

SOLAR WATER

solar safe water
for humanitarian needs



SOLAR WATER
by Kare Engineering Co.

A unique innovation by Kare Engineering Co.
Built Future with Inspired by Nature Solutions and Innovative Engineering



WATER via SUN : SOLAR WATER



 **SOLAR WATER**
by Kare Engineering Co.



Kare Engineering has developed
and manufactured **SOLAR WATER**
that converts any kind of non-potable water
- except radioactively polluted ones -
to healthy drinkable water via solar thermal energy.

GLOBAL WATER CRISIS

Make Change Together !

- 1 on 10 : lack of access to safe water
672 million people (UNICEF)

- Every **37 seconds** a child dies because of waterborne disease (WHO)

- Globally, at least **1.8 billions** people use a drinking water source contaminated with faeces, and 200 millions die of it each year. (WHO)

Only 0,5% of the earth water is available to satisfy our fresh water demands (UNIDO)

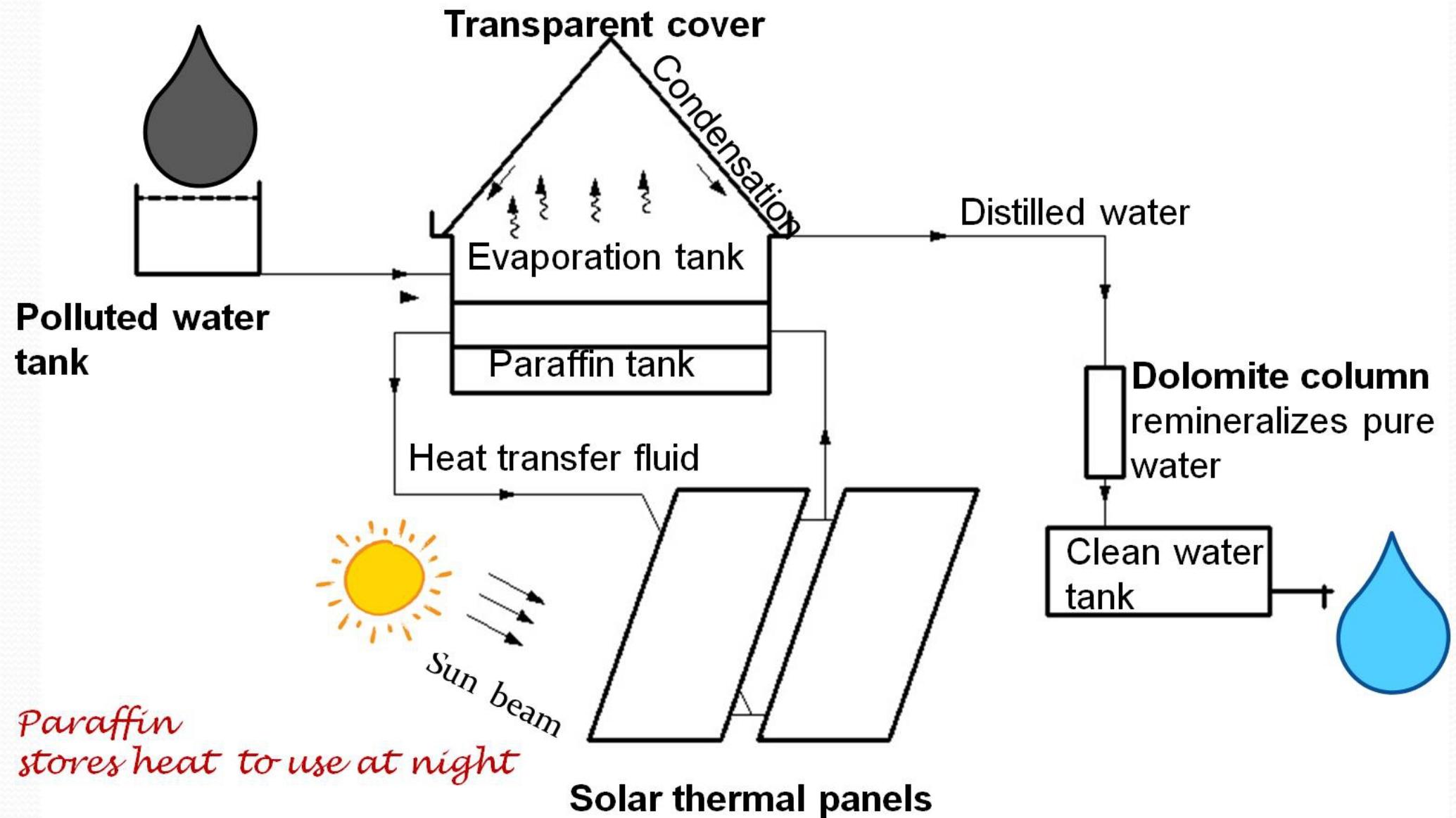


FUTURE is NOW, SOLUTION is EASY : POLLUTED WATER + SUN + SOLAR WATER = CLEAN WATER



- Mother nature offers a simple solution: **SOLAR WATER** generates clean drinking water by using solar thermal energy only.
- **SOLAR WATER** wisely solves drinking water crisis.
- **SOLAR WATER** produce up to 35 liters per day of *mineralised*, healthy drinking water
- **SOLAR WATER** is designed for large families (10-12 members)
- WHO recommends 10 mg/L of Magnesium and 30 mg/L of Calcium for drinking water. Dietary deficiency causing risk of ischaemic heart and cerebrovascular disease.
- Human drinks about 1.8 liters of water per day

METHOD=SIMPLE, AS MOTHER NATURE DOES



COMPETITORS: Forget all those complex treatment systems THE SOLUTION IS SIMPLE !



Competitors Products and SOLAR WATER	Energy Source	Capacity (L / day)	Mineral	Observation
Watly 2.0 Watly.co	Sun	Water Infrastructure needed Big capacity	+	Sophisticated: educated person and maintenance are compulsory, frangible tubes
Rainmaker™ 550 Sol Aqua	Sun	6 Liters	-	Simple but insufficient. Cover is glass, frangible
