www.nhggroup.org.uk

Competition and Markets Authority
Delivered by email

30 May 2018

Dear Sir/Madam,

RE: Notting Hill Genesis response to CMA Heat Networks Market Study update paper published 10 May 2018

Notting Hill Genesis welcomes the CMA's market study into heat networks supplying domestic customers, and the opportunity to comment on the recent update paper.

About us

Notting Hill Genesis (NHG) is one of the UK's leading housing associations, providing homes for around 170,000 people in 64,000 properties across London, the home counties and East Anglia.

We were formed in April 2018 from Notting Hill Housing and Genesis Housing Association, two organisations established over 50 years ago with the purpose of tackling homelessness and poor quality housing in west London.

Our growth over the decades has given tens of thousands of people a place to call home, and Notting Hill Genesis is committed to giving future generations the same opportunities. More than half our homes are general needs properties, charged at social or affordable rent levels. Combining a commercial outlook with a clear social purpose means that we can reinvest surpluses to build around 2700 new homes every year and do our bit to tackle the housing crisis in London and the south-east.

Customer focus

For NHG, the customer is paramount. We are committed to providing high quality homes, managing our properties with professionalism and compassion, and delivering value for money for our residents.

Whilst our customer base has diversified over the years since our parent organisations were founded, and we now provide homes for households with a wide range of incomes, we know that the affordability of household running costs is important to all of our customers. And all of our customers rightly expect a high standard of service from us as their landlord or property manager.

Phone 020 3815 0000 Fax 020 3815 0005 Email info@nhhg.org.uk

Heat networks and NHG

In recent years, NHG's strong presence as a developer in London (where the Mayor's London Plan strongly encourages the development of heat networks) has resulted in a steep upward trajectory to the number of our homes that are served by heat networks. We currently manage around 10,000 homes served by some form of heat network, and have thousands more in our development pipeline.

Our portfolio of heat networks ranges from small supported housing schemes, to 50-100 unit residential buildings with communal heating systems, to 1000+ unit mixed use developments with ESCO-operated district heating networks. The bulk of our heat networks (in terms of customer numbers) have been developed within the past 10 years, and have been driven by planning policy in the Greater London area.

We consider ourselves to be in a strong position amongst residential developers and property managers, in our know-how and operational practices relating to heat networks. Nonetheless, in common with our peers, we have experienced (and indeed continue to experience) significant challenges relating to the financing, design, construction, maintenance and management of heat networks. We don't always get things right, and we are conscious that our residents suffer the consequences when things do go wrong.

For many years NHG has been an active contributor to improvements in the heat networks market. We contributed to and supported the introduction of the Heat Trust and the CIBSE Heat Networks Code of Practice. We have actively engaged with the Greater London Authority on its policy work relating to heat networks. Some years ago we took the initiative to establish and co-ordinate a forum of likeminded housing associations, in order to share best practice and support one another in addressing the challenges and opportunities associated with heat networks.

General response to the update paper

NHG welcomes the CMA's review of the heat networks market, since intervention in this market has the potential to greatly benefit heat network customers across the UK, including our own residents.

The review appears to have been executed carefully, fairly and comprehensively. We support the CMA's decision that a Market Investigation Reference is not necessary.

In principle we support the introduction of some form of regulation to the heat networks market.

We naturally have reservations about the speed and precise manner in which such regulation may be introduced, and the challenges this may pose for us in an already challenging context. We also have concerns about the potential for conflict and misalignment between the obligation for compliance with new heat networks regulations, and our obligations as a landlord under the Landlord & Tenant Act and associated law.

NHG would welcome any opportunity for engagement with the government, as it takes forward the recommendations of the CMA. We feel that, as a commercially minded yet socially responsible residential developer and property manager, our contributions may be of value in shaping the future regulatory systems, with a view to achieving the aspirations whilst avoiding potential pitfalls. Further to this, we

would welcome advance consultation on any forthcoming regulations, to allow time to adjust and plan for compliance – as noted at 7.24 of the CMA update report.

