The voice of the energy industry

HNTAS consultation response – 15th April 2026

Executive Summary

Energy UK welcomes the steps being taken to improve heat network standards and consumer outcomes, and the work that has been undertaken to develop the draft Heat Networks Technical Assurance Scheme (HNTAS). Heat networks are set to play a crucial role in decarbonising heat, with the Government's Warm Homes Plan aiming for 7% of heat to be supplied by heat networks in 2035, and 20% by 2050. Establishing technical standards will be critical for heat networks to perform effectively and deliver good outcomes for consumers, including fair prices and minimal disruption.

Adopting an outcomes-based approach to regulation by streamlining technical and governance requirements

Energy UK supports the adoption of an outcomes-based approach to raising technical standards through HNTAS. This could be achieved with less focus on the detailed input specifications and greater emphasis on a smaller number of crucial Key Performance Indicators (KPIs). The KPIs should be based on critical determinants for the successful operation of a network, e.g. return temperatures. Reporting requirements for KPIs should also be aligned with those within the Ofgem consumer protections framework, for example quarterly or annual. Ultimately, for domestic customers and small businesses, the prices that they are charged for heat, and the quality of service provided will be measured through the data collected as part of Ofgem's consumer protections regime.

An outcomes-based approach will encourage the implementation of a more efficient, proportionate and cost-effective scheme, which can help deliver improved and more consistent consumer outcomes across the sector.

Energy UK would like to see continued refinement of the proposed HNTAS scheme, developed in collaboration with industry. HNTAS should be a proportionate and practical scheme that delivers for both consumers and supports growth in the sector. Energy UK is concerned that, as proposed, HNTAS introduces risks to new heat network developments and their investors, including higher costs driven by complex technical compliance requirements.

As proposed above, streamlining of the technical requirements of the scheme could include reducing the number of KPIs that must be reported on. Refinement can also be achieved within the proposals around governance to reduce the scale of third-party assessment required across multiple gateways. An option which should be considered is to enable heat network operators to develop in-house assessments teams who can self-certify minor stages of the HNTAS process, would help to streamline compliance and reduce burden on external assessors. This would align with the requirements for training set out by the Code Manager, and would also bring the approach to technical

compliance more in line with other parts of the energy industry, such as the approach to the National Electricity Registration Scheme (NERS) and Renewables Obligation Certificates (ROCs).

Energy UK supports the consideration of the proposal for heat network operators to self-certify elements of new network developments in this way. However, we recognise the need for a degree of independent oversight across each individual network to fully certify them and achieve consistent standards. Overall, the HNTAS process should not be more onerous than approaches in other sectors such as in construction where developers are required to notify Building Control and facilitate in-person inspections at relevant stages of construction.

Heat pump customers on ambient and Shared Ground Loop (SGL) networks should be excluded from HNTAS beyond the design and construction phases to help further streamline the technical requirements. These types of networks do not have any central plant or energy centre that requires monitoring in the same way as other heat networks. There is limited consumer and network benefits provided by metering and monitoring in these circumstances, and if anything, the introduction of these standards will likely cause significant disruption to consumers, reduce their consumer choice and add additional costs. Furthermore, extending HNTAS beyond the design and construction phases to ambient loops and SGLs would risk a high degree of regulatory duplication with the Smart and Secure Electricity System (SSES) and MCS regulations for individual heat pumps. Duplicating regulation risks making the installation of heat pumps on ambient and SGL networks significantly more challenging.

Managing the cost burden and timeline of implementing new technical standards on existing networks

There is an important balance to strike in implementing these regulations in terms of the cost of upgrades and consumer benefit. The high cost of any proposed upgrades needs to be balanced against potential household savings derived from better performance and greater efficiencies. The Government estimates that the average cost per dwelling to meet the standard will be £5,500, but with a high degree of variation, suggesting figures of up to £15,000. Streamlining the requirements in relation to the technical standards and governance will help to reduce costs, but it is important to balance the cost of upgrades against the net impact on consumer bills, and ensuring that these costs can be spread out over long timescales as far as possible.

Energy UK welcomes the Warm Homes Fund: Call for Evidence considering options to address the funding challenges posed by HNTAS for heat network operators, especially for social housing providers, local authorities and other not-for-profit entities that own and operate heat networks. The reference in the consultation to the Government

exploring options to support the sector to invest in the necessary upgrades while protecting consumers from unaffordable price rises is welcome.

In addition to the cost-benefit trade-off, the timeline for delivery also requires careful consideration. DESNZ should undertake close consultation with professionals responsible for implementing these upgrades within social housing providers and other heat network operators to ascertain the likely realistic timeline for implementation within existing networks, and the projected cost.

Ensuring a cohesive approach to regulatory governance across the sector

There is a strong risk that governance of regulations within the heat networks sector becomes too thinly spread across multiple responsible organisations, including the Code Manager, Ofgem and the Warm Homes Agency. It is, therefore, essential that there is close collaboration and mutual oversight across these bodies to ensure that all regulations are working together to support, and not hinder, development. Collaboration between governing bodies should occur before implementation of new regulations to avoid duplication, for example pricing controls, or requirements on operators to double count metrics.

Delays in achieving compliance with one regulatory framework, for example HNTAS, should not prohibit authorisation under the Ofgem consumer protection framework.

Establishing links or feedback loops between HNTAS, Ofgem's consumer protections regime, and the proposals for consumer protections reform being undertaken through the Warm Homes Agency will also be important for ensuring that consumers on heat networks are afforded the same support as customers on individual heating systems. This will be most crucial where households on heat networks are seeking support with complaints or redress. They should not be turned away from the Warm Homes Agency when looking for support, but instead be helped to contact the appropriate responsible party.

HNTAS must support development on new build housing sites and in heat network zones

Where heat networks are being incorporated into new build developments, it is important that HNTAS provides certification to new networks at a pace that is aligned with the build-out of the new homes. HNTAS should support more networks to be incorporated into new build sites, rather than acting as a hindrance. HNTAS should require a similar amount of regulation as installing individual heating systems and should avoid enforcing an unnecessary high regulatory burden, which would deter the use of heat networks.

