Which?

Turning up the heat:

Getting a fair deal for District Heating users

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Executive summary

Most people in the UK get their heating from mains gas. They can switch suppliers if they aren't getting a good deal and have protection if they are mis-sold a service, wrongly billed or their energy supply is interrupted. In contrast, district heating customers have no opportunity to switch suppliers or right to redress should the service fail to meet expectations.

Around 210,000 households across the UK are connected to district heat networks and the government believe this could rise to 8 million by 2030, representing around 14% of the UK's total demand for heat. Despite the level of ambition, there is a lack of information about consumer experiences of district heating, making analysis of the sector challenging.

To better understand the consumer experience, Which? conducted a series of focus groups and telephone interviews with consumers on district heating. We also collected price data on more than 50 schemes supplying heat to around 87,000 households.

This investigation uncovered a significant number of consumers who were dissatisfied with their district heating scheme, with cost a widely held concern. Consumer dissatisfaction ranged from concerns that they may have been mis-sold district heating to confusion about what was included in their bills. Meanwhile many consumers felt let down and frustrated by poor customer service and complaints handling procedures.

While Which? has been working with the industry on a voluntary consumer protection scheme, we believe regulation of the district heating industry is necessary and inevitable in the long-term. The issues that district heating customers face mean that the Government must consider measures to regulate the market and to introduce fair pricing.

This should include steps to ensure that homebuyers and tenants are given clear, accurate and timely information on their district heating scheme; schemes are registered and report key information annually; a single organisation takes responsibility for consumer complaints and problems within each scheme; and that all district heating consumers have access to ombudsman services.

On price, suppliers should provide transparent and standardised bills with a full breakdown of costs, and an easy-to-use and reliable heat price comparator to allow customers to compare their bills with alternative heating systems. Ultimately, to ensure consumers are paying a fair price, regulation may be required.

Consumers with district heating deserve effective protection for this essential utility, and deserve to know how their prices compare and that they are fair. At present they are not only cut off from the gas grid but they are also cut off from effective consumer protection.

Recommendations

Better reporting is urgently needed

Recommendation 1:
All district heating schemes should be registered and heat suppliers required to report key information annually, including price data

Recommendation 2:
Heat suppliers should be required to assess the efficiency of their network(s) annually and report on this to government

Complaints handling must be improved

Recommendation 3:
The organisation responsible for billing should take responsibility for dealing with all consumer problems within each district heating scheme

Recommendation 4:
All district heating consumers should have recourse to a single ombudsman for the sector

Government must ensure all consumers are effectively protected

Recommendation 5:
The government should look beyond voluntary consumer protection

Suppliers must be more transparent on pricing

Recommendation 6:

Tenants and buyers should receive clear and accurate information – including on price - before they commit to living in a property on a district heat network

Recommendation 7:

Consumers should be told what they pay for their heating in a clear and transparent way

Recommendation 8:

An independent, tailored and easy-to-use heat price comparator should be developed for all home owners and tenants connected to a district heat network

A review of fair pricing for district heating customers is needed

Recommendation 9:

Regulation may be needed to keep prices in check

CHAPTER 1

Introduction

Energy is an essential utility and regardless of how people heat their homes, we believe a set of key principles should underpin all energy provision:

1 All consumers should have access to reliable energy supplies that are sufficient to meet their energy needs.

2 All consumers should be treated fairly by their supplier[1] and covered by effective protections. This should include a) the broad application of consumer protection legislation and sector specific legislation; and b) access to independent and binding redress.

3 All consumers should have confidence that the price they pay is fair, with access to information that allows them to understand their bill and how it was arrived at.

The vast majority - around 83% - of energy consumed in UK homes goes on heating rooms and water.[2] More than 8 out of 10 consumers get this heat from mains gas, however a small but growing number of homes are being connected to district heating (Box 1).[3]

District heating networks are a natural monopoly

District heat consumers are unable to switch their supplier. In theory this could be possible in future – it happens in other countries – but competition in the UK is currently a long way off. If a consumer decides to use an alternative type of heating, such as an electric heater, they would typically still have to pay a standing charge for their district heating.

Not only are consumers stuck with one supplier, they may be stuck with one supplier for a very long time. Long supply contracts are common for companies that build and operate networks, to help de-risk the high upfront investment. For example, Cofely East London Energy has a 40 year contract for running the Olympic Park scheme and E.ON has an 80 year agreement for the Cranbrook scheme.

This means that district heating customers have less consumer choice than households on mains gas or electric heating. As a result there is a risk that companies will take advantage of their guaranteed customer base and won't deliver good service or reduce bills through efficiency improvements.

There are also concerns that while some standards[4] are in place to promote the good design of heating networks, these standards are not mandated, leading to added complexity and higher costs than necessary.[5] For example, a number of engineers have told us that schemes in the UK have been over-sized and are therefore less efficient. This could be addressed by the new *Heat Network Code*

of Practice,[6] which sets out minimum standards and best practice. However, while the code is welcome, it remains to be seen how it will be used as compliance will be voluntary.

Finally, beyond general consumer law,[7] there are no specific consumer protection rules for customers on district heat networks. A supplier does not need to be licensed to operate and , unlike mains gas and electric heating customers, the Energy Ombudsman is not required by Ofgem to provide an independent complaints mediation service to district heating customers. Depending on who owns the network, some consumers can seek redress through specific ombudsman schemes, such as the Local Government Ombudsman. However, many consumers do not have access to any independent adjudication.

Box 1. District Heat Network Infrastructure

A district heat network can be broken down into three separate components:

1 **The primary network**
This refers to the pipework connected to the energy centre, which distributes hot water or steam to heat sub-stations. Predominantly the primary network comprises buried insulated external pipework and heat substations in each building or group of buildings which connect the buildings to the network;

2 **The secondary network**
This refers to the riser and lateral pipework which distributes heat within a building (e.g. a block of flats), from the heat sub-station to individual homes. Particularly in newer systems individual homes are often connected by Heat Interface Units (HIUs) which act like the interface on a domestic boiler. The HIU is essentially the link between the wider network and the heat and hot water system within the customer's home. Any dwelling level heat metering is typically housed in the HIU.

3 **The tertiary network**
This describes the pipework after the HIU within the property, providing the internal space and water heating. This is generally the responsibility of the occupier or landlord.

Current scale of district heating in the UK

There are around 210,000 households on an estimated 2,000 district heating networks.[8] Three quarters (75%) are small networks, connected to less than 100 homes and over half (55%) are in London with large schemes in Sheffield, Leicester and Southampton.[9]

There are a wide range of organisations involved in district heating, from major energy companies such as E.ON, SSE, British Gas, Veolia and GDF Suez[10] to smaller Energy Service Companies (ESCo), such as SW Energy or Graylingwell Energy Services. Other companies involved in schemes include housing developers, such as Taylor Wimpey, Crest and Barratt, as well as councils and housing associations. Some of these organisations not only own but also operate and maintain schemes.

District heating expansion in the UK

An estimated 14% of UK heat demand could be cost effectively met by heat networks by 2030 according to the government, up from 1-2% today.[11] There are already a number of schemes in development, including 150 networks being developed by UK local authorities.[12] This expansion is being driven by the UK's carbon reduction targets, as well as the goal of reducing fuel poverty.

District heat networks may help reduce emissions, as they can be highly efficient and use waste heat from industrial processes or low carbon fuel sources, such as biomass or waste. Research suggests district heating will be one of the most cost effective carbon abatement options for decarbonising heat in urban areas.[13]

A second driver for developing new schemes is tackling fuel poverty. Above average numbers of consumers in fuel poverty use electric heating and oil boilers.[14] Replacing expensive to run heating systems with a district heat network, especially in high-rise social housing, may reduce fuel costs.[15] This retrofit is generally accompanied by action to improve the energy efficiency of the properties, and may draw on government funding.

Government efforts to promote district heating

There are a number of local, regional and national initiatives to promote district heating. For example, £9 million in grant funding is available through the Department of Energy and Climate Change (DECC) Heat Networks Development Unit (HNDU), which supports local authorities across England and Wales in developing district heating schemes.[16] Meanwhile, the Scottish Government has provided £8 million to the District Heating Loan Fund and funding is also available through the Warm Homes Fund.[17]

A number of policies, such as the non-domestic Renewable Heat Incentive (RHI) and Energy Company Obligation (ECO),[18] are in place to subsidise the cost of building or running networks that help cut carbon emissions.

New schemes are largely being installed in new build properties and hard to heat social housing. However, in the longer term retrofitting private housing on mains gas may be necessary to meet the Government's ambitions. Given the popularity of gas heating, the inability of district heating customers to switch, and the disruption which will result from the installation of new networks, there is likely to be significant consumer resistance to extending district heating to existing private housing. Therefore, building consumer confidence and trust in the district heating sector will be crucial to overcoming this resistance.

