

Citizens Advice Response to the CMA's Heat Networks Market Study (Update Paper)

May 2018



Introduction

The Citizens Advice service provides free, independent, confidential and impartial advice to everyone on their rights and responsibilities. It values diversity, promotes equality and challenges discrimination. On 1 April 2014, the Citizens Advice service took on the powers of Consumer Futures to become the statutory representative for energy consumers across Great Britain.

The service aims:

- To provide the advice people need for the problems they face
- To improve the policies and practices that affect people's lives.

The Citizens Advice service is a network of nearly 300 independent advice centres that provide free, impartial advice from more than 2,900 locations in England and Wales, including GPs' surgeries, hospitals, community centres, county courts and magistrates courts, and mobile services both in rural areas and to serve particular dispersed groups.

In 2017, Citizens Advice Service helped fix 163,000 energy problems through our local network and 61,000 through our Consumer Service Helpline. Our Extra Help Unit specialist case handling unit resolved 8,367 cases on behalf of consumers in vulnerable circumstances, and their Ask the Adviser telephone service handled 2,593 calls from other advice providers in need of specialist energy advice.

Since April 2012 we have also operated the Citizens Advice Consumer Service, formerly run as Consumer Direct by the Office for Fair Trading (OFT). This telephone helpline covers Great Britain and provides free, confidential and impartial advice on all consumer issues.

Response

Assessment of the issues

Q1. Do you have views on our approach to analysis and our findings regarding heat network outcomes, misaligned incentives in the supply chain and transparency?

Citizens Advice welcomes the findings from the CMA's market study of the heat networks sector. It is our view that the CMA has accurately highlighted the main issues that consumers in the domestic heat sector face. Energy use in the home, including heat, is an 'essential for life' service and should be accessible, safe, affordable and fair for all.

Citizens Advice has been concerned for some time about the impact that a lack of regulation has on consumers of heat networks. We have welcomed the opportunity to contribute to the market study as it has progressed, and commend the CMA for taking an approach which focuses on addressing the drivers of poor outcomes for heat network consumers.

We note that one area that the CMA does not appear to explore is how to best ensure the construction of low-carbon heat networks occurs at a pace compatible with the government's Clean Growth Strategy while simultaneously ensuring markets are functioning effectively, costs are spread fairly and consumers are adequately protected.

The CMA makes important proposals that property developers shoulder any additional costs where low-carbon planning requirements oblige them to install heat networks with whole life costs exceeding a gas boiler comparator, however it is unlikely that local planning requirements will, by themselves, be sufficient to drive the uptake up of heat networks on the scale envisaged by government (e.g. 1 in 5 buildings by 2050).¹

This question may be beyond the formal scope of the CMA's market study, however, we note that the UK's statutory climate targets are the main driver of the expected growth in heat networks. From a consumer perspective, it is

¹ Page 151 HM Government [The Clean Growth Strategy](#) (October 2017)

important that the UK's decarbonisation targets are not only met at least cost, but that those costs are fairly distributed. The question of how to best drive forward demand for low-carbon heat networks is therefore a fundamental one.

Q2. Do you consider the individual household gas boiler price to be a reasonable benchmark for customers to be confident that their heat supply is value for money?

Citizens Advice agrees that the individual household gas boiler price is a reasonable benchmark against which to measure value to heat network customers. The CMA has constructed two price comparators: Comparator 1 uses a unit price of gas price based on the *average* price currently charged to domestic consumers, whereas Comparator 2 uses a charge based on the *safeguard* tariff which the CMA has prescribed for prepayment meter customers (and also assumes a more efficient boiler). The CMA notes that Comparator 2 gives benchmark prices around 14% lower than Comparator 1.²

Comparator 1 does not seem to be the best benchmark against which to assess whether heat network customers are receiving value for money, insofar as the CMA has recently found that the largest energy suppliers were overcharging their customers to the tune of £1.4 billion a year over 2012-15 and proposed a suite of reforms to reduce consumer detriment in the energy market, including a prepayment price cap.³ We therefore welcome the CMA's application of Comparator 2 which we consider to be a fairer benchmark for good value.

Q3. Have we accurately captured the two broad categories of delivery models in the heat networks market (described in section 5) employed by housing associations and private property developers and their impact on customer outcomes? Do you have any views on potential different categories?

The two delivery-model categories described by the CMA in the interim report (right-to-use sits with leaseholders versus right-to-use sits with Energy Service Companies) appear appropriate to us at this time.

However, the CMA's section on delivery models states: *"We do not focus on heat networks operated by local authorities as we consider that the risk of detriment is substantially reduced as they do not have the same profit motive and incentives as*

² Para 3.21 of [CMA Heat Networks Study update paper](#)

³ Para 194 [CMA Energy Market Investigation \(Summary\)](#)

private operators.” While the large BEIS consumer survey seems to confirm that service and pricing is generally worse for customers on private networks, some of the worst complaints of high prices and poor service Citizens Advice is aware of have come from residents of low-income housing estates.⁴ Customers of heat networks operated by local authorities or housing associations will still need strong regulatory protections.

It is important to note that consumers do not differentiate by operator. Given the proliferation of heat networks and the anticipated increase in the number of heat networks installed, it is important that all heat network consumers can access and easily navigate the market. Citizens Advice recommends that any new regulation of this market should serve all consumers regardless of delivery model.

Recommendations

Regulation of heat networks

Q4. Do you have views whether heat networks should be regulated? If you agree that they should be, please provide any views on which body might be best placed to act as the sector regulator.

