



#### INTELLIGENT SANITARY HOT WATER STORAGE SYSTEM WITH SOLAR COLLECTORS

### **Description:**

This offer refers to a domestic hot water (DHW) storage device that allows air to enter in order to optimize its energy efficiency. The assembly is completed with solar collectors that are used as a natural heating system and allow the energy required to heat the water to be minimized. The use of this proposal entails a very considerable reduction in the energy consumed since it allows to use all the hot water contained in the accumulator without it being mixed with cold water, which happens as hot water is consumed in any conventional installation.

## **Keywords:**

Renewable Energy, Energy Efficiency, Heater, Acs, Solar Energy

#### **Sectors:**

Engineering, Environment and Energy, Others

#### **Areas:**

<u>Industrial</u>, <u>Equipment</u>, <u>Instrumentation</u>, <u>Quality of life</u>, <u>Energies</u>, <u>Technological Improvements</u>



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## **Advantages:**

The offer presents both user and technological advantages. Among them are: - This technology avoids the need to use additional electrical resistance to heat cold water in periods of absence of sufficient solar radiation. - This system refers to maintaining the desired temperature for a longer time, thus improving the comfort of users. - In this system, the volume of water to be heated by means of electrical resistance is much smaller in relation to the total volume, which is why there is significant saving in electrical energy. - Solar collectors work with a maximum temperature differential. Causing an increase in the performance of solar collectors.

# **Uses and Applications:**

The present invention is included in the energy efficiency sector, specifically in the sector of the production of DHW by means of solar thermal energy.

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