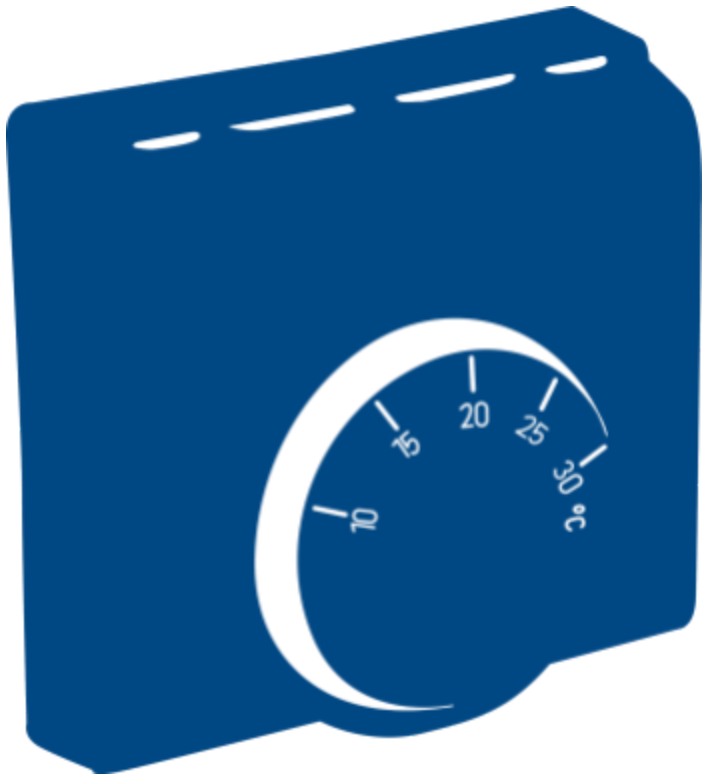
District heat networks 2

Analysis of responses from private heat suppliers



Zoe Guijarro

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Summary

Heat networks are a growing energy sector but they are unregulated. These systems are natural monopolies, delivering heat to customers in homes and business across Great Britain without the benefit of competition or the regulatory protections available in the gas and electricity markets.

The government has made clear its support of the continued development of this sector and so, in this analysis we set out to understand how some of the biggest heat suppliers are approaching customer service in four key areas: supply agreements (contracts), tariffs, metering and debt and arrears.

Findings

The calculation and availability of heat tariffs varies widely from supplier to supplier. 70% of heat networks only offer a single tariff and there is no set formula for how suppliers should calculate their tariffs or what items should be included.

Heat customers have less choice when it comes to meter type. Some customers prefer to have the option of a pre-payment meter (PPM) in order to help them budget. However, differences in heat network systems mean that some customers are not able to have a choice of meter type, regardless of their needs. Only 50% of customers supplied by our survey respondents had a choice of meter.

In most cases consumers cannot disconnect entirely from a heat network without incurring future costs. Unlike gas and electricity customers, heat customers cannot switch supplier. Only three of the seven suppliers allow customers to opt out at all and two of those stated customers would incur disconnection charges.

Overall level of debt and arrears is low but the average levels range widely across networks. It is encouraging that levels of debt and arrears in heat networks remains low at an average of 1.45% in comparison to the gas and electricity averages of 3.4% and 3.1% respectively.

Recommendations

1. The Competition and Markets Authority should launch a study into the lack of choice and control for consumers in the district heat sector.

2. The Heat Trust should develop best practice regarding the way in which heat tariffs recover costs through both standing and variable charges to consumers.
3. Where systems allow, heat suppliers should be providing customers with a choice of PPMs. Where a customer chooses to have a PPM installed it should be at no additional cost to the consumer.
4. The Government should build upon the latest evidence and work already undertaken on consumer protection to develop and deliver regulation for the heat sector in the long-term to ensure adequate, and consistent, protection for all heat customers.

Introduction

Through the Climate Change Act (2008) the UK has committed to decarbonising the energy delivered to our homes and businesses. This will mean changes to both the sources of fuel we use to generate the energy supplied to our homes, and the technologies used in the home to make use of that energy. These changes will affect us all and Citizens Advice wants to ensure the transition to a low-carbon energy future is affordable, safe, accessible and fair for all energy customers.

