

# County Hall reduces annual CO<sub>2</sub> emissions by 190 tons

London tourist attraction trims energy by £150k pa with Combined Heat & Power (CHP).



## Reliable energy supply to London landmark

County Hall is a major leisure destination in central London. The site, opposite the Houses of Parliament, is home to the London Aquarium, two hotels, a theatre, Shrek World, London Eye, venue spaces, serviced offices and several restaurants. The site operators wanted to improve energy efficiency and reduce CO<sub>2</sub> emissions.

## Improving resilience and reducing energy usage

Combined Heat and Power (CHP), works by efficiently converting gas into both electricity and heat onsite – improving resilience and reducing energy usage.

Centrica Business Solutions conducted a thorough site survey, with analysis of energy demand based on existing half-hourly usage reports. The low NOx E230 CHP unit, installed in the basement, replaces two existing but outdated boilers. There was no disruption to the operation of any of the site's leisure facilities during installation. Uniquely, Centrica Business Solutions was able to offer a one-stop solution, capable of build, supply, fit and maintenance of the equipment.

## The results

The project is expected to deliver energy cost savings of £150,000 per year. In addition, annual carbon savings are estimated to be 190 tons. This is a major contribution for a central London landmark with up to 100,000 daily visitors.

“Being a Grade II listed building, changing to LED and lighting control has helped with carbon reduction targets,” says Steve Matson, Electrical Engineering Manager, County Hall Estate Management. “The only way we could lower our Building Energy Rating was with CHP.”

Because of the unique nature of the site – the London Aquarium requires consistent heating 24/7 throughout the year to maintain the temperatures of its tanks, the project is expected to deliver an ROI in less than two years. Under the previous system, energy consumption for the site was in excess of £3 million per annum.



CO<sub>2</sub> abatement  
per annum



Estimated annual  
net energy savings



Expected ROI in  
less than two years

“

The only way we could lower our Building Energy Rating was with Combined Heat and Power. Centrica Business Solutions is a one-stop shop for build, supply, fit and maintenance of the equipment.”

**Steve Matson, Electrical Engineering Manager,  
County Hall Estate Management**

## Why Centrica Business Solutions?

Since the acquisition of ENER-G, the UK's leading supplier and operator of Combined Heat and Power units, Centrica Business Solutions has helped customers gain competitive advantage from energy – delivering intelligent, end-to-end energy solutions that power performance, resilience and growth.

- Over £2m spare parts available for next day delivery
- More than 200 parameters are measured and monitored on every CHP system
- Over 600MW of CHP plants maintained and operated by Centrica Business Solutions