Hy4Heat

WP10 hydrogen smart meter engagement event, Friday 14 December

Q&A

DEVELOPMENT OF HYDROGEN SMART METERS

Is Hy4Heat's requirement for a pure hydrogen meter and not for a blend of hydrogen and other gases?
Firstly Hy4Heat would like a meter developed that demonstrates metering/measurement of full hydrogen (i.e. Type A c.98%). If feasible we are looking for a meter that can operate and measure dual gases (i.e. natural gas as is currently used and then full hydrogen). The reason for a dual gas meter is that it would support an easier transition process from natural gas to hydrogen if this decarbonisation pathway is chosen. We are not expecting or requiring the meter to operate on any varying blends of natural gas and hydrogen. However, if a proposed meter could also operate on a blend, then this would be equally welcomed.

What are the timescales for hydrogen meter development?
We are keen that hydrogen meters are part of Hy4Heat's demonstration trials (work package 8) which are due to begin in April 2020. These demonstration trials will show the early prototypes of domestic hydrogen gas appliances (developed in work package 4) and we will be looking to demonstrate prototype meters as well.

Is Hy4Heat looking for meters for both commercial and domestic use?
Yes. The Hy4Heat programme is looking to demonstrate hydrogen meters for both.

INDUSTRY PROGRAMMES

There's currently activity across the UK installing homes with smart meters - has any consideration been given to this?
The Hy4Heat programme is not connected to the existing smart meter rollout, nor does it reference it. However, it is reasonable to say that if decarbonisation of heat pathway, via hydrogen, is chosen then it's likely to be 2030 at the earliest that appliances would be needed to be used at scale to work with hydrogen gas. So, by this time existing smart meters will be over 10 years old.

How is the hydrogen produced? Carbon capture and storage (CCS) is surely fundamental to decarbonisation, but it's not mentioned in the Hy4Heat Programme?
The Hy4Heat programme is focused on all aspects of end use of hydrogen for heat 'downstream of the ECV (emergency control valve)'. There are other BEIS and Ofgem programmes looking, for example, at the supply, storage and delivery of hydrogen. Hy4Heat is collaborating with these other programmes as required.