



The World's First Green Hydrogen-powered Crematorium Will Use FTPS Gas Division's Technology

FTPS Gas Division will supply a twin-stream Gascat gas pressure reducing system to one of the successful projects on the Government's £57.5 million Industrial Fuel Switching (IFS) Programme, which funds the development and demonstration of innovative fuel switch solutions. The IFS is part of the £1bn Net Zero Innovation Portfolio which provides funding for low-carbon technologies and systems.

The project, HyCrem, involves the decarbonisation of a working crematorium, located in Worthing, West Sussex. This project will demonstrate the potential for deep decarbonisation of a working crematorium by fuel switching to hydrogen. In the UK, 79% of people are now cremated, with around 470,000 people cremated each year across the UK. Cremation is an energy-intensive process currently reliant on natural gas and the crematorium has the largest carbon footprint of any one council site. Annual emissions from gas use are nearly 70,000 tCO₂e/year across the UK crematorium industry. Worthing Crematorium is the third busiest crematorium in the country, consuming 2.3GWh gas last year with an associated carbon footprint of 425 tCO₂e.

Worthing Borough Council recently conducted a feasibility study in decarbonising its crematorium, which showed that a switch to electric cremators would carry with it some initial technical and financial challenges. As a potential alternative to electrification, the project partners (FT Pipeline Systems, Worthing Borough Council, DFW Europe, the University of Brighton, Ricardo AEA and Net Zero Associates) will demonstrate at scale that natural gas can be replaced by hydrogen in a working crematorium and still maintain the same level of service. The proposed new process will use green hydrogen, which is produced using electricity from renewable sources, to power one of the three cremators during the trial period. Unlike natural gas, hydrogen doesn't give off carbon emissions when burnt. Green hydrogen is also produced without any carbon emissions.

FT Pipeline Systems Gas Division will supply a twin-stream Gascat pressure reducing station for the initial trial which is scheduled to start early in 2024. The dual system is precautionary, offering a back-up option in the unlikely event one is needed. Our supply partner, Gascat, are world leaders in their field and are located in Brazil.