Access to ENERGY, WATER and COOLING systems is VITAL for survival.

Having drinking water, keeping medicines, vaccines and food cold, outdoor lighting to guarantee safety, health care, communications... These are crucial PRIORITIES for humanity and a SOLUTION should be provided to those who are forced to flee their homes due to natural disasters, wars or as a result of CLIMATE CHANGE.

It is therefore necessary to create sustainable energy solutions that allow electricity to be generated from RENEWABLE sources.
There is an **objective demand** for this solution

**Refugee Camps**
(UN, World Food Programme, Red Cross Cooperation Centre with Africa)

**Isolated areas by natural disasters**

**Transport of medicines**

Also, for the provision of electric power ...  
... to small fishing villages on the West African coast  
... rural areas in remote areas that are not connected to the electricity grid  
... isolated villages with a planned connection to the electricity grid  
... to mining camps
Potential market waiting for solutions

**Investors & Companies**

Enough capacity to meet demand taking into account locations and uses (isolated areas, complex climates, emergency situations, insufficient communications, difficult access...)

This solution has the following characteristics:

- It is robust
- Maximum efficiency
- Easy to transport
- Allows electricity generation from renewable sources
- Scalable according to demand
- Easy to implement
This is an integrated, mobile and easy-to-implement solution for the supply of:

- **ENERGY**
- **WATER**
- **REFRIGERATION**

4 standard 20-foot containers

Space and transport optimisation

An *intelligent* energy management system that is able to optimise the operation of the different elements to reduce operating costs

Through *Machine Learning* tools, the system can learn and improve its performance

A technological *innovation* compared to other systems available on the market

Ready to be used in any situation that requires *immediate* power, water and cold

The CLIMARISK project was awarded the IBERDROLA International Energy Cooperation Award in 2019
Energy generation system

15 kilowatts of power

Solar photovoltaic renewable energy and storage batteries

No need for civil works and rapid scalability on demand

Intelligent energy management system: Machine Learning, weather forecasting, load optimisation, inter-container communication

Quick to install and implement: the power supply can be ready in 15 minutes and the deployment of the whole system takes approximately 5 hours

It generates enough energy to:

- Produce more than 12 m³ of water per day
- (1,000 people)
- Power a 120-bed hospital
- Provide energy for about 1,000 to 2,000 people depending on the level of renewables
- Keep the refrigerator at 5 °C (15 m³)

Simultaneously
Drinking and distilled water production system

**Two solutions** in one container

<table>
<thead>
<tr>
<th>Production of water from humidity in the air.</th>
<th>A water treatment or a desalination plant, depending on the source of the water:</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 litres/day</td>
<td>24,000 litres/day (2,000 people)</td>
</tr>
</tbody>
</table>

**Plug&Play system:** the generation system **recognises** the water system as soon as it is connected and **adjusts** the controls to supply energy so that the required demand is met at the **lowest possible cost**
Two cold production systems

**Frozen and fresh products**

Food and medicines from -25°C to +12°C

It includes a thermal inertia improvement system with PCM and strip curtains

**Fresh products**

Food and medicines from +5°C

It includes a thermal storage system with PCM and an autonomy of up to 16 hours
CLIMARISK = SECURITY

1. It meets the technical conditions and safety guarantees required by ISO and UNE standards and Spanish regulations.

2. All equipment bears the CE marking and a declaration of conformity.

3. The system comes with user guides that provide instructions for use and maintenance.

4. Verified by Lloyd’s Register.
The ITC is a leading centre with over 25 years of experience looking for solutions to supply energy, water and refrigeration.

Partner of more than 12 African governments

Endorsed by the UN and International Red Cross

Technology transfer through a public-private partnership

Project financed by the ERDF
Talent to make the world a better place

https://www.clima-risk.com/