



WATENERGY

Portable Solution
Electricity & Drinking water



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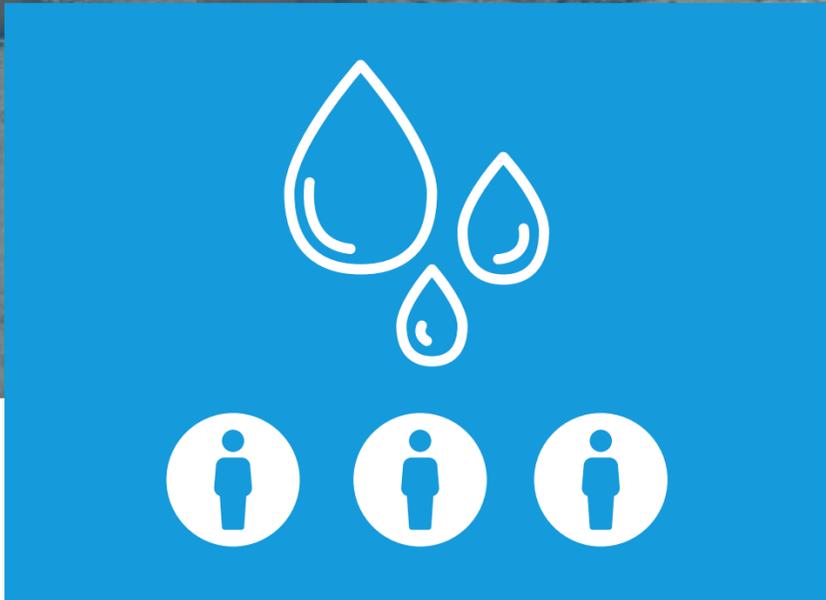
Your Most Efficient Energy



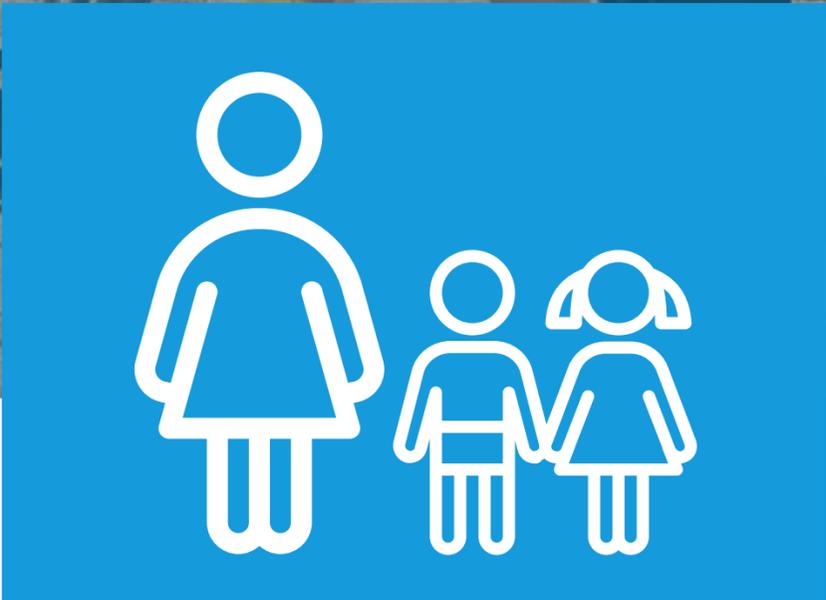
Lack of Drinking water and electricity in countries such as ethiopia

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One in three people across the world don't have access to drinking water. Lack of water affects over 40% of the world's population.



Women and children are particularly affected by water scarcity which has a direct effect on the possibilities of success.



789 million of people live without access to electricity, mainly in sub-Saharan, Africa.

THE SOLUTION

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WATENERGY



Today, we can find solutions on the market capable of making groundwater drinkable, however, all of them require access to electricity and complex civil engineering works in isolated places.

The WatEnergy solution provides an efficient, economical and sustainable solution capable of generating electricity in areas where they do not have it and that enables the operation of atmospheric water condensers that allow the generation of drinking water.



The same electricity and water generation system in a highly innovative format, which avoids works and is portable.

