Heat Networks Market Study
Update Paper
Response of E.ON

INTRODUCTION

1. On 10 May 2018 the CMA published the update paper for its market study into heat networks. This document is E.ON's submission relating to the CMA's Update Report which sets out the CMA's findings so far, emerging thinking and possible recommendations.

2. E.ON agrees that low carbon heating technologies are fundamental to the UK's future energy system and that heat networks have a key strategic role to play as part of the future energy mix as outlined in the Clean Growth Strategy. One of the key policies in the Clean Growth Strategy is to 'build and extend heat networks across the country', underpinned by £320m of funding[1] out to 2021. The aim is to help pave the way for a self-sustaining market for heat networks by the early 2020s.

3. The Clean Growth Strategy implies significantly increased investment in the sector, whilst ensuring the protection of customers' interests. We also foresee the continued evolution of heating technology and emphasise the need for the recommendations to be able reflect and adapt to this, encouraging continued investment and innovation in the sector. However, it is also important to ensure that the underlying commercial models of existing heat networks are not compromised so that they remain viable and attractive to operate, and we welcome the CMA recognising the need to recognise this balance in how its recommendations are implemented.

4. E.ON welcomes the CMA's findings so far, emerging thinking and possible recommendations to improve the experience of customers whilst encouraging the continued growth in heat networks across Great Britain. We note the CMA have found that many heat customers experience good price and service quality outcomes. We also recognise that for schemes not covered by the Heat Trust, when things go wrong there is limited consumer protection and redress.

5. As described in our response to the Statement of Scope, we acknowledge the CMA's observation that some customers experience poor outcomes in terms of price and service and that these appear to be driven by misaligned incentives of developers, operators and customer; the fact that heat networks are natural monopolies and that there can be low transparency for customers on how their network is owned, operated and charged (again, particularly for those networks not covered by the Heat Trust).

6. E.ON believes that it is already in line with many of the expectations set out in the preliminary recommendations relating to heat network operators. For example, we already adopt a fair and reasonable pricing methodology that has regard for costs and an alternative heat comparator, and provide a comprehensive suite of information to our customers, developers and housing associations. E.ON agrees that it is important that customers should be able to access, assess and act upon relevant information on heating options, and is committed to ensuring that there is transparency and availability of information for current and prospective customers of the heat networks that it operates.

[1] Heat Network Investment Project, https://hnip.salixfinance.co.uk/

7. E.ON has openly voiced its support for mandatory membership of the Heat Trust[2] scheme for all operators of heat networks, which would certainly establish a consistent level of standards for all heat customers. We agree that consideration should continue to be given to whether this is sufficient or whether further, enforceable, standards are required, but would suggest that the Heat Trust provides an already experienced and robust framework that should be used as a basis for recommended improvements.

8. Based on our experience of regulation for gas and electricity customers, we welcome the proposed principles based approach and mindset, covering all aspects from quality of service and customer protection to pricing. A principles based approach would provide the flexibility to reflect the differences between networks; their costs, service levels, tariff and technology choices. It would also guard against the risk of unintended consequences of applying prescriptive rules to the wide variety of current and future heat network schemes.

9. We note that the CMA considers heat networks to be natural monopolies and observe that with ESCO models the protection of customers is limited to the extent that they are considered at the point of the freeholder's/developer's tender/negotiation with the ESCO. Whilst it is E.ON's experience that customer outcomes are considered in the selection of an ESCO, we acknowledge that freeholders/developers need not select an ESCO solely on such criteria.

10. We welcome the proposed continued use of the ESCO model as we believe that it facilitates future low carbon schemes, not just traditional off gas grid schemes. Furthermore, unlike communal heating models, the ESCO model drives efficiency and value for all parties over time. In our experience of operating ESCOs, we continue to optimise their operation and invest in efficiencies to derive benefit, which is enabled by the long-term nature of the contractual arrangements and our expertise in running such networks. Within an ESCO arrangement, life cycle replacement costs are managed across the full length of the contract, minimising 'bill shock' for end customers in the case of asset failure and renewal.

11. E.ON therefore welcomes the CMA's market study into heat networks serving domestic residents and supports the CMA's emerging thinking as outlined in the update paper. We address the specific questions raised by the CMA below. This study represents an opportunity to pull together a number of debates, studies and consultations regarding the current experience of customers of heat networks and how heat networks can be expanded across the UK.

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?