Citizens Advice welcomes the CMA’s recommendation to regulate heat networks for current and future consumers, and has been calling for more consumer protections in this sector for some time.⁵ It is standard practice for natural monopolies to be regulated so as to prevent consumer detriment, and several examples of regulated natural monopolies already exist in the energy sector, e.g. the electricity transmission and distribution networks and the gas distribution networks. For both gas and electricity networks Ofgem notes that, *“Since [these] are natural monopolies they are regulated by us to protect consumers from potential abuse of monopoly power.”*⁶ Similar protections are needed for customers on heat networks, and our latest research has found that these consumers have a keen desire for regulation and more protections in the sector.⁷

⁴ Forthcoming qualitative research from Citizens Advice found that heat network consumers living in social housing had numerous complaints about pricing and customer service.

⁵ See e.g. [District Heat Networks](#) (January 2016), [District Heat Networks 2](#) (May 2017), [Heat Network Customers Deserve Better Customer Service](#) (blog: December 2017)

⁶ See e.g. <https://www.ofgem.gov.uk/electricity/distribution-networks/gb-electricity-distribution-network> and <https://www.ofgem.gov.uk/gas/distribution-networks/gb-gas-distribution-network>

⁷ Focus groups conducted on behalf of Citizens Advice by Future Thinking found that 95% of respondents felt that regulation was important (research is currently unpublished).

The evidence collated by the CMA suggests that, on average, heat network customers enjoy lower prices and experience similar satisfaction/dissatisfaction levels to gas customers with household boilers. Nevertheless, there remains considerable variability in the prices and satisfaction levels experienced by heat network customers. Moreover, on those occasions where heat network customers face extortionate prices or receive unacceptable levels of service, most consumers have limited avenues of formal redress.

There are currently around 450,000 households on heat networks, but this figure is set to climb dramatically as the government seeks to meet its legislated carbon budgets and its longer term target under the Climate Change Act. Supported by BEIS's £320 million Heat Network Investment Project (HNIP) the number of households served by heat networks is expected to roughly double by 2021, and continue to climb rapidly thereafter.⁸ The long-term scenarios in the government's Clean Growth Strategy assume that 1 in 5 buildings will be supplied heat by heat networks between now and 2050.⁹ With the volume of customers served by heat networks expected to grow aggressively under these policy drivers, it is essential that this consumer base will be properly protected, lest the worst practises of today become the standard practices of tomorrow.

As the statutory consumer watchdog for electricity and gas consumers, Citizens Advice has significant experience of working bilaterally with suppliers, with trade bodies and with the regulator, Ofgem, on identifying and addressing customer service and consumer experience issues. We agree that Ofgem has the experience and organisational structure to implement and enforce regulation of heat networks. In addition, a single regulator for all energy consumers could avoid duplication and consider the energy system as a whole, which will be beneficial in a fast changing market on the cusp of significant technical and regulatory change. However, if Ofgem were to take on this role there would need to be a considerable investment into understanding the building, development, planning and construction industries given the key roles that these sectors have in relation to heat networks. Furthermore, regulation in this area must also consider how to best work with local authorities who are crucial to the planning/building control process.

The CMA has rightly suggested that an effective regulatory regime would require both design of suitable duties and a mechanism for identification, monitoring and enforcement of regulation. Citizens Advice has consistently called for heat

⁸ An additional 400,000 buildings are expected. See page 7 of the [Government response to the HNIP consultation](#)

⁹ Page 151 HM Government [The Clean Growth Strategy](#) (October 2017)

network consumers to benefit from the same protections as gas and electricity consumers. This could be delivered by mirroring the current licensing regime. However, given the rapidly changing nature of the energy market, it is unclear what form future regulation of electricity and gas supply should or will take. It has been our experience that the current licensing regime is proving to be difficult to enforce, with new entrants into the market setting up and taking on customers before they have the systems and processes in place to deliver good quality customer service.¹⁰ This is pertinent to the heat market, given the number and size of heat networks that operate currently, as well as the desire to expand heat networks across the country. It will be important to ensure that BEIS, Ofgem and other bodies continue to discuss these issues, and work with stakeholders on the shape of future the regulation of heat networks. It is essential that the focus on delivery for consumers is paramount, regardless of the approach taken to regulation.

Citizens Advice agrees that there is a need for consistent regulation across Great Britain. Heat is a devolved matter in Scotland, and it is our view that consumers would benefit from a consistent approach to regulation across the nations, with the option for devolved governments to go further and enhance these protections for consumers.

Q5. If there is sector regulation, should it apply to all communal and district heating networks, all delivery models and existing as well as new networks?

Citizens Advice recommends that all heat networks should be subject to regulation, though we recognise that rules will need to be flexible to accommodate the variety of different heat networks, and especially the differences between new and existing networks.

Ultimately, consumers do not make a distinction between the different types of heat network or delivery model, and any future regulation should ensure that it is easy for consumers to understand and exercise their rights.

Q6. Do you have views on whether regulation of heat network prices to end customers is appropriate? If there were a form of price

¹⁰ Citizens Advice [Energy star rating “raises serious questions” for some smaller firms, says Citizens Advice](#) (press release, March 2018)

regulation, should it be a cap at a certain level, or a 'principles based' approach with self-reporting against permissible contract terms and a regulator to investigate complaints? What factors should determine the maximum level of prices?

Citizens Advice supports the regulation of heat network prices to end consumers. The CMA has expressed a preference for 'principles based' regulation with self-reporting and the ability of a regulator to investigate complaints instead of a price cap. Citizens Advice tentatively supports the CMA's 'principles based approach'.