1 Central to this is for consumers to receive good customer service from their supplier.
2 DECC, *Energy Consumption in the UK 2014: Chapter 3, Domestic Data Tables*, 2014.
3 We share the DECC definition of a district heat network, i.e. a district heat network is where a) two or more distinct buildings are connected to a single heat source, or b) more than ten individual consumers in a building are connected to a single heat source, so we include communal heating within this definition. See: *DECC, Summary Evidence on District Heating Networks in the UK*, 2013.
4 Health and Safety Executive, *Design Codes - Pipework*.
5 DECC, *The Future of Heating: Meeting the Challenge*, 2013.
6 CIBSE/ADE, *Heat Networks: Code of Practice for the UK-Raising Standards for Heat Supply*, 2014.
7 District heat consumers are protected under the Consumer Protection from Unfair Trading Regulations 2008 (CPRs) which govern misleading and unfair commercial practices towards consumers by a business. However, CPRs do not extend to the quality of a service or fair pricing.
8,9 DECC, *Summary Evidence on District Heating Networks in the UK*, 2013.
10 GDF Suez operates schemes through its subsidiary Cofely, under a number of names, such as East London Energy and Southampton Geothermal Heating Company Ltd.
11, 12 DECC, *News Story: £7m boost to heat industry innovation*, 2015.
13 Poyry, *The Potential and Costs of District Heating Networks*, 2009.
14 Consumer Focus, *Off-gas consumers: Information on households without mains gas heating*, 2011.
15 Whether a district heating scheme is a cheaper heating option for consumers will depend on what the alternatives are for those properties and the characteristics of the particular network, such as its size and what sources of heat are available.
16 DECC, *Heat Networks Delivery Unit*, 2014.
17 Energy Savings Trust, *Warm Homes Fund*, 2015.
18 In July 2014, government confirmed that heat networks installed from April 2014 would be counted as a primary measure under the Carbon Emissions Reduction Obligation element of the ECO.

CHAPTER 2

The experience of district heating consumers

General consumer awareness of district heating is low. In 2012, Ipsos MORI conducted research looking at homeowners' willingness to move to more efficient heating systems.[19] This found that 31% of respondents had heard of a 'heat network', 'district heating' or 'community heating' but only 16% knew what this type of heating was.[20]

Little is known about the attitudes of consumers already on a heat network. There is no publicly available research on existing schemes to understand how satisfied consumers are or what problems they face. On top of this there is no consumer complaints data for district heating to help identify the common problems being faced.

Which? research with district heating consumers to shed light on their experiences

To better understand the experience of consumers and how district heating measures up against our key principles, we carried out a series of focus groups and telephone interviews with consumers on district heat networks between November 2013 and March 2014.

Three of the focus groups took place in London, while others were held in Southampton, Bath, Huddersfield, Leicester and Sheffield, and involved consumers from 16 different networks. We wanted to understand the experiences of consumers on different types of schemes, so we recruited from schemes that varied in size and age. Participants were a mix of private owners (7), private tenants (9) and social tenants (34), and we recruited from both metered and unmetered networks.

Alongside the focus groups we conducted in-depth telephone interviews with a further five private owners on district heat networks. In total our qualitative research involved district heating consumers from 21 different schemes. These discussions and interviews provide revealing insights into consumer perceptions of district heating and the problems they face.

General attitudes

Attitudes towards district heating were mixed.[21] Some consumers liked the practical aspects of how their district heating worked. For example, one participant said: *"You don't have to worry about breakdown and repairs - it is all included"* (private owner, London).

Consumers on unmetered networks generally liked the flat charge (irrespective of use), as it helped them to budget and meant they didn't need to worry about having the heating on as much as they wanted: *"A set amount does mean that you can budget it ... there is never a shock if it is a set amount"* (social tenant, outside London), *"Boiling hot water and heating 24 hours a day ... communal heating works for me, I don't do the cold"* (private owner, London).

However, the lack of consumer protection had left many feeling vulnerable: *"It seems to be done with a certain amount of protectionism towards the companies and nothing for the consumer"* (social tenant, outside London), *"As a district heat consumer I feel very vulnerable ... the current district heat supplier can take advantage of the lack of regulation and freely implement unfair trading terms within the supply contract"* (private owner, outside London).

This risks undermining the positive sentiments towards the technology more generally, as one consumer put it: *"It's great in theory, but coming down to the consumer side of things it is lacking big-time"* (social tenant, outside London).

Consumer satisfaction varies significantly between schemes, but consumers on the same scheme generally have similar views

Consumer attitudes tended to be polarised. For example, at one unmetered scheme, participants' attitudes were generally very positive. For example, one consumer said: *"Constant hot water and heating, I love it"* (social tenant, outside London). Other participants on the same scheme said: *"Five years I've been there and there's not been one problem"*, *"It's affordable, it feels as though we are lucky"* and *"At first I thought it was more expensive, but I think because the cost of energy has gone up so much in the last few years, we are now better off"* (social tenants, outside London).

In contrast, at another unmetered scheme a range of problems, including the poor performance of their network, had resulted in widespread dissatisfaction: *"You go to turn on your hot tap and there isn't any hot water"*, *"I have to open the windows because it's that warm"* and *"The only positive is that it is a set amount each week to pay"* (social tenants, outside London). Dissatisfaction wasn't restricted to older and unmetered schemes. Participants from one new metered scheme shared common grievances with how their meters were working and billing errors.

Price is the key issue and most people lack confidence that prices are fair

The overriding issue for most consumers was price. Many consumers lacked confidence that they were paying a fair and accurate price for their heating. This was fuelled by a lack of transparency in how their bills were derived, concerns over unfair charges and doubts over the efficiency of their network.

Consumers don't know what is included in their bill

Consumers were frustrated over the lack of transparency in what was covered by their bill. For example, one participant commented: *"It's not clear what [the standing charge] is for - maybe for admin or insurance in case the boiler breaks?"* (private tenant, London), while another said: *"It's so expensive. We don't know how we incur the bills. And we don't have the time to spend an hour on the phone arguing"* (private owner, London).

Consumers on one district heating scheme couldn't understand why the cost of running a biomass boiler was used to calculate their tariff, given that the biomass boiler on their scheme was not running. Similarly, some of those we spoke to wanted to know if revenue from electricity sales (in the case of a combined heat and power network) was being reflected in the price they paid for heat.

Some consumers think they are being unfairly charged

Metered consumers universally felt that their standing charges were too high and this was a particular source of frustration for those with low usage: *"I haven't turned the heating on in months, but the bill is sometimes £40 [a month]"* (social tenant, London) and *"I hardly ever use my heating but I still pay £25 a month. That seems excessive to me"* (social tenant, outside London).

Many didn't understand why they continued to pay a standing charge, despite being on holiday or otherwise unable to use their heating. For example, one consumer said: *"In the summer we still have to pay even when it is turned off - the cost seems high, we pay £950 a year and that seems quite a lot"* (private owner, London).

We heard from some consumers on new developments, who suspected that partial occupancy and/or slower than expected build out rates, meant prices were higher for early occupants, so the ESCo or management company could recover costs from fewer residents. If true, this is unacceptable and should be further investigated.

Some consumers question how efficiently their scheme is being run

Many participants felt their scheme was not being run efficiently, which they suspected was pushing up their heating costs. For example, consumers at several schemes complained that heat was being wasted, including on communal areas. A participant in a new metered scheme said: *"We were told it would work out cheaper because it's eco-friendly, but in fact it turned out the opposite, because we share the heat for the communal areas. It's warmer in my corridor than it is in my flat"* (private owner, London). Another participant commented that, despite being generally happy with their scheme, *"it seems like heat is escaping and it could be more efficient"* (private tenant, London).

What will reassure consumers' that the heat price they pay is fair?

We asked participants what might reassure them that the prices they pay are fair. For some participants, the fact they cannot switch supplier is a problem and fuels their suspicion that they are being 'ripped off'. In the words of one consumer: *"I can't switch - I'm stuck with one supplier and that is my main concern"* (social tenant, London). Another participant said: *"It's a bit strange, in the age of consumer choice, that we are tied to the energy company. We were told that it was a condition of our tenancy"* (social tenant, outside London).

However, switching was not a universally held solution. Other participants said they shouldn't have to switch to get a fair deal or showed a lack of interest in switching: *"We say we want more control and choice, but when it comes to it, we really can't be bothered"* (private owner, London) or as another consumer said: *"At least I don't have to sit there looking at meerkats to compare it"* (social tenant, outside London).

It was clear that a lack of information was a barrier to making an informed decision on whether pricing was fair. A number of participants called for clearer pricing and greater transparency: *"I would just like to know what I'm paying for ... I need someone to come and break it down for me"* and *"The only way is a breakdown of the bill"* (social tenants, outside London). A few participants suggested 'someone' should be monitoring prices, but they were unsure who this ought to be.

