

Ecological hotels

Project "100 solar hotels"



Presentation

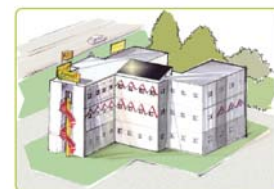
As part of its sustainable development program "Earth Guest", Accor is carrying out a project called "100 solar hotels".

The goal is to equip about a hundred of hotels with solar panels for 2010, most of them from Etap Hotel and F1. Those infrastructures are being installed in France in partnership with the ADEME (the French agency for environment and energy). The 100 hotels of the project will hence join the 50 of the Accor network which are already equipped in solar panels (France, Morocco, Brazil, China, Australia).

Implementation & Results

The solar captors are used to **produce hot sanitary water**, covering on average 50% of the needs each year. The hotels involved in the project belong to different brands: 47 F1, 19 Etap Hotel, 10 Ibis, 16 Mercure and 21 Novotel.

If the principle of thermal solar is simple, its application requires tailored technical solutions (choice of materials, regulation systems, circulation pumps resistance).



Accor set up **an efficient cooperation with CLIPSOL, a company which will monitor the whole process of the installation**. The cooperation will allow quick progress on the following aspects of the project:

- Maintenance: Finding a solution to avoid overheating during summers.
- Efficiency: Warming the hotel's hot water closed-loop system through solar energy.
- Economy: Cutting costs with pre-made structures for the panels.
- Organization: Keeping things simple by being Accor's single contact.

The first buildings have been equipped in late 2007, most of them with a unique solar design. Some of the installations will allow for the implementation of other technologies (vacuum tubes, solar actuated drain systems...).

A screen in the hotels' lobby indicates to the guests how much solar energy is produced overall.

Financial Aspects

Investment:

The call for tenders helped to reduce investment costs. However, this reduction is limited by the geographical scattering of the hotels, their architectural differences (roofs, space organization...) and the time needed to install the system. The price per m² hence vary depending on the hotels. On average, it should be around 700 €/m².

ADEME subsidies:

They fund 40% of the total investment.

Energy savings:

They vary depending on sunshine levels. In Lyons, productivity is about 570 kWh/m²/year, which makes for an annual saving of 28 €/m². The economic payback time is close to 15 years if the ADEME's subsidies are taken into account.

Outlook

- Raising the awareness of our guests on thermal solar energy.
- Experience feedbacks shared with the ADEME on innovative systems.