Appended to this letter is NHG's response to some of the specific consultation questions posed by the CMA at this time. Due to the tight timescale for consultation responses to be submitted, we have unfortunately been unable to provide as comprehensive a response as we otherwise might.

In summary, the main points we wish to raise are as follows:

- We support a 'principles-based' approach to regulatory compliance, recognising that there can be no one-size-fits-all solution given the diversity of the market.

- We advocate a proportionate and pragmatic approach to the regulatory requirements, particularly in respect of their application to small heat networks and existing networks.

- We wish to emphasise the importance of considering co-ordination with other existing legal frameworks, particularly the Landlord & Tenant Act which governs the ways in which many heat networks are operated as a 'property service'.

- We agree with the CMA's decision not to pursue more stringent intervention options that have been considered (e.g. maximum price caps, banning long-term ESCO contracts).

- We wish to raise concerns about the proposals for whole life cost assessments on new heat networks, due to the conflict with planning authority expectations. Specifically, the proposal for developers to cover a portion of future operational costs where a heat network is not deemed to be the most cost effective heating solution for customers, and the potential for this to impact on development viability and the delivery of new affordable housing.

- We consider that additional regulation of heat bills is not required, over and above the existing Heat Networks (Metering & Billing) Regulations 2015.

We trust that you will be able to incorporate our comments into your final report this summer, and would be happy to discuss these with you further should you find this of assistance.

Kind regards,

Kylie Bickford

Head of Design Technical and Sustainability

Notting Hill Genesis

Preliminary recommendations

	CMA RECOMMENDATION	NOTTING HILL GENESIS RESPONSE
1	**We recommend that there should be a statutory framework underpinning regulation of heat networks, with formal powers for a sector regulator to make regulations, and to allow effective monitoring and enforcement.** We are seeking views both on whether stakeholders agree with our recommendation. If so, we are also seeking views on whether we should make recommendations on conditions which would be necessary for a body to be effective as the sector regulator, and any supporting implementation mechanisms that would be needed to ensure effective regulation of the sector.	In principle we support the introduction of some form of regulation to the heat networks market, but we have some apprehension about its execution. **'Principles based' approach:** We advocate a 'principles based' approach to regulation, rather than prescriptive, at this stage in the heat network market's trajectory. It would be useful if the regulation could define a set of typical 'routes to compliance' whilst not precluding suitable alternatives from being devised by industry – much in the same way as building regulations and the approved documents operate. This would aid clarity without stifling innovation or nuance. **Cost of compliance:** The costs associated with compliance with any regulation should be kept as low as possible, as these costs will need to be passed on to customers (particularly in the case of non-profit heat networks). **Heat Trust:** Any regulation should build/draw upon the excellent work already done in developing the Heat Trust. This would include the understanding and insight the Heat Trust administrator has about the challenges for some heat network operators in signing up to the Heat Trust rules. **Co-ordination with other law – particularly Landlord & Tenant Act:** We wish to emphasise the necessity for any regulation of heat networks to co-ordinate with other relevant legislative or regulatory frameworks. In designing the regulatory structure it will be necessary to map out the various other relevant legal structures; identify areas of overlap or conflict; and apply measures to address such overlaps or conflicts in order to offer clarity as to which areas of law take precedence. In particular we wish to highlight the legal frameworks relating to the role of 'landlord' which many heat network operators hold – the Landlord & Tenant Act and associated law. Ideally, heat network regulation would provide clarity around some of the legal 'grey areas' and matters of legal interpretation, currently associated with the application of the Landlord & Tenant Act to heat networks. We would be happy to discuss this point in more depth with the CMA. **Ombudsman:** We would support the use of an independent ombudsman for escalation of customer complaints (ref 7.30 of the CMA update report), as part of the regulatory structure. We believe this to be an invaluable component of the Heat Trust scheme, particularly for ESCO-run heat networks, as it provides a route for resolution to act as a check/balance on the inherent monopoly. Equally we would want to see that potential costs associated with ombudsman subscriptions are kept to a reasonable and proportionate level.