A comparison with gas heating was a popular suggestion: *"For reassurance we would need to compare [district heating] with [the cost of] natural gas with different suppliers"* and *"A comparison of the average of the big six for certain size properties to compare to what you are paying now"* (social tenants, outside London). Another idea was *"benchmarking ... against similar schemes. Then you know if the developer is getting a kickback"* (private owner, outside London).

Council involvement in a district heating scheme gave some consumers confidence that the price they paid for their heating was fair. In the words of one participant: *"If it's a council run thing, it's surely there to make it cheaper"* (social tenant, outside London). In contrast, among participants who already had a generally negative view of their council or housing association, the involvement of these organisations was a reason to lack confidence in the efficiency of the scheme and its costs. One participant put it bluntly: *"The council is very inefficient"* (social tenant, outside London).

Some schemes are not built with the consumer in mind

The long-term financial interests of consumers and the short-term interests of housing developers are not always aligned. The latter generally focus on meeting planning requirements, achieving compliance with building regulations, and then being able to move onto their next development. Often the ESCo who adopts the district heating scheme (and so has an interest in the long-term performance of the network) is not involved in the early planning and design stages.

This effect is compounded by the fact that the district heating sector is fragmented and multiple organisations can be involved in the design, construction, operation and maintenance of a single network. The draft *Heat Networks: Code of Practice* for the UK highlights the risks associated with this fragmentation and the importance of having each party focused on delivering an optimum scheme in its entirety.

We have been told by engineers and housing associations of instances where the interpretation of planning requirements has led to the installation of systems that are inefficient, and therefore, not good value for consumers.

For example, installing a combined heat and power (CHP) or renewable system can allow developers to achieve compliance with planning regulations, but it is not necessarily an efficient long-term solution when the scheme is operating. We found instances where CHP systems were not being operated because of low heat demand or where biomass boilers were no longer running due to sourcing issues. It is unclear what the financial implications of this are for consumers.

System performance is a problem on some schemes and a source of frustration

Many consumers did not report any issues with system performance or told us that their heating worked well. In the words of one consumer: *"It's reliable - we have constant hot water"* (social tenant, outside London). However, we also heard complaints from some consumers about how well their scheme was working. Common complaints included being too hot, there being no hot water, hot water running out quickly or it taking a long time for water to run warm. These provide examples of instances where consumers are not having access to reliable energy supplies, sufficient to meet their needs (principle one).

The most common complaint we received about system performance was that temperatures were too high: *"The corridors in our building are unbearable in the summer. We complained about the pipes being hot even though the radiators aren't on - it's dangerous"* (social tenant, outside London). This was a common problem across a number of unmetered schemes: *"My washers on the hot tap used to melt, the hot water was so hot"* (social tenant, outside London), *"I've only got one radiator in my house, but it makes the place like a sauna"* (private tenant, London) and *"The pipes are so hot [that] I leave the windows open, even when the radiators are off"* (private tenant, London).

However, these problems were not restricted to older, unmetered schemes. For example, a participant from one new metered scheme said: *"Sometimes when I put on the heating it doesn't work and sometimes it is so stuffy, I have to open the window"* (social tenant, outside London).

We were also told of heat meters or HIUs that were not functioning properly, potentially resulting in overpayment. And on one scheme, consumers reported suffering from an intermittent lack of hot water over an 18 month period: *"We are stuck between the supplier and the developers, with each blaming the other for the lack of hot water. All the while we ... face numerous outages and so have to boil a kettle to wash or bath my two and a half year old in"* (Private owner, outside London).

The quality of information provided to consumers is mixed

Some consumers had received all the information they needed from their heat supplier and/or landlord: *"I got a booklet - it had everything you want, what numbers to phone up if you need to"* (social tenant, outside London). Another said: *"We have basic information on when they're going to switch their heating on or off, and things like that ... When the heating broke down they sent a letter within 24 hours telling us what would happen. We pay a lot for the management, so you would expect it"* (private tenant, London).

However, other participants said they had received insufficient or confusing information about how the scheme works and what to do when there is a problem. In the words of one participant: *"They give us information that is impossible to understand"* (social tenant, outside London). Others commented: *"There was no real explanation of how [the communal heating system] worked"* (private owner, London), *"The man who showed me round when I moved in didn't know anything about it"* (social tenant, outside London) and *"I'm not sure that the developer understands it all"* (private tenant, London). One participant recalled a conversation with a housing officer: *"I asked 'do you understand how it works?' He [the housing officer] said no, and I said, how do you expect me to understand?"* (social tenant, London).

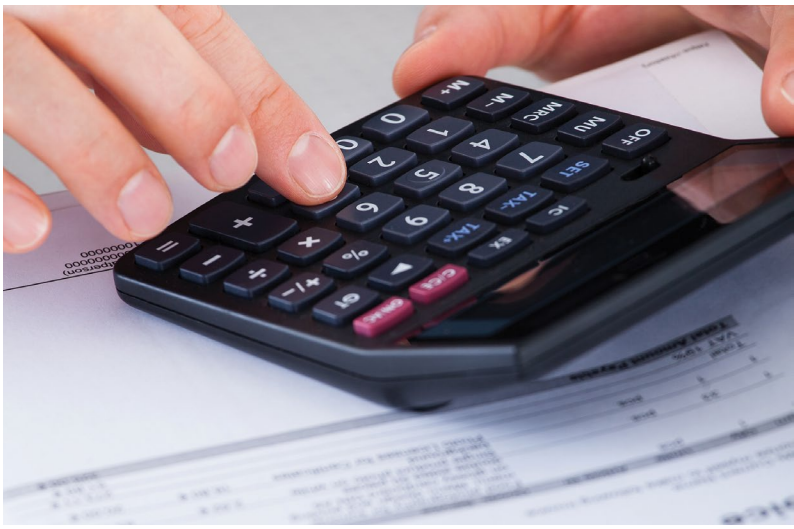
There was also confusion among participants from one scheme about whether they could switch electricity suppliers or whether they were tied in, as with their heat.

Some consumers reported receiving misleading information before they moved in

Several consumers stated that the information they received about district heating before purchasing their property was poor or misleading. Almost all said the property had been marketed as having 'low-cost' heating, but when receiving their bills they didn't feel this was the case. In the words of one consumer: *"When I purchased my flat one of the selling points was that district heating is this environmentally-friendly, low cost heating system. This turned out to be a big disappointment. My bills are high despite low usage and it's very worrying that government is promoting district heating whilst there is no regulation protecting its customers like there is for electricity and gas"* (private owner, London).

For others, the issue was not about the quality of the information, but that they had little choice. For example, a consumer buying a property on a new network in London said that they had had misgivings about signing the heat supply agreement because of the terms. However, they felt they had no choice but to go ahead with the purchase, as they had already invested significant time and money in buying the flat: *"We had no choice but to sign an agreement with the ESCo to provide a district heating supply with exorbitant fixed charges and inconsistencies, such as some blocks incurring a Common Heat Availability Charge and others not"* (private owner, London).

This is a particular issue in fast moving housing markets, like London, and further highlights the dangers of being unable to switch, especially as long-term contracts with suppliers are common.



Bills are often unclear and confusing

Some consumers said they found how they were billed, and what their bill said, unclear and confusing.[22] For example, one metered consumer on a two-tiered tariff – where the unit price changes according to use – said: *"You don't know how much you need to get second-rate, so it's not much use as it is"* (social tenant, outside London). Others were frustrated by the billing process itself: *"The way they manage the bills is a shambles"* (Social tenant, outside London).

Several participants had complained about their bill to their supplier. In some cases, consumers had received a refund after complaining but this was not true of everyone. For example, one consumer said: *"I queried the heating bill, but I didn't have the energy to fight it"* (private tenant, London). In another case, tenants from one new metered scheme had not received a bill in over a year, despite complaining to their supplier: *"I went to the Citizens' Advice Bureau, who said charging for over a year [at once] is illegal"* (social tenant, London).

Frustration with the complaints process

When raising complaints, some consumers reflected positively on their experience: *"If there is any problem … they come and fix it the next day"* (social tenant, London). However, other consumers were unhappy with the quality of customer service they received: *"If you say something that is not on their sheet they have a meltdown"* (private owner, outside London).

A recurring source of frustration was that there was no single point of contact when a problem arose. Several participants said they had been 'passed around' and that there was a lack of clear information on which organisation was responsible for what: *"I would like it if they [the housing association, heat supplier and developer] all communicated with each other and the residents, so that if we have a problem, we know where to go"* (social tenant, outside London).