The delivery of heat to homes using heat networks (also called 'district heating') has been identified by the Committee on Climate Change (CCC) and the government as a key technology to support the decarbonisation of heat.

The use of heat networks to provide heat to homes can be traced back to the beginning of the twentieth century. The UK experienced a brief rush to installing type of heating in buildings during the mid-twentieth century but take up was limited.

Today, heat networks are experiencing a renaissance as a means to deliver heat to homes and businesses with a lower carbon content than individual heating systems. The most recently available figures[1] estimate that around 2,000 heat networks in the UK are supplying heat to approximately 210,000 homes and 1,700 commercial and public buildings[2]. A further 150 schemes are known to be under development[3]. In addition, analysis using figures from the CCC suggests that by 2030 one million homes[4] would need to be connected to heat networks in order to deliver on UK carbon targets. Other reports suggest this should be higher, closer to 2 million homes by 2030, and decarbonisation of heat would be more cost-effective if focused on heat networks rather than individual low-carbon heat systems such as heat pumps[5].

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[1] Heating networks were required to notify the National Measurement Office of their existence by December 2015 and this figure should be updated by December 2016, providing a more robust number.

[2] DECC (2013), *The future of heating: meeting the challenge,* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/190149/16_04-DECC-The_Future_of_Heating_Accessible-10.pdf pp 39.

[3] DECC (2015), news article, *£7m boost to heat industry innovation*, https://www.gov.uk/government/news/7m-boost-to-heat-industry-innovation [accessed 05/11/15]

[4] WWF (2014), *Warm homes not warm words,* http://assets.wwf.org.uk/downloads/wwf_heat_report_summary_web.pdf?_ga=1.223494811.1661905323.1413989380

[5] Policy Exchange (2016) *Too hot to handle?* https://policyexchange.org.uk/wp-content/uploads/2016/09/too-hot-to-handle-sept-16.pdf

Unlike the gas and electricity sectors, the delivery of heat to homes is not regulated. People receiving heat in this way do not receive the same protections as those heating their homes using individual gas boilers or electricity. Heat customers are unable to switch and are obliged to sign up to long-term contracts (usually 20 years or more). This means consumers do not benefit from any form of competition and are at risk of paying more for their heat in comparison to alternative technologies. Finally, people on heat networks do not have automatic access to a dedicated alternative dispute resolution (ADR) scheme (i.e. they cannot seek redress from the energy ombudsman) if they have a complaint that cannot be resolved directly with their supplier[6].

Citizens Advice's role

Citizens Advice is concerned about the lack of consumer protections for heat customers. There is no indication that Government will regulate this growing sector in the near future and has instead supported the creation of an industry-led, voluntary consumer protection scheme: the Heat Trust[7].

The Heat Trust was launched In November 2015 and while Citizens Advice welcomes the potential of the scheme as a means to improve the consumer experience of district heating, we remain concerned that it is purely voluntary. At present we see little evidence that heat suppliers will be compelled to join the Heat Trust in the future. However, it is worth noting that the scheme cannot set any guidance regarding reasonable costs to consumers or length of contracts, two of the biggest concerns to consumers[8].

Over the last year Citizens Advice has seen an increase in contacts to its consumer helpline about heat suppliers. The lack of specific regulation for the heat sector limits the options Citizens Advice has to help these customers. As the heat sector grows there will likely be a greater number of households struggling to get help when they need it.

Having a warm home is vital to the health and well-being of its occupants. Vulnerable consumers are those most at risk and without adequate consumer protection could suffer a high level of detriment.

[6] Unless their supplier and scheme is part of the Heat Trust consumer protection scheme.
[7] http://www.heattrust.org/
[8] Based on calls received by the Citizens Advice consumer service telephone line.

About this research

In May 2016 Citizens Advice issued an information request to 7 private heat suppliers[9] known to be operating district heating networks in England, Wales and Scotland. The aim of this request was to build a clearer picture of the services being provided to heat customers. This information helps us to identify the areas consumers might have most difficulty with as well as note any areas of best practice that should be replicated across the sector. A list of the the questions asked are attached in annex 1.

