

District Heating and Heat Networks

Report from Southwark Housing Scrutiny Commission

September 2020

Members of the Housing Scrutiny Commission

Commission Member	Role
Councillor Gavin Edwards	Chair
Councillor Hamish McCallum	Vice-Chair
Councillor Jack Buck	Committee Member
Councillor Dora Dixon-Fyle MBE	Committee Member
Councillor Jon Hartley	Committee Member
Councillor Nick Johnson	Committee Member
Councillor Bill Williams	Committee Member
Cris Claridge	Co-Optee
Ina Negoita	Co-Optee

Introduction

Southwark Housing Scrutiny Commission (HSC) decided to investigate the council's approach to district heating systems for three primary reasons:

1. Because the council is already engaged in wide-ranging projects to upgrade existing systems and to expand district heating in the borough
2. Because the number and regularity of outages of existing district heating systems causes significant inconvenience and discomfort to residents, and so it is important to analyse how the council responds to these situations.
3. Southwark's will need to respond to changes in government regulations regarding individual metering and the regulation of heat networks.

Everyone agrees that district heating systems are very important to Southwark residents and to the council's longer-term strategy for investing in council housing. Southwark is a major heat network operator. We have 120 heating systems serving some 17,000 residents with heat, including nearly 3,000 served by heat from the waste incinerator at SELCHP. As the evidence presented in this report confirms, improving reliability remains an issue which needs to be urgently resolved.

So, there is a strong connection between point 1 and point 2 set out above. The unreliability of some existing heat networks is a direct consequence of aging infrastructure and a lack of strategic investment over many years. But changing this is a long-term project. In the meantime, we also need to ensure that the council can respond to outages in a way which gives maximum support to residents and ensures they are kept up to date.

This report is broadly structured to address these three separate but connected issues. We are seeking to address recommendations which help to guide the long-term investment programme *and* shape how the council supports residents experiencing outages.

This report will avoid simply repeating the copious amounts of information publicly available on Southwark's plans in regard to district heating. It is focussed on the additional evidence we have gathered as a commission.

For context, the following links may be useful in providing context for what follows.

[Heat Networks Cabinet Paper, July 2019](#)

[Summary of ESCO Structures](#)

[Roadmap for developing heat networks strategy, July 2019](#)

The Housing Scrutiny Commission carried out the following actions to gather evidence:

1. Formal Interview with Cabinet Member
2. A formal Interview with officers leading on response to district heating failures
3. Two formal Interviews with officers leading on strategic investment and extension of SELCHP and wider heat network (July 2019 and October 2020)
4. Informal discussions with officers.
5. Case studies on the Aylesbury and Brandon Estates
6. Notes from Tenant engagement meetings (Carried out by officers, but shared with the commission)
7. Formal evidence submitted by Southwark Group of Tenants Organisations (October 2019)
8. "Keeping the pressure on" a further dossier from Southwark Group of Tenants Organisations updating their evidence following the Covid-19 lockdown (July 2020)

The evidence gathered is presented below followed by recommendations of the committee.

Formal Interview with Cabinet Member

On 8th July 2019, the Housing Scrutiny Commission formally interviewed Kieron Williams, the Cabinet Member for Housing Management and modernisation. Below are the key extracts from the interview.

On the longevity of district heating systems, the council's historic approach and why change is needed: ". . . most of our systems, it's fair to say were original systems installed when blocks were built. And, and what's happened over time is we've had a process of maintaining them with responsive repairs when they've gone wrong and increasingly, they're coming to the end of their lives. So we've got a lot of the big major systems that are getting to the end of their life cycles and beyond their life cycles actually. Some of them were put in to last for 20 years and are now 30 odd years old and we've them kept going until now. And why has that been the case? Well, we've never had enough money to do all the repairs that want to do and we've made priorities and that has worked up to now. But the truth is it is stopping working now and what we've seen at the moment is that the

availability rate of heating and hot water systems is now at 97%. Sounds good. But that means that three in every hundred days people not getting their heating or hot water.”

On carbon reduction: “. . . almost all of our district heating systems at the moment are gas powered with the exception of SELCHP and clearly we are committed to end carbon emissions we need to move away from those gas powered heating systems. So this cabinet paper also talks about some proposals to put in some heat pump renewable systems and look at the extension of SELCHP to cover more estates. And then the strategy work really is answering the question of where do we go beyond that, in terms of having sustainable heat sources beyond and into the future.

On heat market regulation: “. . . potentially a whole different level of regime coming down the line. So at the moment, if you provide electricity, you're regulated. If you provide heat you're not. It looks quite likely that the level of regulation will come in around heat provision that is equivalent to around electricity so the cabinet paper sets out all the things that we will have to understand as a council to do this.”

On the council response to outages: “. . . when we do have outages and we have had significant episodes, we have made sure that we stepped in, and particularly for those people who are vulnerable providing electric heaters provide people compensation for the electricity that they're using, instead of using the district heating they're provided at the moment, but what we really want people to have is reliable heating systems that are on all the time or almost all the time, and up to modern standards.”

On fuel poverty and individual metering: (In answer to a question from Cllr Bill Williams) “This is one of the challenges we face at the moment, the regulation that's come in suggests that all everyone should be individually metred but it hasn't been implemented yet. So there's regulation on the books that says everyone should have individual metering, but it hasn't been enforced yet. And if that was coming in place in the future, and there are lots of reasons why that would be sensible . . . We have to come up with a policy that balances those. But we will have to have a policy and in the end, my view is we probably will have to move to some kind of individual metering as it's likely to be the way the regulatory context works.”