A few consumers thought their heat supplier was complacent regarding the quality of customer service they provided, because they knew their customers couldn't switch: *"I think the heat company are rubbish and that is because they know you don't have any choice. Their customer service is rubbish"* (private tenant, London).

In the absence of an ombudsman, consumers had pursued unresolved complaints with a range of other organisations or individuals. These included the Competition and Markets Authority (CMA, formerly the Office of Fair Trading), the Citizens' Advice Bureau, Which?, local trading standards organisations, local MPs, DECC and Ofgem. These consumers were concerned - and in some cases angry - that they didn't have recourse to an ombudsman. This highlights the risks for consumers, when an essential utility is not underpinned by effective consumer protections, including access to independent and binding redress (principle two).

Summary

This investigation indicates many schemes are performing poorly against the three key principles that should underpin energy provision:

Principle 1

All consumers should have access to reliable energy supplies that are sufficient to meet their energy needs. However, consumers have told us that some district heat networks are unreliable. For example, some systems are running out of hot water too quickly or producing too much residual heat, making properties uncomfortable. These performance problems are experienced by people on old and new schemes.

Principle 2

All consumers should be treated fairly by their supplier and covered by effective protections. This should include a) the broad application of consumer protection legislation and sector specific legislation; and b) access to independent and binding redress. However, many consumers have experienced poor customer service and complaints handling from their supplier and do not feel they are treated fairly. Some consumers have invested considerable time pursuing complaints with little success. These consumers feel trapped with their current supplier, as they cannot switch, no matter how dissatisfied they are with their heating and the quality of customer service.

Principle 3

All consumers should have confidence that the price they pay is fair, with access to information that allows them to understand their bill and how it was arrived at. However, most district heating consumers - like energy consumers more generally - do not trust that prices are reasonable. This distrust is often compounded by their inability to switch heat supplier, and many district heating consumers feel frustrated with the lack of price transparency and information.

19 Homeowners using only low carbon heating system, including district heating, were also excluded from the sample.
20 Ipsos MORI and the Energy Saving Trust, *Homeowners' Willingness to Take Up More Efficient Heating Systems*, 2013.
21 We asked participants to rate their overall satisfaction with their district heating scheme on a five point scale. The overall rating was 3.6 out of 5 but the sample size was small (only 20 from three of the focus groups were asked the question).
22 Billing problems are a common complaint among all energy customers, a recent Which? survey found 18% of consumers thought the clarity of their energy bill was poor or very poor. See: *Which?, Energy Tracker Results: September 2014*, 2014.

CHAPTER 3

District heating prices

There is currently a lack of information on the prices paid by consumers on district heating networks, this is partly driven by the fact that suppliers are not required to publish price data or share this information with any third party. In order to fill this major evidence gap Which? collected price data from a number of different schemes.

We compiled a list of known networks, then we requested price information from local authorities, housing associations and private district heating suppliers and collected information directly from consumers.

Between November 2013 and March 2014, we collected price information on 51 schemes; this represented around 36,000 unmetered households and around 51,000 metered households.[23] The networks were operated by 22 different heat suppliers and varied in age. Schemes were spread across the UK but with the majority (33) being in London. Around two thirds of the properties we collected price data from were social or affordable housing. But we also found an increasing number of new build networks connected to private properties.

Metered schemes

We collected price data from 40 metered schemes, including both private and social housing. Most consumers on these schemes paid a unit rate, alongside a fixed daily, monthly or annual charge (or charges). These unit rates and fixed charges varied significantly between schemes. High fixed charges were often accompanied by comparatively low unit rates, and vice versa.

The average build date of the metered schemes we investigated was 2010. Therefore, we use the annual space and water heating demand of a typical two-bedroom flat built between 2010-2016 (6150kWh, see box 2) as our benchmark to establish how district heating costs compared across networks and against alternative technologies. We estimate that average annual bills for metered customers were between £339 and £919 per year (equivalent to 5.51-14.94 p/kWh), with an average cost of £679 per year (equivalent to 11.04 p/kWh) of which 38% was made up of fixed charges. These values do not include the cost of additional electric heating should the system perform poorly, the additional cost of electric cooking rather than gas cooking, or the cost of the forthcoming voluntary consumer protection scheme, Heat Trust.

Box 2. Average heating requirements for homes

New properties on average consume far less energy for space and water heating than older properties. For example, a two-bedroom flat built between 1976 and 1995 has an average space and water heating requirement of 7,868kWh, nearly a third more than a two-bedroom flat built between 2010 and 2016 (Figure 1).

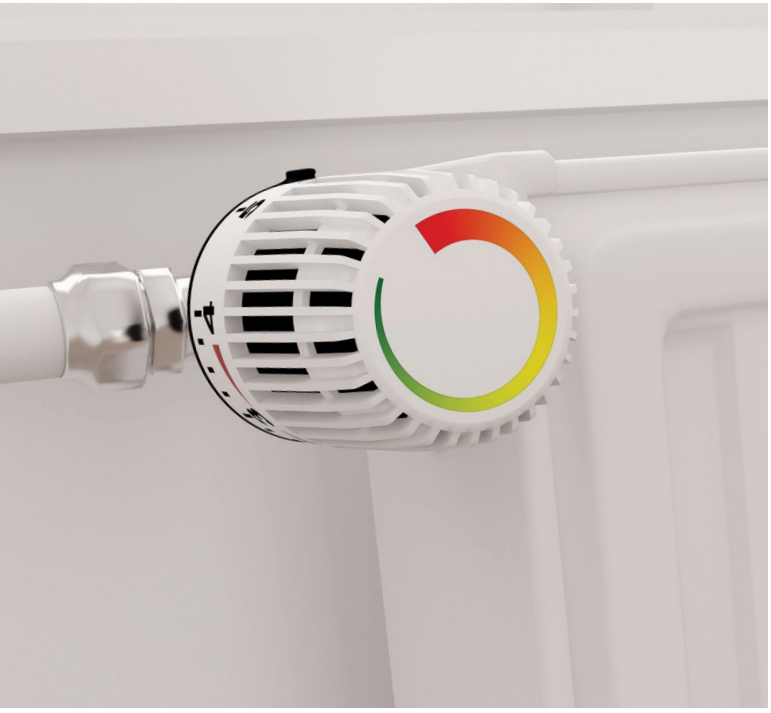
	Studio flat	1 Bedroom flat	2 Bedroom flat	3 Bedroom+ flat
Pre-1950's	7,916	10,078	12,659	20,594
1950-1975	6,189	7,660	10,376	14,650
1976-1995	4,565	6,112	7,868	10,556
1996-2010	3,881	5,436	6,918	9,611
2010-2016	2,938	4,003	6,144	7,861
Post 2016	2,809	3,815	5,969	7,668

Figure 1: Total space and water heating requirements (kWh) for a range of flat sizes[24]

An increasing proportion of heat demand goes on water heating in newer properties, particularly small flats (Figure 2). This is relevant for consumer perceptions of their heat consumption, as many consumers assume most of their bill goes on space heating, rather than water heating. For example, many consumers reported to us that they rarely turned on their heating because their property was energy efficient (or communal spaces were very hot), so they believed their heat demand was low.

	Studio flat	1 Bedroom flat	2 Bedroom flat	3 Bedroom+ flat
Pre-1950's	83%	82%	81%	86%
1950-1975	78%	75%	77%	80%
1976-1995	70%	70%	70%	72%
1996-2010	65%	65%	65%	70%
2010-2016	54%	53%	61%	63%
Post 2016	52%	51%	59%	61%

Figure 2: Proportion of heat used for space heating



The average price paid for gas by domestic consumers in Great Britain is equivalent to 5.73 p/kWh. However, the cost of gas is only part of the cost of heat.[25] The cost of gas includes wholesale costs, supply costs, distributional charges, transmission charges, environmental charges, profit and VAT, but does not factor in the efficiency of the boiler and excludes the maintenance and replacement costs of the boiler. These costs are often, but not always, included in the cost of district heating; making like-for-like comparisons between district heating and conventional gas heating costs difficult.

Taking into account these 'hidden' costs, our analysis suggests that average heating costs for a modern two-bedroom flat using a new gas combi boiler are between £587 and £713 per year (9.55-11.60p/kWh), while the average heating costs using a new electric combi boiler would be higher, between £1,347 and £1,414 per year (21.91-22.99p/kWh) (Box 3). But there are major caveats and uncertainties in these calculations. This clearly indicates the need for a robust and transparent heat cost comparator, to allow district heat customers to make more meaningful cost comparisons and ensure they are getting value for money.

Box 3. How much does district heating cost compared to gas and electric heating? Worked example for a typical two-bedroom flat, built between 2010 and 2016.

