

Hotel uses data to roll out upgraded CHP system

Following an initial investment in Combined Heat and Power (CHP) over 16 years ago, Kilkenny Ormonde Hotel recently upgraded its system to further reduce operating costs.



CHP unit reduces operating costs and emissions for Kilkenny hotel

Located in Kilkenny City in Ireland, the hotel offers 118 guest bedrooms with leisure centre facilities, a swimming pool, meeting rooms and conference venue. It required an upgraded CHP unit to better reflect its current heating and electrical requirements so turned to Centrica Business Solutions, in conjunction with its partner Temp Technology.

Driving down costs and carbon emissions

Using past experience of the savings that CHP technology offers, the hotel invested in a more appropriately sized unit that would have a longer uptime and therefore generate further efficiencies and financial savings.

The CHP technology is used to heat the water for the leisure centre to 60°C which is then moved from the leisure centre to hot water storage tanks at the hotel, where it is kept at adequate temperature until required.

During the day, from 8am to 11pm, the CHP unit is operational while at night the heated water from the storage tanks is used to keep the temperature constant. The whole process is controlled automatically by a computer system monitoring the usage conditions.

The results

The new CHP unit installed at the Kilkenny Ormonde Hotel by Centrica Business Solutions has resulted in annual energy savings of around €47,000, with payback on investment in less than three years. Since the installation of the new system, uptime has increased by 25% which has ensured a reduction in maintenance costs. An average of 5,475 operating hours per year is projected.

The hotel has also benefited from an environmental perspective with carbon emissions reduced by 312 tonnes each year, as well as contributing to a fall in noise pollution.

The CHP unit now satisfies 65% of the total heat demands and 40% of the electrical demands.



Annual energy
cost savings



Payback on
investment



CO₂ reduction
per annum

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We are extremely happy with the new investment which has provided a number of benefits including on-site electricity generation, greater uptime, further efficiency gains, financial savings and fewer maintenance costs.”

Colin Aherne, General Manager, Kilkenny Ormonde Hotel

Why Centrica Business Solutions?

- Works closely with its partner Temp Technology which designed the new energy system and managed the project
- Provides extensive knowledge of CHP technology to allow the hotel to invest in a more appropriately sized unit to improve operational efficiencies
- Market leader in providing businesses with the most cost-effective energy solution