

Cost Savings €34,900 / Annum

Investment €39,000

Payback 13 Months

Environmental Benefits:

CO₂ reduced: 135.7 Tonnes p.a.

Efficient Lighting Saves €34,900 Per Annum

CASTLEMARTYR HOTEL



Description of Property

The Castlemartyr Resort is a 5 star resort located 20 minutes outside Cork City. It has 103 bedrooms, 3 restaurants, spa, gym and a golf course. The resort has received Environmental Certification from the Green Hospitality Programme and has been member of the programme since 2009.



Project Description

In 2010, management investigated the possibility of using energy efficient lighting as a cost effective solution to reducing electricity costs. A lighting consultancy was employed to survey the light fittings and revealed that the resort hotel had 3,004 light fittings, most of which were halogen and incandescent lamps.

It was recommended that these inefficient lights be replaced with LEDs (Light Emitting Diodes). The cost of installation of these LEDs was estimated at €39,000. Management made the decision to carry out the replacement programme. This was done on the basis that LEDs would reduce electricity requirements for lighting by 90%.



The Results

The savings generated by this change in technology generated savings of €35,000/ annum in energy costs and €3,800 annual maintenance costs, delivering total savings of €38,800 in the 1st year. This gives a payback period of 1.1 years.

	Running costs	Energy kWh	Tonnes CO ₂	Replacements/annum
Existing	€38,700	277,000	150	€3,800
New	€3,800	27,500	15	€0
Savings	€34,900	250,000	136	€3,800

The installed LEDs have a minimum life span of 5 years. It is predicted that the hotel will have saved nearly €175,000 in energy costs over the life span of these LEDs.

