



## British Airport Authority

# HEATHROW AIRPORT

Rural Energy was contracted to design, install and maintain a turn-key biomass solution for M&E specifier Rotary Southern.

Heathrow Airport Maintenance chose biomass technology for the emergency services station in order to help meet carbon footprint reduction targets. This heating system helps BAA to reduce carbon emissions at Heathrow Airport. The 995kW BioFire meets the huge heat load requirements of a 24-hour maintenance, ambulance and fire service station, working tirelessly to heat the site at all hours. The installation will make approximately 226 tonnes of carbon savings per annum and the boiler offers up to 90% efficiency.

The project comprised a 995kW Herz BioFire for wood pellets, including a flue, automatic ash removal system, external silo, fuel feed system, buffer and commissioning of the system. After this Rural Energy trained the end user in managing the system.

This was the UK's first Herz BioFire installation. The project proved to be challenging, with a limited amount of space available to retrofit the boiler into the plant room.

The Heathrow emergency service building had a plant room that was in need of full mechanical refurbishment lacking space to input a suitably sized pellet store, therefore needing an external pellet silo. Rural Energy went through a lengthy planning permission application in order to fit the silo outside and next to the airport and the exact height and colour passed through planning.

With a very detailed approach to the project, Rural Energy were able to meet BAA standards, from labelling every wire to providing a Collinson silo that exactly matched the colour requirements for the surrounding environment.

## CASE STUDY FOCUS

Supplying  
**995kW**

Herz® BioFire

Annual saving of  
**226 Tonnes**  
of carbon per annum

## WORKING WITH

**Main Contractor:** Constain Construction

**M&E Contractor:** Rotary Souther

**Consultant:** Power Plan Solutions

## SYSTEM SUMMARY

**Boiler Type:** Herz® BioFire

**Fuel Type:** Wood pellet

**Fuel Store:** Cylindrical silo

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**Rural Energy**   
INSTALLING BIOMASS SINCE 2002



## INSTALLING THE HERZ BIOFIRE 995kW

This boiler meets the huge heat load that the 24 hour service station required. It is also modular and can be delivered in two parts, ideal for ensuring that the boiler could be moved into the restricted plant room and installed correctly, maintaining the high standards BAA demanded.

Rural Energy tackled the difficult plant room and site circumstances by recommending using wood pellet fuel. This allows for fuel to be blown through a pipe into the silo from some distance.

## CUTTING HEATHROW'S CARBON FOOTPRINT

Rural Energy relished the opportunity to work with a major international airport like Heathrow and assist in reducing its carbon footprint. The challenges of the project, from the tight plant room, restricted fuel delivery options and rigorous scrutiny the scheme had to undergo means that this turnkey solution deserves to be recognised. Rural Energy went out of their way to ensure every aspect of this project complied with BAA's high standards.

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