

Crowne Plaza saves £10K per year on energy spend

The Crowne Plaza Liverpool at John Lennon Airport has been renovated to become a luxury and energy efficient hotel in a listed Art Deco building.



Driving down carbon emissions at protected site

ENER-G (now part of Centrica Business Solutions) needed to ensure that the Combined Heat and Power (CHP) system selected would be of optimal size to meet the demands of the hotel while protecting the listed building.

Specialist installation of CHP system at listed hotel building

Centrica Business Solutions undertook a careful assessment and detailed design work at the site, operated by Kew Green Hotels. The proposal included the supply and commissioning of a 110 kW CHP unit which was installed in a roof top plant room. As the site is listed with English Heritage, extra care had to be taken to avoid the original Art Deco building from being altered.

To gain access to the plant room, the exterior wall had to be taken down brick by brick with photographic evidence documenting the process. A crane was then required to lift the unit carefully into place before painstakingly replacing each brick to its original position.

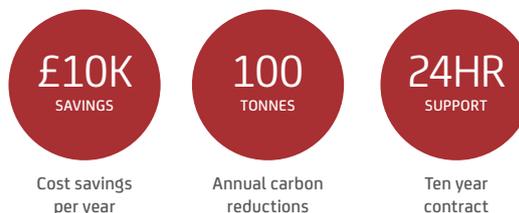
The results

Now in full operation, Centrica Business Solutions provided Kew Green Hotels with an all-encompassing 'Premier Plus' maintenance contract, providing round-the-clock support for ten years.

Centrica Business Solutions operates a discount energy purchase scheme for the hotel, which provides annual financial savings of £10,000 and carbon reduction of 175 tonnes each year, which is the equivalent of taking 58 cars off the road.

CHP is almost twice as efficient as conventional power generation as the majority of heat is recovered and used on site, rather than wasted into the atmosphere. By using CHP to generate electricity onsite, the heat is used to provide heating and hot water for the hotel during the winter.

The typical payback period on CHP technology varies between two to four years.



Why Centrica Business Solutions?

- Experts in delivering small-scale 4 kW to 10MW CHP solutions to customers worldwide
- Offers the broadest range of CHP products incorporating more than 1,400 installed cogeneration systems globally
- CHP systems provided by Centrica Business Solutions can be powered using a variety of different fuels including natural gas, biogas, propane, biodiesel or pure plant oil (PPO)