

BEIS HY4HEAT

HYRAD CONSORTIUM

HYDROGEN RADIANT TUBE HEATER



THE HYRAD CONSORTIUM

Enertek International Ltd – Consortium lead and R&D partner



Nortek Global HVAC – Radiant Tube heater manufacturer



The HyRad Consortium comprises Nortek Global HVAC (the UK's largest manufacturer of radiant tube heaters) and Enertek International Ltd, (an independent R&D consultancy specialising in gas product design and development). Both companies have worked collaboratively throughout the Hy4Heat programme with input from key component suppliers to produce a 100% hydrogen fired radiant tube heater.

THE PRODUCT - 100% HYDROGEN RADIANT TUBE HEATER

Vision VS overhead gas fired radiant tube heater – 25 kW



The radiant tube heater has been certified for use in field trials and full certification (for serial production) will be achieved before the end of 2021.

PRODUCT FEATURES:

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

FUTURE DEVELOPMENTS

Prior to commercial launch, the new hydrogen model will be adapted for use with methane (natural gas) so that a 'Hydrogen Ready' version 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 areas within commercial premises
- Gas heating offers instant, easily controllable heat