On the capacity of SELCHP to deliver on council plans (In answer to a question from Cllr Nick Johnson) “SELCHP has a huge amount of capacity to put on thousands of more homes. That's definitely, definitely the case. And the question is how much more capacity - a lot more and potentially with some more works done at SELCHP. . . And so then, importantly, the next bit about this is that works are interrelated to each other. So there's a big cost of extending the network in any direction. But if that cost is shared across a large number of homes, it comes down to a much smaller cost per home. A very affordable and reasonable way to provide heat. But it means you can't just do one small estate here and connect it to SELCHP and one small estate there, the viability all has to be stacked up on the basis of saying there are enough, there's a swathe of the borough here that we can confidently connect. And that will work. And the two broad branches I mentioned in the papers are either and or moving towards Peckham and moving down towards Canada Water and around.

On private sector investment and involvement in delivering our heating strategy: “Tenants and residents in our homes will always hold the council to account for the heating they're receiving. And so, you know, that's our responsibility and we need to keep it. My personal preferred option would be able to find the investment to keep it all in house and develop our expertise and capacity to be the first choice of heat provider for the borough, whether that's our own stock, or other people's stock and whether that's commercial buildings as well. So the more we can explore those things, the better. That said, you know, there is a world of organisations with much more history of investing in these systems globally or in Europe than we have so we do have to think about what those providers may or may not bring and so the options for getting the district heating systems to where we need them to be .

On linking new private housing developments to heat networks: (In answer to a question from Cllr Hamish McCallum): “So the London plan and the Southwark plan are obviously used for large developments, if they can viably connect to an existing network, it should as their first option, and so that, for example, in Canada Water that's the discussion we're having at the moment about whether it's fully viable for them to connect to SELCHP. And that should be the first option that they consider.”

[Councillor McCallum went on to ask about making linking to networks a condition of planning and including it in the Southwark Plan. The cabinet member gave a commitment to look into this further]

On outages on the big estates, both planned and unplanned: “The Wyndham, Comber and Brandon system, one of the reasons that has had so many outages is the design of it has not been like a modern system. So it's one system, if the boilers go down. Originally, it had a couple of boilers and one of them broke so there's only one running, so other things going on. But if there is a leak is probably a better way - a leak anywhere in the system that stops the whole system. And there's no way of just saying, well, let's just shut off this bit over here. . . The good modern designed system has much more ability to deal with the fact that it's just this bit that's broken. You know, we know where the pipes are and they're more reliably built. Absolutely, if they're not maintained in 40 years time, we will be back in the same place. So having a proper maintenance regime really is important

On tenant and resident involvement (In answer to a question from Cllr Dora Dixon-File) “. . . we won't get any of this, right unless we're working with people living in these homes to make sure it's the right systems, in all aspects of that from the heat to the metering or whatever else it might be. . . obviously the proposal in here to set up a new borough wide group. We are already setting up groups in particular estates where there are works going on, and resident project groups in those estates so they can shape those projects in detail. In the format that I think most people here will be familiar with for major works and new homes schemes. There are some very practical things that were not going right in the past. So for instance, when some of our really dedicated TRA chairs, would ring up and say, the system on my estate is down, the call centre would say, well, you're just one person ringing

up. We should have got beyond that now in the call centre if you're a TRA rep and you're phoning up, they should just acknowledge, okay, you know, your estate is down.”

A formal Interview with officers leading on response to district heating outages

Also providing evidence on the 8th July 2019 were the Head of Engineering, and the Director of Asset Management. The Housing Scrutiny Commission is very grateful for their contributions and insight. Below are the key quotes from their contributions:

On the long-term reliability of district heating systems and the need for investment:

“So, analysing the data going back nearly 10 years We roughly provide between 96% and 99% availability. That's not where we want to be. We want to give people 100% availability throughout the year. The engineering team works remarkably hard when there are unplanned outages to get them fixed as quickly as possible. But sometimes we can't fix them as quickly as we'd like and two recent illustrations of that, where we had some catastrophic boiler failures on the Wyndham Estate a few months ago, and a major leak in Thurlow Street that affected almost half of the Aylesbury Estate. Those compounded the figures for last year if you like, so far for this year, we're at 99.3. But of course we still got the winter to come. Talking about the paper, the investment need. We took a paper to cabinet in January 2017 that estimated the investment need in the district heating stock at around £350 million. That's not money that we've got to hand. So we were tasked with going off and coming up with a strategy for investing in that stock and levering in the investment required into it. So we eventually got hold of a man who you really need to meet, Tom Vosper who's our strategic project manager, ideal for the piece of work in front of us, and the author of the report that you've got

On private sector involvement in ESCOs: “It shows you the different type of ESCOs that we will need to look at. They range from council owned if you like, through to private owned. So with the council owned there'd be quite a high investment needed. But similarly, I don't want to run away from the fact that if we went privately owned there'd be a level of investment needed, because a private investor would expect to make money, and it might be that you - these are all the things that Tom's got to look at. But these - they might want to change the rent structure so that they're actually paying for what they receive - residents. If you look at appendix one, there's a whole range of ESCOs and how they operate within that appendix.”

On individual metering and implementation of government policy: “So the regulations say that we should look at individual meters. But the government department has yet to come up with the viability tool that says you've now got to put them into existing district heating systems or homes served by existing district systems, as you can imagine, some flats are so old there's really actually not a lot of space to put a meter. So we're waiting for that viability tool. Anything that we build now does have to have heat meters. Any material alterations to blocks that we might be refurbishing, there's a set of rules that says whether you need to put individual. And of course we meet those rules going forward.”

On a resident's feedback group on District heating: "One of the recommendations is about setting up a residents' group. To look at two things exactly those is, what do we do during current outages? And how can we improve what we do? And how can we engage with residents in a strategy or strategies going forward? So I think that's really important, we recognise the need, that the residents are at the end of this stuff. And we need to take them with us and work with us with them is what we need to do .

