

Marseille, France

New built private collective housing: collective hot water production by solar heat pump

Key facts**Building**

Location	<i>Marseille, France</i>
Construction	<i>2015</i>
DHW production	<i>collective heat pump</i>
Heated area	<i>2833 m² living</i>
Level of insulation	<i>BBC-Effinergie label</i>

Heat pump and source

Number of	<i>2</i>
Installed power	<i>2 x 12kW</i>
Operation mode	<i>DHW only</i>
Heat source	<i>unglazed solar panels 100 m²</i>

Domestic hot water

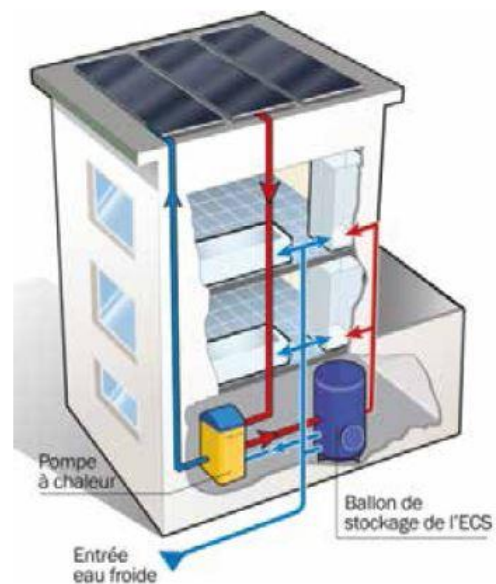
Type of system	<i>central</i>
Max. temperature	<i>60 °C</i>
Hot water storage	<i>2 x 2000 l</i>

Other information

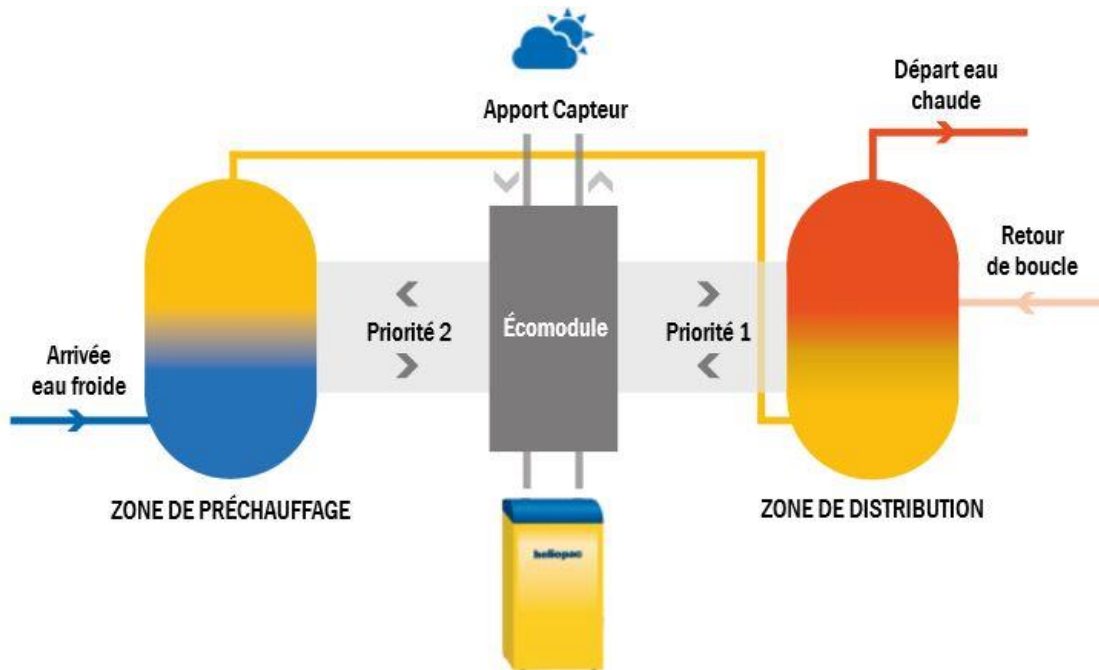
Annual COP	<i>3.63</i>
Renewables part	<i>70%</i>
Electrical part of HP	<i>27%</i>
Electrical back-up	<i>3%</i>



This new built private housing is located in Marseille, in South-East of France. Climate and sunshine are very favorable to the installation of a “solar heat pump”, which means that the cold source consists of unglazed solar panels installed on the building roof.



Soissons, France, Technical details



Description of the technical concept

The system consists of :

- 2 x 12 kW Brine/Water heat pump Solerpac®
- 2 storage tanks with a 2000 liters capacity each
- 100 m² unglazed solar panels

Heliopacsystem® is a domestic hot water production technology for collective applications. It uses specific solar panels able to collect energy from both sun and air.

Here, heat is collected on the roof by 100 m² unglazed solar panels. Brine heated in these panels is sent in the evaporators of the heat pumps.

Bureau d'études : Elithis Dijon
Installateur : Sodexal
Installateur : Heliopac