While Citizens Advice has elsewhere supported the price cap on Standard Variable Tariffs for gas and electricity consumers, we recognise that the heat networks sector encompasses a large number of small suppliers and is highly heterogeneous, with different networks facing significantly different upfront and operating costs. In electricity and gas, the regulator only has to adjust its price cap for the different cost to serve of 14 regional networks – each of whom serve hundreds of thousands, or millions, of households. Conversely, there are around 14,000 heat networks, each of which will typically serve a much smaller number of households. This means that any attempt to set network-specific price caps in heat would be far more difficult, and is likely to be far less proportionate, than it is in electricity and gas. An alternative approach of setting the same price cap for all heat networks would avoid that complexity, but would not reflect the individual cost differences between them. This could mean that even if it was set at, on average, the right level, it might be too high or too low for any individual network – exposing either consumers or the asset owner to detriment.

There are differences between the electricity and gas price cap, and any potential heat price cap, on the risk of detriment were prices to converge around the cap. In the case of the prepayment meter cap introduced for electricity and gas, this was set at a level below the average prices charged by large suppliers. This meant that even if prices had converged around the cap consumers would still have benefitted (e.g. because the convergence could only have been downward).¹¹ While the design of the broader electricity and gas price cap is yet to be finalised, it also looks likely to be set below average prices. But in the case of heat, both of the benchmark gas comparators the CMA uses in its analysis are set above average heat prices. Because of this, if a price cap was set based upon

¹¹ Incidentally, evidence suggests that the gas and electricity price spread is actually very similar now to where it was before the cap was introduced, e.g. See Figure 4 of our [response to Ofgem's consultation on its third working paper on the design of the electricity and gas price cap](#).

either benchmark, there is a risk that price convergence could push prices upwards.

In the gas and electricity market, the risk of SVT prices converging at the price cap is also mitigated by customers' access to alternative tariffs and energy suppliers and by competition between suppliers to attract engaged customers.¹² As heat network customers are not afforded the same opportunity to switch, the risks that price capping will lead to consumer detriment are more acute.

The CMA notes that, in the Netherlands, an interim price cap on heat network prices benchmarked against the price of gas on a household boiler saw supplier prices converging at the price cap. Given that the CMA found that most UK heat networks are currently priced below the CMA's two gas-boiler based comparators (around 90% below Comparator 1 and around 80% below Comparator 2), with many priced significantly below (54% of networks charged less than half of Comparator 1) convergence at a price cap benchmarked against gas boilers in the UK could lead to significant consumer detriment.

Citizens Advice remains concerned that some specific heat network customers – who have even less market power than prepayment customers in the gas and electricity markets – might be left behind in the current wave of consumer protections and market reforms. In its consumer survey, BEIS notes that some heat network customers are “paying more than £1,000 or even £2,000 per year”.¹³ We will therefore be monitoring the evolution of any new regulations carefully and will continue to engage in the policy discussions as they develop. If the new regulations leave any customers on heat networks paying more for their heating than similar customers protected by the prepayment meter cap, it will be an important signal that the new regulations are failing some consumers and need to be further developed. We are also mindful that it may take some time for the new system of regulation to be implemented. To avoid the risk that consumer problems remain unchecked during this transition period, we expect the CMA to maintain a watching brief, and to take appropriate action under existing consumer protection legislation, if problems emerge prior to the implementation of the new regulatory regime.

While we agree with the CMA that a principles based approach, including self-reporting and the creation of a regulator who is able to investigate

¹² Indeed, we have found that historical switching patterns have not been significantly affected by the price differential between the cheapest fixed deals from large suppliers, and the average SVT offered by the Big 6. See para 3.14-3.18 in our [Written Evidence to the Domestic Gas and Electricity \(Tariff Cap\) Bill Committee](#)

¹³ Page 4 [BEIS Heat Networks Consumer Survey \(Results Report\)](#)

complaints that rules or guidance have not been followed, appears preferable to setting price caps, it is not without its own difficulties. There are currently around 80 electricity and gas suppliers, but there are over 2,000 operators of heat networks. This will create challenges for the new regulator. For example, in its assessment of proportionality – while it might not choose to act if only a handful of customers complained about an electricity supplier, because this might constitute only a small fraction of its customer base, an equivalent number of complaints against a heat network could constitute a much larger fraction of its customer base and necessitate action. It may therefore need to intervene in a larger number of smaller cases than utility regulators have traditionally been used to. Similarly, the ability of the regulator to build up a working relationship with – and understanding of – the suppliers it regulates will be challenging when there are so many of them, and they are often small.

Lastly, Citizens Advice is keen to ensure that the impact on consumers is recognised and that there is provision made to support consumers in this market. The introduction of a regulatory regime with consumer protections will potentially also create challenges for consumers, in understanding and exercising their rights. In the electricity and gas sectors, there is a statutory role for Citizens Advice in providing advice and support to consumers in exercising their rights. This includes providing targeted assistance to vulnerable consumers experiencing problems with their supplier through our Extra Help Unit, and monitoring and referring possible enforcement issues to the regulator. The Consumer Council for Water carries out a similar role in water. It is our view that there will need to be something similar in the heat sector.

Q7. Do you consider that any rules and guidance on pricing and quality should apply to all heat networks or, for example, only to those with ESCOs? Do you consider that it would be proportionate to ban 'capital contributions'?

Citizens Advice supports the introduction of rules and guidance on pricing and quality which apply to *all* heat networks, irrespective of the delivery model. Complaints received on our customer helpline, as well as through our qualitative research, has found that it is sometimes customers in social housing who have received the worst value for money and poorest service¹⁴.

Banning capital contributions from ESCOs is not a disproportionate intervention in our view. The CMA has identified that ESCOs have a greater chance of securing concessions if they make large capital contributions to developers and

¹⁴ Forthcoming qualitative research commissioned by Citizens Advice.

has found that this creates a perverse incentive for ESCOs to charge captive heat customers the maximum prices that will be acceptable to the developer (in order to recover these contributions).