On the reliability of SELCHP: "My experience with SELCHP so far is we get very little outage from SELCHP itself. Some of the outages that happened on the blocks or estates that were on it, were on the secondary pipework which might be ours. So that is a leak in our pipe work. And that takes out that estate or that block. Very rarely, in fact, I don't think I remember any time when SELCHP itself has failed to provide the hot water or the heat

On compensation for residents arising from outages: "Well as the compensation policy, which is actually part of our complaints policy and compensation part is actually being reviewed at the moment. But I haven't got an end date for that yet. But it's always been the case, certainly, as long as I've been engineering that whilst, it doesn't sound very fair, during periods of outages of more than 24 hours, me and my team actually rebate the rent element of the heat, and hot water every quarter for every outage over 24 hours. So if it's three days, they'll get three days back. But during exceptional outages, and we accepted that the outages on Wyndham, Brandon, Comber and what happened on the Aylesbury were exceptional, and we paid some compensation for that. And that's not unheard of - the amounts were unheard of, to be honest with you. Prior to that, they were they were smaller amounts. But that's not to say they haven't happened before. We are reviewing our compensation policy to make sure right now that it's where it needs to be.

At the March 2020 Housing Scrutiny Commission meeting, officers provided the following table demonstrating how the engineering team is prioritising the district heating major works programme, which addresses the known long term issues and the poorest performing systems.

System	% Availability	
D'Eynsford	93.0%	We currently have issues with the main gas supply to this site. There are two 2930 Kw winter boilers and one 780 Kw summer boiler. Unfortunately because of the limited capacity mains gas supply, we are only able to run one winter boiler and the summer boiler together at the same time. We can hold service with this arrangement as there is enough output however it does mean that we have to cycle the duty of the two winter boilers manually. The solution to this problem would be to install a second gas stream on the supply side. This would have to be done by the National Grid via the supplier. Note that the summer boiler was replaced approx. 8 years ago, and a new burner and gas booster was fitted to boiler 2 (one of the winter boilers) in 2017. Partial re-tube works have also been done to both winter boilers in the last two years.
Aylesbury	94.2%	Underground mains replaced 2014, Boilers/plant refurbished 2019. Currently considering options for future across life of estate
North Peckham/Gloucester Grove	94.5%	Underground mains replaced 2016/17, now planning to replace worst rising mains in 2020/21.
Wyndham	94.9%	Refurbished boilers 2019, phase 1 replacement of underground mains now and phase 2 in 2021/22.
Lettsom	95.8%	All three boilers have had major structural repair work in 2019 including new tubes and patch repairs to their respective furnace and shells. We have also fitted two of the three boilers with new burners (two new burners) and renewed all three gas boosters. A new pressurization unit was installed in 2018.
Acorn	96.1%	New energy centre installed 2018, underground mains replaced 2019/20.
Newington	96.2%	Planning to replace secondary mains 2021/22
Brimmington	96.2%	Underground mains replacement commenced
Setchell	97.1%	Planning to replace underground mains in 2021/22
Brandon 1	97.2%	All 9 plant rooms refurbished 2019/20, planning to replace rising mains at all towers in 2021/22

Formal Interviews with officers leading on strategic investment and extension of SELCHP and wider heat network (July 2019 and June 2020)

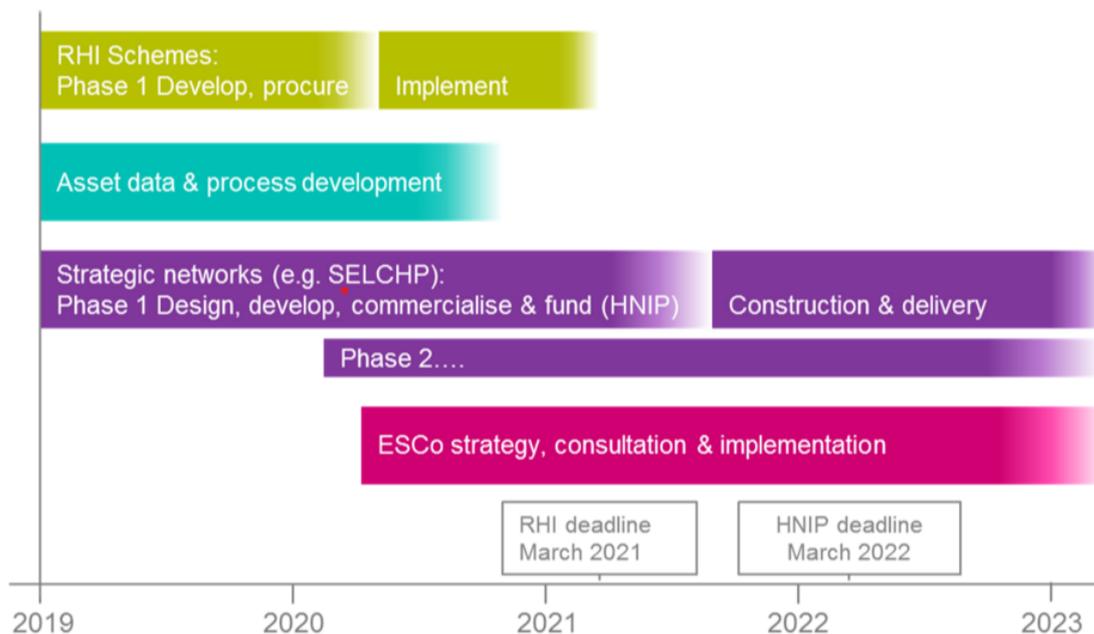
On 28th October, the Strategic Project Manager, district heating attended the Commission meeting and gave a wide ranging talk on the development of heat networks in the borough.