12. As noted we broadly support and welcome the CMA's approach, analysis and findings. We do note that the CMA recognises that its analysis is predominantly based on older, gas boiler based heat networks. We would therefore raise a concern that recommendations derived from that analysis need to explicitly take account of the huge growth anticipated in heat network development and the fact that these will primarily be driven by low carbon technology and the continued evolution of that technology.

[2] http://heattrust.org/

13. That said, we do believe that the CMA has recognised this risk and the constraint it could have on future investment, but would ask that the CMA make this an explicit requirement in its final report, to guide those then taking implementation of the recommended remedies forward.

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?

14. E.ON believes that the prices charged to its heat customers are fair and reasonable. We endeavour to be transparent with customers on all the elements and charges included in their bill. We have always applied an approach that seeks to look at the comparable charges a heat customer might face if instead they had a conventional gas boiler with its incidental charges. More recently, as a member of Heat Trust, our customers have access to the Heat Trust's 'Heat Cost Calculator'[3] which provides them with the ability to compare their heat network costs with what it would cost to obtain their heat through a modern individual gas boiler.

15. We currently believe gas to be an appropriate benchmark for heat networks as it is the predominant source of heat supply in the UK, and the cheapest available alternative. However, we do need to be mindful of the continued evolution of heating technology and guard against stifling that innovation by creating prescriptive rules that then constrain bringing new technologies to bear, by anchoring the revenues to one alternative benchmark.

16. As we set out later, the use of a principles based approach will go some way to address this concern, but it also requires consideration in all aspects of the development of any new regulatory regime.

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?

17. E.ON recognise and support the two broad categories of delivery model and associated customer outcomes outlined by the CMA.

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.

18. As noted by the CMA, we are very mindful of the work being undertaken by the Heat Network Task Force and the Scottish Government and are therefore keen to ensure that there is GB-wide alignment in how any proposed changes to the heat network market, rules and regulations are made. It is key to avoid inconsistency and inefficiency at a time when there is a desire to promote the growth of heat network deployment, as recognised in the Clean Growth Strategy.

19. The creation and enforcement of minimum technical, maintenance and construction standards would ensure the reliability and performance of the service experienced by the customer. Mandating or utilising schemes or standards such as those

[3] http://heattrust.org/index.php/heat-cost-comparator

employed by the Heat Trust could establish consistent standards of customer service and redress. However, there is also a practical consideration as to how to manage the complexity of thousands of networks, each with its own unique characteristics.

20. In our view this would point to any new regulatory regime needing to be light touch, overseeing and enforcing clear, principles based standards and requirements for tariffs and service, and managing an overall assurance process that ensures the correct application and use of technical standards for design, build and operation.

21. For our part, E.ON has sought to replicate the standards and practices that we have applied to our residential electricity and gas customers where appropriate and were founder members of the Heat Trust. Over time, as the heat market and our own practices have matured, we have evolved our approach to address the experiences and expectations of heat customers and drive engagement. We maintain an overall aspiration of delivering an analogous service to all our customers, whether they are consumers of our heat, electricity or gas, or any other of our energy solutions, and believe that this is what customers expect given that they are not necessarily interested in which sector their heat comes from.

22. From the work that Ofgem is doing in the gas and electricity sector with the introduction of Standards of Conduct and Informed Choices, we appreciate the benefits for customers of moving from a prescriptive, rules based approach to a principles based regulatory regime. With respect to heat networks we believe that a flexible, principles based, lighter touch regulatory approach aligns well with the emerging and evolving nature of the heat sector.

23. We do recognise that Ofgem would be well placed to act as sector regulator given its experience in energy, but we are also mindful that the gas and electricity sector is very different from heat networks, including the number of networks/operators (many of them small), the level of innovation and development in the sector, and the way that heat networks are interwoven with the property sector. We certainly do not therefore believe that Ofgem could simply roll out its approach to gas and electricity to heat networks and a new approach will need to be established. In that regard we would be supportive of taking learnings from the regulation of other sectors, such as telecoms and food.

24. Whilst minimum technical standards and a quality assurance scheme would underpin any regulatory regime, we do believe that planning and building regulations and Landlord and Tenant law also have an important role to play in the regulation of heat networks.

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?

25. E.ON believes that any sector regulation should apply to all communal and district heating networks, all delivery models and existing as well as new networks based on the premise that all customers should be treated fairly.

26. E.ON stresses the need to apply any potential remedies that have a retrospective impact on existing heat networks proportionally, for example the application of technical standards that, by their nature, would be prescriptive. It is important to ensure that the underlying commercial models of these heat networks are not compromised so that they remain viable and attractive to operate whilst also not causing any unintended consequences for end customers and the prices they pay.