WHY WATENERGY

- Guarantees the generation of electricity in places where there is no access.
- Allows drinking water to be available in any corner of the planet, without the need for civil engineering.
- Reduces the carbon footprint associated with combustion electricity generation and water transport.
- Eliminates the use of plastic waste.
- Allows access to drinking water without the risk of impurities, reducing diseases such as cholera, malaria, typhus or typhoid fever.
- Allows access to electricity from renewable energy generation sources that are not harmful to the body, reducing diseases associated with tuberculosis, respiratory infections or infant mortality.

WATENERGY STRENGTHS



Portable



Plug & Play



Easy-to-
operate



Certified



Monitoring
system



Cold and hot
drinking water

ELECTRICITY AND WATER THERE WHERE IS NEEDED

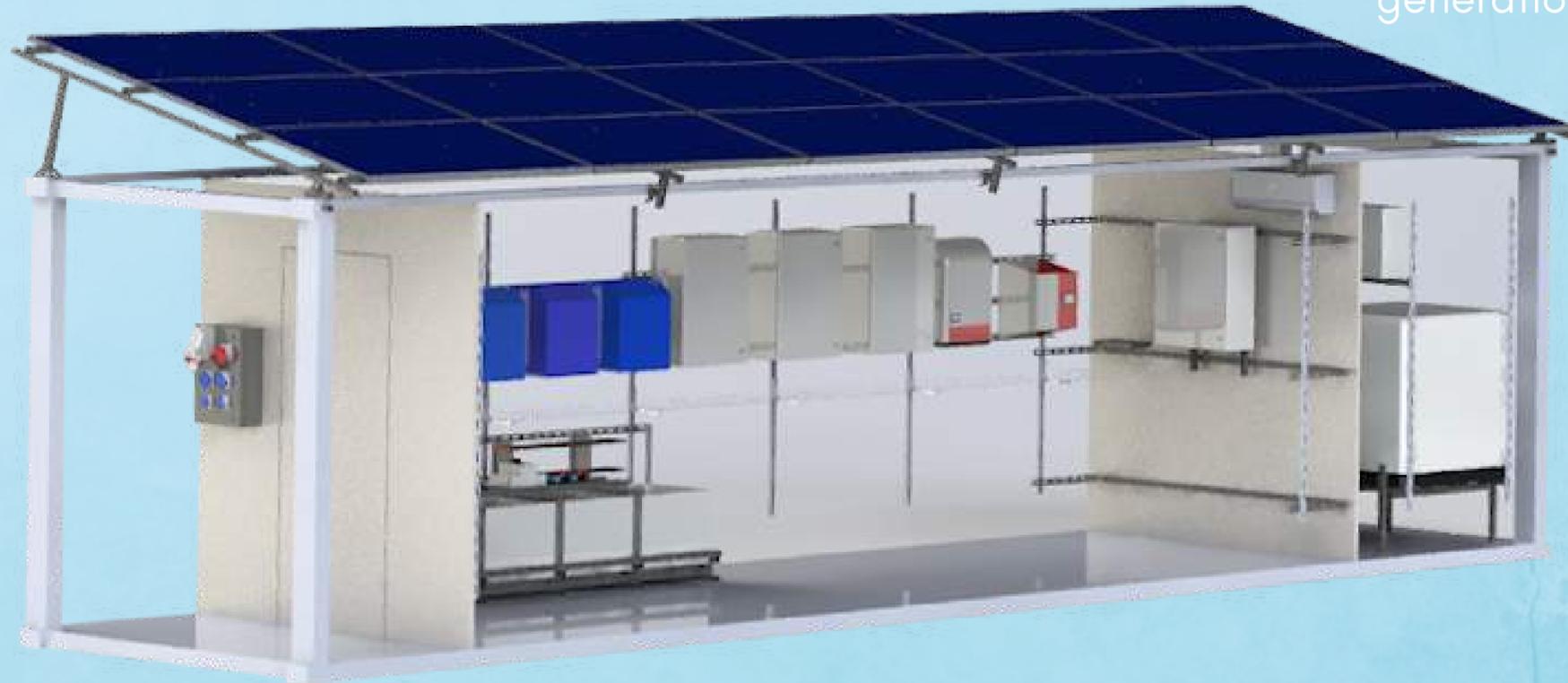
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WATENERGY SOLUTION