A link to the presentation the Strategic Project Manager gave is here:

<http://moderngov.southwark.gov.uk/documents/s85378/Heat%20Networks%20Update.pdf>

The key points from the presentation and questions to the officer are:

The officer explained that the council's primary objectives with the strategy were to improve the reliability of the system, ensure affordability and reduce carbon emissions. A general timeline for planned work is set out below.



Southwark hopes to access renewable heat incentive (RHI) grants to fund work on heat pump networks. The commission was told that the amount of carbon it takes to generate a unit of electricity has reduced significantly in the last ten years, but the gas carbon factor has stayed the same. The outcome is that electricity now uses much less carbon than gas. A heat pump takes heat from the local environment, and then uses electricity to concentrate it and make it useful. Essentially, the process uses electricity to drive heat into places it can be used. The gap between heat pumps and gas is now large, in terms of carbon efficiency.

To create a heat pump, we bore holes into an aquifer and take heat out. At the time of this evidence session, this approach was being considered in estates/locations, but it was already recognised that it would probably only be feasible in three of them (See update session below). It is expected that, over a twenty year period, a heat pump project should cover its own costs. The project would not completely replace the gas boilers. The pumps would replace between $\frac{1}{2}$ and $\frac{3}{4}$ of current demand.

The officer then went on to explain our approach to expanding the South East London Combined Heat and Power (SELCHP), the waste incineration plant in South Bermondsey. It generates both heat and electricity. SELCHP has a carbon factor of 0.06, which is 3-4 times lower than gas and there is lots of capacity for extending SELCHP to other developments. Both extension projects (Canada Water and Peckham/Old Kent Road) are at feasibility stage.

The officer explained that the council has more control over the Peckham/Old Kent Road extension, but he believes both extensions are viable.

Regarding the Renewable Heat Incentive (RHI) projects, the officer explained that a grant would pay for capital costs and installation. So there would be no cost to leaseholders and no section 20 notices would be required. It would also help to keep charges down for tenants.

Update session, 24th June 2020

On the 24th June 2020, the Housing Scrutiny Commission received an update on the investment programme for district heating from the Cabinet Member for Housing and the Strategic Project Manager for Heat Networks to ensure our considerations of these issues and recommendations were fully up to date. The updates received were as follows.

The Commission heard that the Cabinet had approved and created a Heat Networks Governance Board. The group discusses a range of issues including priority estates and problems, resident communication, carbon saving projects and future investment.

Officers stated that the Heat Networks Resident's Working Group has been established with resident representatives from across numerous estates and tenures. There are 15 people on the group. This group has met three times between October 2019 and February 2020, providing feedback on the Council's heating operations and future strategy. Key messages communicated by the group are the need to:

- Improve communications
- Increase digital integration
- Maintain affordability and consider investment impacts on leaseholders.

The chair of the commission has asked to see the notes from these meetings and these are considered later in this report.

Consultants Arup have (in June 2020) mostly completed the Heat Mapping and Master Planning work. An extension to the project was commissioned in which Arup's hydrogeology team drew together additional data.

There was also an update on the water source heat pump project. A feasibility study of eight sites had been carried in 2019 and pointed to a high technical and economic potential for five sites. A detailed feasibility study was commissioned and undertaken throughout the autumn 2019. This found three of the five sites to be both technically and economically feasible – these are Consort, Newington and Wyndham. Between the three estates the project is expected to save almost 4,000 tonnes of CO₂ in the first year alone while also reducing local flue gas emissions. A detailed specification for the project has been written. Gateway 2 contract approval was received at the start of April 2020. The preferred contractor has not yet been appointed to begin work. Members of the commission were told further information on the contract award could not yet be given but would be available soon.

Regarding the SELCHP Heat Network extension, a feasibility study looking at the extension towards the Old Kent Road development area and Peckham was completed the end of 2019. The primary conclusion of this work was that extending the SELCHP network offered the best value approach to reducing carbon for Old Kent Road developments as well as the council's housing estates. To deliver on this it was found that varying the existing contract with Veolia, rather than undertaking an open tender was the best approach. On questioning, officers explained a wider procurement process would not have been worthwhile because the market would not have been able to deliver further options. The Council has since worked with Veolia to develop a collaboration agreement to define the steps, roles and responsibilities of the two parties in extending the network.

The Commission also heard that, in January 2020 the Council was successful in having five sites join a consultancy investigation led and funded by Department of Business Energy and Industrial Strategy to identify how different heat networks could have their performance levels improved.

Southwark's consultancy partner investigating the costs and benefits of various improvement measures that could be carried out at Brandon, Brimington, Newington, North Peckham and Sylvan Grove estates. Investment grade proposals should be ready by the end of 2020.

The report provided to the Commission also stated "Of private investment into Council heat networks to investigate ways in which the private sector could potentially play a role in investing into the Council's networks and providing operational and maintenance services over a long-term contract. This work is still in progress."

On this point, members of the commission did raise questions and concerns about the potential new maintenance contracts being put in place given the council's negative experience of private sector repairs contracts in other areas. Members also raised the point possibility of better integration of heating repairs with the council's own repairs service which has now been brought fully in-house.

