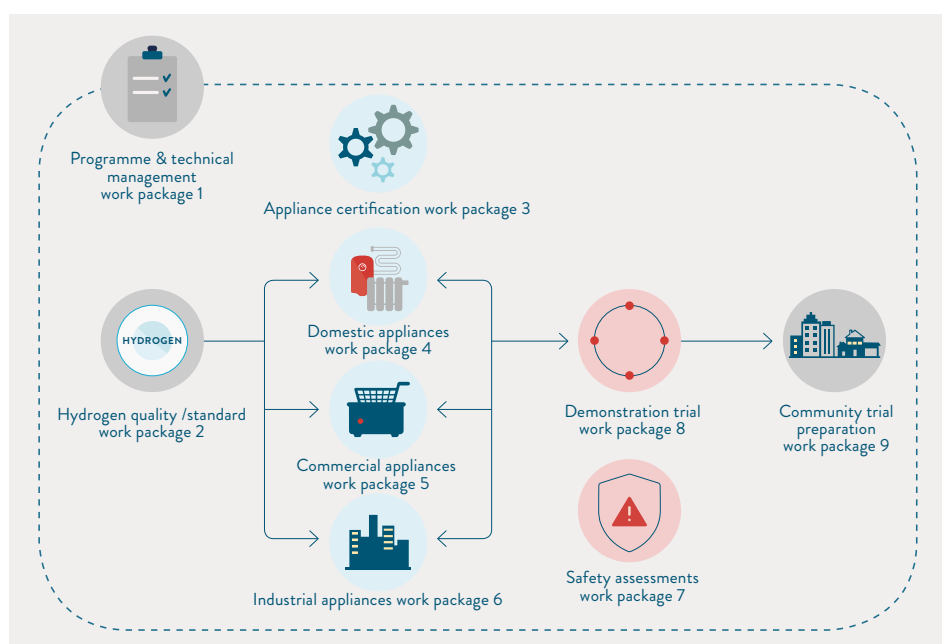


Hy4Heat – demonstrating hydrogen for heat

BEIS (Department for Business, Energy & Industrial Strategy) is looking at ways of decarbonising heat. One of the options is replacing methane with hydrogen, as when converted to heat it releases no carbon dioxide.

Hy4Heat is a range of an inter-related work packages that form a feasibility study to establish if it is technically possible, safe and convenient to replace natural gas (methane) with hydrogen in residential and commercial buildings and gas appliances. This will enable the government to determine whether to proceed to a community trial.

Hy4Heat programme work packages



Developing domestic hydrogen gas appliances competition (WP4)

Our 15 June 2018 event, focused on those interested to be part of the development of domestic gas hydrogen appliances, was held at BEIS conference centre with around 70 people attending.

BEIS has issued an [ITT](#) using a pre-commercial procurement process using SBRI (small business research initiative) approach for work package 4 – development of domestic hydrogen appliances. SBRI is a well-established approach for governments and public procurement to connect public sector challenges with innovative ideas from industry through the public procurement of research and development (R&D). [A brief webinar](#) has been created to support organisations considering applying to be part of the competition to develop domestic hydrogen appliances. Register your interest by emailing builtenvironmentinnovation@BEIS.gov.uk

Developing hydrogen gas standards (WP2)

This work package is to develop an enabling hydrogen gas standard for the Hy4Heat programme. An ITT has been issued and tenders have been returned for undertaking studies on the purity of the hydrogen and colourant which will be required as part of the hydrogen quality standard. Tenders are being evaluated at the moment.

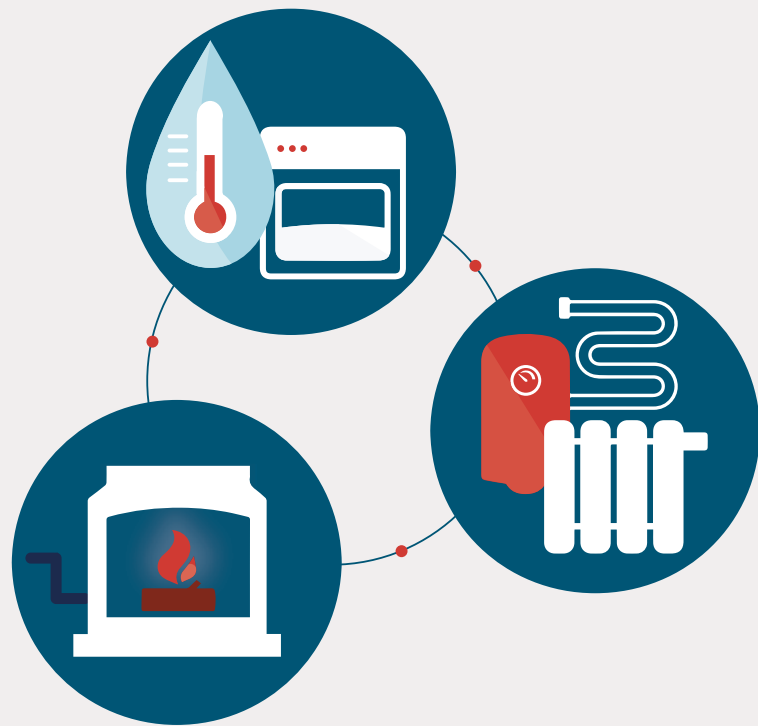
Certification for domestic hydrogen appliances (WP3)

On 7 August we held a stakeholder engagement event to consider our approach to developing standards for certification of domestic hydrogen appliances.

We shared the results of our survey of Notified Bodies and Test Labs undertaken earlier this year – which found that participants all believed hydrogen appliances could be certified under the current GAR (gas appliance regulations) and that the majority of existing facilities have the capacity to certify the number of hydrogen appliances developed as part of work package 4.

The group also discussed establishing an appliance testing and certification committee – to provide guidance on how existing standards can be applied to hydrogen and develop and issue guidance notes to assist in this.





Commercial and industrial appliances (WP5&6)

The invitation to tender has been issued by BEIS to appoint contractor(s) to deliver comprehensive research reports on the feasibility of converting the industrial and commercial sectors from natural gas to hydrogen. Tenders for work packages 5 and 6 have now been received.

Safety assessments (WP7)

A co-ordination group has been established with the GDNOs (gas distribution network operators). We are working on agreeing an approach for work package 7 and aligning Hy4Heat with other hydrogen programmes and initiatives.

Demonstration trials (WP8)

Work package 8 is exploring the options available for a hydrogen development and testing facility, as needed, to support work package 4 in conjunction with an unoccupied demonstration trial. We're aiming to understand and evaluate the benefits this could bring to the overall programme.

Coming up...

Hy4Heat will be presenting at:

- 11 September 2018 APPG (all party parliamentary group) energy studies in Westminster
- 12/13 September 2018 Annual Conference and Gas Utilisation, University of Leicester
- 25/26 September 2018 Scottish Hydrogen Fuel Cells Association

If you'd like us to present at a conference, or similar, then just drop us a line with the details and we'll do our best.

Hy4Heat in the news

The BEIS Hy4Heat study is the focus of an article in [Heating, Ventilation & Plumbing](#) magazine. Heating and Hot Water Industry Council Technical Manager, Steve Sutton, explores some of the challenges involved with introducing hydrogen as a fuel source for homes.

Get in touch

If you'd like to contact us with an enquiry or invite us to present at your conference or event email Hy4Heat@arup.com