Which? research found a new gas combi boiler (24kW-32kW capacity, suitable for a two-bedroom flat) costs between £610 and £1120, installation costs are between £540 and £1440, and an average annual gas boiler maintenance cost is £93 (without a boiler-servicing contract).[26] If we assume an average gas boiler requires replacement every 11.2 years,[27] this would equate to a total annual equivalent replacement cost of £196 to £322.

Dividing this figure by the average annual demand of a two-bedroom flat built between 2010 and 2016 (6150kWh), gives an annual equivalent in p/kWh (3.18-5.23 p/kWh). We can then add this to the average cost of gas (5.73 p/kWh), accounting for the average efficiency of a new boiler (90%). On this basis, space and water heating using mains gas, costs the equivalent of between 9.55 and 11.60 p/kWh.

Mains gas is only one of the alternatives to district heating. In existing social housing stock, district heating is likely to replace electric heating. Comparison with electric heating is more challenging as 'electric heating' can include a number of different technologies, such as electric combi boilers, immersion heaters, storage heaters or heat pumps. However, by choosing one technology we can give an illustrative example of costs.

A new electric combi boiler will cost between £1500 and £2500,[28] with installations costs of approximately £1000 (maintenance costs are assumed to be negligible). If we assume an average lifespan of an electric combi boiler is 15 years, this would equate to an annual equivalent replacement cost of between £167 and £234.

Then if we convert the annual equivalent replacement costs to p/kWh (2.72-3.80 p/kWh) and add this to the average operating costs (19.19 p/kWh,[29] assuming 100% efficiency), we find that electric heating costs 21.91-22.99 p/kWh. However, this could be reduced by using time-of-use tariffs, i.e. economy 7.

Summary

- **District Heating:** **5.51-14.94 p/kWh**
- **Gas Heating:** **9.55-11.60 p/kWh**
- **Electric Heating:** **21.91-22.99 p/kWh**

Unmetered schemes

DECC estimate that three quarters of existing residential networks do not have heat meters.[30] Unmetered schemes tend to be older local authority networks, where heating bills are paid alongside rent.

Our price data was taken from networks run and/or owned by local authorities or housing associations. We excluded consumers on private unmetered schemes because their heat charges were not separated out from their general maintenance/service charges. We also excluded leaseholders, as most local authorities and housing associations could only provide information on the heating costs charged to tenants.

Pricing structures varied across unmetered schemes. On some unmetered schemes all residents pay a flat charge, irrespective of property size, whereas on other networks the charge is set according to occupancy levels, the number of bedrooms or habitable rooms, or square footage.

Based on costs apportioned to a two-bedroom property,[31] we found unmetered district heat consumers paid £771 a year on average. There was a significant difference between the cheapest and most expensive schemes. Of the eleven schemes we analysed, three charged more than £900 a year while the most expensive was £938. Three networks cost less than £650 a year with the cheapest being £421.

The challenges of comparing prices across schemes

There is a general lack of consistency across schemes in relation to how heating costs are calculated.

We saw energy bills where the standing charge for electricity and heat was combined.[32] In other instances, the electricity used in the energy centre and in running the heat network was paid for through consumers' electricity bills, rather than through their heat costs. This effectively makes the total heat costs for these schemes appear cheaper than they are.

There was wide variation in the structure of tariffs for metered consumers. Most metered consumers paid a unit rate and a single fixed charge. However, in a few schemes there was only a unit rate. In other schemes, there was more than one more than one unit rate, or more than one fixed charge, for example there were monthly standing charges and capital replacement charges. The proportion of the total bill made up of fixed charges differs considerably between schemes.

Landlords generally do not expect tenants to pay for costs associated with maintaining and replacing a conventional heating system, yet for district heating tenants these types of costs are effectively covered in the standing charges. For housing association and local authority tenants, it is often unclear whether a contribution is being made to the tenants' standing charge and/or the capital replacement fund.

Unmetered consumers pay a fixed weekly, monthly or annual charge irrespective of their consumption. For some unmetered blocks or schemes, bills are forecasts for the year ahead and this is not reconciled until the following year, which means the price data collected for some schemes is a year or even 18 months older than for other schemes.

Why are some networks more expensive than others?

While some district heat networks appear to be performing well on price, others are not. There are a number of reasons why some networks may be more expensive than others. These can relate to the fundamental nature of the network, such as its size, fuel costs, whether it benefits from subsidies and the financing model adopted. However, there is also evidence that some schemes may be poorly designed, running inefficiently and there is no reporting of costs and turnover so we cannot be certain whether or not companies are making excessive profits.

Our investigation suggests that existing estimates of district heating costs - such as those used in Energy Performance Certificates[33] - are too low and do not reflect the significant variation between schemes. Developing a more comprehensive picture of costs will help improve the accuracy of these estimates and identify where improvements can be made.

23 Includes city-wide schemes.
24 Cambridge Architectural Research for DECC, *Cambridge Housing Model and User Guide*, 2010.
25 We are also comparing different consumption rates. Gas costs per unit equivalent may be different to those published here, given that this value is calculated using Ofgem's average annual gas bill for a typical medium gas user (13,500kWh per year). This is the only usage rate we have recent cost data for. See: *Ofgem, Outlook for costs that make up energy bills: Jan 14-Dec 14 estimate*, 2015. Demand for space and water heating in a two-bedroom flat, built between 2010-2016, would typically be lower (6150kWh per year).
26 Alternatively, a consumer may choose to take a boiler-servicing contract for peace of mind. These can range in cost from £183 to £372 per year. However, Which? research (Oct 2014) found 55% chose not to take out insurance and paid on average £93 per year.
27 CIBSE, *Guide M: Maintenance Engineering and Management*, 2014.
28 Service Magic, Cost Guides: Electric boiler running costs. See: www.servicemagic.co.uk/resources/cost-guides/electric-boiler-running-costs-prices/
29 We are comparing different consumption rates. Electricity costs per unit equivalent may be different to those published here, given that this value is calculated using Ofgem's average annual gas bill for a typical medium electricity user (3,200kWh per year). This is the only usage rate we have recent cost data for. See: *Ofgem, Outlook for costs that make up energy bills: Jan 14-Dec 14 estimate*, 2015. Demand for space and water heating in a two-bedroom flat, built between 2010-2016, would typically be higher (6150kWh per year).
30 DECC, *Implementing the Energy Efficiency Directive as it applies to the meeting and billing of heating and cooling*, 2014.
31 Where schemes charged for heat by the number of habitable rooms, we have equated a two-bedroom property with a three-habitable room property. Where schemes charge heat consumers according to size (i.e. square footage) or occupancy, rather than the number of bedrooms, heat suppliers provided an average cost for a two-bedroom property on their scheme.
32 This occurs in private wire networks, where a mini-network distributes locally produced electricity to consumers.
33 BRE, *The Government's Standard Assessment Procedure for Energy Rating of Dwellings: 2012 Edition*, 2013.

CHAPTER 4

Current response to the lack of protection for district heating consumers

Beyond general consumer law, households with district heating are not covered by consumer protections, such as guaranteed performance standards and the right of redress to the energy ombudsman. This leaves many consumers with district heating feeling vulnerable and powerless.

Government backs a voluntary and industry-led approach to consumer protection

The UK government is aware that some district heating consumers are dissatisfied with their heating supplier and/or the price they pay. However, in March 2013 in its report *The Future of Heating*, the UK government said it did not want to prevent sector growth by bringing in unnecessary regulation.[34] Instead it called on the sector to develop an industry-led scheme. The Government set out that ideally a new customer charter would provide consumers with protections "at least as good" as those enjoyed by households with gas and electric heating, and would cover disconnection, transparent billing, and vulnerable consumers.

Meanwhile, in November 2012 an Expert Commission on District Heating recommended to the Scottish Government that it should create "a licensing body for district heating or add this to the responsibilities of an existing agency or organisation".[35] It went on to state that only suppliers who achieve "defined design and operating standards and use a standard heat supply agreement which contains robust clauses guaranteeing supply and customers' rights for all tenancies and provides full transparency on price" should be awarded licences. In its response in May 2013, the Scottish Government said it supported the Commission's recommendation[36] and in March 2014, they published their draft Heat Generation Policy Statement which said the Scottish Government would "develop appropriate regulation" and engage with the industry-led consumer protection scheme "to ensure that it meets the needs of Scottish consumers and district heating providers".[37]

In 2013, following a series of complaints from consumers, the Office of Fair Trading (now the CMA) set up a case team to determine whether a wider study should be carried out on the district heating sector. The CMA is talking to the industry and government with a view to encouraging compliance with competition and consumer protection law.

Heat Trust

The district heating industry is finalising a set of common consumer protection standards for households and businesses: Heat Trust.[38] It is intended to launch in 2015. Heat Trust will replicate "where appropriate" the statutory requirements of the regulated gas and electricity markets[39] and will be open to district heat suppliers in England, Scotland and Wales.[40] Once a district heat supplier becomes a member, it will be able to use the Scheme Certification Mark.

