



## **IGEM chosen to develop new hydrogen standards as part of £25m government Hy4Heat scheme**

The Institution of Gas Engineers & Managers (IGEM) has been chosen to develop hydrogen standards for the government's £25 million research and innovation programme.

The Hy4Heat programme is a feasibility study into the use of hydrogen for heat in UK homes and businesses aimed at establishing whether it is technically possible, safe and convenient to replace methane with hydrogen in residential and commercial buildings.

As part of this project, IGEM will be reviewing all relevant existing standards and bringing together a group of technical specialists to identify knowledge gaps, both in the UK and internationally.

This work will help the government to determine whether to proceed to a future community trial. A separate project will look at purity, odourisation and colourisation.

The Department for Business, Energy and Industrial Strategy (BEIS) has appointed Arup+ as the programme management contractor for the Hy4Heat programme to manage and co-ordinate the various work packages, including the standards work.

Mark Neller, Director at Arup, said: "The UK has an opportunity to lead the way in using hydrogen as a domestic fuel, making a significant reduction in CO2 emissions. This project will help establish the feasibility using hydrogen for cooking, hot water and heating our homes. It will also undertake the essential preparatory work for possible future community trials."

Three IGEM working groups will look at the following areas: DSEAR, materials, leakage rate and ventilation; appliance location, fluing, installation and air supply; and installation. The work will be peer reviewed by the Hy4Heat project board, industry experts from the Health & Safety Laboratory, DNV GL, and IGEM's own Technical Coordinating Committee and Gas Utilisation Committee.

IGEM Head of Technical Services Ian McCluskey said: "IGEM is recognised around the world as the leading body producing standards relevant to the whole gas supply chain.

"Thanks to our network of senior engineers from every corner of the gas industry, no other organisation is better placed to develop a hydrogen standard for the Hy4Heat project.

"This work, alongside IGEM's involvement in other GDN-led hydrogen projects, will ensure that the relevant standards are developed and owned by the UK gas industry, ensuring the UK's proud 200-year history of gas safety is maintained.

"This will significantly contribute to our industry's ambition to develop a safe and secure low carbon gas network for the future."

IGEM will be delivering this project with industry partners DNV GL, Global Energy Associates, Health & Safety Laboratory, Heating and Hotwater Industry Council (HHIC) and ICOM Energy Association.

## **Notes to Editors**

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## **About IGEM**

The Institution of Gas Engineers & Managers, IGEM, is the professional engineering institution supporting individuals and businesses working in the global gas industry. Our core role is to encourage the highest standards of professional competence amongst individuals working in the industry.

We help individuals stay up to date by delivering technical training. We support industry through the development of technical standards that are recognised around the world. We share knowledge and expertise amongst our members and the wider gas industry. We work across sectors to demonstrate the innovation taking place in the industry through networking events and conferences.

We are licensed by the Engineering Council to award the professional titles Chartered Engineer, Incorporated Engineer and Engineering Technician and support individuals to become professionally registered engineers.

Working with stakeholders from across the sector we seek to demonstrate how the gas industry will help to decarbonise the energy sector and represent the views of our members to inform and influence future energy policy.

## **About long-term heat decarbonisation**

The Government's Clean Growth Strategy, published by the Department for Business, Energy and Industrial Strategy, recognises that to meet our 2050 commitment of reducing emissions by at least 80% of 1990 levels, we will need to decarbonise nearly all building heat and most industrial heat. There is currently no clear consensus on the best pathway to decarbonising heat at the scale needed to meet our 2050 targets. There are a number of options with potential – including hydrogen, heat networks, heat pumps, and biogas – but it is not yet clear which will work best at scale. BEIS are exploring these alternative options and technologies and, as outlined in the Clean Growth Strategy, plan to publish a full report on the review of evidence by end of this year.

## **About Hy4Heat**

Hy4Heat, a £25 million Hydrogen for Heat Programme, commissioned by the Department for Business, Energy and Industrial Strategy (BEIS), will look at the feasibility of replacing natural gas with hydrogen for cooking and heating. Arup+, the Arup-led team, including hydrogen specialists Kiwa Gastec, will explore the practicalities of using the zero-carbon gas in homes. The programme is expected to run until March 2021.

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