The developers and ESCOs interviewed by the CMA have indicated that reputational risk imposes a natural ceiling on the prices that ESCOs can charge (and developers will allow), and that this corresponds with the price of heat using an individual gas boiler. Citizens Advice is not reassured that reputational risk is a sufficiently robust safeguard for heat network consumers. First, as the CMA notes, to the extent that this price ceiling exists it is ill-defined and likely corresponds to the SVT price;¹⁵ second, our consumer helpline and qualitative research have given repeated examples of customers being charged significantly more than the average SVT gas price; third, we are mindful that the research conducted by Kantar Public indicates that consumers have limited awareness of heat networks and take little account of their heating choices when making their buying/renting decisions.¹⁶ In seller's markets such as London, reputational factors are therefore unlikely to provide a significant constraint on developers heat network choices.

While banning capital contribution from ESCOs might help improve the value for money that heat network consumers receive, it will not by itself be sufficient to protect these consumers, as the CMA itself notes. Citizens Advice recommends that additional interventions are considered as the detail around the regulation of heat networks develops.

Q8. Do you have views on whether heat network customers should have similar consumer protections to customers of regulated gas and electricity utilities?

As natural monopolies with captive customers, Citizens Advice recommends that specific regulations are introduced to ensure that heat network customers are receiving good value for money and are receiving guaranteed minimum standards of service. In addition, we strongly recommend that heat network customers should be afforded similar protections to electricity and gas consumers, and also offered additional protections which reflect their conspicuous lack of market power.

Energy is an essential for life service, and it is important that consumers are able to maintain continuity of supply and can expect to resolve issues in a timely and

¹⁵ See footnote 95 of [CMA Heat Networks Study update paper](#)

¹⁶ Kantar Public, [Qualitative Research: Heat Networks](#)

consistent manner. For example (as is the case in electricity and gas) there should be clear requirements regarding how complaints are to be handled, with a statutory Alternative Dispute Resolution scheme (ombudsman) empowered to resolve disputes between heat network customers and their suppliers.

Billing continues to be the issue that most electricity and gas consumers contact the Consumer Service about and we note that the CMA also found that heat network consumers experience a range of issues in relation to billing.¹⁷ Experience from the electricity and gas market suggests that clear guidelines on billing should be introduced, including how standing charges, variable charges and usage charges are to be calculated and communicated to customers. Customer bills should be required to be both regular and frequent, and heat network suppliers should be prevented from back-billing customers by more than a year.

Electricity and gas suppliers have a number of duties and obligations specifically focused on supporting vulnerable consumers. Citizens Advice recommends that these should be replicated in the heat market. Heat network providers should be obliged to maintain a priority register for vulnerable customers and to provide these customers with alternative heating arrangements during a disruption. Appropriate safeguards should be put in place to ensure debt repayment plans are offered at an affordable level. A statutory consumer watchdog should also be appointed to the sector, whose contact details are clearly signposted in customer bills.

Citizens Advice also supports the introduction of a regulatory mechanism to put in place a 'Supplier of Last Resort' which would come into force if the original heat supplier is no longer able to meet its contractual obligations and a special administration regime would ensure that consumers are not left off supply. This is an important backstop for consumers, and is especially significant given the anticipated increase in heat networks across the country. As in gas and electricity, consumers' credit balances should be protected in the event of a heat supplier entering administration.

The CMA notes that Citizens Advice has in the past called for improved provision of prepayment meters as an option for heat network consumers. Prepayment meters can be an important tool which consumers in traditional electricity and gas markets like because they give an element of control and can help with managing budgets. Not all heat network providers provide the option of a

¹⁷ "Billing errors" account for 9,448 cases out of 26,346 total Energy Issues raised with Citizens Advice Consumer Service over the past year. See [this link](#) to access the data (Note that this public data covers England, Wales and location unknown calls only).

prepayment meter to their customers. The introduction of smart metering to all electricity and gas consumers, with the ability to see how much you've spent in in pounds and pence as well as the ability to switch payment mode, will make this distinction between gas/electricity consumers and heat consumers even more stark. Meter choices give consumers an element of control which is vital, and Citizens Advice recommends heat consumers are given the same or similar options to gas and electricity consumers once heat suppliers pass a reasonable minimum threshold of customers.

More broadly, heat network customers should, wherever possible, have meters installed to measure their actual usage. This is a legal requirement under the EU Energy Efficiency Directive¹⁸ and the UK's Heat Network (Metering and Billing) Regulations.¹⁹

The BEIS Consumer Survey found that only 36% of heat network customers were metered, and also found that heat network customers were almost twice as likely to report being "uncomfortably warm" as customers on mains gas (39% HN vs 22% non-HN). The survey also noted that heat network customers were less likely to be able to turn their heating off (11% HN vs 7% non-HN) with this problem being particularly acute for unmetered heat network customers, a quarter of whom have complained of overheating.²⁰

This low incidence of metering and high incidence of overheating suggests that a relatively high number of heat network customers are being billed based on an "unlimited use" basis, and we have some anecdotal evidence of this from our customer complaints helpline.²¹ Moreover the CMA notes that, *"The majority of suppliers told us that they do not bill the customers on their heat networks individually; the costs of heating and hot water are instead recovered via service charges levied on each property connected to the network."*²²

Unlimited use tariffs, or tariffs which otherwise fail to reflect individual usage, remove financial incentives for consumers to invest in energy efficiency measures or reducing wastage. Unlimited use tariffs therefore work against the decarbonisation agenda that heat networks are intended to support, while also needlessly increasing overall costs (though we note that the metered properties

¹⁸ [EU Energy Efficiency Directive \(2012/27/EU\)](#) 25 October 2012

¹⁹ [The Heat Network \(Metering and Billing\) Regulations 2014](#)

²⁰ See page 32 [BEIS Heat Networks Consumer Survey](#)

²¹ See e.g. p.18 of Citizens Advice [District Heat Networks 2](#) (May 2017)

²² Para 6.49 of the [CMA Heat Networks Study update paper](#)

sampled by the CMA currently tend to charge more than unmetered properties).