Across all new developments, whether on house building sites or elsewhere, to facilitate more efficient project timelines HNTAS should approve networks on a development basis. This would help avoid delays caused by having to obtain sign off on a building-by-building basis when connecting buildings to heat networks.

It is crucial HNTAS does not compromise heat network's competitiveness within the new build sector. Energy UK is particularly concerned about the impact that the currently proposed technical standards could have on the viability of heat networks on new build housing sites. Heat networks and shared ground loops provide an efficient and cost-effective solution for new house building schemes of all densities, including new towns. However, as it is proposed, HNTAS could place undue cost pressures on heat network developers, which individual heating systems are not subject to. Therefore, we have significant concerns that the regulation will exclude heat networks from the new build market.

Particular challenges may arise on new build housing sites where developers are typically keen to ensure that buyers can move into new homes as soon as their house is completed, while the rest of the project is continuing to be built. It is essential that HNTAS does not preclude a heat network from supplying to these initial homes because it is a requirement that the network should be compliant from day one of the connection to the new site. For example, for that small initial number of households, the network may be oversized, but this is merely because the housing development has not been completed yet.

Energy UK is also concerned that the proposals are not fit for purpose to enable the development of large, city-wide heat network projects. This is because, across all types of development, heat networks will be built out in stages. In early development, the operator may considerably oversize the main pipe that is connected to the heat source, relative to the requirements of the small number of initial connected buildings. However, as more connections to the network are secured and economies of scale are achieved, the pipe will no longer be oversized. HNTAS needs to be adaptable to the way in which heat networks are developed.

Preparing the supply chain for new technical standards

Investment in skills within the heat network industry needs to be supported by robust policy environment, which demonstrates sufficient ambition to give industry certainty. The introduction of this extensive technical assurance scheme, while critical to forming part of a robust policy landscape, as currently designed will likely cause a shortage of suitably qualified and experienced professionals to fulfil the range of roles outlined. This risks slowing delivery timelines and creates uncertainty for project investment.

Next steps

Energy UK and its members would welcome further consultation with DESNZ on HNTAS design, in response to the concerns raised above and the detail provided in response to the consultation questions below. Energy UK encourage Government to continue to collaborate with industry and draw from approaches in other industries e.g. Loyd's Registered Quality Assurance (LRQA) to produce robust technical standards for heat networks.

Thank you for the opportunity to respond to this consultation.

Question 1: Do you agree with the proposed approach to not include the Consumer Heat System in scope of HNTAS after the construction phase? If not, can you please suggest an alternative approach and set out your justification.

Support.

The Government is correct to suggest that ongoing monitoring and evaluation of consumer heat systems post-construction would represent a disproportionately invasive approach.

HNTAS is introducing an additional regulatory regime on top of a large volume of new regulations for the sector, including Ofgem's consumer protections regime, and the regulations for networks being developed within Zones under the scrutiny of the Zoning Authority. The complexity of the proposed structure of HNTAS, in particular the multiple gateways and large number of KPIs, risks being disproportionately burdensome on the sector in its early stages of growth without delivering significant and proportionate consumer benefit.

Technical standards should be outcomes-focussed and the number of KPIs should be reduced to critical determinants of network performance, e.g. return temperatures. This would help to balance regulatory burden and developer costs (which ultimately feed through to customers), while maintaining high standards for new and existing networks. Reporting requirements should also be aligned with those within the Ofgem consumer protections framework, e.g. quarterly or annual.

The effectiveness of the network will be made evident through data collected as part of Ofgem's fair pricing framework, which will ensure the proportionality of bills customers are paying, and the quality of service they receive (supported by Guaranteed Standards of Performance).

Question 2: Do you support the use of 6 properties or more for domestic-only networks, or the connection capacity equivalent for non-domestic/mixed use

networks, as an appropriate minimum heat network size to which HNTAS participation would be mandatory for new networks after scheme go-live? Please provide reasoning for your answer and, if you answer is `no` please provide an alternative approach.

Support.

Six properties is an appropriate threshold by which HNTAS requirements should apply to new build networks, on balance of a reasonable application of technical standards, cost to the Code Manager, and cost-effective benefits to consumers.

The Government is correct to suggest that the responsible heat networks operator under the Ofgem consumer protections regulations should bear the same responsibility for HNTAS compliance. That said, HNTAS requests for information should be streamlined and minimal. Any request for the same information across both schemes should be gathered by data sharing. Ofgem and DESNZ should also ensure they do not make requests for very similar information to avoid creating undue admin burden.

Question 3: Based on the trade-offs between the benefits and costs of bringing smaller networks in scope of HNTAS, what, in your view, is the appropriate minimum heat network size to which HNTAS participation would be mandatory for existing networks? If this differs from the proposed use of 11 properties for domestic networks, or the connection capacity equivalent for non-domestic/mixed use networks, please provide supporting evidence and justification.

Disagree.

HNTAS scoping should not discriminate based on scale. All consumers should benefit from networks that are operating to the appropriate standard, and that includes consumers on small and communal networks.

Heat network zoning will require the mandatory connection of existing buildings with communal heating systems, with no minimum number of dwellings. Therefore, there may be a significant increase in consolidation of existing small and communal networks with large city-scale low-carbon networks to achieve economies of scale and relieve small private landlords of regulatory burdens, while improving service levels for customers.

It is important to ensure that the upgrades undertaken to buildings with fewer than 11 properties to connect old networks to new city-scale developments are improving the efficiency and performance of the existing network. Achieving this outcome could be done by implementing HNTAS to existing networks serving fewer than 11 properties. Ensuring that small networks are operating to the appropriate technical standard will

mean that an old network does not increase costs for existing customers of the larger network by affecting operational aspects, such as return temperatures, to the network.

Question 4: Do you consider there to be need to subject existing networks with between six and ten properties to minimum network performance and monitoring requirements, or any other HNTAS requirements? What do you consider to be the implications of doing so?

Support.

Existing networks will be in scope of Ofgem's customer protections framework and therefore subject to the fair pricing framework. The most important outcome of any of the new regulations and standards is that heat network customers are paying affordable prices and experiencing minimum disruptions to their service. In this way, HNTAS should also be an outcomes-based regime.