SOLAR WATER by Kare Engineering	Sun	Basic size up to 35 Liters for Family capacity, adjustable for village needs	+	Unbreakable, 20 years life span. DIY assembly. Maintenance-free, Simple: uneducated people can use it. Remineralize.

MARKET: Water will become the oil of the 21st century



- Goldman Sachs* : «Water Is Still the Next Petroleum »
- Water is a U.S.\$425 billion industry,
and this water shortage could be
a more serious threat to humanity
than food and energy shortages in the 21st century.»

Every \$1 spent
in water and sanitation
provides a \$4
economic return

* an American multinational banking Firm

**WATER is a SMART investment
in people, in future, in possibility**

Channels : “Until nobody on earth dies from dirty water...”

- Charity organizations (Rotary Clubs, Lions and similar)
- Crowdfundings
- Foundations
- Churches
- Angel investments
- UNIDO and other UN organizations
- The Coca-Cola foundation



SOLAR WATER IS NOW READY :

« All you need is the sun, just walk away and let the sun do the job »

- Cleaned water is equivalent to high branded drinking water according to TÜV
- **SOLAR WATER** is recommended by UNIDO
- Engineering and Design can be adjusted, like size, capacity, pumping solution from source, or production



3 AVAILABLE SIZES and SOLUTIONS : (depending needs and requirements)

- **SOLAR WATER Blue** : Drinking water capacity from 10L to 18L / day
(1 solar panel) : from 1500€, size : ab. 1m x 2,5m, weight 80kg
- **SOLAR WATER Basic** : Drinking water capacity from 24L to 35L / day
(2 solar panel) : from 2000€, size : ab. 1m x 2,5m, weight 80kg
- **SOLAR WATER System** : Allows you to create your own solution, depending requirements, for water needs from 5 to 5000 peoples / unit. For indication : For a 600 liters/day capacity, we need 60 solar thermal panels and 60 m² concrete-made basin (recommended for villages)
- As Engineering company It is possible :
to increase capacity by adding solar panels,
and enlarging the polluted water basin,
- as well as the input connection from source and water output