Finally, there was also an update on the issue of government regulation, which the Commission had been forewarned about during the 2019 evidence sessions, and which was referenced in the July 2019 Cabinet paper. The commission was told that the government had recently consulted on two major areas affecting the Council's heat networks. Firstly, the proposed amendments to the Heat Networks (Metering and Billing)

Regulations 2014. The requirement to install heat meters in dwellings other than newly built properties has been on hold in recent years. According to the report provided stated:

"If this requirement returns in a significant way when the government's response to the consultation is released and primary legislation comes forward it could have far reaching implications on the Council's operations. The installation of dwelling heat meters and controls can be expensive, disruptive and change the way residents pay for heat, but overall could reduce energy consumption and carbon emissions."

The other update in regard to regulation was the development of a regulatory framework for heat networks. Government has proposed to make heat networks a regulated market in the same way as gas and electricity markets. The proposed regulator would be Ofgem. Government aims to protect consumers, increase technical standards, increase investment and drive decarbonisation. The result of the Government's response to the consultation could have significant impacts on the way the Council operates its heat networks.

Aylesbury Case Study

On 9th March 2020 a report was presented to Housing Scrutiny Commission giving an overview of district heating outages. Both residents and ward councillors representing the Aylesbury were present and contributed to the meeting. Councillor Jack Buck represents Faraday Ward where the Aylesbury Estate is situated and sits on the Housing Scrutiny Commission. The Housing Scrutiny Commission would like to thank them for providing evidence to us.

The Aylesbury estate district heating system is the council's biggest, originally serving 2400 dwellings when the estate was first built. The numbers served by the system are in gradual decline as the estate is undergoing phased decant and is being regenerated. The number of dwellings currently served is at circa 720.

As is well known, the regeneration programmes have not been delivered and the district heating system plant and above ground distribution pipework is still largely original, though most of the underground distribution pipework was replaced in 2014, and the boilers refurbished in 2019.

Despite this interim investment, the Commission heard evidence of a major outage that began on 16th January 2020 which caused serious discomfort and inconvenience to residents of the Aylesbury. Residents told us of their often harrowing experience of being left without heating and cold water for prolonged periods during cold weather. Members of the commission put on record their anger and, in the case of one member, his "shame" at what residents has been put through as a result of the council's failure to put in place a reliable system for residents. The Cabinet member, who was also in attendance, repeated his apology to residents and gave a commitment to address these issues.

The Commission heard that 3 of 4 boilers failed with bulges or splits in boilers – mostly caused by fresh water entering the system which damaged the boilers. Two of the three (no's 3 and 4) had recently been shut down following statutory insurance inspections, who then insisted on inspection of boiler no. 1 on 18/1/20 when the bulges were found and boiler could not be reinstated.

The work to purchase, install, power and commission these temporary boilers and fuel storage was "largely completed" in 3 days from Friday 17th January to Sunday 19th January, but residents continued to experience significant periods without heating and hot water.

The Commission spoke with Councillor Paul Fleming (Faraday Ward) who gave a wider overview of the situation on the estate and how residents viewed the council's actions on

district heating. Councillor Fleming said that heating and hot water outages had been one of the biggest problems for residents for over 10 years. He pointed out that the council has spent over £10 million in seeking to address these issues but has apparently still failed to put in place a reliable system. In his own words “We’ve thrown money at the problem.”

He described how the council had installed the new boilers, then silt had come in from the old pipes and broken the new boilers. Both Councillor Fleming and several members of the Commission noted that such a use of resources without a positive outcome is incredible and should never be allowed to happen again.

Councillor Fleming spoke about the possibility of the council installing and providing electric showers for residents as one way of resolving problem. The council first said this was too expensive, then said it was not possible because of water pressure issues and is now saying it can’t be done because of issues with the electric load problems. The moving of the goalposts has led to even more cynicism among residents about the council’s commitment to dealing with the issue.

Councillor Fleming conceded that the wider issue is inherently linked to regeneration. He stated his view that decisions around rephrasing the regeneration are taking far too long.

In response to these points, the Cabinet member for Housing spoke of his frustration that the large amount of investment had still not dealt with these problems. He stated that some of these blocks would still be homes to people for a number of years. He went on to say that this is why the Cabinet will come forward with reliable plan, based on a new independent assessment, for those blocks which are going to be around for a while.

Councillor Lauder (Faraday Ward) also reflected the views of local residents and said that many felt let down. Work needed to be urgently done to win back their trust.

Officers did admit that despite temporary heating being put in place quickly, there has been some issues with the contractor, particularly in regard to engineers being taken off jobs too early. The Cabinet member accepted that the stop-start communications on showers shouldn’t have happened. Upgrading of electrics in the blocks would be looked at.

At the time of writing the outcome of an independent review of the outage is not yet known. The independent review is being carried out by the City of London Corporation.

Since March 2020 the council has conducted a concurrent review of the possible options to mitigate further outages and prepared a report with recommendations. Currently a number of temporary boilers are in operation across the estate to provide heating and hot water.

Residents of the estate reported to the commission that accessing compensation payments for discomfort, inconvenience and the additional electrical costs from having to use electric heaters were difficult to access. They told us the process was cumbersome and bureaucratic. Compensation payments are paid directly from the district heating budget. Officers reported that a revised compensation payment policy has been prepared and will shortly be presented to the strategic director of housing and modernisation.

Case study: Brandon Estate District Heating Outages

On 11th November 2019, residents from the Brandon Estate and their ward councillors attended the Overview and Scrutiny Committee meeting to discuss a variety of issues of concern on the estate including the delay in decision making around installing CCTV cameras, slowness of progress in establishing a young people's hub at the Jack Hobbs Club, and, with relevance to this scrutiny process, the heating outages on the estate and the system of compensation for outages.

At the meeting the Chair of the Housing Scrutiny Commission agreed to look into the district heating related issues at future meetings. It was specifically noted that this should include the question of how compensation for heating outages is paid – specifically whether it can be credited to bank accounts instead of rent/service charge accounts.