Ofgem's data collection will identify disproportionate cost drivers on networks that are charging their customers outlier prices. This will require network operators to make improvements to small networks where they are breaching the consumer protections framework to bring the prices they are charging back in line with comparator networks.

Small network operators should be provided with technical advice from the Code Manager about how to manage a programme of improvements to the network, and how to access financial support or affordable finance to implement these changes. The application of these technical improvements should be done within the HNTAS framework to avoid any two-tier regulatory regimes within the sector.

Question 5: Do you agree with the proposals for minimum network measurement and that industrial networks (as defined above) should be exempt from HNTAS at scheme launch? Please give reasons why you agree or do not agree with the proposal.

Support.

Providing an equivalent heat demand for property numbers increases clarity to the exemption regime.

Question 6: What, in your view, are the implications of including consumer heat pumps on Ambient loop and Shared Ground Loop networks within HNTAS past the design and construction phases? If you think an alternative approach is needed, please provide details and reasoning, including (if applicable) if this differs with respect to new build networks and existing networks.

As the consultation states, there are challenges with applying HNTAS where the network potentially in scope does not include an energy centre, a mechanical element within the pipe network, or individual heat interface units.

Consumer heat pumps on ambient and Shared Ground Loop (SGL) networks should not be included within HNTAS beyond the design and construction phases. At the very least this should be the case for SGL networks, and ambient networks not utilising central heat pumps (i.e. those relying only on boreholes and waste heat). For these forms of network without any central plant/energy centre, we believe the limited consumer and network benefits provided by metering and monitoring would be outweighed by the disruption to consumers (a point recognised in DESNZ's decision to exclude consumer heating systems from metering and monitoring), the reduction in consumer choice/flexibility, and the additional operational and capital requirements that would introduce a new barrier to deployment of these networks.

While the consultation states that the proposal to include individual heat pumps for phases 4 and 5 of HNTAS has been arrived at following consideration against the technical, consumer, and policy objectives of HNTAS, no evidence of this has been provided, and industry was not engaged in this process. We propose that individual consumer heat pumps for SGL and ambient networks are excluded from phases 4 and 5 of HNTAS for the following reasons:

Technical: Consumer heat pumps connected to SGL and ambient networks (those not utilising centralised heat pumps) do not have the capacity to impact on the overall efficiency of the network in the same manner as a Heat Interface Unit (HIU) or even consumer heating systems on high-temperature heat networks. A poorly performing or malfunctioning heat pump, while an issue for an individual consumer, will not impact the overall efficiency of the wider network.

- The major factor impacting the efficiency of an SGL or ambient network (without central plant) will be ground/brine temperature, and by extension the inlet temperature for consumer heat pumps on the network. The individual heat pumps have effectively no ability to affect this, other than through the overall system design. That is, if the borehole and waste heat source have not been designed to match the overall heat demand/heat loss of the homes/buildings connected to the network. Provided the design and installation has been carried out correctly, an individual heat pump will not be able to adversely affect the efficiency of the network.
- The major concerns regarding HIUs and consumer heating systems' impact on high temperature heat networks are largely not relevant on SGL and ambient networks (without central plant). High temperature change requirements don't exist on these networks as:
    - There is no central plant to affect the efficiency.

    - Heat losses in distribution are not relevant as the networks are operating at such low temperatures.
    - There are no pumping costs on SGL networks (as defined by Ofgem) so no savings to be had by maximising temperature change.
    - The flow and return temperature within an individual heating system is important on these networks, as this will affect the efficiency of the individual system, but again it will not have an impact on the wider efficiency of the network.
- The consultation, and HNTAS more generally, assumes that heat network designers will always have the ability to design and spec the individual consumer units on new networks. While this may be possible in many cases it will not always be so. For many new SGL and ambient networks installed in existing homes, consumers will request minimal changes to their existing central heating systems. In a high-temperature heat network this would be an issue as it would have a detrimental impact on the return temperatures, and the wider network. Again, this is not a concern for SGL or ambient networks. While the individual heat pumps will have to work harder (and cost more to run), the heat delivered to each home from the boreholes or ambient networks will be the same.
- A poorly operating heat pump is clearly of concern to the individual customer, but not the wider network. The proportionate response here is to include individual heat pumps within the design and installation elements of HNTAS, to ensure that each individual consumer heat pump is correctly installed (alongside clear design and installation standards for the boreholes or ambient networks). This is the approach taken for individual heat pumps under Microgeneration Certification Scheme (MCS)s (currently the requirement for heat pumps connected to SGLs). The MCS requirements currently in place should be considered proportionate and sufficient for heat pumps connected to SGLs and ambient networks on an ongoing basis and will ensure regulation is not duplicated for heat pumps on SGL or ambient heat network.
- The efficiency of an SGL or ambient network should be assessed on the basis of the temperature and pressure of the brine provided to the individual heat pumps connected to the network. This is what should be metered and monitored on an ongoing basis.
- Smart and Secure Electricity System (SSES) requirements will see electricity meters installed on all heat pumps as default. This will be more useful and cost effective than additional requirements that HNTAS may seek to introduce.

Consumer: Requiring monitoring and metering of individual heat pumps on SGL and ambient networks (again those without central plants) will have a detrimental impact on consumers and consumer choice:

- As noted above, a poorly performing heat pump and consumer heating system is a concern with regards to the individual consumer rather than a wider network problem. Proportionate steps should absolutely be taken to ensure heat pumps

and heating systems operate efficiently, which would entail including these elements within phases 1-3 of HNTAS.

- Any extra metering and monitoring would come with additional costs that the consumer would have to pay for. Given the minimal benefits of heat metering individual heat pumps, it cannot be considered proportionate or sensible to require this within HNTAS.
- Additional metering and monitoring requirements will be an additional barrier to deployment. Industry reports potential customers in new build and social housing already being deterred by potential new metering requirements. The alternative heating systems in these cases will be forms of direct electric, with a clear detrimental impact on the consumer.
- As the consultation notes, metering and monitoring of individual heat pumps would likely require all heat pumps to be owned and maintained by the heat network operator or supplier. While this may be the model some networks utilise, it should not be DESNZ's aim to force all networks to operate in this way. SGL and ambient networks in most cases are designed to provide maximum consumer choice and flexibility. Consumers can choose their own heat pump, their own installer, their own electricity provider, and have a fixed and capped heat network charge. DESNZ should not be attempting to reduce this consumer choice without very good reason. Metering and monitoring of individual heat pumps does not come with sufficient consumer benefits to justify reducing consumer choice.
- Related to the above point, on many SGL and ambient networks the consumer will own and operate their own heat pump. This gives them significant flexibility on how they operate their heat pumps, including any changes they may or may not have made to their heating system prior to installation. This introduces significant variability to the efficiency of individual heat pumps on the system which a) DESNZ should not necessarily seek to eliminate, and b) heat network operators may have no ability to affect. As such, in many cases it is unrealistic to hold heat network operators to account for the efficiency of individual heat pumps through metering and monitoring in HNTAS.