2	**We recommend that the decision to install heat networks and the decision on design of heat networks needs to include consideration of whole life costs to be faced by consumers. Where the whole life cost for customers of a new heat network exceeds that of alternative fuels, the additional cost should be met by the developer of the heat network.** We are seeking views on whether stakeholders agree with our recommendation, and if so whether it should be implemented by the sector regulator, through the planning process, or through a combination of the two.	We fully support the principle that there should be controls to prevent developers from making decisions about heating systems which focus solely on capital cost to the exclusion of long-term operational cost. However we don't feel that the particular recommendations offer an effective solution to this at present, and we are concerned about the ramifications. We consider that improving minimum technical quality standards for new heat networks (as per recommendation 3 below) would go a long way to address the concern about whole life costs, and would likely negate the need for any further controls such as those suggested by this recommendation. Additionally, we consider transparency of information for prospective residents (as per recommendation 5 below) to be of principal importance to the issue of operational cost, to ensure new customers are aware of the costs associated with the property they are purchasing or renting and can make an informed choice. **Impact on development viability:** As a responsible developer, we are somewhat caught between our commitments to act in the best interests of our future customers, deliver new affordable housing, and achieve low-carbon development – these three commitments do not always align. There is potentially a wider debate to be had about the cost of heat networks in this regard. We wish to caution against the likely impacts of the proposed recommendation, in its intersection with planning policies for low-carbon development. Heat networks are generally chosen for new developments over alternative heating systems as a result of planning authorities' drive for district heating and low-carbon energy systems, rather than because heat networks represent the most cost-effective solution for either capital or operational costs. In this respect the 'decision' to install a heat network instead of other heating systems is often not within the developer's control. Cost parity between heat networks and alternative solutions is a challenge, particularly at smaller developments. Further to this, emerging planning policy in London suggests that the drive towards lower carbon and potentially even more costly forms of heat network will further ramp up over coming years. If through the proposed whole life cost approach, developers are required to cover the higher operational costs in addition to the higher capital costs associated with heat networks, this will be an additional squeeze on developers' financial viability and hence impact upon the delivery of new affordable housing and/or S106 contributions. There is therefore the potential for conflict amongst different political objectives. We would encourage the CMA to consult carefully with key planning authorities such as the MHCLG and GLA in this regard, as well as developers like ourselves. **Practical considerations:** There is a challenge in identifying appropriate comparators for alternatives to heat networks, or alternative fuels within heat networks. This was a topic of debate during the creation of the Heat Trust. Often there is in fact no viable alternative to a heat network, due to planning authority requirements and/or technical feasibility. There are practical questions around how whole life costs would be assessed in a consistent manner; one would assume through a standardised cost model. If the regulator proceeds with creation of a standardised cost model, it would do well to draw upon the commercial modelling expertise of multiple commercial heat network operators and expert advisers, as there are different modelling methods in use in the market. Care would need to be taken in