To become a 'member', a supplier must agree to the terms of the scheme and pay a joining fee, as well as a fee per connection.

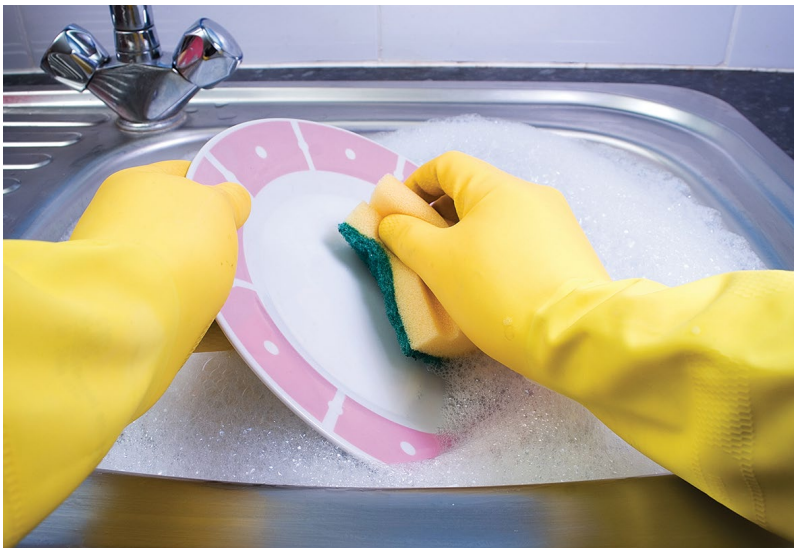
Consumers whose suppliers are members of the scheme, will have access - and at no cost - to independent adjudication through the energy ombudsman. This will allow consumers the opportunity to raise complaints with the ombudsman once they have exhausted a suppliers' internal complaint handling procedure. The ombudsman will report on the type of complaints it receives and the outcome to the Heat Trust Committee for monitoring.

Other welcome criteria include: suppliers not disconnecting vulnerable customers during the winter and ensuring that these households are warm and have access to hot water during any supply interruptions; guaranteed service payments to customers when suppliers fail to meet performance standards; and the development of a heat price comparator to help consumers establish how their heating costs compare to other forms of heating. However, there are weaknesses with the scheme, as discussed below.

The scheme will not offer universal coverage or satisfactory protection

We believe that all district heating consumers should be covered by effective protections. This is unlikely to be best served by a voluntary scheme. The costs associated with joining a voluntary scheme, along with the financial impact of needing to implement changes to meet the assessment criteria, may deter heat suppliers from signing up to the scheme. Even for those households whose heat supplier joins the scheme, there are a number of major concerns.

First, various voluntary standards or self-regulatory codes of practice in the energy sector have failed to deliver an improved experience for energy consumers. For example, Energy UK - the trade association for energy suppliers and generators - runs the code of practice for billing gas and electricity customers. While suppliers have all had successful audits for their billing practices, consumers still found their bills difficult to understand. Until regulations were introduced in March 2014, under Ofgem's Retail Market Review, many bills did not provide essential information.



Doorstep selling of gas and electricity tariffs similarly fell under the jurisdiction of a voluntary code of practice. Despite the code, an Ofgem's 2008 Energy Supply Probe found that nearly 50% of consumers who bought on the doorstep were mis-sold tariffs.[41] Following the Probe, non-binding standards of conduct were introduced to improve how gas and electricity suppliers deal with customers. However, in August 2013 a binding licence condition was put in place to ensure suppliers take all reasonable steps to treat their consumers fairly, for example in the information they provide and the processes they adopt.[42] According to Ofgem this step was required because voluntary interventions had *"not, in our view, resulted in improved interactions between consumers and suppliers"*.[43]

Second, the costs associated with running the scheme will be met by membership and registration fees paid by heat suppliers.[44] These costs will be passed to consumers through their bills and it is vital that these costs are not only fair and representative, but that they are transparent in order to build consumer trust.

However, membership fees should be sufficient to allow the scheme to be properly resourced. Depending on the number of schemes that join and the number of consumer complaints received and sent to the scheme ombudsman, resourcing could be a problem. In turn this could impact on the scheme's ability to carry out its role effectively, such as its initial and ongoing independent auditing of networks.

Third, there is no supplier of last resort protection in the unlikely event of a district heating supplier being subject to a winding-up resolution, going into receivership or administration. For mains gas and electricity customers, Ofgem can appoint a gas or electricity supply licensee to take over responsibility for a failed supplier's customers.[45] It is difficult to see how this could be covered by a voluntary scheme.

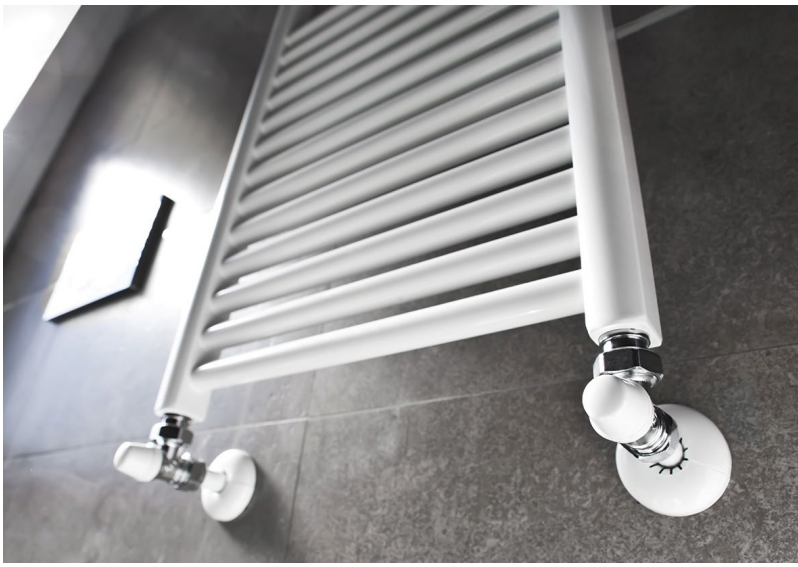
Fourth, it is unclear what effective sanctions could be introduced to penalise non-compliance with any aspect of the assessment criteria. Proposals state that enforcement mechanisms for breaches by heat suppliers within Heat Trust are *"likely to centre on sanctions that impact reputation"*. Suggested sanctions in the draft proposals include:

- Written warnings to the supplier, with a timetable to make improvements.
- The supplier's right to use the Scheme Certification Mark temporarily suspended.
- The supplier's expulsion from the scheme.

Clearly, such sanctions would be weak. Developers and owners of new schemes should take the supplier's membership, and record as a member, into account when awarding contracts to heat suppliers for future heat networks or when renewing contracts. However, in the absence of any requirement to only award contracts to Heat Trust suppliers, it is likely the deciding factor for most developers or scheme owners will remain financial.

Moreover, it is difficult to see how reputational sanctions alone, including expulsion from Heat Trust, could have a material impact on the particular heat network where the breach had taken place, or any other schemes currently being run by the heat supplier. After all, consumers do not choose their heat supplier and contracts can last for several decades.

Fifth, the scheme will offer consumers the option to escalate complaints to the ombudsman but the ombudsman will still be bound by the rules of the scheme and cannot rule on fair pricing. Furthermore, the terms of the scheme require that consumers are not charged for access to ombudsman services, however these costs will be indirectly passed to consumers through their bills. Therefore, it is unlikely to be a deterrent to poor performance if anticipated costs are simply factored into suppliers' costs.



Sixth, the scheme does not tackle the crucial, but thorny, question of fair pricing, which is the major issue for most consumers. In reality, it is difficult to see how any voluntary industry-led scheme could have a remit around pricing, given competition law and a lack of power over suppliers. Heat Trust does include some requirements on price transparency. However, greater transparency alone will not be enough to provide reassurance or adequate protection for consumers.

The development of a heat price comparator is welcome,[46] although it remains to be seen whether consumers will consider a heat price comparator, developed by an industry-led scheme, independent and reliable. Furthermore, if the comparator shows a consumer that they are paying more than they would be if they were on gas (or electric[47]) heating, it will clearly offer no reassurance that the price they are paying is fair. In fact, it is likely to further fuel consumer dissatisfaction, as these consumers will have nowhere to take their complaint around price.

Seventh, the proposed heat price comparator takes into account the estimated full costs associated with an alternative heating system, i.e. the purchase of a gas boiler, installation, maintenance and running costs. This means it is not appropriate for social or private tenants. A tenant would expect to pay for costs relating to boiler maintenance through their rent, not through their heating bill. Without a tailored price comparator for tenants, these consumers are likely to find this tool confusing. Furthermore, the comparator overestimates maintenance costs for gas boilers and doesn't differentiate between the age of a property or the age of a network, which will have a major impact on energy efficiency.