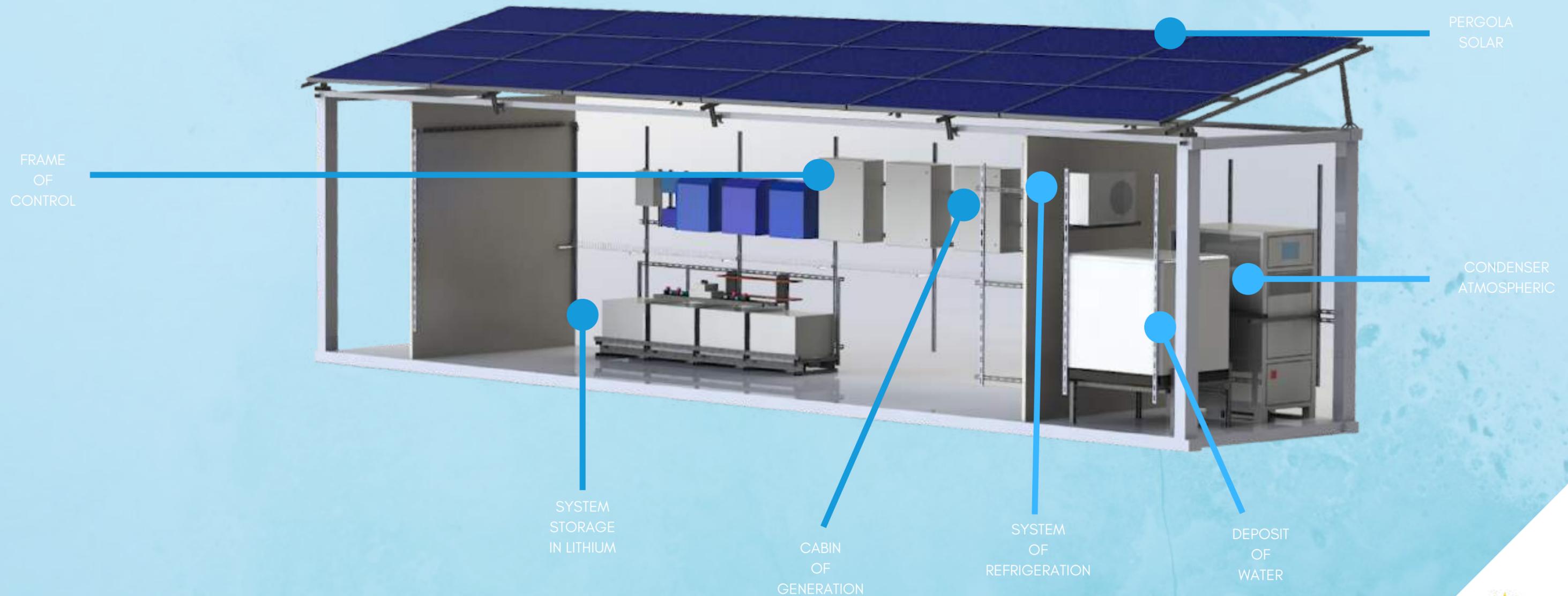
WatEnergy is an autonomous, uninterruptable and portable PV-based power generator in a 20FT shipping container which allows a quick deployment and operation in any part of the world. The integration of an atmospheric condenser enables to have stable electricity and safe water in a same format.

The container has two rooms, one for the electricity generation, and the other for the water generation.