		developing the assessment method, to avoid costs being overstated or understated. Further practical questions would include: How will the relative costs of different heat systems be predicted for future years? How many years' worth of costs would the developer be expected to cover? Logistically how would the developer's payment toward future costs be managed?
3	**We recommend that all heat networks need to comply with minimum quality standards, and that new standards are designed, drawing on existing industry expertise including CP1, to allow monitoring and compliance with quality standards.** We are seeking views from stakeholders as to how effective standards can be designed, and how they should be applied to existing heat networks.	**New heat networks:** We strongly support the recommendation that improved minimum technical quality standards should be introduced for new heat networks, provided that these are set at an optimal level to avoid excessive burden on capital costs. Many of the challenges we encounter in managing heat networks stem from the original design, installation and/or commissioning. It is clear that current minimum standards set by building regulations are inadequate, and that the CIBSE Heat Networks code of practice is starting to have a positive impact in the industry. We would expect any technical quality standards and associated compliance schemes to build upon the good work already done / in progress for the CIBSE code of practice. We suggest compliance assessments should be undertaken at both design and commissioning stages. We wish to also highlight the importance of ensuring that the industry is geared up to deliver heat networks to higher technical standards. The design of good heat networks requires the application of considerable skill, expertise and judgement. Issues with the industry knowledge gap are identified to some extent at 4.16 of the CMA update report. It is important to introduce measures to help ensure the competence of designers, for example training and professional accreditation – the CIBSE Heat Networks Consultant certification scheme may provide the foundation to this. Accreditation should also be applied to installers of heat networks. To give further weight to this point, it is worth noting that Dame Judith Hackitt's review has recognised the 'competence' of specialist designers and installers as a key factor in the quality of fire safety in construction; the same principle may be applied here to the quality of new heat networks. Designers should particularly be trained and incentivised to design more efficient heat networks with reduced operating costs. We would strongly advocate for performance standards and training that seek to prevent system oversizing. **Existing heat networks:** We consider that application of technical standards to existing heat networks would be positive as a way to incentivise effective and efficient network operation. We would advocate the introduction of technical standards or best practice guidance for operation and maintenance regimes. Accreditation for contractors who operate and maintain heat networks could also be considered, as per the point above about accreditation for designers and installers. However, any standards applied retrospectively to existing networks must be set at a proportionate level and be subject to customer-focused cost benefit assessments, to guard against a potential consequence of upgrade work or tighter maintenance regimes that incur a high cost but limited return. We would have concerns about the level of cost that would need to either be passed on to residents or absorbed by the heat network operator to make such upgrades or introduce more stringent operation/maintenance regimes; we feel that the standards should not create a burden.

4	**We recommend that the sector regulator requires all heat networks providers to comply with 'principles-based' rules or guidance on pricing and service quality, to ensure that customers are protected from the incentives that exist for monopoly suppliers.** **We recommend that there is some flexibility as to appropriate pricing mechanisms, and that these could include pricing by reference to ongoing cost (which is the case for many suppliers today) or an alternative benchmark.** We are seeking views on whether this is a proportionate response to the risk of high prices or low quality for heat network customers, and in particular whether stakeholders agree that this should be implemented through regulatory guidance and monitoring.	We support the suggestion of a 'principles-based' rather than prescriptive approach to pricing and service quality. This recognises that there can be no one-size-fits-all solution when it comes to heat networks. It will be necessary to allow for pricing by reference to ongoing cost, however this provides no incentive to the heat network operator to optimise costs. In this respect, it may be prudent for heat networks regulation to draw upon the Landlord & Tenant Act approach to service charges, whereby leaseholders have the right to challenge charges on the grounds of 'reasonableness'; this helps to guard against the disincentive. Equally the structuring of heat pricing is a key area in which many heat network operators are constrained by certain unhelpful parameters of the Landlord & Tenant Act; we would welcome regulation that removes some of these constraints to permit more effective approaches to pricing. We wish to caution that introduction of minimum standards of service for heat network customers may, particularly in the case of small networks without economies of scale, result in higher service costs for customers. Therefore standards should be proportionate and subject to cost-benefit assessment. We support in principle the suggestion of introducing parameters for ESCO tendering criteria. NHG has developed a careful and robust process for ESCO tendering and would be happy to share further details with the CMA as precedent.
5	**We recommend that government, including where appropriate a future sector regulator, implements rules or guidance as to the level of information which is necessary to help heat network customers.** **This should include information required to allow people to make appropriate decisions when considering whether to live in a property with a heat network and information for heat network customers to understand and act upon their bills.** We consider that industry standards could be prepared in advance of the introduction of any statutory mechanism for monitoring and enforcement.	We agree that it is vital to provide all customers who are considering purchasing or renting a property with a heat network, with adequate information so as to make an informed choice. NHG has developed what we consider to be exemplary information packs about communal/ district heating services at new developments, which prospective customers receive prior to committing to a property (e.g. at sales reservation stage). We would be happy to share further details with the CMA. We suggest that in advance of the introduction of a statutory mechanism, standards for information about heat networks could potentially be trialled through integration within existing voluntary industry codes, such as the Consumer Code for Home Builders. In relation to information for existing customers, we would advocate that heat network operators should be required to supply certain kinds of information to customers on request. For all customers (prospective and existing), we would support greater levels of transparency for customers on the composition/ structure of heat tariffs (e.g. what is included in the tariff), so that customers understand what they are paying and why.