On 24th June, the Commission received a report from officers and held a discussion about issues experienced on the estate with ward councillors and the Cabinet Member for Housing. The commission heard that the Brandon district heating system serves approximately 580 properties and serves the Brandon 1 and 2 sections of the Brandon estate. Brandon 2 receives its heating and hot water via the Wyndham Boiler House. 4 boilers provide the service, 3 were replaced in 2014 and the remaining boiler dates back to circa 1980. The underground heating mains were replaced in 2011.

An extensive major works project to refurbish the 9 plant rooms has now been completed and in a defect liability period ending in February 2021. This project incurred a cost of approx. £900,000. Planned maintenance works within the boiler house are continuing over the summer period

In their report, officers conceded that residents received interruptions to service during the changeover to the plant rooms during the recent refurbishment. They explained that this was due to the system dynamics being changed to allow a reduction in pressure to properties to extend life of the heating system and allow local isolation of blocks. They stated that these issues were now resolved after Engineering Services and our term contractors worked together with BSW Ltd (the major works contractor).

Councillor James Caldwell told the Commission that there was a “feeling of resignation and despair” about the constant outages. He explained that the outages seemed to happen every winter and seemed to be getting worse. He noted that the most serious outage in recent years was that which started in November 2018 and lasted the entirety of the winter. For that outage the council issued blanket compensation to all residents of Brandon 2 and 3 (and Wyndham) of £253 each. Cllr Caldwell was asked about communications with residents during outages. He replied by saying:

“Yes this is a problem. In 2018, there was one meeting in particular where there was a lot of anger in the room and one of the things that residents noted was the lack of communication. It wasn't that there was no communication from the council but it seemed that there was no consistency. Some people were getting notices and others weren't. And for the most recent outage in May 2020, this was still a problem.”

In response to this, the Cabinet Member for Housing apologised for the prolonged problems being experienced by residents on the estate. He pointed that major investment was now taking place in order to remedy these issues, but the age of the system and the historic lack of investment meant that it was very difficult to deal with. He said he was confident that the right programme investment was now in place. He had asked officers to look at it again to make sure that everything which needed to be done was being done and nothing was being missed. The Cabinet Member also addressed the issue of communications during outages. He said that the call centre was more pro-active in calling other residents when there was a report of an outage and that residents who had registered their mobile number with the council should get a text message when an outage happens and updates on what is being done to fix the problem.

Prior to the Commission's meeting on 24th June, one resident of the Brandon Estate wrote to us and said the following on the issue of communication:

“... for all residents, there is still often a lack of adequate warning of longer term outages, with many residents still receiving no prior notice. The level of compensation provided to all is woefully inadequate at times, like winter 2018, of long term outages of the heating system; or at all times when the hot water is off for days on end, given the high additional costs incurred especially by those with larger and / or young families.”

Co-Opted Commission Member Cris Claridge reported that a particular problem with noise from the heating system in Prescott House was causing significant problems for some residents, including one who was being forced to sleep in their car at night. Now that the heating system has been switched to summer mode the issue has been temporarily addressed, but this should be looked at again prior to winter mode being switched back on. Cris Claridge also reported the view of tenants that the levels of compensation issued were seen as “totally inadequate”.

Notes from Tenant engagement meetings

As noted above, during the period of this scrutiny process the council has established a District Heating Resident Involvement Working Group. The group includes a range of tenant representatives from across the borough and includes both tenant and leaseholders. Three meetings of the group have now taken place and the Housing Scrutiny Commission has reviewed the notes from these meetings. The meetings took place on 10th October and 16th December 2019, and 24th Feb 2020.

Members of the group have expressed a view that text messages and website should be used more often and more effectively in communicating with residents regarding district heating outages. Council officers have informed the group that first communication with residents is via text messages and website updates, but that letters are sent as well when outages go over 24 hours. These are often delivered by housing officers and vulnerable residents are prioritised for delivery.

The agenda for the group meetings has also included a discussion on the pros and cons of creating private sector heat partnerships (ESCO model). It was explained that it has been estimated the council would need to invest at least £350m to bring the condition of its heat networks up to a modern standard in the long term, and so the council is considering such partnerships in order.

Quotes from residents in response to this include the following:

“This sounds a bit like a PFI deal – there can be eye-watering legal and financial set-up costs to these deals.”

“Myatts Fields North in Lambeth is an ESCO and that has been disastrous”

“I’m open to this kind of arrangement as long as there is a good service. It might be necessary to make the level of investment that is required. What’s the alternative? One con though is that the service provider is an extra level removed from the residents.”

The 24th February meeting was largely taken up with discussions about the council’s response to government policy on individual metering. It was explained that new-build homes are already required to have heat meters by law and Southwark could be forced to retrofit heat meters into existing council properties.

This is subject to how the current Heat Metering and Billing Regulations are amended (currently being updated by central government). If heat meters were rolled out across all existing properties, it would need a massive programme of education to help people understand how they work and how any associated charging system would affect them. The group was asked about the possibility of YouTube videos being used and/or a standard handbook.

Regarding the type of tariff the council should apply if metering is introduced across the board, the table below was used to explain the various options which would be available.

Heating tariffs, like gas or electricity tariffs, normally comprise of two elements:

1. A **standing charge**, normally accounted for daily, just for being connected to the heating system. The price of the standing charge is normally calculated so that the network operator can recover their fixed costs.
2. A **variable charge**, normally accounted for per unit of heat consumed. The price of the variable charge is normally calculated so that the network operator can recover their variable costs.

There are certain advantages and disadvantages to constructing a heat tariff in this way.

