

International Consultants in Product Research, Design, Development & Certification

# **BEIS HY4HEAT**

## HYAIR CONSORTIUM

## **HYDROGEN COMMERCIAL AIR HEATERS**



### THE HYAIR CONSORTIUM

Enertek International Ltd – Consortium lead and R&D partner

Nortek Global HVAC – Commercial gas air heater manufacturer

**Powrmatic** – Commercial gas air heater manufacturer

Reillo (Key supplier) – Commercial gas burner manufacturer

The HyAir Consortium comprises two leading commercial gas air heater manufacturers supported by a major worldwide burner manufacturer together with an R&D consultancy specialising in product design and development. These companies have worked collaboratively throughout the Hy4Heat programme to produce a range of two air heaters and cabinet heaters suitable for use with 100% hydrogen gas.

#### **THE PRODUCTS - 100% HYDROGEN COMMERCIAL AIR HEATERS**

#### **Suspended Atmospheric Air Heaters – Nortek and Powrmatic Models**





Forced Draft Cabinet Heaters – Nortek and Powrmatic Models







Each of the air heaters developed have been certified by BSI as being in compliance with the Gas Appliance Regulation for use with hydrogen.

### **PRODUCT FEATURES - (Applicable to all appliances):**

- User operation virtually identical to natural gas models
- Dimensions and performance identical to the natural gas equivalents
- Installation requirements straightforward and similar to natural gas models
- Zero carbon emissions
- Costs (when manufactured in volume) will be similar to natural gas equivalents
- Safety features comply with hydrogen standards (PAS 4444)

#### **FUTURE DEVELOPMENTS**

Prior to commercial launch, the new hydrogen models will be adapted for use with methane (natural gas) so that 'Hydrogen Ready' versions will be available for use with natural gas prior to the gas supply being converted to hydrogen.

#### THE MARKET OPPORTUNITY

Conversion of the gas supply to hydrogen offers continuity and minimal disruption for the building owner / occupier, especially with the advent of hydrogen-ready appliances in the years preceding conversion of the gas supply to hydrogen. The market is driven by:

- The cost of gas is lower than the cost of electricity (and likely to remain so)
- Gas offers a cost effective, flexible and convenient way of heating large volumes of air within commercial premises
- Gas heating offers instant, easily controllable heat