Heat Trust consultation on an electric Heat Cost Calculator

Consultation Response July 2019

This response to the has been drafted by the secretariat of The Heat Network. The Heat Network is a forum to discuss and share good practice about district and communal heating within social housing. We aim to bring together our own communal heat experiences and share the lessons we've learnt with colleagues across the sector.

This consultation response is supported and counter-signed by the following social housing providers:

- Peabody Housing Association
- Southern Housing Group
- Swan Housing
- London Borough of Haringey

Collectively, these housing associations represent over 10,000 homes on heat networks: on our own metered and unmetered schemes as well as those at arm's length on S106 sites.

Respondent name:	Rachael Mills
Email address:	rachael.mills@se-2.co.uk
Contact telephone:	07747 801812
Are you responding as an individual or on behalf of an organisation?	An organisation
Organisation name:	The Heat Network
Would you like the name of the organisation you represent to remain confidential?	No
Would you like to receive further information on the development of the Heat Trust?	Yes
May the Heat Trust contact you for clarification or further information on your response?	Yes

1. Do you agree that developing an electric Heat Cost Calculator would be helpful? Please explain your answer.

We believe that open and transparent communications with customers is an essential element to any heat network. Customers should understand what being on a heat network means, what restrictions and opportunities that offers them, and how much it will cost from the earliest point in their customer journey as possible. Being able to compare the costs of living on a heat network compared to alternative heating solutions is a key part of this transparency and so yes, we support the development of an electric Heat Cost Calculator to sit alongside the gas version.

2. To develop the HCC to cover other electric technologies requires access to publicly available data. Are you aware of reliable public data sources that can be used to inform assumptions?

No comment

3. Do you agree with the proposed formula for direct-acting electric heaters? And if not, please can you explain why?

No comment

4. Do you agree with the proposed formula for off-peak storage heaters? And if not, please can you explain why?

We have not undertaken an in-depth review of the formula, but it doesn't quite feel right to us. For example:

- There is an assumption that all non-heating electricity use occurs during the day (when E7 tariffs are higher than standard tariffs) when some of it will be at night (when E7 off-peak tariff is lower than standard tariff): this overestimates running cost impacts of a dual tariff system slightly
- ii) For the E7 system efficiencies, they really need 4 efficiencies:
 - a) off peak heating system (which might be about 88% as you suggest)
 - b) on-peak secondary heating system (which might be 100%)
 - c) off-peak immersion might be 99% taking into account cylinder losses
 - d) on-peak immersion might be 100%

The formulas given only have a single efficiency of c88% which will also be overestimating running costs.

- Using Economy 7 as a benchmark in the long-term may be flawed altogether as we look to a future where demand management is likely to superseded Economy 7. The Heat Cost Calculator could therefore also include a caveat that we are looking at the 'now' rather than the future which is likely to be radically different.
- 5. Are you aware of reliable public data sources that can be used to inform assumptions on: -purchase costs for electric panel and storage heaters? -selecting the number of heaters required according to property size?
 No comment
- 6. Do you have any other comments?

There are two comments we would like to make:

i) As time has progressed, the Heat Trust has added fact sheets and further explanation to the Heat Cost Calculator, including a note that tenants may pay for part of their costs through a separate service charge. Users of the Heat Cost Calculator are asked to tick to confirm they've read the Customer Information Sheet, which explains:

When we look at the cost of heating your home, for a property on a district heating network, all the costs associated with heating a home are often contained within a single heat bill. This includes the cost for the fuel (e.g. gas, biomass), repair and maintenance, metering and billing. In comparison, a property with an individual gas boiler receives gas from the national gas network, which is then used within the property to provide heating and hot water. The costs of servicing the boiler, repairs, insurance and replacement of a boiler are separate additional costs, on top of the gas bill.

The Heat Cost Calculator then gives a breakdown of the gas central heating costs:

- annual boiler installation costs over the lifetime of your boiler
- boiler insurance and repair costs
- gas use

The heat network costs however are not broken down, but this would be helpful to aid further comparison. Are annual boiler installation costs included for example? And how does the gas/fuel usage compare?

We know that the Heat Trust is trying very hard to explain how heat network costs are differently billed, but we still think a consumer coming to the Heat Cost Calculator may not fully appreciate the nuances. Not every gas central heating owner for example, pays for boiler insurance and is unlikely to think of their boiler installation as an annual lifetime cost. Misunderstandings such as these could undermine all our best efforts to demonstrate cost similarities.

ii) Linked to this, we believe that the true cost of heat on many networks is likely to be masked by - sometimes inadvertent - subsidises in the social housing sector. The extent to which social housing providers are undercharging and making a loss on heat networks is not known but is a common concern amongst our members. Sometimes this comes to light only after overdue financial analysis, sometimes it's knowingly done because to charge the full rate would put customers into fuel poverty. At the core of this is poorly operating and inefficient systems, for which we have no or little data. As customers become more aware and better protected on heat networks, the reputational risk not only to social housing providers but to the heat network industry as a whole, will be increase. There is an urgent need to understand and improve our legacy heat network stock so it can truly deliver the low cost, low carbon heat it promises.