Letter of Introduction

The deBarsy Group

VENTURE ACCELERATION

TO WHOM IT MAY CONCERN:

I am writing on the behalf of Mr. Ahmet BÖRÜBAN as representative of Kare Inc. from Adana who was selected to participate in the [GCIP-Turkey](#) 2016 programme cycle with his project AQUA VITA. Mr. Boruban graduated from this cleantech business accelerator programme successfully and is now an alumnus of the programme.

[Global Cleantech Innovation Programme \(GCIP\) for SMEs in Turkey](#), is an initiative of the Global Environment Facility (GEF), United Nations Industrial Development Organization (UNIDO) and TUBITAK in the trust of Minister of Science, Industry and Technology (MoSIT), as well as the networks of UNIDO, TUBITAK and all other national stakeholders. The programme identifies high potential entrepreneurs has been identified and supported in an efficient and effective manner, giving them the opportunity to further develop their entrepreneurial skills and attract investment since 2014.

GCIP-Turkey combines a competition and a business accelerator to offer participants five months of extensive **Mentoring, Training, Access to Investors** and opportunities to **showcase** their innovations to the media and the public.

I am happy to confirm that Mr.Ahmet Börüban during the GCIP Programme successfully completed the identification and validation of a viable business model for AQUA VITA which converts every kind of non-potable water – except radioactively polluted ones - to healthy drinkable water via solar thermal energy. The Product produces mineralized water for families is developing countries where there is limited access to clean water resources and suffering from highly contaminated waters for drinking and cooking. The product is of durable, easy-to-use design and does not require either water infrastructure or electric power infrastructure.

Mr. Boruban's product has high potential for the developing world and should be given every assistance possible to move it toward commercialization.

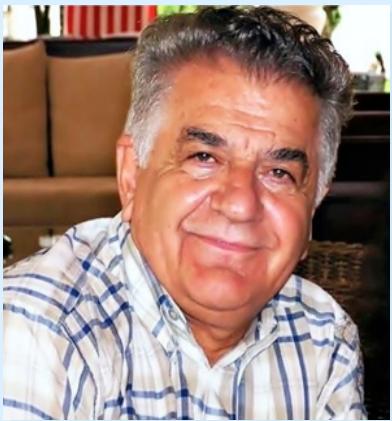
Sincerely,

Paul deGive
Director, Training & Mentoring
[Global Cleantech Innovation Programme \(GCIP\)](#)
Managing Director, The deBarsy Group
paul.debarsygroup@gmail.com