Policy: The government has set out a number of policy objectives from HNTAS, which we do not believe are served by inclusion of individual heat pumps in phases 4 and 5 of the scheme:

- Improve consumer outcomes: As set out above, we do not think the small consumer benefits available from metering and monitoring heat pumps outweigh the negative consumer impacts of this proposal. Again, it should be noted that SSES will require all heat pumps to have electricity meters, which will provide the consumer with far more useful information than a heat meter on a heat pump could. This, coupled with metering and monitoring of the SGL or ambient loop by the heat network operator, is the cost effective and proportionate approach.
- Improve affordability: The unnecessary metering and monitoring of consumer heat pumps will add cost for customers with little perceptible benefit. With

electricity meters being introduced via SSES, also requiring individual heat meters is an unnecessary additional cost.

- Improve reputation and investor confidence: Given the additional barriers to deployment this proposal will create for SGL and ambient networks, it will most likely dent investor confidence in these networks.
- Reduce carbon emissions: We believe the most proportionate approach to achieving high efficiencies on SGL and ambient networks, and therefore lower emissions, is the application of phases 1-5 for communal elements of the network and phases 1-3 for individual consumer elements (heat pumps and heating systems), as well as the inclusion of electricity meters on heat pumps via SSES.
- Build evidence: Again, a proportionate approach to building evidence of the efficient operation of SGL and ambient networks is as set out in the previous bullet.

Question 7: Do you agree or disagree with our proposed governance structure, and in particular with the appointment of a Code Manager? Please provide reasons for your response.

It is right that the Code Manager has oversight of training, scheme operation, and certification. This will ensure adequate data sharing across each of these functions, and coherence in the application of the regulations and achieving the policy intent. The Code Manager role should be carried out in-house to ensure sufficient oversight is held over the operations and outcomes of the scheme. Government oversight will help ensure that quality assurance and consumers are protected.

Energy UK supports the appointment of a Responsible Party of the network, consistent with the heat network operator responsibility that is in scope of the Ofgem consumer protections regime. Owners of different constituent parts of the network may need to clearly define areas of liability within their contracts.

Within the framework, with oversight from the Code Manager, it is essential the certification requirements are streamlined as far as possible. Energy UK is highly concerned that the proposals within HNTAS are unduly onerous and prohibitive for development. Reducing the number of KPIs to streamline requirements on developers would help reduce the regulatory burden on developers, while introducing more realistic demands on a cohort of assessors that do not yet exist.

To streamline the certification process heat network operators should be allowed to develop an in-house assessment team that can self-certify elements of the network, in line with the requirements of the Code Manager. For consistency, there should be some level of independent sign off on each heat network within an operator’s portfolio.

Enabling minor stages of the HNTAS process to be self-certified is more consistent with what is in place in other parts of the energy system, for example the National Electricity Registration Scheme (NERS), which certifies independent connection providers on behalf of DNOs to be allowed to build new electrical connections. Another example is the Renewables Obligation Certificates (ROCs) where generators must complete an application form and claims are made by the generator without any upfront assessment or approval. Ofgem engages a third-party auditor to review a selection of these sites for compliance annually.

Further, aligning the independent inspection of heat network technical compliance with other regimes such as Building Regulations, which require notification and relevant site inspections, should be sufficient to provide compliance within HNTAS.

It is essential that the Code Manager works closely with the Warm Homes Agency, which is intended to provide the Zoning Authority functionality and oversight of the reformed consumer protections regime for green home upgrades. HNTAS should complement and accelerate the progression of zoning, such that it supports development programmes and planning permissions in all zones across the country, removing barriers to development. The current procedure does not appear to adequately reflect this aim.

Establishing links or feedback loops between HNTAS and the reformed consumer protections regime, with oversight from the Warm Homes Agency, will also be important for ensuring that consumers on heat networks are afforded the same support as customers on individual heating systems. This will be most important where households on heat networks are seeking support with complaints or redress. They should not be turned away from the Warm Homes Agency, but instead supported to contact the appropriate responsible person, either via their supplier or a responsible party within the HNTAS framework to ensure that their complaint is resolved, or to have redress undertaken on the upgrade works (such as the installation of the heat interface unit or heat meter) inside their home.

There is a risk that governance of heat network development becomes too thinly spread across multiple responsible organisations, including the Code Manager, Ofgem and Warm Homes Agency. It is, therefore, essential that there is close collaboration and mutual oversight across these bodies to ensure that HNTAS is supporting, and not hindering, development.

Question 8: Do you agree or disagree with the need for a Code Management Committee and sub-committees to ensure the views, interests and experiences of those involved in, or impacted by, HNTAS are taken into account to further evolve and improve the scheme? Please provide reasons to support your views.

Support.

It is right that the Government should introduce a Subcommittee to ensure views, interests and experiences of those impacted by HNTAS are considered. However, it is essential the Subcommittee includes industry voice and that the breadth of the industry is represented on such a forum. Adopting an iterative approach to the HNTAS through the creation of subcommittees to ensure that industry's and consumers' voices are central to the implementation of these standards is a positive way forward.

Question 9: Do you support our proposal for the Code Manager to be housed within DESNZ initially, whilst we work through long term governance options? Please provide a justification for your answer.

Support.

This is the most streamlined route to market while other options are assessed. Decisions on future governance of the standard need to be taken together with a wholesale review of the proposed regime, in response to feedback provided as part of this consultation process, and as part of an iterative implementation of the standards, with industry and consumers' voices at the centre of this.