27. However, by taking a principles based approach to any such regulation it should be possible to address some or all of this concern as it could allow sufficient flexibility to allow for the differences and variations that are seen across the heat network sector, both in terms of the type of scheme and the size and experience of the operator.

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?

28. E.ON's pricing methodology is aligned with the principles of customer choice through offering a range of tariffs, customer confidence driven by benchmarking and making fair profits underpinned by reflecting all costs. We do not support there being a cap on prices and entirely agree with the reasons given by the CMA for not recommending a cap.

29. If there is to be regulation of tariffs for heat networks, then E.ON would support it being done on a principles based approach. We believe that this would align best with the emerging nature of the heat market, allowing flexibility to embrace new and innovative heating solutions and technologies, different investment models, as well as the diversity of existing networks.

30. E.ON currently reviews the heat prices of each of its networks annually, against a set agreed formula that has regard for the costs of operating and maintaining the heat network and an alternative fuel comparison (currently gas). We therefore recognise and support the proposal for a fair and reasonable approach to pricing on such a basis, and would suggest that an operator should be required to have regard to an appropriate comparator benchmark, costs of operation and maintenance and/including the cost of future repex or improvement in justifying their tariffs.

31. Taking account of all of these factors together should avoid any unintended consequences of stifling technology or network innovation or the development of tariff choices for customers, and it should help better align the continued decarbonisation of heating technology with the appropriate heat comparator benchmark.

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? Do you consider that it would be proportionate to ban 'capital contributions'?

32. E.ON believes that any rules and guidance on pricing and quality should apply to all heat networks in order to ensure fair and consistent outcomes for all heat customers. A principles based approach would offer the flexibility to proportionately provide consumer protection to both customers of existing and future heat schemes and the flexibility to reflect different operating models (such as Housing Associations).

33. We have no reason to disagree with the CMA's decision not to ban capital contributions and have ourselves observed that there has been a move away from them being requested. Our overall concern is to ensure that any recommendations support the continued growth of heat networks in GB.

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

34. Within our heat business, E.ON has sought to reflect the standards and practices that we applied to our residential electricity and gas customers where appropriate, and was a founder member of the Heat Trust. We maintain an overall objective of delivering a consistent service to all of our customers, whether they are consumers of our heat, electricity or gas, or any other of our energy solutions.

35. The introduction of regulation into the heat sector would provide a unique opportunity to develop and embrace a flexible, principles based approach, without the legacy of the prescriptive, rules based regulatory regime which gas and electricity regulation is transitioning away from. A principles based approach could also facilitate analogous consumer protection being available across different sectors despite their unique characteristics. It is therefore important that any new sector regulator (whether or not that be Ofgem) therefore takes the opportunity to establish such a principles based regime from the outset.

36. We support the idea of there being an analogous service to consumers of our heat, electricity and gas, and believe that this is what customers expect given that they are not necessarily interested in which sector their heat comes from.

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

37. E.ON supports not acting on the recommendations described in section 7 which the CMA are minded not to pursue, for the reasons given by the CMA.

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?

38. The CIBSE ADE CP1 Code of Practice is not currently comprehensive in scope, but could be developed to provide the minimum standards needed. In E.ON's view it should extend to the whole energy system including the in-home distribution/ tertiary systems and incorporate best practice maintenance regimes. It could also look to establish the roles of the various parties involved in heat network design, build and operation, as well as responsibility for the whole lifecycle. We believe that if the Code of Practice were developed in this way, and enforced as the minimum standard, then it would result in better customer outcomes.

b. Do you have views on how these proposals could be embedded in the planning authorisation process?

39. We believe minimum technical standards and a quality assurance scheme should underpin any regulatory regime (whether through licencing or accreditation). However, we do believe that planning and Building Regulations still have an very important role to play.

40. Planning obligations can make it a condition of approval that relevant building regulations and technical standards are adhered to, providing another element of assurance. In addition planning should also be taking account of the balance between heat network development costs, carbon reduction and the efficient

expansion of existing networks, in turn helping to align the incentives of developers, operators and customers.

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?

41. See response above. National planning and Building Regulations would be able to set the overall framework and minimum technical requirements for the approval of proposed heat networks. Regional and local application of these would then enable the relevant authority to reflect the current and planned state of heat network development in that area, enabling the most efficient local solution to be adopted.