The deBarsy Group
VENTURE ACCELERATION

The SOLAR WATER Team



**Prof. Ahmet
BÖRÜBAN**

**General Manager /
Inventor
Mechanical Engineer
Heat and Fluid Mechanic**



**Dr. Serdar
ÖZPOYRAZ**

**Serial Entrepreneur
Green & Sustainable Energy**



**Guillaume
TROESCH**

**Team Leader
Kare Engineering
Representative**



**Samy
MELLOUKI**

**African / Arabic area
Representative
Crowdfunding initiatives**

GOVERNMENT REGULATION AND CERTIFICATION

No	Parameters	Unit	Test remarks	Requirement (Turkish Standard TS 266)	WHO Standards
1	Turbidity	FTU	0.84	5 max	No guideline
2	Sediment		Negative	Negative	
3	Odor	Pt-Co Scale	Negative	Odorless	
4	Taste	Pt-Co Scale	Normal	Tasteless	
5	pH	Pt-Co Scale	7.82	Between 6.5-9.5	No guideline
6	Color	Pt-Co Scale	Normal	20 max	No guideline
7	Conductivity	µs/cm	477	2500 max	250
8	Free-chlorine	Mg/lit	0	0.50 max	
9	Hardness	°F	7		
10	Sulfate	Mg/lit	≤40	≤250 max	500
11	Nitrate	Mg/lit	≤1	≤50 max	50
12	Nitrite	Mg/lit	≤0.05	≤0.50 max	50
13	Ammonium	Mg/lit	≤0.02	≤0.50 max	
14	Chloride	Mg/lit	91.5	250 max	250
15	Enterococcus	CFU/100ml	0	0	Not mentioned
16	Escherichia coli	CFU/100ml	0	0	Not mentioned
17	Coliform bacteria	CFU/100ml	0	0	Not mentioned

SOLAR WATER STRESS TEST WITH TÜV INSPECTOR

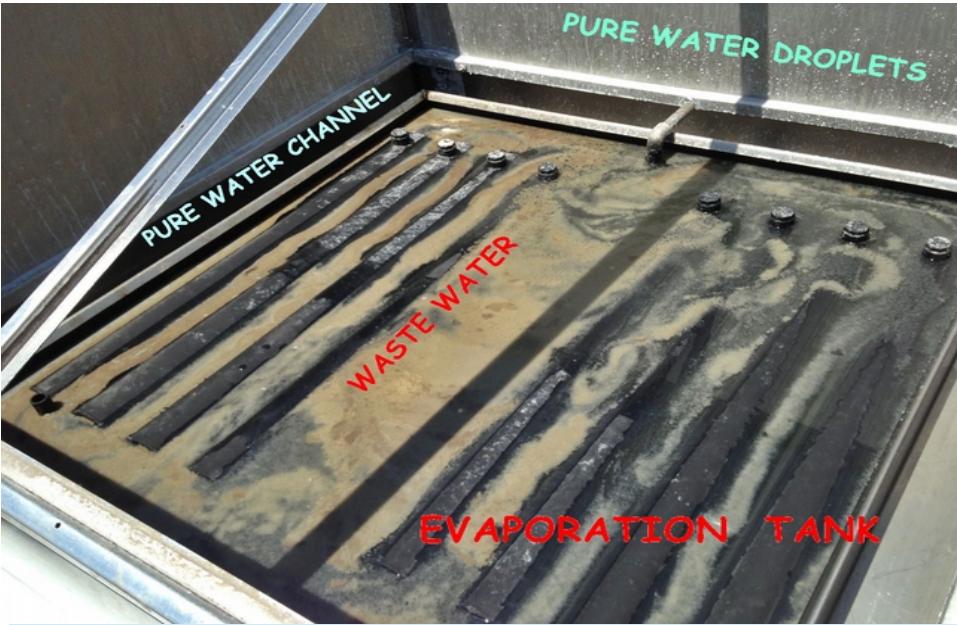


Non-potable water prélevement
at the Adana Organised
Industrial Zone Wastewater
Treatment Plant Balancing Pool

