*	*APHA 3120 – B*	4.88	200 (Max.)
Potassium (K)	*mg/L*	*APHA 3120 – B*	3.40	---
Iron (Fe)	*mg/L*	*APHA 3120 – B*	0.01	0.3 (Max.)
Copper (Cu)	*mg/L*	*APHA 3120 – B*	0.12	1.0 (Max.)
Manganese (Mn)	*mg/L*	*APHA 3120 – B*	< 0.01	0.1 (Max.)
Zinc (Zn)	*mg/L*	*APHA 3120 – B*	< 0.01	3 (Max.)
Lead (Pb)	*mg/L*	*APHA 3120 – B*	< 0.01	0.01 (Max.)
Chromium (Cr)	*mg/L*	*APHA 3120 – B*	< 0.01	0.05 (Max.)

"The following tests were conducted at AHSL, AUH (Mussafah, ICAD - 1, Plot 9R7B) (accredited by DAC, LB-024)."

PARAMETERS	UNITS	TEST METHODS	RESULTS	*Guideline
Aerobic Colony Count	*CFU/mL*	*CCFRA 1.1.4:2003*	$3.0x10^3$	500 max. #
Total Coliforms	*CFU/100mL*	*APHA 9222 B*	< 1	Absent
Fecal Coliforms	*CFU/100mL*	*APHA 9221 E.1*	< 1	Absent
Escherichia Coli	*CFU/100mL*	*APHA 3222 B*	< 1	Absent
Enterococci	*CFU/100mL*	*APHA 9230 C*	< 1	Absent

 # Not accredited by DAC

Remarks: *Submitted sample meets with GSO 149/2000 specification limits for un-bottled drinking water, with respect to the parameters tested above*

Test method variation: None

Sandeep P.K

Head of Chemistry Dept., Dubai

CHEM/G/01/02/REV.03 dated 16/06/15 /MR

This report relates only to the sample tested and shall only be reproduced in full and with the written approval of AHS Laboratories.

- END OF REPORT -

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DUBAI, U.A.E. P.O. BOX 16756 TEL.: (04) 3472201 FAX: (04) 3472727

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Environmental Benefits

Based on a standard 1,000 hydropanel array

8,000 metric tons

CO^2 offset

54 million

single use plastic bottles

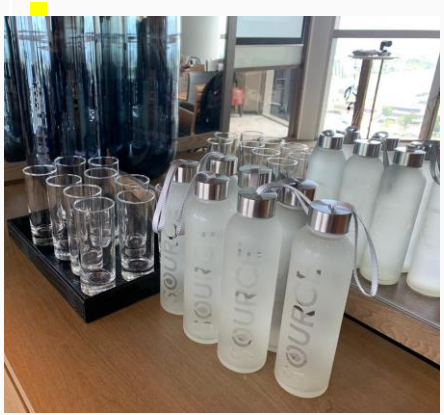
51,000 m3

Landfill waste offset

SOURCE vs. Water Desalination Plant

	SOURCE	Desalination plant
Tastes good	✓	✗
Simple to maintain	✓	✗
Modular and scalable	✓	✗
Zero discharge into the sea	✓	✗
100% solar powered	✓	✗
Net positive impact on environment	✓	✗

Delivery Channels

Office	Hospitality	Residential
		
18L water jugs Reusable plastic, less water to clean vs. 500ml bottles, easier to transport, little water wastage	**Glass 500ml bottles** Convenient for site use, accessible to all workforce, no wastage associated with 1L bottles	**Residential rooftop panels:** Providing water independence and sustainability

Applications of SOURCE

Remote Communities

Schools

Disaster Relief

Child Care

Mining Camps

Offices

Remote Communities

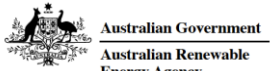
Rural

Government

Installed in over 40 Countries

SOURCE produces water in a variety of climates, from very humid to very dry

ZERO MASS water® Partners



Closing thought

ZERO MASS water®