²³

We also note that the BEIS postal survey found that heat network customers were about half as likely to be informed of the amount of heating they had used compared with non-heat network customers (30% HN vs 61% non-HN (kWhs)).²⁴ Citizens Advice believes accurate metering will help provide customers with transparent and accurate bills (see Question 17 below). It is a prerequisite for customers to access tariffs based on actual usage. This could also open up opportunities to provide a range of tariffs based on intensity of usage, which some consumers we have engaged with have expressed a preference for – especially low usage consumers who are currently paying high standing charges.

²⁵

Energy is a notoriously complicated market for consumers to understand and navigate.²⁶ It will be important to ensure that any mechanisms to inform, advise, support or represent consumers does not contribute to this confusion. As the statutory energy consumer representative, Citizens Advice has a number of responsibilities which relate to electricity and gas consumers:

- Providing first tier energy advice via the Consumer Service helpline
- The Extra Help Unit which has a statutory duty to help vulnerable energy consumers
- Consumer advocate for energy consumers with a research, policy, advocacy and campaigns remit.

It is our view that heat network consumers would benefit from similar support and representation. This will be increasingly important as there are more heat networks in operation.

Q9. Do you have views on the recommendations described in section 7 that we are minded not to pursue (eg banning capital contributions from ESCOs to property developers, and mandatory re-tendering of heat network operating and billing contracts)?

[No response]

²³ See para 3.28 of the [CMA Heat Networks Study update paper](#). Metered customers in the sample might also be paying more because they tend to be customers of private network operators.

²⁴ Para 6.33 and footnote 120 of the [CMA Heat Networks Study update paper](#)

²⁵ See page 13 and page 10 of Citizens Advice [District Heat Networks 2](#) (May 2017)

²⁶ GK Consulting [Strengthening and Streamlining Energy Advice and Redress](#)

Planning and technical standards

Q10. Do you have views on how to improve technical standards, which cover the design and operation of heat networks, and make them enforceable? Could this be achieved in the absence of a regulatory regime requiring a licence to operate a heat network? For example:

- a. What is the role of the CIBSE ADE CP1 Code of Practice in this process?
- b. Do you have views on how these proposals could be embedded in the planning authorisation process?
- c. For potential heat network connections affected by Building Regulations and / or planning, how could appropriate technical standards could be embedded these processes at local, regional and national levels?
- d. Could operating technical standards be applied retrospectively to existing heat networks?
- e. What is the impact of the current approach to professional indemnity insurance for heat network design and build on the recommendations of design engineers?

Strong technical standards for the design, build and operation of heat networks are essential for securing both good value and reliable service to end consumers. Properly enforced, such standards could prevent property developers from cutting corners to save on upfront costs at the expense of higher operations costs, prevent developers from demanding inappropriate specifications from design engineers, and could help ensure that whole life costs are taken into account from the start of the construction process (see question 11 below).

Whilst Citizens Advice currently remains agnostic about the specific type of regulatory regime that is appropriate (e.g. a licensing regime versus an authorisation regime), it is our view that strong regulation is required to enforce technical standards. While the CIBSE ADE CP1 provides a starting template on which to base new technical standards, it is only a voluntary code of practice at this stage and neither this, nor a quality assurance scheme are a substitute for full regulation.

There are indications from other stakeholders that the Domestic Building Services Compliance Guides do not currently provide sufficient guidance to design an efficient heat network and need to be further improved, and we would support such improvements. However, while it is important that technical standards for heat networks be built into the building regulations, this is necessary but not sufficient. Industry stakeholders have noted that building regulations on energy are weakly enforced relative to fundamental health and safety requirements, which suggest other forms of complementary legislation will also be required.²⁷

We support the retrospective application of operating technical standards to existing heat networks to ensure that these are properly maintained and run. We note that the Fair Heat report cited by the CMA indicates that 20% gains in system efficiency are available through operational improvements, and industry stakeholders have separately advised that proper maintenance is fundamental to the longevity of heat network infrastructure.²⁸

Q11. How could local and development plans and their supplementary guidance be adjusted to take lifetime costs and customer prices into account? What would the impact of this be?

As the CMA notes there is a potential misalignment of incentives between property developers and end consumers, e.g. property developers might be encouraged to commission heat networks with higher operational and maintenance costs because this lowers their up-front costs (increasing their profit margin or making the price at which they can profitably sell the property more competitive). The CMA notes that the financial viability tests that property developers currently perform before applying for planning permission only look at the costs of building the development and do not consider lifetime costs or customer heat prices.²⁹

The CMA also highlights instances where property developers have demanded inappropriate specifications when commissioning the network which raise both up-front and operating costs, e.g. oversizing the network to meet capacity levels well in excess of those that that will realistically be required by the households connected to the network.³⁰

²⁷ Intervention at the CMA's heat networks roundtable (24th May 2018)

²⁸ Intervention at the CMA's heat networks roundtable (24th May 2018)

²⁹ Para 171 [Appendices to CMA Heat Networks Study update paper](#)

³⁰ FairHeat [Optimising Heat Networks](#)

In addition, the CMA notes that *“in some locations heat networks can be the most cost-effective way of achieving carbon targets set out in planning regulations”*³¹, but that higher costs to install and operate low-carbon or low-carbon “ready” heat networks risk increasing consumer energy bills compared with installing individual gas boilers.