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PARTS OF THE SOLUTION



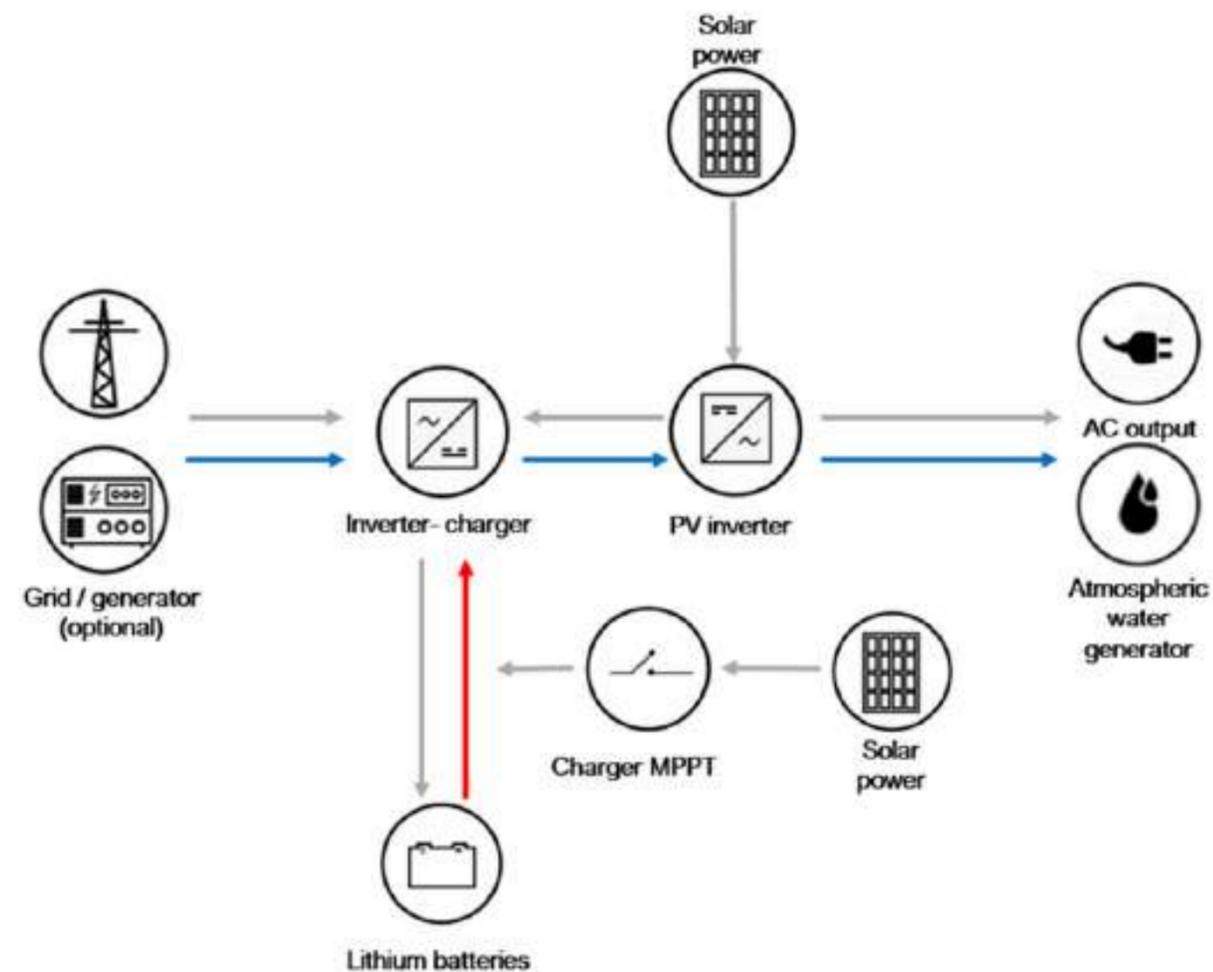
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HOW IS IT GENERATED ELECTRICITY