	Fixed rate for heating	“Mobile phone contract” equivalent	Industry standard heat metering approach	No standing charge approach
Explanation	The current pool charge is like this	Paying a fixed monthly charge gives	Paying a daily standing charge	All payments are on an elevated

		you a certain amount of heat to use. If you go above this level, you pay extra on a variable basis	plus p/kWh for any heat consumed	p/kWh basis
Standing charge covers	100% fixed cost 100% variable	100% fixed 50% variable?	100% fixed cost 0% variable	0% fixed 0% variable
Variable charge covers	0% fixed 0% variable	0% fixed 50% variable?	0% fixed costs 100% variable	100% fixed cost 100% variable



Pros	Really simply People don't worry about heat consumption	Encourages people not to use too much heat. Encourages people to use at least some heat.	Encourages people not to use too much heat. Simple	Encourages people not to use too much heat. Benefits very low users / people who are sometimes away.
Cons	Does not encourage efficiency behaviour.	Might tempt people to turn off when they reach limit even if it's cold. Requires instant and reliable access to meter data. Market doesn't currently offer.	Can discourage heat use altogether in some cases to save money.	Could discourage heat use altogether in some cases. Some residents could end up subsidising the standing charge for others. Market doesn't currently offer.

It was explained to the group that pre-payment arrangements for heat meters with auto cut-off are not uncommon in the housing association sector (probably the standard approach). Some members of the group thought an auto cut-off approach would be very negative for some residents.

Southwark does not have discretionary aid programme for people who have medical conditions that require high level of washing and bathing. It is difficult to do this with communal heating systems.

Members of the group expressed that freedom of choice ought to be a clear principle in deciding on heating systems.

The group commented that the current compensation approach is too ad hoc. A case by case process of needing to "prove your extra electricity cost" doesn't protect the most vulnerable residents. However, the group also wanted to avoid a "compensation culture" because it costs the Council money which could be better used improving problematic heating systems.

Formal evidence submitted by Southwark Group of Tenants Organisations

Southwark Group of Tenants organisations have been engaged in this Scrutiny process from the outset. Chair of the SGTO (Cris Claridge) sits on the Housing Scrutiny Commission as a co-opted member, and the Commission has also taken two sets of written evidence from SGTO in October 2019 and again in July 2020. The second submission included feedback arising from the experience of residents following the Covid-19 lock-down. Rhiannon Hughes, Campaigns and Research Officer for the SGTO, has been very helpful in providing evidence and the Commission would like to thank her for her engagement in the process.

SGTO provided evidence of the extent of disturbance and discomfort that outages inflicted on tenants. They noted that, during March 2018, the period when the so called 'Beast from the East' hit the UK, 16,104 council homes were affected by heating and hot water outages.

The October 2019 report from SGTO also highlights the huge impact that district heating outages can have on people's lives, including increased debt because residents have to take alternative actions to heat their homes and water. The SGTO raised particular concerns about the position of elderly and vulnerable residents when there is an outage. They pointed out that this group is particularly vulnerable because their physical health is often not good and because they are on fixed incomes and can struggle when bills come in. One quote from a tenant included in the report is:

"You have pensioners who are sitting there in the cold, pensioners feel it more than others. Why should they have to pay more to have an electric heater on?"

SGTO highlighted the experience of some tenants when they are trying to access compensation which they say is a bureaucratic and cumbersome process.

SGTO recommended that the council do more work to make sure people know how to report outages. They also wanted reassurance that multiple job numbers were not being allocated for the same district heating repairs leading to a lack of accountability for when the job is really complete.

SGTO asked that vulnerable tenants/leaseholders receive more support from Southwark Council when there is outage in their property.

SGTO also said that there are discrepancies in who is offered gym/leisure Centre access for washing during period of outages on estates. If people are offered this, gym staff should be made aware this is happening. There should be a blanket approach when offering this.

They also said that any new compensation Policy "needs to be made much clearer, where to find it, how to claim it and what is needed to claim it." And that "a blanket, measurable approach needs to be given with compensation and support during outages."

The July 2020 report from SGTO also highlighted the issues mentioned earlier in this report in relation to noise created by district heating systems for people living in certain properties.

This report also gave more detail on what SGTO wanted to see from a revised compensation policy.

The report also states that “Payment should be in cash or to bank accounts, not via rent accounts. Many people are in arrears with rent (not least due to the fact that this is how Universal Credit pays it) so the money is swallowed up and does not help them heat their homes.”

And “Payment should be in advance (at least for planned outages) or immediate and guaranteed, to ensure no one goes cold.”

Recommendations

Strategic expansion of and investment in the heat network

1. **Encouraging use of SELCHP (A low carbon option) through the planning process:** HSC notes that there are both GLA level (London Plan) and Southwark level (New Southwark Plan) policies in support of new developments (both private and public) connecting to existing district heating systems. Clearly, encouraging more developments to join with what are low carbon heat networks is something the council should be encouraging. To strengthen this, HSC recommends that the Cabinet investigates possibility of creating a “Local Development Order” which would mean the default energy solution to be a SELCHP connection unless it is practically unfeasible.
2. **District Heating and investment partners:** HSC notes that the council’s current policy is to “ . . . investigate ways in which the private sector could potentially play a role in investing into the Council’s networks and providing operational and maintenance services over a long-term contract. This work is still in progress.” In regard to this policy position, HSC makes the following recommendations:
 - a) Southwark has recently taken a much firmer hold of the housing repairs service (a service which does not generally cover district heating repairs), ending the client model arrangements with SBS and making it a genuinely in-house service. This direct management control of the repairs service opens up significant opportunities for cost-saving, and efficiency. The Cabinet should investigate if this expanded in-house capacity might replace some of the contractual arrangements with the private sector for repairs to district heating.
 - b) Southwark council has a long history of failed or inadequate strategic partnerships with the private sector. Housing repairs, the call-centre and IT are just a few examples, and there are many more. On each occasion, when the service is eventually brought back in-house, we have seen improvements in

service quality and significant cost savings. HSC is concerned that the council does not repeat the mistakes of the past. The Cabinet member should ensure all other avenues for securing service delivery and investment are exhausted before proceeding with strategic partnerships with the private sector.