To address these risks, the CMA recommends introducing *“a whole life costing approach encompassing the end user heat price and a comparison with prices and quality of service customers would experience if they were supplied by alternative options in the regulated energy sector (such as individual gas or electric boilers). This should include the choice of design of heat network, where a heat network is the preferred solution.”*³²

The CMA goes on to also recommend that, *“Where the government or local authorities promote the use of heat networks because of their carbon benefits, but they are more expensive to install than an alternative heating solution, our view is that this should not all be passed onto heat network customers through higher bills.”* adding that, *“As a general principle, the costs of installing infrastructure in a new development will be met by the developer as part of the construction phase, rather than being borne by customers through ongoing charges.”*³³

Citizens Advice is still formulating its position on these recommendations. We note, however, that there are some tensions in comparing the lifetime costs of heat network against an individual gas boiler using today’s gas prices, noting that a boiler installed today can be expected to be in operation until 2030, midway through the 5th carbon budget, and a heat network installed today could be in operation well after 2050 when the UK’s statutory climate target is due to be met. Over these timeframes there is a growing political risk that the government will introduce carbon pricing or equivalent measures to domestic heating as the UK’s carbon budgets become more challenging. If mandatory whole-life-cost comparisons are introduced which fail to somehow take account of these future policy costs, there is a danger they could unduly discourage low-carbon heating solutions, and exacerbate technological lock-in. We note that if future policy changes require the replacement of high-carbon heating systems only part-way through their lives, this could ultimately impose additional unnecessary costs on energy and heat consumers. To illustrate the potential policy risks, we note the HMT’s green book applies a shadow carbon price of £65 per tonne in 2018

³¹ Para 4.3 [CMA Heat Networks Study update paper](#)

³² Para 7.33 [CMA Heat Networks Study update paper](#)

³³ Para 7.34-7.35 [CMA Heat Networks Study update paper](#)

growing to £224 in 2050.³⁴ Indicatively, against 12,000 kWh of annual usage, this would imply annual (shadow) carbon costs of around £160 in 2018 growing to £550 in 2050.³⁵

Q12. How should a heat network quality assurance scheme be established and embedded into the regulation of heat networks? Should such a scheme seek to accredit the commercial, financial and contractual aspects of a heat network as well as the technical?

It is encouraging that the heat networks industry is developing a voluntary quality assurance scheme covering technical standards, however, a voluntary scheme such as this cannot be seen as a substitute to legally enforced minimum technical standards. Citizens Advice recommends that adherence to a Quality Assurance Scheme could, however, become a pre-condition for eligibility for central, regional or local government funding schemes (such as HNIP, etc.).

Transparency

Pre-transaction

Q13. Is further information required to improve consumer understanding of the significance of living in a home with a heat network? If so, what information would be useful?

Citizen Advice strongly agrees that further information is needed to improve consumers' understanding of what living in a home with a heat network entails before they choose to move in to a property. Multiple lines of evidence have converged to show that heat network customers have little awareness that their home is heated by a heat network before moving in, or what this will mean in terms of price, service and contractual lock-in.

The BEIS postal survey found that 20% of heat network customers did not know their heat was supplied by a heat network.³⁶ The qualitative research the CMA commissioned from Kantar Public found that heating arrangements were not explained to prospective residents when they were viewing properties and – to the extent that they were explained – were weakly understood, playing a very

³⁴<https://www.gov.uk/government/publications/valuation-of-energy-use-and-greenhouse-gas-emissions-for-appraisal> (Last accessed June 2017)

³⁵ This assumes a carbon intensity of 0.20463 kg/CO₂e per kWh as taken from BEIS's [GHG Conversion Factors 2017](#)

³⁶ [BEIS Heat Networks Consumer Survey \(Results Report\)](#)

limited role in housing decisions.³⁷ Research by Which? as well as the CMA's analysis of customer complaints found evidence of mis-selling, with misleading information being provided about heat networks.³⁸

This evidence suggests there are significant behavioural barriers which need to be overcome if prospective residents are to duly consider how their property is heated when selecting a new home. Additional obligations could be introduced to make this a much more salient feature in the consumer's decision to move in to a particular property, e.g. before moving in to a property, prospective residents should be clearly apprised of the fact that the property is heated by a heat network and informed that this means they will be unable to switch their supplier once they move into the property. Prospective residents should also be provided with a representative bill and informed of how the annual price of heat on the property is likely to compare with both a) the average price for similar properties served by individual gas boilers and b) the best market offer for similar properties. They should also be made aware of estimates of planned and unplanned outages and other service issues.

In short, consumers should have a clear sense of how much their heating arrangements (which are effectively tied to the property), can be expected to increase or decrease their routine living costs compared to those they would face if they rented or bought a similar property with more conventional heating arrangements. Other features of a property (cost, rent, location, environmental footprint, aesthetics) might make a home with a heat network attractive to prospective residents, even when an engaged customer might be able to secure cheaper heating prices in an alternative property with a gas boiler; however this should be an informed decision based on clear information.

Citizens Advice also recommends that this information should be made available as early as possible in the property selection process to ensure that proper consideration of the heat network arrangements are not swamped by other considerations in the property selection process. The same information should also be highlighted at multiple stages of the pre-transaction process.

Q14. Who should be responsible for ensuring that new leasehold agreements include a clear reference to the treatment of heat network assets connected to a leasehold property?

[No response]

³⁷ Kantar Public, [Qualitative Research: Heat Networks](#)

³⁸ Which? [Turning up the heat: getting a fair deal for district heating users](#) (March 2015)

Q15. Should heat supply agreements or contracts which set out key performance indicators, such as guaranteed terms of service, be made compulsory?