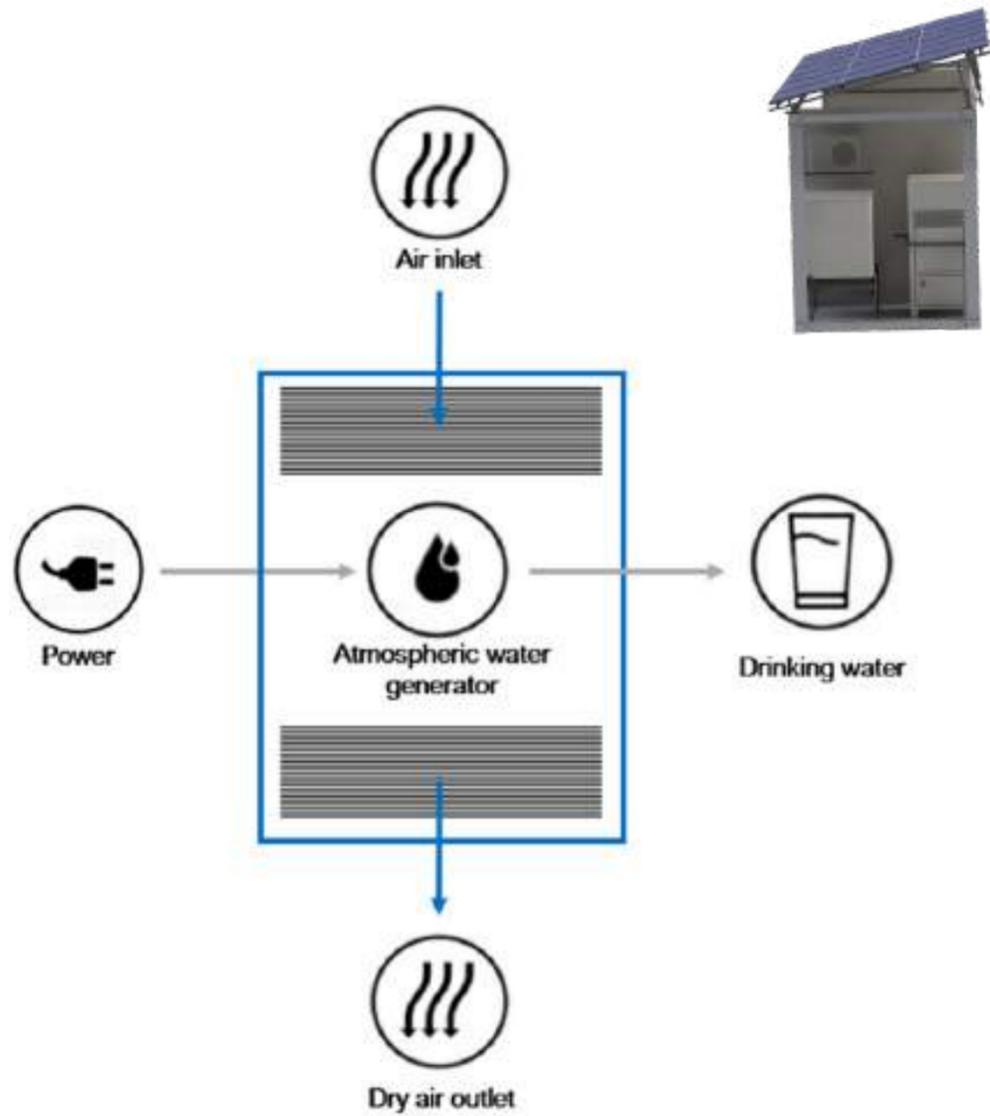
Solar generation is used as a priority to attend to the proper functioning of the water condenser. Excess energy can be used to charge batteries or for alternative productive uses such as electrification of small industries, water pumping, etc...

The WatEnergy solution allows us to generate energy from 32kWh/day to 305kWh/day.

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HOW IS IT GENERATED DRINKING WATER



The generation of water occurs thanks to the condensation of water from the air through a cooling process. Therefore, the WatEnergy water condenser replicates the natural process of rain.

The electricity generated by the WatEnergy will have as priority the supply of the water condenser. This allows us to generate up to 500 liters of water in nominal conditions.

As humidity increases, water production levels should increase as well. Consequently, we will maximize water production in those climates with warm temperatures and high humidity levels.



WATENERGY CATEGORY

LIGHT

Solar power
14.400 **Wp**

PV inverter
6kVA

Charger-controller
140 Ah/ MPPT

LifePO4 storage
31 kWh

Water generation
Up to 200 liters/day

Operational Time
10 hour

Container
20"Container

OPTIMUM

Solar power
20.250Wp

PV inverter
6kVA

Charger-controller
255 Ah/ MPPT

LifePO4 storage
62 kWh

Water generation
Up to 290 liters/day

Operational Time
14 hour

Container
20"Container

ADVANCED

Potencia Solar
76.050Wp

Inversor FV
6kVA

Controlador
1300 Ah/ MPPT

Almacenamiento litio
154 kWh

Generación
Hasta 500 litros

Tiempo operación
24 horas

Contenedor
40 pies

DO YOU NEED A CUSTOMIZED SOLUTION?

From GFM we give you the option to customize the project to suit you. Depending on your needs in terms of electricity generation and drinking water production, our engineers will be at your disposal to carry out a detailed study and a "turnkey" project.

This includes all phases, from the study of your particular case to the start-up of the solution and the energy consulting service.

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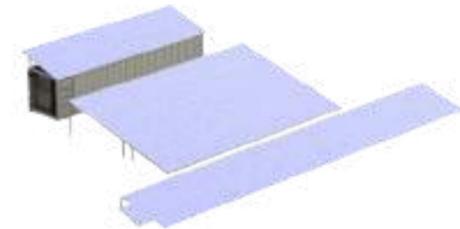


WATENERGY ADD-ONS



All solutions are prepared for the support of the network, diesel generator or other power generation source.