Finally, many consumers do not feel they were given adequate information about district heating before they moved into their property, this issue will not be tackled by Heat Trust. Our investigation has found that if a business - such as an estate agent - has misled a consumer into moving to a property connected to district heating on the basis that it will lower their bills, when this is untrue, then they may well have breached the Consumer Protection from Unfair Trading Regulations 2008 (CPRs).

The CPRs may enable some consumers to seek compensation. However, there are strict conditions as to when the right to redress is available. If the CPRs route to redress is not available, redress may be available under the law of misrepresentation or negligent misstatement. However, these measures are reactive rather than proactive and are not a substitute for an effective consumer protection scheme.

34 DECC, *The Future of Heating: Meeting the Challenge*, 2013.
35 Expert Commission on District Heating, *Recommendations to The Scottish Government*, 2012.
36 The Scottish Government, *District Heating Action Plan; Response To The Expert Commission On District Heating*, 2013.
37 The Scottish Government, *Towards Decarbonising Heat: Maximising the Opportunities for Scotland Draft Heat Generation Policy Statement for Consultation*, 2014.
38 ADE, *Independent Heat Customer Protection Scheme: Summary of Proposals*, 2015.
39 *Independent Heat Consumer Protection Scheme: Revised Proposals and Consultation Feedback*, 2014.
40 The scheme is not intended to cover Northern Ireland.
41 Ofgem, *Energy Supply Probe - Initial Findings Report*, 2008.
42 Ofgem, *Letter: Implementation of the domestic Standards of Conduct -decision to make licence Modifications*, 2013.
43 Ofgem, *The Retail Market Review – Final domestic proposals Consultation on policy effect and draft licence Conditions*, 2013.
44 The government will only consider giving grant funding to help with Heat Trust start-up costs and only once Heat Trust has been finalised.
45 Ofgem, *Supplier of Last Resort: Revised Guidance*, 2008.
46 The heat price comparator will show whether the alternative heating is more or less expensive than district heating.
47 Heat Trust might provide a heat price comparator for electric storage heating and direct electric heating, as well as gas, but this remains outstanding.

CHAPTER 5

Conclusions

Conclusion 1:

Existing data on the sector is inadequate

There is a striking lack of data on the district heating sector. There is no comprehensive information on where schemes are, who the heat supplier is for each scheme, how many homes are connected, or, crucially, how much consumers pay on these networks. The absence of robust data hinders a thorough assessment of the sector and the level of current consumer detriment within it.

Conclusion 2:

A lack of confidence that prices are fair is widespread among district heating consumers

It is clear from our research that price is the key issue for consumers. Many consumers simply do not have confidence that their heating prices are fair. This is because:

1 Consumers think there is not enough transparency around what they pay.

2 Consumers think standing charges are high and it is unclear to them why.

3 Consumers in new properties expect low heat bills.

4 Consumers question how efficiently their scheme is being run.

5 Consumers are experiencing problems with billing and this undermines confidence in price more generally.

6 Consumers cannot compare what they pay to other schemes or forms of heating.

Conclusion 3:

There is reason to suspect some district heat consumers are not getting a fair deal in what they pay

Owing to the lack of transparency and variability in what is included in district heating bills - i.e. build costs, fuel costs, maintenance costs, administration fees and profit - it is difficult to compare district heating costs with alternative sources of heating. However, there is evidence to suggest that some district heating schemes might not be delivering value for money for consumers. This may be because they are poorly designed, inefficient or excessive profits are going to the supplier.

Conclusion 4:

Some district heating schemes are performing poorly

Some district heat networks are performing well but feedback from consumers indicates that other heat networks are performing poorly. Performance issues can be broken down into three categories:

- **Reliability** – Poor system reliability can lead to a loss of access to heat and hot water, also heat meters that are not functioning properly can lead to billing errors.

- **Efficiency** – Poor design or a lack of insulation can lead to system heat loss, causing unnecessarily high costs and a lack of thermal comfort for consumers.

- **Sustainability** – The system may not be delivering the expected carbon savings, which are often subsidised through bills.

These performance issues are not restricted to older schemes, with recurring problems experienced by consumers at some new heat networks, resulting in significant consumer dissatisfaction. Schemes which are inefficient are also likely to have higher costs, and in turn higher end-prices paid by consumers. These issues are compounded by the fact that there is no requirement for suppliers to report on how efficiently schemes are performing. Again a lack of data and monitoring hinders any assessment of how common performance problems are.

Conclusion 5:

Many consumers think the information they were given on district heating before they moved into their property was inadequate or misleading

Many consumers who have recently moved into properties with district heating expressed dissatisfaction with the quality and timeliness of the information they were given on the heating system, and the implications of having district heating, i.e. not being able to switch supplier, before they decided to purchase or rent the property.

For some consumers, marketing claims from the developer or the estate agent that the district heating would be 'low cost heating' for residents amount to mis-selling, and have led to disappointment and significant frustration when bills are higher than expected. Our investigation found that if an estate or letting agent has been misleading consumers into taking properties on a district heating scheme on the basis of cheap energy bills, those agents may well have breached the CPRs and consumers may be entitled to redress.

Conclusion 6:

Consumers feel let down and frustrated by poor customer service and complaints handling procedures

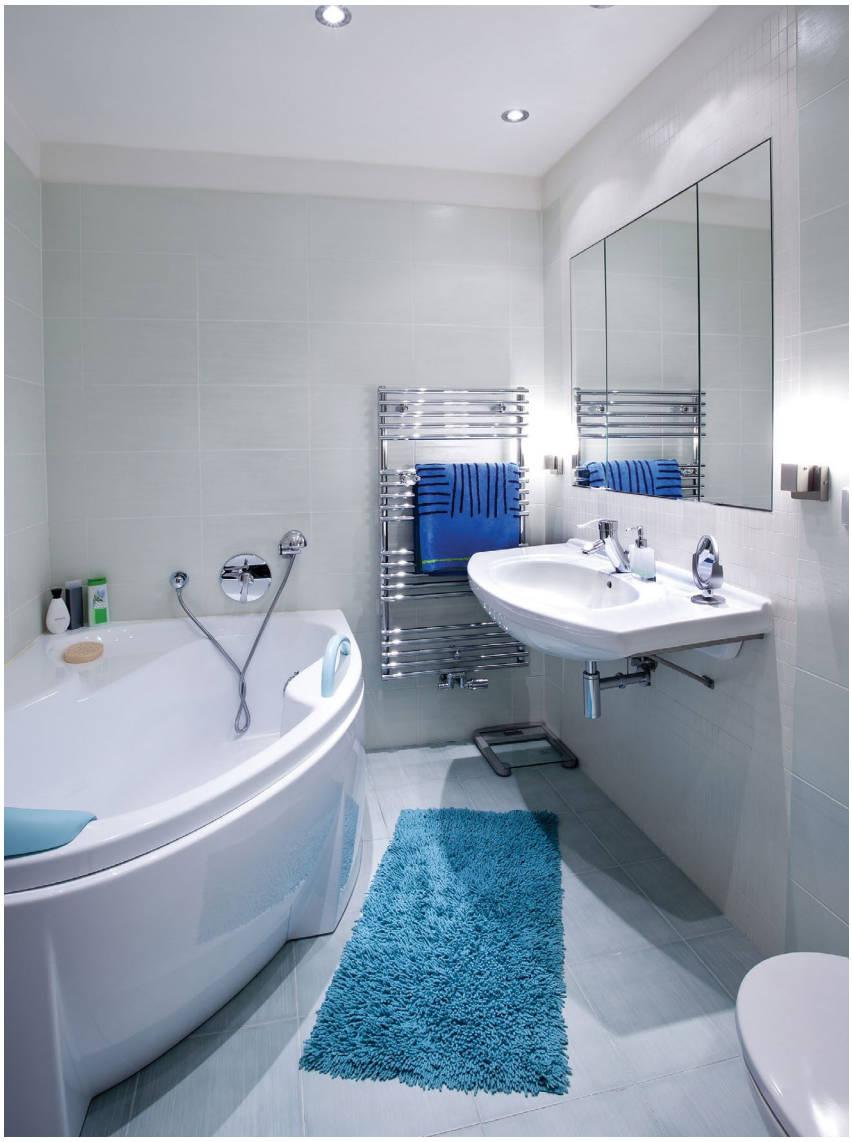
When there is a problem with their scheme, many consumers tell us that they receive poor customer service and that there is not a single point of contact with whom they can take their complaint forward. Instead heat suppliers, developers, councils and/or housing associations can blame each other for the issues consumers are experiencing, with no organisation taking responsibility for ensuring problems are addressed. This can be a source of major frustration for consumers.

