

Ecological hotel

Integration of photovoltaic cells at the Ibis Porte de Clichy hotel: an architectural success story



Presentation

The ACCOR group decided to create a first hotel equipped with photovoltaic cells as part of its research and support for renewable energies. At the beginning of 2004, in partnership with ADEME and EDF, a photovoltaic energy-production system connected to the national grid was implemented at the Ibis Porte de Clichy hotel.

Conditions are currently favourable for the development of renewable energies. The European Directive of September 2001 set a target for increased production of renewable electricity, because by 2010 France will have to produce 21% of its electricity from renewable energy sources, compared with 15% in 1997.

The photovoltaic project of the Ibis Hotel in Clichy is unique and exemplary. Moreover, the visibility and popularity of the hotel help to promote the brand and create an extremely positive image for the hotel.

Implementation & Results

Principle of operation

The photovoltaic cells produce a total energy power of 7.9 kWc. The system is connected to the national electricity grid, and will sell all the energy produced. Meters and detailed measurements are used to ensure optimal management of the system.

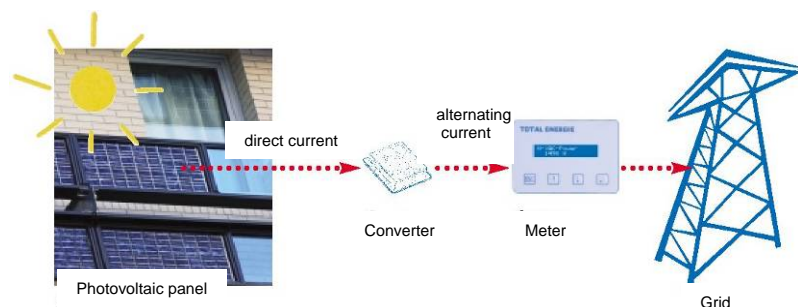
Description of the system

Surface area: 75 m² of polycrystalline cells

Power: 7.9 kW peak

Estimated production: 4,600 kWh/year (approximately 5% of the electricity used for lighting).

Date of connection to the grid: October 2004



Construction

Client: ACCOR / Engineering Department: Tecsol / Installer: Tichit SA

Solar panels: Photowatt / Solar system: Total Energy

Financial Aspects

Cost

Installation: € 70,000 exc. taxes / Engineering: € 26,000 exc. taxes

Financial support

ADEME Ile-de-France: 49% (i.e. € 34,500 exc. taxes) / EDF: 39%

Outlook

Promote the use of solar energy for production of hot water

Since 1998, Accor has equipped 41 hotels, including the Académie Accor in Evry, with solar thermal panels for the production of sanitary hot water, with a total panel surface of 2867 m². Solar energy is currently the most widely-used renewable energy source in the world and the best suited to the hotel industry, which is a large-scale consumer of hot water.

Objective 2010: 200 hotels equipped with solar panels in France (in partnership with ADEME).