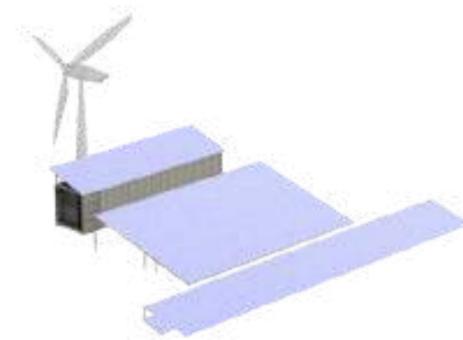
Julia Version



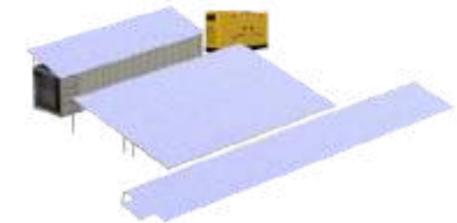
H2020 Version



Renewable hybrid
Version



Diesel hybrid
Version



WATENERGY ADD-ONS



Control Board



**Smart
load management
system**



**Monitoring
platform and
control remote.**



Water tank.



Harmonic Filter

MONITORING SYSTEM



The GFM engineering team has developed its own platform with which the solution can be remotely monitored.

Through it, remote monitoring and control of the photovoltaic solution will be carried out, facilitating maintenance and corrective actions without technical presence.

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GFM HISTORY

YEARS 2005-2012

Solar plant promotion /
Solar plant maintenance

YEAR 2000

GEA wind power was funded

YEAR 2004

GFM Photovoltaic creation

YEARS 2013-2014

First self-consumption projects / ITECAM member / First SuninBox Julia with AECID in Ethiopia

YEAR 2014

SuninBox H2020 development / Seal of Excellence by European Commission

YEAR 2015

First participation in national and international exhibitions

YEARS 2017-2018

First SuninTrailer development in Chile / Recognition as Innovative SME / INNOVA Adelante projects / First SuninTrolley in Dominican Republic.

YEAR 2018

First EV-charging point / Certification in accordance with ISO 9001 and 14001 standards / First consulting actions.

YEAR 2019

APPA management boards / UUNN consulting services

YEAR 2020

Certification in accordance with SA800 standards / Recognition as Innovative SME by AENOR / First self-consumption project in Senegal / WatEnergy project / Syrian refugees aid project in Jordan with AECID.



The investment in research and development, the high qualification of our team of engineers and the commitment to quality and innovation, have allowed us to get here to continue developing new solutions with which to meet the needs of our customers.

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GFM

WE ARE SPECIALISTS

PRODUCT

We are specialised in industrial and household PV self-consumption, as well as solar carport development with EV-charging point.

OFF GRID SOLUTION

Pioneers in rural electrification through portable and plug&play solution such as:

SuninBox / SuninTrailer
SuninTrolley / Watenergy

SERVICES

Engineering projects, solar plant maintenance and integral advisory.

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SAVINGS

Our solutions obtain cost savings derived from their industrialization, structural optimization and integration of components

TURNKEY SOLUTIONS

GFM offers you a turnkey product from the design of the car park, to the manufacturing, assembly, management of permits and monitoring of the installation

INTEGRAL ADVISORY

GFM offers an integral advisory service in a structural and energy level to achieve the most efficient solution based on client needs.

ENERGY EFFICIENCY

Consumption and solar production can be viewed in real time by our clients in order to maximize the performance of the installation and avoid power losses.



REVIEWS



CERTIFICACIÓN SA
8000



CERTIFICACIÓN ISO
14001



CERTIFICACIÓN ISO
9001



PYME
INNOVADORA



COLABORACIÓN
CON NACIONES
UNIDAS



MIEMBROS DE LA
ALIANZA PARA LA
ELECTRIFICACIÓN
RURAL



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PROJECTS

SUNINBOX

SUNINTRAILER

SUNINTROLLEY

WATENERGY



United Nations
UNGSC



ALIENA

ASSOCIATIONS

PARTNERS



ezzing solar



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CONTACT

In the heart of La Mancha, in the municipality of Villacañas, Toledo (Spain), is our headquarters.

From here we design and work on the best energy solutions to convert businesses and homes into energy efficient and sustainable places.



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