



Response to the Fuel Poor Network Extension Scheme review consultation

October 2014

Summary

The Combined Heat and Power Association (CHPA) is pleased to respond to Ofgem's consultation of the Fuel Poor Network Extension Scheme review. The CHPA is the leading advocate of an integrated approach to delivering energy services using combined heat and power (CHP) and district heating and cooling.

We welcome Ofgem recognition of the role district heating systems can have in alleviating fuel poverty. In the right circumstances, district heating (DH) can provide an affordable and low-carbon source of space heating and hot water to households.

District heating investments can support gas networks to help address fuel poverty today while ensuring the Fuel Poor Network Extension scheme helps support meet future decarbonisation targets. Heat networks are able to use gas more efficiently than would otherwise be the case with individual gas boilers. Well operated heat networks can keep the costs of heating down so that households do not need to switch on and off their heating system throughout the cold season.

This efficiency reduces both fuel poverty and carbon emissions today, with no DECC subsidy, whilst also providing heat infrastructure which will allow further cost-effective decarbonisation over the longer term. As pointed out by DECC and Ofgem, the challenge of heat energy is the need to provide transitional approaches to decarbonising heat production. The 2013 Government's Heat Strategy recognises that heat networks make it easier and cheaper to switch to renewable heat generation technologies in the longer term, such as large-scale heat pumps or fuel cells CHP, in contrast with individual solutions.

We recognise that the sale of heat is not part of the Ofgem's regulated responsibilities. We would therefore encourage DECC and the Ofgem to enable third-party organisations to deliver district heating asset investments funded through the Fuel Poor Network Extension Scheme during the current price control period. Such organisations could be independent ESCOs or district heating companies owned by gas networks operators. Gas network companies should be allowed to integrate the capital cost of DH schemes into their funding programmes.

This could be achieved by funding new gas connections to an energy centre located in an area of fuel poverty, but then requiring district heating connections to the group of multi-unit buildings when such investments are appropriate and cost-effective, and when the required building owner and resident agreement is secured.

Responses to the consultation's questions number 1, 2 and 4:

Q1. Do you think the Scheme effectively interacts with the UK heating Strategic Framework and Scotland's Heat Generation Policy Statement? How might it be improved to better align with wider activity? Please evidence your answer

At present, no. Both the 2013 UK Heat Strategy and the Scottish draft Heat Generation Policy Statement¹ identify district heating as a cost-effective solution, alongside other technologies, to provide lower-cost and lower-carbon heat to residents.

The strategic framework for low carbon heat sets out a pathway as to how to achieve Government's targets for a low carbon, affordable and secure energy future. This is only possible to achieve this target by developing alternatives to gas networks that will provide the transitional step to more sustainable heat in building future.

The review of the Fuel Poor Network Extension scheme offers an opportunity to better align the scheme within these strategic policy frameworks by supporting investment that can both help deliver affordable heat today while facilitating cost-effective carbon abatement as part of the UK's long-term heat Strategy. Heat networks supply can evolve over the lifetime of the asset (30 to 50 years) from gas to a wider energy mix because they can accommodate any source of heat of sufficient quality and temperature. As a result, district heating is recognised by DECC as an important transitional step needed for our low carbon future.

National Grid² provided some evidence that a large majority (85%, equivalent to around 1.5m households) of fuel poor residents not connected to the gas network within its distribution area live in high-rise, multi-occupancy buildings. These multi-unit buildings offer an opportunity to be connected to gas networks while also using district heating to use that gas more efficiently, further addressing fuel poverty.

From a behavioural approach, fuel poor households are also more likely to experience financial distress when upgrading or replacing a boiler (every 6 to 8 years). Replacing an individual boiler entails a significant upfront cost which may not be available in fuel poor households, who may not have budgeted for large, unexpected capital expenditures like energy improvement works. As district heating schemes own the entire heat infrastructure, connecting fuel poor households to heat networks enables to smooth away the maintenance costs over the lifetime of the infrastructure and take away the responsibility of maintaining the equipment.

How to deliver district heating through the Fuel Poor Network Extension scheme?

Due to its ability to use gas to reduce fuel poverty today and meet long-term renewable heat generation aims for the future, we therefore propose that the Fuel Poor Network Extension scheme continues to fund new gas connections to fuel poor households in individual households but there would be an assumption that district heating connections would be encouraged in larger multi-unit buildings, where it can be shown to be appropriate.

To determine where such district heating connections are appropriate, the Fuel Poor Network Extension scheme would need to ensure a district heating scheme at a particular site:

- Helped to reduce fuel poverty compared to business as usual; and,

¹ [Towards decarbonising heat: maximising the opportunities for Scotland, The Scottish Government, 2014, p 41](#)

² [Energy and Climate Change Committee: Fuel Poverty in the private rented and off-grid sector. Written evidence submitted by National Grid, December 2011](#)

- Was agreed to by the building owner, who would agree to ensure appropriate arrangements are put in place to operate and manage the scheme on behalf of residents. The 'owner' could include a housing association or a local authority; and,
- In cases where several multi-unit buildings are in the same community, allows for the option for one district heating scheme to connect several buildings, providing additional efficiency benefits.

To date, a majority of small-scale heat networks are supplied by a CHP plant using gas. The energy savings delivered by a CHP result in both energy bills savings for consumers and a reduction in carbon emissions.

In order to drive forward district heating investment, we would recommend that the review of the scheme set up sub-targets for a percentage of multi-unit buildings within a gas distributor area to be connected to district heating schemes, subject to the building owner acceptance of district heating.

The right solution in the right places – Micro CHP

In the right circumstances, heat networks can be effective in reducing fuel poverty, but there are areas where heat networks will not be appropriate, such as disseminated rural homes which are off the gas grid. It will be important that as part of any extension of gas networks to these areas, considering the expected rising cost of gas, that this resource is used as efficiently as possible. The fuel scheme should consider, in these cases, how to use other efficiency technologies like micro CHP, connected to a gas network or using LPG, to help reduce fuel costs for fuel poor customers.

Q2. Should the Scheme be targeted at certain types of customers/certain locations to maximise long term benefits (eg over a period of 15-45 years)? If so who/which locations should be targeted and how might this best be achieved?

Yes. The scheme could most cost-effectively help the maximum number of fuel poor customers by targeting large multi-unit buildings. However, this would need to be balanced against the aim to target those households in most fuel poverty.

By using gas more efficiently through district heating, the scheme could more effectively protect vulnerable customers over the longer term. Today's global energy markets are characterised by rising fuel prices and an uncertainty over fuel supply from Russia. With the volatility of international fuel prices, district heating networks alongside other technologies such as CHP, heat pumps or recovered heat can protect fuel poor households from the volatility in the fossil fuel market on the long-term.

Q4. Are there any changes we could make to the Scheme that would better align it to these strategies and forms of assistance?

Currently, district heating connections are not supported under the scheme but this is an option being considered by the Ofgem. We would highlight that if the Ofgem were to carry forward the inclusion of district heating in the scheme, a situation could arise where the Ofgem is simultaneously funding new gas connections while ECO is funding alternative approaches.

For further information, please contact:

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