Consultation questions

CMA QUESTION	NOTTING HILL GENESIS RESPONSE
Assessment of the issues	
1. Do you have views on our approach to analysis and our findings regarding heat network outcomes, misaligned incentives in the supply chain and transparency?	We consider the CMA's approach to analysis and its findings to be generally careful, fair and comprehensive. One area which we feel may be under-represented is the need to consider the interrelation between any future heat networks regulation and the Landlord & Tenant Act. The CMA has identified three main drivers of poorer outcomes on price and service – misaligned incentives between property developers, heat network operators and customers; monopoly supply and delivery models; and low transparency. We would wish to highlight some further factors, namely: poorly developed UK supply chains; a general industry knowledge and skills gap; and the impact of economies of scale for smaller networks.
2. Do you consider the individual household gas boiler price to be a reasonable benchmark for customers to be confident that their heat supply is value for money?	At this point in time, the full cost of running an individual gas boiler appears to be the most appropriate benchmark for heat network customers to assess value for money – in the manner of the Heat Trust cost comparator. However this is not without its flaws. For example, we wish to highlight the difficulty with the inclusion of price elements relating to the costs of owning and maintaining a boiler (ref 3.19 of the CMA update report) – this is valid for leasehold or freehold properties where the owner is responsible for maintenance and replacement of a boiler, but we feel it does not work as well for rented properties, for which the costs of such maintenance and replacement should be deemed to be inclusive within the rent. The comparator is far less favourable to heat networks if maintenance and replacement costs are omitted.
3. Have we accurately captured the two broad categories of delivery models in the heat networks market (described in section 5) employed by housing associations and private property developers and their impact on customer outcomes? Do you have any views on potential different categories?	Broadly yes, although there are more nuanced variations on the themes, and it is possible to have a combination of the two categories.
Recommendations	
Regulation of heat networks	

4. Do you have views whether heat networks should be regulated? If you agree that they should be, please provide any views on which body might be best placed to act as the sector regulator.	Please see response to recommendation 1, above. We consider that Ofgem may be best placed to act as the sector regulator due to its existing expertise and structures, and its relative political independence. However it will need to guard against potentially an inclination to apply too much of a gas/electricity regulation mindset to the heat networks market, which is fundamentally very different at present (as the CMA report identifies). Regulation by a government department such as BEIS may result in greater politicisation of the regulatory structure than an independent government-appointed body. Regulation by local authorities would likely lead to a too fragmented and politicised approach, and the pursuit of local agendas. We are intrigued by the proposal currently being considered by the Scottish Government, described at 2.62 of the CMA update report, whereby developers of heat networks would need to obtain a licence from a regulator in order to develop and/or operate a heat network. This may be an effective approach to regulation.
5. If there is sector regulation, should it apply to all communal and district heating networks, all delivery models and existing as well as new networks?	We consider there would be benefits in applying some form of regulation to all heat networks – provided that a nuanced 'principles based' approach is taken in recognition that there can be no single one-sized-fits-all solution, thereby allowing different networks to achieve the principles in different ways and to varying extents. It would be useful if any such regulation is able to define a set of typical 'routes to compliance' whilst not precluding suitable alternatives from being devised by industry – much in the same way as building regulations and the approved documents operate. This would aid clarity without stifling innovation or nuance.
6. Do you have views on whether regulation of heat network prices to end customers is appropriate? If there were a form of price regulation, should it be a cap at a certain level, or a 'principles based' approach with self-reporting against permissible contract terms and a regulator to investigate complaints? What factors should determine the maximum level of prices?	Please see response to recommendation 4, above. We advocate a 'principles based' approach rather than a price cap.
7. Do you consider that any rules and guidance on pricing and quality should apply to all heat networks or, for example, only to those with ESCOs?	We consider that there should be appropriate checks and balances in place to protect all heat network customers, but that there cannot be a one-size-fits-all approach covering all types of heat network and heat network operator. We advocate regulatory provisions that would allow alternative approaches to providing customer protection, i.e. a 'principles based' approach.