All 7 suppliers responded to our request[10] and we are grateful to them for taking the time to do so. All information in this summary that relates to individual suppliers will remain confidential unless already publically available from that supplier[11].

[9] Private companies operating and billing customers directly. Their networks will, however, have a mixture of private homeowners and tenants as well as social housing tenants.
[10] Brookfield Utilities, Engie, Eon, Pinnacle (Loka Energy Ltd) SSE, Switch2 and Vital Energi.
[11] Such as on the supplier's website or in another public report.

1. Heat supply agreements

Most heat networks require that connected householders sign a long-term contract. These contracts can be 20 years or more if the supplier deems it necessary to offset any risk and recover their investment. Long-term contracts with no option to switch puts all the control in the hands of the supplier and none with the customer.

Customers are unable to receive any of the benefits of competition (heat networks are effectively monopolies) such as downwards pressure on prices or choice of supplier. While we understand that there may be good reasons on the part of the supplier for long-term contracts, we have considerable concern about the balance of power in this relationship.

To better understand how prevalent the lack of choice is for heat customers, we asked suppliers if they allowed their customers to opt out of receiving heat from their network. Three suppliers stated that they allow customers to opt out while the other four said they do not.

Two of the three suppliers that allow opt out charge the customer the costs of disconnection. In the case of the third supplier it was not clear if they charge for the removal of equipment but they did state that the customer would continue to be charged the fixed cost elements of any heat bill (standing charge).

2. Heat tariffs

Heat customers generally receive bills in the same way as gas and electricity customers. A heat bill is usually made up of a unit rate (applied to each unit of heat used) and a standing charge. Standing charges are generally applied to cover any repair and maintenance of the heat network, and for the future replacement of equipment to ensure continuous running of the system.

Availability of tariffs

Unlike the gas and electricity suppliers we found there to be a limited choice of tariffs for consumers, with the majority providing no choice at all. 70% of the schemes we surveyed only had a single tariff for domestic customers. Two respondents did offer multiple tariffs. Choices were often either a standard tariff (as is common in the retail energy sector) or tariffs based on whether the customer had high or low usage. One supplier also provides a tariff for social housing residents.

Low usage tariffs tend to have a lower standing charge to reflect that the customer's use will have less of an impact on overall system repair, maintenance and replacement. This is the same for the social housing tariff, as the housing association will pay a proportion of the costs relating to repair and replacement while the tenant will contribute towards the servicing elements of the standing charge.

The lack of choice for the majority of customers in this sector could mean that some consumers are losing out and paying a high standing charge while using a low amount of heat. While it might be reasonable that the long-term replacement costs should be borne equally by all consumers, there is a question as to whether maintenance costs should be apportioned to better reflect the different amounts used by customers of a particular system.

Calculating the tariff

We found that there are a range of approaches used by suppliers in calculating their tariffs. However, for calculating the unit rate, the majority of suppliers use the domestic gas tariffs as a benchmark. Where this calculation was explained in more detail, two suppliers (across 4 schemes) take an average of the Big 6 gas prices to set their benchmark, and in one case it is based on the best available tariffs in the market. This cost is then adjusted to account for boiler efficiency (and in some cases losses). One supplier told us that after the initial benchmark

the cost is adjusted according to real changes in the costs of fuel to the energy centre.

There are some common elements, across all suppliers, that make up the standing charge:

- Costs of operation and maintenance;
- Replacement costs of Heat Interface Units (HIUs)[12]; and
- Boiler, insurance and management costs.

Most suppliers set standing charges to take account of the costs to serve customers and maintain buildings. They then link this to a measure (or measures) of inflation. The measures of inflation used include either the Consumer Price Index (CPI), the Retail Price Index (RPI) or a mix of the two.

One supplier separates out the capital replacement fund (usually the portion of the standing charge that will replace old equipment) from the standing charge, and adjusts this with inflation or BEAMA indicies[13]. In this case then the standing charge only accounts for the operating and maintenance costs of the system plus costs to serve customers.

