

A riad is the traditional Moroccan guesthouse with two or more floors built around a courtyard that contains a fountain or a swimming pool, typical of the medieval cities ("medina"). There has been a recent surge in interest in the renovation of old riads and transforming them as hotels in and around the touristic areas of the old cities of Marrakech, Fes, Essaouira, Rabat etc.

Energy cost is a major element affecting the running costs of hotels. High utility costs directly impact hotel rates for customers and thus, the competitiveness of the hotels. Historically, the riads were built and recently even renovated with no particular attention to energy efficiency. Walls were built without insulation materials, butane is used instead of solar energy for hot water, old air conditioners without split technology are used for cooling, and incandescent lamps are still in use for lighting.

Mindful of the importance of energy efficiency as a competitive advantage, Joel Gestion, a company that owns and manages riads in Morocco, initiated a project to convert three former non energy efficient riads into guesthouses / hotels in the city of Marrakech. Several measures to enhance the energy performance were integrated including, thermal insulation of floors and outside walls, installation of two removable roofs on patios, heat pumps coupled to solar panels to produce hot water and heat up the under-floor, installation of an air-to-water heat pump to heat the water of the indoor pool and Jacuzzi, acquisition of 12 air-conditioning units with inverter technology, and installation of 334 LED lamps.



THE COMPANY

SME

Hotel

Location - Marrakech, Morocco



INVESTMENTS

88 934 Euros

Insulation

Heat pumps

Solat water heaters

Air conditionners with inverters LED lamps



PROJECT GOALS

Buildings renovation Energy efficiency



RESULTS

Energy savings: 154 MWh/year

% Energy savings: 61 %

Reduction in CO2 emissions: 61 TCO2e/year

IRR: 41%

SPBP: 2.4 years

Developed by



In Cooperation with