Do you consider that it would be proportionate to ban 'capital contributions'?	We concur with the points raised at 5.43-5.44 of the CMA update report, which recognise that the practice of requesting capital contributions from ESCOs is on a downwards trend in the industry. As a housing association that can be (along with our customers) on the receiving end of such capital contributions in the form of higher heat tariffs, we welcome and support this downwards trend. However we do not consider that capital contributions should necessarily be banned – doing so could call into question the delivery models of new local authority sponsored district heat networks, making such networks unviable. Instead we consider there is a need for clarification around legally permissible investment models for heat networks, following on from the points made at 7.36 of the CMA update report. This relates to a broader question as to whether heat networks should be treated as utilities or as property services (the latter bringing the Landlord & Tenant Act into play). We would be happy to discuss our insights on this matter further with the CMA. There should also be checks and balances over the use and potential unintended consequences of capital contributions; this could be achieved through the regulation of related matters such as customer pricing and the contractual mechanisms for remedying poor ESCO performance, rather than through rules governing capital contributions specifically.
8. Do you have views on whether heat network customers should have similar consumer protections to customers of regulated gas and electricity utilities?	We consider that the regulated gas and electricity utilities currently represent such a different model of service delivery to heat networks, that the same approach cannot be applied to both. For now, we would advocate an approach whereby the protections of gas and electricity utilities are drawn on as precedent and applied to the extent feasible/appropriate, but not fully replicated – this was the approach taken in the formation of the Heat Trust.
9. Do you have views on the recommendations described in section 7 that we are minded not to pursue (eg banning capital contributions from ESCOs to property developers, and mandatory re-tendering of heat network operating and billing contracts)?	We support the CMA's recommendations as they represent a proportionate response to the context; we feel that the other options considered would be a step too far at this time. We would not support a mandatory re-tendering obligation; we concur with the CMA's finding that there are efficiencies, and therefore cost and service benefits, to be gained through use of long-term agreements (ref 7.63 of the CMA update report) provided these are properly managed and overseen. We support the CMA's position not to pursue a recommendation for price caps and minimum service quality (in favour of a 'principles based' approach instead). Price caps and minimum service standards would seem premature given the market's current position. On the subject of long-term ESCO concession arrangements – whilst it will not be appropriate for customers to hold the 'right to use' for a heat network, we consider that there is merit in continuing to investigate options for controls around the long-term security and standard of heat supplies. For example, we suggest a requirement to clearly identify a 'promoter' or 'sponsor' for any heat network, which will be responsible for the contract with the ESCO; responsible for addressing poor performance contractually on behalf of customers if required; and responsible for securing a replacement ESCO on

	behalf of customers in the event of expiry or termination of the initial ESCO contract.
Planning and technical standards	
10. Do you have views on how to improve technical standards, which cover the design and operation of heat networks, and make them enforceable? Could this be achieved in the absence of a regulatory regime requiring a licence to operate a heat network? For example: a. What is the role of the CIBSE ADE CP1 Code of Practice in this process? b. Do you have views on how these proposals could be embedded in the planning authorisation process? c. For potential heat network connections affected by Building Regulations and / or planning, how could appropriate technical standards could be embedded these processes at local, regional and national levels? d. Could operating technical standards be applied retrospectively to existing heat networks? e. What is the impact of the current approach to professional indemnity insurance for heat network design and build on the recommendations of design engineers?	Please see response to recommendation 3, above. In addition, in relation to limb c) of this question 10 (and with reference to 7.45 of the CMA update report) – Implementation of requirements is likely to be more effective if addressed at a national level through either building regulations or a new heat networks licensing regime – rather than solely through the planning process, which is subject to negotiation by developers, is subject to geographical variation, and can be highly politicised. Equally, in order to permit justifiable regional differences in heat networks market contexts, there may be merit in a similar approach as that taken for water efficiency and accessibility requirements in building regulations following the Housing Standards Review – whereby building regulations sets out tiers of compliance and local planning authorities elect the tier to apply within their local plans.
11. How could local and development plans and their supplementary guidance be adjusted to take lifetime costs and customer prices into account? What would the impact of this be?	Please see response to recommendation 2, above.
12. How should a heat network quality assurance	We would advocate reference to both the Heat Trust and the CIBSE Code of Practice as the foundation