Citizens Advice supports the move to make heat supply agreements compulsory, noting that the CMA finds that, *“There also appears to be low incidence of heat supply contracts, meaning key information, contractual rights and obligations may not be available”* and recognises that *“this may also weaken the ability of customers to challenge suppliers and therefore their ability to incentivise suppliers to provide a better deal.”*³⁹

Heat supply agreements should include prices, tariffs, metering and billing details; future variations to price and tariffs; length of agreement; and arrangements at end of contract. They should also set out guaranteed performance standards at least as robust as those outlined by the Heat Trust concerning, e.g. temperature, continuity of service, response times, service payments for not meeting performance standards, and provision of alternative space/water heating arrangements to vulnerable customers during an outage.⁴⁰ Lastly, a heat supply arrangement should also include annual cost estimates and signpost to advice and dispute resolution arrangements.

Q16. How could EPCs be improved in relation to heat networks?

Energy Performance Certificates (EPCs) are an excellent opportunity to make consumers aware that a property they are considering is heated by a heat network, to explain what this means and to indicate the potential heating costs or savings they can expect to incur relative to similar properties heated through a gas boiler.

In Appendix D, the CMA notes that both the A-G rating and the estimated annual costs to run the building that are published in an EPC currently reflect average fuel-specific prices laid out in the Standard Assessment Procedure methodology rather than real life tariffs for the specific heat network the property is attached to.⁴¹ Integrating real tariffs into the Standard Assessment Procedure when calculating EPCs for heat network customers would help prospective residents to better understand the real costs they face.

³⁹ Para 6.50 [CMA Heat Networks Study update paper](#)

⁴⁰ See Section 6 of the [Heat Trust Scheme Rules](#)

⁴¹ Para 195 [Appendices to CMA Heat Networks Study update paper](#)

These issues should be considered in the government's forthcoming call for evidence on reforming the EPC. Citizens Advice has actively engaged with both national and EU policy discussions on how to improve the EPC and will continue to do so. However, we note that changes to the EPC, while an important step, are not sufficient to ensure that people considering moving into a property served by a heat network are duly aware of what that entails. In its recent consultation on Building a Market for Energy Efficiency⁴² the government noted 'EPCs are rarely considered by homebuyers in their property decisions, with many people purchasing a home and not seeing the EPC.' As outlined in our response to question 13 of this consultation, other steps are needed to inform potential residents that a property is on a heat network and what this means for them.

During residency

Q17. Should heat supply bills be improved? Is further information necessary? If so, what information would be helpful?

Complaints received through the Citizens Advice consumer service helpline, as well as additional evidence gathered through a consumer focus groups we've commissioned, have flagged transparency of bills as a major issue. The consumers we have spoken to have described confusion about how standing charges and unit prices are calculated (where they have been provided at all) and have expressed alarm at unpredictable changes in their heating bills. Several consumers have complained that their standing charge is routinely higher than their usage charge, that their standing charges change unpredictably, and that they are sometimes charged separately for repairs and maintenance when they had assumed these charges were subsumed within the standing charge they already pay. As the CMA notes, most billing complaints to the Energy Ombudsman from customers on Heat Trust heat networks have been concerned with standing charges.⁴³

Even where heat network prices are competitive with the costs of heating a similar property with gas on a household boiler, consumers may perceive that their bills are unfair if they can't understand them, or if frequent changes in the price make their household budgeting difficult. Citizens Advice considers it paramount that clearer guidelines on how standing charges and usage charges are calculated and communicated are introduced, as well as explanations of what the standing charge covers.

⁴² Page 24

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/653731/Call_for_Evidence_-_Building_a_Market_for_Energy_Efficiency_Final.pdf

⁴³ Para 6.44 [CMA Heat Networks Study update paper](#)

Ofgem is currently consulting on a new principles-based approach to their customer communications rules.⁴⁴ This approach is designed to be customer-centred and based on achieving consumer outcomes, but allowing flexibility for suppliers in how these outcomes are delivered. While we are still engaging with Ofgem on the details of these proposals, we are supportive of the general approach that the regulator is proposing.

Citizens Advice recommends that some of these proposed rules could be equally applicable to bills and other communications in the heat sector, and beneficial for these consumers. See Appendix A to this response for a list of these principles. The relevant principles for heat are those which seek to ensure that consumers:

- understand and can manage their consumption and costs
- know who they can contact for assistance and advice, including from third parties
- know what they need to pay, how it is calculated and when payment is required (with sufficient time to arrange payment)
- understand any disadvantageous contract changes and price rises, and their rights in relation to these events

The approach that Ofgem suggests may also be well suited to regulation of the heat market, which includes a broad array of companies and schemes, as well as public sector bodies, because each scheme will have specific issues and, potentially, serve specific consumer demographics. A principles-based approach would allow suppliers to meet their customer needs, based on their characteristics and preferences, as well as the characteristics of the scheme.

In addition to a principles-led approach, there may also be a need for some prescriptive rules in relation to communications. The need for these could be decided as and when such rules are developed.

As with gas and electricity bills, a customer service helpline should be clearly provided as well as additional signposting to organisations like Citizens Advice which can provide advice and support consumers seeking redress. Customer service helplines should have adequate opening hours to enable consumers to quickly resolve their problems, especially in the case of urgent issues related to failure of heat supply or self-disconnection of a prepayment meter. As set out in our response to question 8, gas and electricity customers at risk of disconnection or who are in vulnerable circumstances can also receive

⁴⁴<https://www.ofgem.gov.uk/publications-and-updates/domestic-supplier-customer-communications-rulebook-reforms>

assistance from the Extra Help Unit, which is a specialist team to support vulnerable consumers, and can raise a complaint directly with companies on behalf of customers.⁴⁵ A service of this sort should also be made available to vulnerable heat customers.