Another supplier separates out two capital replacement funds within the standing charge, one to replace HIUs and one to replace common assets (boiler and pipework). This same supplier also charges a *common heat availability charge* on another site. This means they include some of the fuel costs in the standing charge rather than just in the unit rate.

The reported monthly standing charges applied to customers of these suppliers range from the lowest at £8.80 to £55.16 at the highest.

This data demonstrates not only the complexities of calculating heat tariffs but also the lack of a common, agreed standard methodology. This makes it difficult for consumers to understand what they are paying for and for consumer representatives, government and other stakeholders to assess whether the costs passed onto consumers are reasonable and fair.

[12] A Heat Interface Unit (HIU) is a piece of kit that acts as the bridge between the central boiler of a heat network and individual homes.
[13] BEAMA produces regular European-wide indicies for a number of industries and Labour and Material cost indicies for Electrical and Mechanical Engineering industries.

3. Metering

Previous research into district heat networks has found a mixed picture regarding metering. Many older systems are unmetered with customers paying a flat rate. This flat rate can be determined using a variety of calculation methods including taking into account dwelling size and occupancy levels. Newer systems tend to be metered, and with the Heat Metering and Billing Regulations 2014 now in force all new heat networks will have to provide meters to their customers.

Less clear cut is the availability of Prepayment Meters (PPMs) to customers and the costs associated with choosing them (where they do have a choice).

Our research found a 50:50 split[14] between consumers having a choice of prepayment meters or not. Suppliers that did not give their customers a choice told us that PPM solutions were not compatible with the metering on these specific systems, although in two cases the supplier did say this will be implemented in the near future.

Some energy consumers prefer PPMs as they allow customers to budget and more closely track how much they are spending. It is disappointing that, in some cases, heat customers are not being given the same opportunity as gas and electricity consumers.

[14] Based on customer numbers not suppliers.

4. Debt and arrears

The high upfront capital required to set up heat networks means that suppliers are under pressure to recover those costs. They also need to ensure ongoing security of supply and as such also have to invest in future replacement costs. This cost recovery is necessarily reflected in the heat bill the end consumer receives. Therefore, understanding the levels of debt in the heat market is important in two regards. Firstly, debt and servicing of debt adds a further cost to the supplier (and ultimately the customer) and secondly, debt can be an indicator that there is something wrong with either the operation or business model of the heat network.

Debt

In the gas and electricity market, debt is defined as those customers who either have their PPM set to collect a debt or customers who are on a debt management plan[15].

The proportion of heat network accounts in debt across all suppliers was 1.45%, this compares with 3.1% of electricity accounts and 3.4% of gas accounts. The average level of debt across all indebted customers was £167 compared to £382 for gas and £355 for electricity (Q4 2014 - see Ofgem's SOR).

This may be lower due to the fact that if the scheme has newer tenants or customers then they will have had less time to build up any debt. The data on debt for heat networks is also not adjusted for any sort of demographics (for example, we might expect more owner occupiers in new build district heating schemes and potentially lower debt levels).

There is a reasonably high range in debt levels across suppliers, from zero accounts in debt (some of which are on schemes not yet completed) to 35% in debt on a scheme with an average level of £175 debt. A scheme with over a third of customers in debt is a cause for concern as it could indicate an ongoing issue with the operation of a scheme.

Arrears

The proportion of accounts in arrears across all suppliers was 2.44%, this compares with 2% of all accounts for electricity and 1.9% of accounts for gas.

[15] The only Direct Debit customers included under this definition would be those who joined the scheme to specifically repay a debt.

The weighted average debt levels across all consumers in arrears is £240, compared to £481 for gas and £512 for electricity[16].

There is a similarly high range in arrears, from zero to 18% with average arrears of £789 and 32% with an average of £546.

[16] See Ofgem's Social Obligations Reporting for latest available figures.