Question 10: Do you support our proposal to recover 100% of the Code Manager's costs through the gas and electricity licence fee mechanism in the short term? Please give reasons or supporting evidence for your answer and clearly outline any alternative proposals.

As set out in the consultation, the expectation of recovering the £5 - £10 million per year Code Manager costs would add 20p to 40p to the average dual fuel customer's bill. Adding new costs on customer bills, particularly on electricity, must be minimised to support affordability and decarbonisation.

Energy suppliers require at least 18 months' notice of forthcoming changes to new levies being included on energy bills. Adjusting levies on bills creates challenges for suppliers offering fixed tariffs, due to suppliers both needing to hedge and plan for adequately cost recovery within the tariffs they offer.

Ofgem should look to find efficiencies elsewhere in its cost base so that there is no net impact on energy bills.

While the levy would be added exclusively onto domestic bills, there may also be impacts on non-domestic suppliers that require consideration, for example an increase in fees due to regulatory changes that non-domestic suppliers need to account for.

Question 11: Do you support our proposal to recover the Code Manager's costs through a blend of gas and electricity licence fees and fees from the heat network sector in the longer term? Please give reasons or supporting evidence for your answer and clearly outline any alternative proposals.

Support.

It is important that heat network customers contribute to the cost of the market infrastructure from which they will be benefitting, and therefore the cost should be extended to heat network customers as well as dual fuel customers.

Question 12. Do you support the preferred approach of a Deed Poll relationship between heat network operators and the Code Manager?

N/A

Question 13: Do you agree with the proposed approach of KPIs, Statements of Conformity and assessment gateways that will ultimately contribute to certification. Please give reasons why you agree or do not agree with the proposal.

Disagree

- It is important that KPIs remain proportionate and work to directly improve consumer outcomes. Opportunities to streamline KPIs would help reduce administrative burden for heat network operators.
- It is critical pre-determined targets are achievable and deliverable.
- The Government must provide support towards heat network operators and developer's skills and capacity to ensure developments have the capacity and capability to meet reported metric requirements.
- The timeline of assessment gateways should be carefully considered to ensure they are aligned with zoning and Ofgem timelines. As the proposed HNTAS currently stands, assessment gateways duplicate both zoning and Ofgem timelines. They must be changed in accordance with industry feedback to ensure a streamlined process. The use of funding of external assessors creates a disproportionate barrier to network investment compared to project delivery. It is, therefore, important assessment processes are not duplicated and the approach is streamlined.

Question 14: Do you agree with the gateways for new build heat networks being at the end of design, then end of construction/commissioning, followed by proof of measured in-use performance after 2 years. If you disagree, please suggest an alternative approach and set out your justification.

Disagree.

- Under the current gateway proposal, it is important to ensure KPIs are deliverable and achievable so as not to hold up heat network development unnecessarily. A delay in projects could cause an increase in risk and, thus, decrease investor confidence and raise costs for customers.
- It is essential that HNTAS compliance is aligned with the pace of zoning and the progression of a new network's planning application, so that HNTAS acts as a support for development rather than a hindrance.

Question 15: If you anticipate that introducing HNTAS will have any impact on the Government's housing supply ambitions please provide expected impacts with reasoning and evidence to support your answer.

- Energy UK welcomes the Future Homes Standard, including the support this provides in enabling new buildings to connect to heat networks and delivering the best outcomes for consumers.
- HNTAS should approve networks on a development basis across all new developments, whether on house building sites or elsewhere, to facilitate more efficient project timelines and to avoid any negative impacts and delays caused by having to obtain sign off on a building-by-building basis when connecting buildings to heat networks.

Question 16: Do you support the proposed milestones for existing heat networks given in Table 6, or do you think there is a case for the final certification standard to be set at Milestone 2? Please provide reasons for your answer including your assessment of the impact on consumers of your preferred option.

The Government should consult further with industry on the potential for incorporating elements of self-assessment, assuming suitable evidence is provided and that the network has been certified to the Code Manager's assessor and training requirements. This would increase speed of delivery and lower the cost of certification, which are both tangible consumer benefits.

No performance improvement plan should be required where preceding gateways have been met and certification achieved.

The Government should also consult further with industry on the option to set the requirements for achieving Milestone 2 Statement of Conformity as the final certification standard. This would reduce the cost of compliance, while ensuring good consumer outcomes.

Question 17: Do you agree with the milestones for existing networks? If you think there is a case for requiring these milestones for existing networks to be met more quickly or more slowly, please give details to explain your answer.

N/A

Question 18: What is your estimation of the cost of meeting the Milestone 2 and Milestone 4 requirements? Please provide information such as the size, age, and number of consumer connections on your network to help contextualise your estimates. Please also indicate if your network is fully metered.

Energy UK members will respond individually to this question.

Question 19: If not already provided in your answer to question 18, what is your estimation of the costs this approach would create for private landlords, registered providers of social housing, leaseholders or their respective tenants? Are there any particular scenarios we should be aware of? Where possible, please provide quantitative evidence to support your answer.

N/A

Question 20 Do you think our proposed treatment of Mixed Age heat networks is effective in appropriately applying different assurance pathways to newer and older parts of a heat network? Please provide reasons for your response.

- Clarification would be appreciated on how HNTAS defines 'significantly affected performance' of a heat network such that it necessitates all elements achieving certification in the case of network extension.

Question 21: Do you agree that the HNTAS Metering and Monitoring Standard should cover both the monitoring points and the Automatic and Remote Monitoring Systems (ARMS)? Please provide reasons for your answer.

Yes.

- A distinction between the two elements and clarity on where each metering and monitoring standard sits will be essential to ensure there are no duplicative data points across the two components of the metering and monitoring systems.

Question 22: Do you agree that the HNTAS Metering and Monitoring Standard should also cover smart metering systems and a Metering and Monitoring Strategy? Please provide reasons for your answer.

Yes.

- Smart meter systems should be encouraged to increase accuracy levels in data and improve open communication with customers to allow consumer outcomes to be more directly influenced by HNTAS.
- Smart meters empower customers to monitor and manage their energy usage and be better aware of the relationship between consumption and cost.
- Smart meters are critical infrastructure that support the route to Clean Power, by delivering efficiencies to the system, which reduces costs for all energy customers.