Conclusion 7:

The voluntary Independent Heat Consumer Protection Scheme is unlikely to deliver universal protection backed by effective sanctions, and will not address consumer confidence on price

We welcome the development of the voluntary protection scheme for district heating consumers. However, the scheme should be seen as an interim development as consumer protection regulation is established. The voluntary nature of Heat Trust means it is unlikely to achieve universal coverage for all district heating consumers. We believe that all district heating customers should be covered by effective protection.

Furthermore, Heat Trust is not intending to tackle the key issue of fair pricing, and it is difficult to see how any voluntary scheme could have pricing within its remit. The proposed independent heat price comparator could be informative. However, if it shows that prices are above those paid by households with gas or electric heating, clearly it will provide consumers with no reassurance. Instead it is likely to further fuel dissatisfaction, and yet there will be no organisation to which these consumers can take their complaint around price.



CHAPTER 6

Recommendations

Better reporting is urgently needed

Recommendation 1:

All district heating schemes should be registered and heat suppliers required to report key information annually, including price data

A robust evidence base is crucial so that consumer protections can be introduced for all district heating consumers and the effectiveness of these monitored. Under the Heat Network (Metering and Billing) Regulations 2014,[48] heat suppliers will be required to install meters on properties connected to district heat networks and report key information annually to DECC. However, the current legislation does not go far enough.

Information passed to DECC should also include information on the end heat prices paid by consumers, maintenance costs and the profit margins of the supplier of the scheme. Furthermore, this information should be made available to the consumer. Government support may be needed to help smaller suppliers comply with the reporting process.

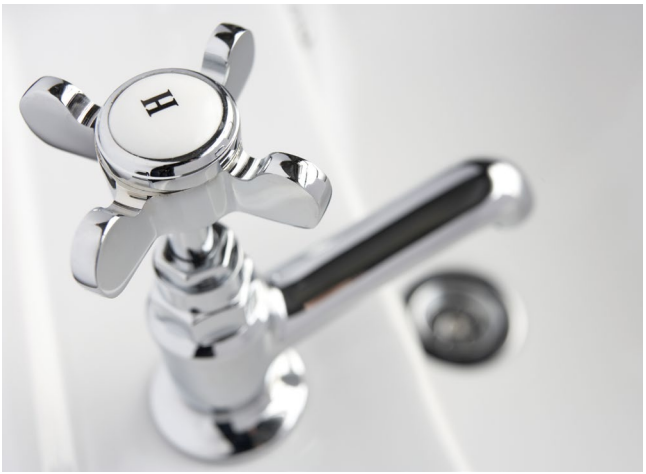
Recommendation 2:

Heat suppliers should be required to assess the efficiency of their network(s) annually and report on this to government

To ensure that district heat networks are well designed, industry should comply with the new Code of Practice and this should be made mandatory for all new schemes. Furthermore, the performance of the scheme should be monitored and reported annually.

Government should develop a standardised format for heat suppliers to measure and report on the efficiency of their networks. This could measure the carbon intensity of heat supplied in g/kWh, including losses. After all, achieving carbon reductions from heat use is a key driver behind the current and planned expansion of heat networks, so it is important to know carbon savings are being delivered.

Further work is needed to assess the impact of high standing charges – common in metered district heat networks – on consumer behaviour, as we believe high standing charges do little to encourage more economical energy consumption.



Complaints handling must be improved

Recommendation 3:

The organisation responsible for billing should take responsibility for dealing with all consumer problems within each district heating scheme

It should be made crystal clear to consumers in their initial information pack, and on all subsequent correspondence, which organisation is responsible for dealing with problems and complaints. We believe this should be the organisation responsible for billing, whether they operate the scheme or not. Contact details of the responsible organisation should be clearly displayed on all communications.

Recommendation 4:

All district heating consumers should have recourse to a single ombudsman for the sector

Independent redress and effective dispute resolution are fundamental bedrocks of a credible consumer protection framework. We welcome the Heat Trust's intention to introduce independent adjudication for households whose supplier is a member of the scheme. However, this voluntary approach to protection risks leaving many consumers on district heating schemes, who are not members of Heat Trust, without redress. All district heating consumers should have recourse to a single ombudsman for the sector.

Government must ensure all consumers are effectively protected

Recommendation 5:

The government should look beyond voluntary consumer protection

The Government should look beyond a voluntary, industry-led consumer protection scheme, towards regulation of the industry. Heat Trust should act as a bridge to help increase protection for some consumers while the regulatory framework is developed. A simple regulatory step may be that membership should be a mandatory prerequisite to planning approval and subsidy eligibility. The development of a regulated market may require that support is given to help smaller organisations comply with the regulations.

Suppliers must be more transparent on pricing

Recommendation 6:

Tenants and buyers should receive clear and accurate information – including on price - before they commit to living in a property on a district heat network

Heat Trust will require registered sites maintain an information pack for distribution to heat customers and other interested parties 'on request'. However, being available on request is not sufficient to ensure consumers are informed before they commit to buy or sign a contract. Furthermore, not all consumers will be covered by the scheme.

It should be a responsibility of the seller, landlord or third party intermediary (i.e. the letting or estate agent) to ensure all prospective buyers or tenants are given the necessary information to make an informed choice about living in a property connected to district heating. An information pack – showing how prices are set and reviewed, and how these compare to alternative forms of heating – should be given to prospective buyers or tenants at the point of sale, i.e. during the conveyancing process.[49] It must be made clear to consumers that they cannot switch heat supplier and whether they are able to switch electricity supplier. Unless bills are expected to be below the heat price comparator, district heating should not be marketed as low or lower cost heating.

We also found evidence that costs of district heating used in Energy Performance Certificate may be too low and we believe BRE should review its approach to district heating in EPCs, to ensure they accurately reflect the costs of district heating schemes.

Recommendation 7:

Consumers should be told what they pay for their heating in a clear and transparent way

It should be clear to consumers what is included in their heat price. Firstly, all heat suppliers or management companies should separate out consumers' heat costs from any management fees or other utility service costs, such as water or electricity. Secondly, on metered schemes, all fixed and variable charges should be clearly separated out in bills.

The Government's Heat Network (Metering and Billing) Regulations 2014 will help address some of these issues by improving transparency in bills but this must be backed up with effective monitoring to ensure compliance. Furthermore, all bills should be standardised to make it simpler for suppliers to comply and easier for consumers to understand.

We would also encourage more property developers to consider including the capital costs of district heating networks in the sales price of the property, as you would for other pipework and wiring. This would reduce the ongoing cost of the scheme and make shorter contracts with suppliers more feasible.

Recommendation 8:

An independent, tailored and easy-to-use heat price comparator should be developed for all home owners and tenants connected to a district heat network

The Government - not industry - should take responsibility for developing an easy-to-use and reliable heat price comparator. To be trusted by consumers, it is important that this comparator is independent.

It should also be transparent – reflecting the age of the property and age of the scheme, i.e. a new district heating scheme connected to a new build property should be compared to the costs of a new gas boiler in a new build property. It would also be useful to show projected costs, to give consumers an indication of how their bills will change in the future.

Furthermore, the heat cost comparator should be adapted for tenants. A tenant would expect to pay any boiler and network maintenance costs in their rent, not through their heating bill. So the price comparator would be unhelpful for tenants, unless the comparator separated out maintenance and running costs.

A review of fair pricing for district heating customers is needed

Recommendation 9:

Regulation may be needed to keep prices in check

Alongside the heat cost comparator there should be a means of keeping prices in check. We believe a government review of fair pricing for district heating customers is needed and action should be taken to give consumers confidence on price; options include:

- **Special Measures:** Consumers could be given the opportunity to raise concerns around costs with Ofgem, who would then be given new powers to parachute in a 'skilled person' to assess high cost suppliers and help them get their costs back on track. Ofgem could also fine suppliers who fail to deliver good levels of efficiency.

- **Price Cap:** In countries like Norway, the price for district heating cannot exceed the cost of electrical heating in any given supply area.[50] A similar approach in the UK could cap costs at no more than the equivalent cost of the alternative heating system. This 'price to beat' would encourage suppliers to reduce losses and improve the efficiency of the system.

- **Opt Out:** Consumers could be given the option to opt out of a district heating contract and install their own heaters, if costs were shown to be higher than the most cost effective alternative, without being liable to pay an exit fee.

48 The Heat Network (Metering and Billing) Regulations, published in November 2014, requires heat suppliers to report key information annually to DECC or the Scottish Government, including the location of a district heat network; estimated total installed heating capacity, heat generated and heat supplied; number and type of buildings supplied by that district heat network; and the number of final customers supplied by that district heat network.
49 In Scotland, house buyers receive a Home Buyers Pack, this could be adapted to include information on district heating.
50 Norwegian Water Resources and Energy Directorate, *Energy Act 1990*.