Conclusions and recommendations

Heat supply agreements

Long-term contracts of 20 years or more that households connected to heat networks are generally obligated to sign mean that customers have no real choice over their supplier. In circumstances where customers are allowed to opt-out of a heat network they are often liable for disconnection costs and/or ongoing standing charges. In addition, the alternative heating systems available to customers opting out are likely to mean high upfront costs for installation and potentially high running costs when combined with ongoing costs from the heat network. This means customers have no real choice over their heating system.

The lack of choice over supplier and the impact this has on the heat costs to customers should be assessed by the Competition and Markets Authority (CMA).

Heat tariffs

Heat suppliers are not currently offering much of a choice of tariffs to their customers. While it might be more difficult to provide customers with as much choice as we see in the regulated energy market, options should at least be available for high and low heat users.

The setting of heat tariffs is also complicated for consumers to understand. Heat suppliers are generally using "big 6" energy tariffs as a benchmark and, while this may be meaningful for consumers, these tariffs tend to be the more expensive in the market. Heat networks also tend to buy gas in bulk which is cheaper. This challenges the use of these tariffs as an appropriate benchmark and whether it is a fair comparison for heat customers. ***Citizens Advice wants heat suppliers to develop and use a more appropriate benchmarking system to assess the affordability and comparability of their prices.***

There are a wide range of standing charges and we have focused on how these are calculated and indexed. It is difficult to determine whether the range of costs reported is fair because of the individual nature of schemes and how they are operated.

There could be a risk that suppliers may over or under- recover their costs through standing charges. Regular reviews of the standing charge may offer opportunities to make changes. These reviews should offer the opportunity to "reset" the charges separate from the normal indexation, which could either

increase or decrease the costs to consumers depending on the scheme performance.

In addition, heat suppliers are using the Retail Price Index (RPI), or a combination of RPI and other indices, to account for inflation to their standing charges. Given that RPI does not meet international standards and has had its designation as a national statistic removed[17], we believe it should not be used as the basis, whole or in part, for calculating inflation on heat network standing charges.

Where standing charges are linked to inflation, suppliers should be using the Consumer Price Index (CPI) to ensure fairness and parity for consumers, especially those who are more vulnerable and may be in receipt of benefits.

Best practice may be to separate the ongoing maintenance and capital replacement aspects of the standing charge. This will help consumers to better understand what they are paying for. The money for capital replacement can be held separately as an assurance to consumers that this will not be used for any other purpose (similar to a sinking fund run by a freeholder).

Citizens Advice recommends that the Heat Trust develops best practice for heat suppliers regarding cost recovery through standing charges and variable charges to consumers.

Metering

There is a lack of choice available to consumers of heat networks when it comes to type of heat meter. Some households prefer Pre-Payment Meters (PPMs) as they enable them to keep a closer control of their energy bills and budget accordingly.

Where systems allow, Citizens Advice would like to see all suppliers offering a choice of PPM meters to customers that would prefer them. These should be offered at no additional cost.

Debt and arrears

It is pleasing to see that overall the level of debt and arrears in the heat sector is lower than that of the gas and electricity markets. However, it is important to note that this is only a snapshot of the market as a whole covering just 7 heat

[17] UK Statistics Authority, https://www.statisticsauthority.gov.uk/monitoring-and-assessment/assessment/register-of-de-designations/ [accessed 7/4/2017]

suppliers and for some of those suppliers it does not cover all of their networks [18].

As the sector grows, given the high level of debt on some networks, it will be important for heat network suppliers to monitor their levels of debt and ensure robust processes are in place to appropriately handle debt and arrears for customers, especially in relation to vulnerable consumers.

[18] Some suppliers provide operational services for networks owned by other companies. This means that there is no uniform method of operation across all sites. Therefore, these suppliers provided details of some of the most appropriate sites for this research.

Appendix A - questionnaire

Name of heat scheme (if completing for multiple schemes):

How many heat customers do you supply? How many of these are domestic and how many are non-domestic?