Question 23: Do you agree with the proposed metering milestones and timelines for existing networks? Do you agree that they allow sufficient time for installation while ensuring consumer outcomes and network performances can be improved as soon as practicable? If you disagree, please set out your reasons and a justification for an alternative proposal.

Disagree

- While it is important to ensure metering and monitoring proposed milestones deliver positive consumer outcomes, skill shortages should be factored into reasoning for delay in installation of the meter.
- It is difficult for asset managers of existing networks to plan for how meters can be installed before invasive exploratory works are undertaken within each property to know where wiring can practically be installed.

Question 24: Do you agree that "smart meter" requirements should also be mandated, and included in the HNTAS metering and monitoring specifications?

Yes.

- Heat networks customers should be able to receive the benefits of smart meter features.
- The sector should keep pace with smart meter billing so that it does not fall behind other industries in consumer protection measures.

Question 25: Do you agree with our proposal to disallow the use of wired M-Bus, and other unencrypted communication protocols, on new heat networks with remote disconnection capability from the point at which HNTAS commences?

Yes.

Question 26: Do you agree with our proposal to allow the continued use of unencrypted communication protocols, where they are already in place on existing systems, until either the first HNTAS certificate deadline, or until meters reach the end of their life (whichever is soonest)?

Yes.

Question 27: Do you agree that unencrypted systems with remote disconnect should have the function removed or meters/protocol be replaced as soon as possible and within five years after HNTAS commences?

Yes.

- HNTAS should ensure alignment with the Cyber Security Resilience Bill. As this is currently progressing in parliament, the Government should carefully consider the potential challenges this could pose for HNTAS compliance.
- Government should also carefully consider the feasibility of retrospectively installing compliant communications technologies on existing networks.

Question 28: Do you agree with our approach to set the minimum level of accuracy at the equivalent of at least Class 2 of the MID 2014?

Yes.

- It will be critical, however, to ensure this is in the Code Managers capacity to take on the responsibility for meter accuracy functions.
- Standards should align with manufacturing standards that currently exist across the industry.

Question 29: Do you agree that ongoing testing and recalibration is required for existing networks?

Yes.

- However, it is important the provision of heat meter testing laboratories and surrounding initiatives necessary to comply with this do not add disproportionate cost and that consumer benefit is evident.

Question 30: Do you agree with the proposal to extend metering requirements to existing buildings of supported housing, almshouse accommodation and purpose-built student accommodation, so that they can be covered by HNTAS?

Agree.

Question 31: Do you think HNTAS requirements, including metering requirements, should be applied to buildings with leasehold related HNMBR exemptions? Please provide reasons for your answer.

No.

- If the Government take on board suggestions made in question 7 to certify that heat network developers and operators can self-certify elements of their networks, it would reduce the requirement for HNTAS to apply to buildings where landlords cannot bill residents based on their actual heat use.
- If Ofgem regulation is to propose to move users to individual metered bills, this should not be conducted through HNTAS and should be addressed through a separate consultation process.

Question 32: What options do you think should be explored to better enable the adoption of consumption-based billing in buildings with leasehold related HNMBR exemptions?

N/A.

Question 33: Do you foresee any challenges arising from the installation of metering and monitoring systems and/or the undertaking of performance improvement works to meet HNTAS requirements in networks supplying leasehold customers? Please provide potential solutions to these challenges.

- Installation of metering and monitoring may need to have flexible timelines to accommodate the scheduling of works in conjunction with other retrofits to cut costs and reduce disruption.
- Clear guidelines should be provided encompassing how communication should be managed with leaseholders to give advanced notice of works taking place and the changes they will bring to the consumer experience of the heat network.

Question 34: Do you agree with the proposal to disallow the use of heat cost allocators to demonstrate compliance with HNTAS requirements? Please give reasons why you agree or do not agree with the proposal.

Agree.

- Standardisation and accuracy across the industry will help HNTAS reach its objectives of improving efficiency of heat networks, increasing consumer confidence, and delivering the scheme effectively.

Question 35: Do you have any comments on our proposal to provide heat network operators powers of entry to conduct necessary maintenance of heat network equipment for health and safety reasons, meeting required technical standards and to install and maintain metering systems?

Agree.

- The similarities to gas and electricity rules are helpful, providing both consumers and industry consistent expectations on powers of entry.

Question 36: Do you have any comments on our proposal to provide the HNTAS Code Manager with powers of entry to enable meter accuracy activities to be conducted, replicating the powers of entry currently provided to OPSS under HNMBR?

Agree.

Question 37: Do you have any comments on our approach to provide necessary and proportionate protection to customers regarding the use of power of entry?

- Energy UK supports that heat network operators must have to meet stringent requirements to gain power of entry and agree this should only be possible in extreme circumstances.
- HNTAS should be aligned with the Ofgem mandatory Code of Practice (CoP) (2023) concerning the installation of prepayment meters for certain groups. Installation of prepayment meters for vulnerable customers should be properly assessed to recognise and consider the benefits to suppliers' debt management and customers' ability to better control their finances, while ensuring vulnerable groups continue to be protected.

Question 38: Do you agree that heat networks which have not yet submitted planning applications at the point of HNTAS commencement should be subject to the same requirements and assurance pathway as new build networks? Please provide reasons for your answer.

Agree.

- Heat Networks which have not yet submitted a planning application are at a sufficiently early stage in the development process to comply with the requirements and assurance pathway for new build heat networks.
- However, the current proposed HNTAS requirements risk stalling heat networks build out and slowing overall timelines.

Question 39: Do you agree that heat networks which have already submitted planning applications but have not yet signed M&E construction contracts at the point of HNTAS commencement should be subject to the new build requirements and assurance pathway from stage 3 (i.e. technical design) onwards? Please provide reasons for your answer.

Agree.

- Heat Networks which have not yet signed M&E construction contracts are at a sufficiently early stage in the development process to comply with the requirements and assurance pathway for heat networks. Specifically, as the M&E construction contracts set out the technical design where majority of HNTAS will apply.