Q18. Should there be specific requirements regarding the frequency of bills beyond that already required by the Heat Network (Metering and Billing) Regulations?

The Heat Network (Metering and Billing) Regulations state that suppliers must bill customers at least once a year, and that this should be based on actual rather than estimated usage, so long as a meter reading has been conducted by the supplier or the customer. The regulations also stipulate that the supplier must provide bills on at least a quarterly basis if the customer requests it or if they opt for electronic billing.⁴⁶

Our research has shown that consumers would generally prefer more regular bills than they currently receive – and that 35% of consumers would like to get monthly bills/statements (something that is standard in the telecoms and banking sectors).⁴⁷ Citizens Advice recommends that heat suppliers should have to offer a range of billing frequencies, as this is most likely to meet diverse customer needs and preferences.

As before, Citizens Advice recommends that the government consider whether it is useful to align rules in the heat sector with Ofgem’s proposed principles for gas and electricity communications. These require billing information to be provided at a frequency that takes account of their ‘characteristics, preferences and their ability to effectively manage their costs and consumption’. This should lead suppliers to offer choices which meet all consumer needs, including those of consumers in vulnerable circumstances.

More generally, and beyond billing, it would be useful for the government to consider whether a high level and broad vulnerability principle should be applied to heat network consumers. In electricity and gas this standard clarifies to suppliers that there is an expectation they will uphold their obligation to treat all domestic customers fairly, and that they need to make an extra effort to identify and respond to the needs of those in vulnerable situations.

⁴⁵ <http://ehu.org.uk/>

⁴⁶ See Schedule 2 of [The Heat Network \(Metering and Billing\) Regulations 2014](#)

⁴⁷ [Response to Ofgem’s working paper on domestic supplier customer communications rulebook reforms](#)

Q19. Should standard performance metrics for suppliers be produced – for example, in relation to planned and unplanned outages and heat temperatures? Should this information be published?

Citizens Advice supports the concept of publishing standard performance metrics for heat networks above a certain size, as is currently required of gas and electricity suppliers. As noted in our response to Question 15, we would expect guaranteed performance standards to be at least as rigorous as those currently enshrined in the Heat Trust scheme rules.

These standardised performance metrics would help consumers see how their heat network compares with other heat networks and other energy suppliers, and these metrics could also be referred to in some of the pre-transaction documents when prospective residents are viewing a property (see our response to Question 13).

However, it is important to note that Citizens Advice has had concerns about the quality of guaranteed standards of performance data in the gas and electricity markets, and we expect that it will be even more difficult to assure the data in the heat market containing so many suppliers and operators. More broadly, data on heat network operators is likely to be more limited than in gas and electricity given number and variety of industry participants, and the smaller number of consumers served by each. In this context it is even more important that any performance indicators that are published need to be robust and demonstrative of service.

Finally, we note that a cross-sector framework for supplier performance scorecards is a proposal in the BEIS Consumer Green Paper – a proposal that Citizens Advice is supportive of. If taken forward we would expect that this framework would also apply to heat through the new regulator.

Appendix A

These are the proposed Ofgem customer communications principles that are relevant, in part or whole, to heat consumers. We have not amended the principles to refer to heat.

Consumption and cost choices

The licensee must ensure that it provides information, services and/or tools for each Domestic Customer throughout each year that, taking into account that Domestic Customer's characteristics, preferences and current Tariff, is effective in:

- (a) Enabling that Domestic Customer to understand the key features of their Tariff, including any Charges, and make timely choices in how and when they consume [electricity/gas].
- (b) Encouraging that Domestic Customer to consider their options to improve their ability to manage costs and consumption, including ways to be more efficient and flexible in how that Domestic Customer consumes [electricity/gas].

Assistance and advice information

The licensee must ensure that it provides relevant information about their energy services to each Domestic Customer at a frequency and in a form that enables that Domestic Customer to know how to quickly and easily:

- (a) Identify and contact the Relevant Party about a problem, question and/or other request for assistance. This includes, but is not limited to, general or specific queries, complaints, disputes and emergencies;
- (b) Seek impartial advice from independent parties such as Citizens Advice or Citizens Advice Scotland;
- (c) Identify their rights as regards to the means of dispute settlement, including how to access to any Relevant Ombudsman, in the event of a dispute with a Relevant Party; and
- (d) Access assistance. This includes, but is not limited to information about:
 - (i) Managing debt and finances;

- (ii) Managing energy consumption and associated costs; and
- (iii) Energy efficiency, social and financial programmes.

Bills and billing information

The licensee must ensure that they provide Bills, statements of account and/or any relevant billing information to each Domestic Customer, at a frequency and in a form that takes into account that Domestic Customer's characteristics, preferences and their ability to effectively manage their costs and consumption, including information about:

- (a) Any Charges that are, or will be, owed to and/or by the Licensee
- (b) How any Charges since the last Bill or statement of account have been calculated, and
- (c) When and how that Domestic Customer needs to pay any Charges, leaving adequate time for that Domestic Customer to understand their circumstances and, where appropriate, arrange payment

Contract changes

The licensee must ensure that it provides notification(s) to each Domestic Customer of any disadvantageous contract change, price change or any renewal of a fixed term contract.

Taking into account that Domestic Customer's characteristics and/or preferences, the notification(s) must:

- (a) Be provided in adequate time and in a form that enables that Domestic Customer to make an informed choice and take action to allow them to avoid any changes before they take effect;
- (b) Describe what the change is, including an explanation of the reason(s) for the change, any implications of the change if that customer takes no action and when the changes take effect; and
- (c) Communicate to the Domestic Customer their rights and options relevant to the change, including those set out in [conditions setting out retained prescription relating to the rights of the consumer].