

Case Study

Energy saving investments in a hotel

Main activities	Hotel
Region	Cyprus
Energy Consumption	not available



Project goals

To reduce energy costs for the hotel.

A significant factor in determining which measures to pursue was the low occupancy level. Hence, for example, it was decided not to insulate the roof because a cheaper solution was to leave the top floor rooms empty.

Other decisions were inevitable. For example, the boiler was in a very bad condition and needed to be replaced anyway. It proved more effective to buy an energy efficient model.

In principle the hotel operated on the principle of carrying out maintenance only in the event of breakdowns. Very little regular maintenance was carried out. The auditors also recommended changes in behaviour and stressed the need for ongoing maintenance in order to optimise usage at no additional cost.

Main investments

The approved investments were:

Compact Fluorescent (CF) Lamps in bedrooms, CF Lamps in common areas, water conservation in rooms, hot water tank insulation, pipe insulation for heating, ventilation and airconditioning systems, new boiler, new solar panels, improved chiller efficiency.

Application

All hotels.

Investment type	Cost (€)	Energy saved (MWh per year)	Saving achieved (€/yr)	Payback period from energy saving
Room Lighting	798	27,952	386	2.1 years
Common area lighting	435	50,768	556	0.8 years
Water conservation	600	5,364(T/yr)	413	1.5 years
Tank insulation	137	6,924	247	0.6 years
Pipe insulation	9891	332,010	8226	1.2 years
Boiler efficiency	9316	-87,195	2676	3.5 years
Solar panels	6637	44,715	1939	3.4 years
Chiller efficiency	22537	254,202	4100	5.5 years
Total	50356	803,766	18547	2.7 years