Question 40: Do you agree that two years from completion is an appropriate timeframe to base the decision on the appropriate entry point at which pre-operation heat networks would join the existing network assurance pathway? Please provide reasons for your answer.

Agree.

- However, the requirements of data sharing and HNTAS, as currently proposed, set too high a burden for heat networks to conform to.

Question 41: Do you agree that pre-operation heat networks should register to a shorter deadline than other categories of heat network? Please provide reasons for your answer.

Agree.

- Further clarity of assessment timelines is required to enable compliance. It is critical the shorter time period is achievable and deliverable for pre-operational networks and clearly communicated to them to avoid confusion and accidental non-compliance.

Question 42: Do you support the proposal to permit non-conformities in certain circumstances where non-conformities are unavoidable and have a negligible impact on heat network performance?

Agree.

- It is important that HNTAS provides flexibility to ensure the scheme is adaptable to the varying characteristics of heat networks.

- This should be iterative and reviewed periodically to include additional permitted non-conformities as they arise upon scheme roll out.

Question 43: In addition to physical constraints and specific technology applications, are there any other categories of non-conformities that you think should be permitted? We are interested in suggestions where permitting non-conformities would have little impact on network performance and would not negatively impact consumer outcomes.

N/A.

Question 44: Do you support the process outlined for duty holders to submit, and assessors to grant, a dispensation for permitted non-conformities?

N/A.

Question 45: Do you support the process outlined for the handling of non-conformities present at assessment?

N/A.

Question 46: Do you support the process outlined for the handling of non-conformities present at certification?

N/A.

Question 47: Do you agree with the milestones for End of Life heat networks? If you think there is a case for requiring these milestones to be different, or to be met more quickly or more slowly, please give details to explain your answer.

Agree.

- However, clarity is needed on what regulation will be put in place to prevent premature declaration of End of Life networks by way of avoiding meeting regular HNTAS milestones. Networks could come 'back to life' after declaring End of Life to delay HNTAS compliance via the existing heat networks HNTAS pathway.
- DESNZ needs to consider how End of Life networks will be treated if they are being consolidated into much larger city-scale low-carbon heat networks. Small networks in existing buildings that are mandated to connect may require significant changes to be compatible with a new network. Consideration is needed as to how the End of Life regime may overlap with instances of consolidation such as this.

Question 48: What is your estimation of the impact HNTAS will have on heat network insolvency and market exit risks? Do you agree that the risk is low and manageable? Further to existing proposals, what mitigations would you suggest?

- HNTAS could add significant costs to heat network operators and developers with some existing networks potentially having to go through significant upgrades to become compliant, materially increasing market exit risk for some heat networks. Support will be needed to mitigate against the considerable risk of consumer detriment caused by insolvency as an impact of HNTAS compliance. Two key measures must be implemented here:
    - Adequate financial support via the Heat Network Efficiency Scheme to improve performance of existing heat networks in line with HNTAS.
    - The Special Administration Regime (SAR) established through the consumer protection framework.

Energy UK also welcomes the Warm Homes Fund: Call for Evidence and the acknowledgment that additional financial support is required to achieve HNTAS compliance. The current £15 million of annual support provided by the Heat Network Efficiency Scheme is insufficient to support the desired level of upgrades across the sector.

Question 49: Do you have views on how, in the event that a heat network has failed to engage with the End of Life process, exhausted commercial options to exit the market, and where these prevailing incentives have not led to another interested party 'stepping in', policy can support market led insolvency arrangements?

- The establishment of the SARs through the consumer protection framework should enforce a robust regulatory backstop to ensure continued supply, and instil confidence in both consumers and industry that consumers will be protected in the case of insolvency. The SAR process should be managed by Ofgem whereby the suppliers authorisation is removed. This should be a single step-in process that will work for all types of insolvency situations and not duplicated by HNTAS. This will reduce the burden on networks and enable them to focus on the key requirements of HNTAS. Ofgem should allow fast-track licencing to facilitate transfer of asset process and cause the least disruption to the consumer.
- Ensure HNTAS support standardised documentation and data sharing to facilitate contract transfer and reduce transaction costs.
- Providing overall long term policy stability to improve investor confidence in the sector.

Question 50: Do you agree with the general approach set out in the data hierarchy (pyramid) above?

Agree.

Question 51: Do you support the development of a 'golden thread' of evidence throughout a network's life, to ultimately be maintained by the heat network operator?

Agree.

- However, the submission of some elements of data reporting may need to be revisited if the approach Energy UK proposes in question 7 of this consultation response is taken forward, which would allow networks to self-certify certain data points using in-house assessors. This may mean the hierarchy of heat network data submission proposed in the consultation needs modifying to account for the more minor elements that only require self-certification.

Question 52: Do you agree with the appointment of duty holders (Designated designer, Contractor and operators) to ensure responsibilities are clear at each stage?

Agree.

- Duty holders within companies makes more sense than external assessors.
- Government support may be needed to develop the necessary skills throughout the sector.

Question 53: Do you agree with the proposed assessment stages, and the roles for assessors and Assessment Organisations set out? If not, please provide details.

Disagree.

- The role of Assessors and Assessment Organisations must be to certify and licence organisations, with the onus on developers and operators to maintain compliance, as with the gas and electricity sectors. Therefore, the role of assessment organisations differs significantly from what has been proposed. If changes to the scheme are made to this end, it would substantially lower the cost burden of such assessment for heat networks.

Question 54: Do you agree with the proposed approach of registered Assessment Organisations issuing Statements of Conformity at various stages of a heat network's life?

Agree.

- However, the Statement of Conformity approach should be reassessed if the approach set out in our response to question 7 is taken forward. Once organisations are certified to issue their own certification on certain elements, a Statement of Conformity can be issued internally by the certified in-house team of assessors. To maintain consistency, however, some elements will require the central body (third party) to issue the Statement of Conformity to maintain a degree of oversight. The approach set out in the consultation would need to be amended to reflect this.

Question 55: Do you agree that accreditation of assessment activities should be divided in the way set out? Do you have any views on the minimum experience and qualification level for each assessment activity? Please provide details.

Agree.

- Energy UK supports heat network developers and similar organisations applying to become a registered Assessment Organisation in their own right, with the intent of maintaining a pool of internal staff to conduct assessments of its own heat networks.