scheme be established and embedded into the regulation of heat networks? Should such a scheme seek to accredit the commercial, financial and contractual aspects of a heat network as well as the technical?	for any such quality assurance scheme.
Transparency	
Pre-transaction	
13. Is further information required to improve consumer understanding of the significance of living in a home with a heat network? If so, what information would be useful?	Please see response to recommendation 5, above. It is important to consider not only the information received by initial sales customers from the developer of a new development, but also the information received by future resales customers. For future resales of private dwellings on the second hand market, the responsibility to inform the purchaser about the property largely rests with the owner of the dwelling. In this respect, the TA6 Property Information Form may be a useful vehicle to help ensure better information at the point of sale.
14. Who should be responsible for ensuring that new leasehold agreements include a clear reference to the treatment of heat network assets connected to a leasehold property?	We support the principle that the treatment of heat network assets should be clearly set out within leases. We have developed what we consider to be robust and fair lease terms addressing heat network services and assets; we would be happy to share further details with the CMA. The content of leases is inherently the developer/landlord's responsibility and should remain so. It will also be important for any regulator to catalyse an upskilling of legal and property professionals. We tend to find that there is inadequate knowledge amongst solicitors in relation to heat networks. One consequence of this is that customers' solicitors and other conveyancing firms don't know what to look for within leases or what questions to ask of the developer, and therefore may not adequately protect their clients' interests in property transactions.
15. Should heat supply agreements or contracts which set out key performance indicators, such as guaranteed terms of service, be made compulsory?	We consider that heat supply agreements should not be mandatory. Our main concern is that customers should receive clear information about what they can expect from the heat service, and that the standard of service should be reasonable; this can be achieved through other means than a heat supply agreement – we would advocate a 'principles based' approach to customer protection in this regard, rather than prescriptive. We note that the Heat Trust has identified the mandatory use of heat supply agreements being part of its scheme rules as a barrier to certain heat network operators joining the scheme; it is currently consulting on changes to the scheme rules to address this.
16. How could EPCs be improved in relation to	We consider that the current approach of EPCs in providing estimated energy costs for a property is problematic; it would perhaps be more helpful to provide estimated typical energy demands, as a

heat networks?	BRUKL report does for commercial units. In any case we have concerns as to the accuracy of EPC data derived from the current SAP calculation methodology, in providing a fair reflection of likely energy usage – we do not encourage our customers to rely upon EPC estimations.
During residency	
17. Should heat supply bills be improved? Is further information necessary? If so, what information would be helpful?	We do not consider that any further regulation of heat bill information is required, over and above the Heat Networks (Metering and Billing) Regulations. Enforcement may be an area for focus. We note that any additional regulation of heat bill information would need to align with the Heat Networks (Metering and Billing) Regulations in respect of unmetered heat networks and the different tiers for compliance. To address issues around customer confidence in the accuracy of bills, we suggest it may be worth considering improvements to regulation around the quality of metering. This could comprise standardisation of meter accuracy check methods, accounting for installation accuracy as well as meter product accuracy (as this is generally the cause of inaccurate metering in our experience), and appropriate routes for customers to contest meter accuracy.
18. Should there be specific requirements regarding the frequency of bills beyond that already required by the Heat Network (Metering and Billing) Regulations?	We do not consider that any further regulation of heat bill information is required, over and above the Heat Networks (Metering and Billing) Regulations. Enforcement may be an area for focus.
19. Should standard performance metrics for suppliers be produced – for example, in relation to planned and unplanned outages and heat temperatures? Should this information be published?	We consider that standard performance metrics may be a useful tool in encouraging better performance amongst heat networks. We would support the publication of such information (along with details of relevant contributing factors such as age of network, and number of customers served) to enable benchmarking – however we consider this information should be anonymised, at least initially.