42. In addition Building Regulations should be developed to fully address heat and chill network standards, but it is important to see a robust enforcement of such Regulations if we are to see the benefits of this from an overall quality assurance perspective.

d. Could operating technical standards be applied retrospectively to existing heat networks?

43. E.ON notes the need to apply operating technical standards that have a retrospective impact on existing heat networks proportionally. It is important to ensure that the underlying commercial models of these heat networks are not compromised so that they remain viable and attractive to operate whilst also not causing any unintended negative consequences for end customers, for example by requiring disproportionate levels of investment that then impact on customer prices.

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?

44. We have no substantive comments, but recognise that where a designer is accountable for delivery of heat to all customers on a network this can result in the need to factoring in tolerances beyond that which might ordinarily be commercially acceptable.

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?

45. E.ON believes that, with perhaps the exception of social housing, market forces will ensure that lifetime costs and customer prices are taken into account. Local and development plans and their supplementary guidance provide incentives for developers to innovate and thereby advance the low carbon agenda. Broader national planning policy can take a clear lead here and promote the use of lower carbon heating solutions in new build developments.

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

46. E.ON supports the establishment and embedding of a heat network quality assurance scheme as part of the regulatory framework of heat networks. Key attributes of any quality assurance scheme need to be simplicity and consistency

and we support the work the ADE is doing in this space, to deliver evidence driven compliance and assurance.

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?

47. E.ON agrees that it is important that customers should be able to access, assess and act upon relevant information on heating options, and is committed to ensuring that there is transparency and availability of information for current and prospective customers of the heat networks that it operates.

48. Our experience has been that this is something that we can influence, but over which we do not have perfect control, due to our position in the purchase/rental property chain. We therefore agree that the property sector has an important role to play to ensure customers are provided with the required transparency.

49. In our response to the Statement of Scope, we set out the processes and information that we currently make available to developers, existing and prospective customers and housing associations. In doing so we comply with the requirements of the Heat Trust and believe that this should be used as the basis of any new rules for the sector.

50. Of course, a properly run conveyancing process should ensure that a prospective purchaser of a property (or long lease) is aware that it is supplied by a heat network. However, we would agree that consideration should be given to formalising the need to provide precontractual disclosure of heat network information during the sales process.

51. Where a property is to be rented, the onus to inform a prospective tenant is on the estate agent, letting company or landlord. Accordingly, we would support the use of Landlord and Tenant laws and regulations to ensure that the required transparency of heat networks is provided to tenants. This is particularly important given the increase in the 'build to let' market where heat networks are being developed.

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?

52. E.ON believe that the landlord should be responsible for transparency within new leasehold agreements regarding heat network assets, supported by appropriate due diligence by the representatives of the tenant. Consideration should be given to underpinning this in Landlord and Tenant law.

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

53. E.ON supports a requirement to provide Heat Supply agreements that include key performance indicators, such as Guaranteed Standards of Service, as part of the terms and conditions for each scheme. Again, we would suggest that the requirements of the Heat Trust would provide an appropriate basis as to how this requirement should be implemented.

16 How could EPCs be improved in relation to heat networks?

54. E.ON supports the findings of the Heat Trust in this area and agrees that EPCs should be improved to ensure that they are consistent with the annual statements customers receive. It is key that the EPC demonstrates the benefits of a heat network, as opposed to causing customers confusion.

During residency

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

55. During a customer's residency, E.ON makes great efforts to ensure that its bills are clear, that the charges are transparent and readily understandable and that paper copies are issued. This reflects E.ON's position as an established energy supply company, as well as being in line with the requirements of the Heat Trust and the Heat Network (Metering and Billing) Regulations 2014[4].

56. E.ON's experience from the gas and electricity sector is that it is important to keep bills as simple and straightforward as possible. The purpose of the bill is to make it easy for the customer to understand what they owe, how that is made up and how to pay. In gas and electricity the bill had become a vehicle for delivering other messages/purposes and this only served to confuse customers.

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

57. E.ON supports the current metering and billing requirements for heat networks, noting the importance of timely bills for customers.

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?

58. We note that any standard performance metrics for suppliers should be linked to the end customer heat availability and outcomes. As a founding member of the Heat Trust, E.ON already report against a number of performance metrics, which are available for our heat customers to view online. It should be noted that different schemes operate within different operational parameters (e.g. temperature ranges) and as such standard performance metrics do need to take this designed variability into account.

[4] http://www.legislation.gov.uk/uksi/2014/3120/contents/made