Question 56: Do you agree with the application process for individual assessors? If not, then please provide details.

Agree.

Question 57: Do you agree with the proposed assessor oversight, training and reaccreditation processes set out? If not, please provide details.

Disagree.

- The cost to industry would be disproportionate to the consumer benefit felt by this proposed assessor oversight and risks duplicating the existing building standards assessment practices.
- The processes would benefit from more streamlining and alignment with existing standards to ensure time, money and resources are not being wasted on a duplicated process.
- It is important that the processes remain iterative to accommodate for the sector adjusting to HNTAS.

Question 58: Do you agree with the proposed accreditation process for Assessment Organisations? Do you have any views on the minimum requirements for Assessment Organisations? Please provide details.

N/A.

Question 59: Do you agree with the proposed Assessment Organisation oversight and re-accreditation processes set out? If not, please provide details.

N/A.

Question 60: Do you agree with proposals to allow second-party execution of assessment activities under HNTAS? Do you agree that project specific consultancy advice should be permitted where it helps ensure standards are met? If not, please provide details.

Agree.

- This is important to enable internal timelines and delivery are met while maintaining rigorous standards.

Question 61: Do you agree with the proposed certification process and timings, and the role of certifiers set out? If not, please provide details.

N/A.

Question 62: Do you agree that HNTAS certification function should be carried out by a single, centralised Certification Body, that is an appropriately qualified body, appointed by the Code Manager?

Agree.

Question 63: Do you have any views on the criteria or process for individual HNTAS certifiers? If so, please provide details.

N/A.

Question 64: Do you agree with our proposed arrangements for handling complaints against and non-compliance of heat network operators? Do you consider that remedies other than withdrawal of certificates, such as financial penalties on non-compliant heat network operators, would be appropriate?

Agree.

- It is important Ofgem and the Code Manager have clear, open communication and can data share. This will help to streamline operations and audits to ensure

HNTAS compliance remains proportionate and achievable for heat network operators.

- This arrangement must extend beyond complaints and compliance to all review and decision-making activities. These activities should always be carried out by a third-party, i.e. a body which is independent and has no interest in the claim of conformity.

Question 65: Do you agree with our proposed arrangements in handling complaints and appeals against Assessment Organisations? Are there any other factors you think we should take into consideration in how complaints and appeals against Assessment Organisations are handled?

N/A.

Question 66: Do you agree with our proposed arrangements in handling complaints and appeals against the Certification Body, Training Provider and Scheme Operator? Are there any other factors you think we should take into consideration in how complaints and appeals against these entities are handled?

Agree.

Question 67: Do you agree with our proposed arrangements in handling complaints and appeals against the Code Manager?

Agree.

Question 68: Do you agree with the proposed measures against the Code Manager to ensure that the Secretary of State is able to intervene in cases of poor performance?

Agree.

Question 69: Do you believe that there is a need for additional grants and/or financial support for installing particular types of equipment to support HNTAS. If so, what types of equipment would you propose?

Yes.

- Energy UK believe there is a need for additional financial support for HNTAS to be adequately implemented. We would welcome the opportunity to be actively engaged in discussion on future funding mechanisms to support HNTAS compliance.

- This will be specifically needed to retrofit existing heat networks and to support the increase in skills and resources HNTAS will require of heat network operators.
- Organisational level funding would be a suitable and productive vehicle for this.

Question 70: Do you believe there is a need for additional grants and/or financial support for services undertaken as part of HNTAS? If so, what types of services would you propose?

Disagree.

- This additional support will be unnecessary if the HNTAS standards are changed to reflect the requirements.

Question 71: Do you believe there is a need to encourage early movers toward HNTAS certification. If so, what form would incentives take and when would these need to be applied?

- The proposals outlined in this consultation response to make HNTAS more proportionate such as more, reducing number of KPIs and introducing more streamlined governance structures, would help to encourage early movers towards certification on account of the consumer benefits and increased efficiency the scheme will bring.

Question 72: Do you believe there is a need for subsidised training to support all the above? Please specify what you believe are the key skills gaps.

Yes.

- The introduction of this extensive technical assurance scheme will likely cause a skills gap with a shortage of suitably qualified and experienced professionals to fulfil the range of roles outlined in this consultation.
- While we welcome the Government support provided by the extension of the heat training grant, with additional funding to 2029, this will still rely heavily on matched funding from installers. Further, it does not address the issue of bringing new entrants into the workforce.
- Investment in skills within the heat network industry needs to be supported by robust policy environment, which demonstrates sufficient ambition to give industry certainty. The introduction of this extensive technical assurance scheme, while critical to forming part of a robust policy landscape, as currently designed will likely cause a shortage of suitably qualified and experienced professionals to fulfil the range of roles outlined. This risks slowing delivery timelines and creates uncertainty for project investment.

- The industry needs to be backed by an apprenticeship scheme better adapted to meet the needs of industry and incentivise the uptake of apprentices in the low-carbon heat sector as a whole.

Question 73: Please suggest any other types of incentives not considered above that could assist existing heat networks in becoming compliant with HNTAS?

- To incentivise compliance to HNTAS the scheme needs to be significantly streamlined to ensure there is no duplication of regulation. This could be achieved by reducing the number of KPIs, and ensuring that they are all orientated around achieving specific outcomes, such as fair prices with minimal disruption.

Question 74: Do you agree that incentives should focus on supporting and encouraging existing heat networks as they are likely to have a more difficult transition pathway to meeting HNTAS requirements?

Agree,

- It will be most challenging for existing heat networks to comply with the new regulations. Government support should focus primarily on helping these existing networks to retrofit in line with the new regulations, as well as adjusting the HNTAS requirements to better reflect the values of proportionality and regulatory clarity.

Question 75: Do you think introducing this type of strengthened and targeted framework could help the heat network sector? Are there other areas that could form part of the frameworks?

Agree.

- This could help to streamline procurement processes for HNTAS. However, it is important that innovation is not restricted as a result of the introduction of a procurement framework.
- An approved contractor scheme would be a helpful addition to HNTAS to give residential heat network building owners confidence in appointing competent contractors.

Question 76: Please provide any other comments you may have on the policy proposals within the consultation.

N/A.