How many heat tariffs do you offer your customers?
Please provide further details of each
[free text]

What does your heat service provide to the customer?
[drop down heat only/heat & hot water/hot water only]

How do you calculate your tariff(s)?
[free text]

Do you include a standing charge in your heat bills?
[drop down Yes/No]

If yes, please provide details of all the items the standing charge includes:
[free text]

If not are any fixed system costs recovered in another way (e.g. through property maintenance charges)? Please provide details. [free text]

Where a standing charge is applied please state how much it is and on what basis it is applied (i.e. per day/week/month or annual figure). Please also state if this varies based on tariff type. [free text]

Do customers have a choice of credit or prepayment meters? If there is no choice please explain your reasoning for that.
[Free text - to allow for explanation]

How long are your contracts for new customers:
- No long term contracts
- 5 to 9 years
- 10 to 14 years

- 15 to 19 years
- 20 to 24 years
- over 25 years
  [drop down selection]

Are customers able to opt out of receiving heat from you?

- Yes
- No

[drop down selection]

If customers are able to opt out of receiving heat from you would any penalties or charges apply?

- No penalties
- Standing charge would still apply
- Other

[drop down selection]

How many of your heat customers are classified as being in debt (debt is defined as being when there is an arrangement in place to repay the debt)?

[free text]

What is the average level of debt remaining for customers who are classified as being in debt?

[free text]

How many of your heat customers are classified as being in arrears (arrears are defined as being when there is debt but with no arrangement in place for this to be repaid)? [free text]

What is the average level of debt remaining for customers who are classified as being in arrears?
[free text]

Is there anything else you would like to share with us about your customer billing and billing systems?
[free text]

Please indicate using question numbers any areas where the aspects of the scheme are not under your control, and explain why this is the case. [free text]

Appendix B - Snapshot of customer complaints

Throughout 2016 Citizens Advice received an increasing number of complaints from consumers on district heat networks. These complaints provide us with valuable insight into the consumer experience of customers receiving their heating and hot water through these networks.

Customer bills

The majority of complaints we receive are related to customer bills. Common complaints are that bills are too expensive in comparison to alternative heating systems or that the costs exceed the estimates that they were provided with before moving into their home.

> "When I moved into my new home I was assured that the heating costs would be no more than a traditional gas boiler. But I am paying £1 a day for my heat and hot water, as gas boiler would only cost me 30p a day"

> "When I moved in I was guaranteed that my energy costs would be £334 a year. Since moving in I have found out that the standing charges for the communal heating system along are £450 a year. My total energy bill is going to be £1,500 a year - considerably more than I was led to believe"

Some customers questioned their tariffs and standing charges. Another query was whether a customer had to pay standing charges for a system they were not using.

> "I don't use any heat from the district heating system we have but I am still expected to pay the standing charge. I have tried to withdraw from my contract but I am not allowed to"

> "I am on a district heating system and my tariff is for unlimited use. Despite this I would like to see evidence of my use and meter readings but my supplier won't let me see this. What options are available for me to dispute this?"

Heat Supply Contracts

Many consumers expressed concern that they couldn't choose their energy supplier and expressed feeling "stuck" or "locked into" lengthy contracts.

> "After moving into my property with a district heating system I received a high bill. I looked into changing my supplier and discovered I am unable to do this and am locked into a contract. I want to know what my rights are regarding changing supplier."

Metering

We also received a number of complaints where consumers called seeking advice on how to get help when their heat meters were not functioning properly or being read correctly.

> "My wife and I are disabled pensioners. We moved into this home because we were told that the meter could be read remotely. Now our supplier is saying that is not the case and we can't change supplier or get help through the Ombudsman"

> "I moved into my home two and a half years ago. I have a meter to measure the amount of heat I use from the central boiler that supplies lots of different homes. During that time I have not had a bill because none of the individual meters were working. Now all of a sudden I have a big bill covering the whole period."

Debt and arrears

Consumers are also reporting issues with debt on heat networks with some being threatened with disconnection. The complaints we received also indicate a lack of understanding of any supplier complaints process and any protections they may have.

> "I have received a backdated bill from my supplier but because I am on a district heating scheme I have been advised that my supplier does not have to abide by the backbilling code."

“My supplier told us that there was a broken pipe in the heat network and this was causing the bills to be higher than normal. They said this would be corrected once the issue was fixed. Now I have received a bill that still doesn’t look right but I have told I have until the end of the week to pay or I will be disconnected.”

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