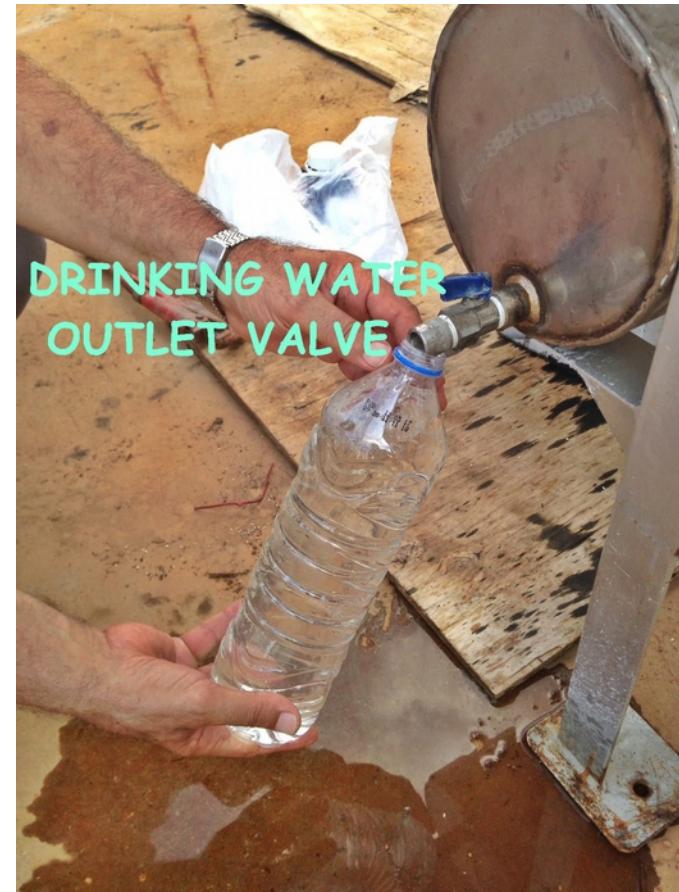


Waste water Intake of **SOLAR WATER**
Here, adjonction of non potable water from
Wastewater treatment plant

SOLAR WATER STRESS TEST WITH TÜV INSPECTOR



Water Purification process outlouk,
Non potable water is in the evaporation tank.
On the back, pure water droplets are
streaming to the pure water channel



After mineralisation, pure
drinking water is available
from the outlet valve

SOLAR WATER

- Green Technology
- Ecological friendly
- Maintenance free
- User friendly
- « Do It Yourself » assembling
- 20 years lifetime
- Not sophisticated but simple device,
- even uneducated people use it easily
- Transparent cover are in polycarbonate therefore can not be broken



GLOBAL POTENTIAL :

**« We believe that ressources are limited,
but creativity is unlimited »**

- Not only drinking water supply
but also tap water supply
- 6 hours of sun is enough (9:00 am to 15:00 pm)
- **SOLAR WATER** capacity can be adapted
from the needs of a Family to those of a Village
- It can be used everywhere where the solar energy is available
- In desert Saharan conditions, **SOLAR WATER**
produces water from the air every day,
a vital solution for a vital need.

Auxiliary 1 : Water Safety

- Contaminated water is transferred by either hand operated pump or solar water pump from source
- Calcium hypo-chloride tablets and lime slake are advised to kill pathogens. Consequently, you will be on the safe side
- Accumulated sludge at the bottom evaporation basin is discharged by opening the valve



Amount of Investment

SOLAR WATER is adapted to your needs !

- Communicate your specific needs on field,
Then we can offer you our best solution,
with an adapted, precise and priced offer:
- Need for drinking water (L / day)?
- Need for non potable water (L / day)?
- For how many people?
- Needs of an autonomous pumping system ? Manual?
- Distance to connection point ?

2 000 € It is, for indication, the amount of investment for one **SOLAR WATER** installation with a capacity of 35 L of drinking water per day.
Either, it represents the water needs of about 20 people for at least 20 years

ALL YOU NEED IS SOLAR WATER, THANK YOU



LET IT FLOW

"LIFE GROWS WHERE WATER FLOWS"



For any question please contact:

M. Mayeul Quiri
Co-fondateur/Président Directeur Général
+33 6 68 89 70 85
mayeul.quiri@kare-engineering.fr

Prof. Ahmet Boruban
Co-fondateur / R&D
+90 532 151 23 86
ahmet.boruban@kare-engineering.fr

Dr. Serdar Özpojraz
Co-fondateur/ Développement d'affaires
+33 7 80 56 37 17
serdar.ozpojraz@kare-engineering.fr



Kare Engineering France SAS
19 rue Déserte
67000 Strasbourg France
www.kare-engineering.fr
contact@kare-engineering.fr