3. **Investigate a 'sinking fund':** Multiple contributions made in evidence for this scrutiny have raised the issue of large charges being made to leaseholders as a result of large scale investment into estate heating systems. HSC recognises that leaseholders must make a contribution to these costs as a matter of law. However, HSC notes that in other boroughs (such as Brent) a 'sinking fund' has been developed which involves the council collecting additional funds (as part of their heat meter tariff). Such a system may not be right for Southwark, but this model is worth looking at more closely because it is a way of smoothing contributions over time so that leaseholders don't receive very large one-off capital works bills. One potential pitfall of sinking funds which should be kept in mind is that there is a danger of the council receiving demands for interest or reimbursement from contributors. HSC would wish to see this risk mitigated. HSC recommends the Cabinet investigate the feasibility of developing a 'sinking fund' from tenants and leaseholders for maintenance and repair and replacement of heating systems.
4. **Spread best practice from DBEIS funded investigation:** HSC notes that Southwark was successful in having five sites join a consultancy investigation led and funded by Department of Business Energy and Industrial Strategy to identify how different heat networks could improve performance and efficiency. Southwark's consultancy partner is investigating the costs and benefits of various improvement measures that could be carried out at Brandon, Brimington, Newington, North Peckham and Sylvan Grove estates. HSC recommends that, should wider lessons from this, this best practice should be applied more widely in other areas of Southwark.

Repairs and response to outages

5. **Improving communications during outages:** It is clear that mobile text message updates for residents are by far the quickest and most effective means of communication when an outage occurs. However, many residents have not registered their mobile number with the council or their details are not up to date. Consequently, some residents do not receive these updates and are unaware of what actions are being taken. HSC recommends the following related actions to cabinet:
 - a) A concerted campaign on estates most affected by district heating outages to get residents to register/update their mobile phone numbers with the council. This could include a prize competition for those registering their details.

- b) Include in the script for call centre operatives taking repair and other calls a request for a mobile number to be registered.
 - c) Information about residents to registering their mobile numbers should be shared with mutual-aid groups that have developed during the Covid-19 pandemic.
 - d) The council should investigate how social media tools might be put to good use during outages. Some platforms, such as Facebook, can facilitate messages being shown to people in specific locations and this might be put to good use during outages. Clearly the cost of this would also need to be looked at closely.
 - e) The Covid-19 pandemic means that the council now has much better information on which residents are vulnerable or sometimes need additional support. This information should be used in cases of significant district heating outages. The council should pro-actively contact vulnerable residents at the start of and during outages and offer support where appropriate.
 - f) **Risks to vulnerable residents from boiling and moving water:** The council should also consider the wider risks to vulnerable residents who, because of hot water outages, are being forced to boil water and then move this around their homes, and investigate what further support can be provided to ensure risks of accidents associated with this are minimised.
6. **Simplify compensation process:** HSC is aware that officers are already in the process of reviewing and changing the council's policy on compensation for residents as a result of additional costs arising from heating outages. We recommend that any new policy should simplify the compensation payment process, and remove the need to detailed and onerous record keeping by residents. The review should also consider if it may sometimes be appropriate to supply pre-paid electric meter cards to those residents who may struggle to pay additional electricity costs up front. Finally, the review should also consider the compensation taking into account the accumulated impact of repeated outages on the quality of life of residents.
7. **Prompt completion of compensation review:** HSC recommends that the review of the compensation process and associated changes are delivered promptly and without further delay.
8. **Ensure residents can use other local facilities during outages:** During outages leisure centre washing facilities are already made available to all residents. However, HSC has received evidence that some residents are being turned away because leisure centre staff are not aware of the policy. Procedures should be put in place to ensure that all customer facing leisure centre staff are made aware of this offer to residents so that they can use these facilities.

9. **Noise pollution from district heating systems:** HSC has heard evidence that some residents (notably on the Aylesbury and Brandon Estates) are suffering from sleep deprivation as a result of the loud noise coming from the district heating systems. These are serious issues which can have a detrimental impact of people's mental health. HSC asks that an investigation of noise levels on the Brandon estate is carried out, followed by appropriate action to resolve any issues with noise pollution.

Metering and heat market regulation

10. **Tariff for individual metering:** *If* individual metering is introduced across the board, the decision on the type of tariff system used in Southwark will have far reaching consequences. Cabinet should seek to strike a balance between simplicity, protecting the vulnerable and encouraging heat use efficiency. Consequently, HSC recommends that Cabinet favours a blended "Mobile phone contract" style tariff, mixing a fixed monthly charge for a standardised amount of heat use, and then further payment when additional heat is required. This also seems to be the favoured choice of residents attending feedback sessions.
11. **Discretionary scheme:** Any new tariff system should be introduced alongside a discretionary aid scheme (including bill reductions) for those with special requirements (such as those people who require additional washing and bathing).
12. **Heat metre education:** If heat meters are required to be rolled out across existing properties, HSC recommends an accompanying programme of education to help people understand how they work and how any associated charging system would affect them. This should include online resources and video tutorials to maximise accessibility.
13. **Returning these issues to Housing Scrutiny Commission:** HSC recommends that the cabinet member and officers brings back further proposals on metering and other changes relating to heat market regulation to HSC in the future.