

20th September 2018

Dear Sir/Madam,

Request for Information: Heat Networks, Low Carbon Heat & Non-Domestic Energy Efficiency

Scottish Renewables is the voice of Scotland's renewable energy industry, working to grow the sector and sustain its position at the forefront of the global clean energy industry. We represent around 250 organisations working across the full range of renewable energy technologies in Scotland and around the world, from large suppliers, operators and manufacturers to small developers, installers and community groups, and companies right across the supply chain.

Around a third of our members report an interest in low-carbon heat, with 60 members active in the sector ranging from manufacturers to installers, project developers and legal and engineering consultancies. These companies work primarily in the district heat network, biomass and electric heat pump sectors. The public sector estate is considered an important potential market for low-carbon heating, and we welcome this opportunity to provide feedback some of the issues and barriers that our members report.

We would welcome the chance to discuss our submission in more detail if required,

Yours sincerely,

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Public sector buildings account for around 30% of non-residential heating and cooling demand¹ in the UK, and in Scotland the public sector estate comprises around 20,000 buildings². These buildings are seen as an important market for low-carbon heat for a number of reasons:

- **Whole-life costs:** some low-carbon heating technologies, particularly heat pumps and heat networks, have higher capital costs than fossil-fuel heating but lower costs. When considering replacement of existing boilers as well as procurement of new buildings.
- **Large heat demand:** buildings with high heating demand (both in terms of volume but also over the course of day and year) more suited. Particularly hospitals and facilities that are open long hours.
- **District heat networks:** large buildings or estates with multiple large buildings are well suited to being served by district heat networks, and have provided the main catalyst for the construction of new heat networks in Scotland.

Issues & proposals

Our members report several issues holding back take up of low-carbon heat in new and existing public sector buildings:

- **Long-term contracts:** some public sector organisations are reluctant to sign up to the long-term contracts required to develop new district heating networks. There is some uncertainty regarding best practice; some regard it as essential to reassess contracts on a frequent, often annual basis in order to assure value. New guidance issued by the SFT may help address this issue, but knowledge and familiarity with district heat networks continues to vary between local authorities.
- **PFI contracts:** many public buildings have been constructed using PFI or similar contracts; where this is the case, it is very difficult if not impossible to change to a different heating system. This stems from the way contracts are structured, which essentially lock in the original heating system choice for the duration of the 30 to 40 year contract. There is also often reluctance to sanction major refurbishment works where these will reduce the availability of a building or service (which may trigger penalty fees). Several members report potential low-carbon heating projects being prevented as a result.
- **Procurement frameworks:** to date the majority of contracts funded through ECO and by Scottish Government HEEPS and ABS programmes have suited larger companies working through framework and subcontract models. The scale and nature of these programmes has meant that these larger companies have had little incentive to develop the skills and tools to offer services to privately owned and non-domestic buildings. Conversely, the smaller installers that specialise in selling to these types of clients have mostly been locked out of the larger Government backed programmes. With significant cross-over between energy efficiency and renewable heat supply chains, particularly in rural areas³, the Scottish Government should consider how to integrate all elements of the existing supply chain in the design of future schemes, encouraging competition and bringing in new skills to sell services to able to pay households and businesses. Potential solutions include helping SMEs with the costs of accreditation (such as for PAS 2030), structuring contracts to allow smaller players to bid for smaller packages of work, and ensuring programme funds run for several years (rather than yearly as at present) to provide greater certainty of long-term work.
- **Public sector buildings as anchor loads for new district heat networks:** large buildings or estates with multiple large buildings are well suited to being served by district heat networks, and have provided the main catalyst for the construction of new heat networks in Scotland. However, significant barriers continue to frustrate potential projects to connect public sector buildings (such as unfamiliarity with heat supply contracts or new technologies and perceived) which current legislative drivers (such as the section

¹ CCC (2016) Next Steps for UK Heat policy

² <https://www.scottishpropertyfederation.org.uk/sites/default/files/resources/SPF-Research-Report-June-2015.pdf>

³ [Energy Efficiency and Low Carbon Market Research, Energy Saving Trust 2017](#)

44 duty on local authorities in the Climate Change Act) are too weak to overcome. We urge the Scottish Government and Procurement Scotland to examine how the proposals for Local Heat and Energy Efficiency strategies (LHEES) and district heat regulation could be used to overcome these. From a heat network developers' perspective, the proposed system of consents and licences fails to reduce the central risk of finding current and future demand. A solution was originally proposed that would have created a compulsion to connect buildings subject to a positive socio-economic assessment (based on an identified district heat zone in an LHEES) but this has now been dropped. In lieu of this we recommend that the approach to securing public sector connections should be strengthened.

Holding an area-based consent for a district heat network will not make it any easier to connect public bodies' buildings. We would urge procurement Scotland to investigate whether in future procurement rules could be amended to a) prioritise connection to a consented district heat network and b) restrict the ability of a non-concession holders to bid. Recent SFT guidance expands on the issue that public procurement rules confine the ability of public bodies to make commitments to specific technologies: energy supply to has to be procured through a competitive tendering process in which district heating operators have to compete. This means holding an area-based consent would not automatically mean public bodies' buildings would connect to a heat network.

One route is discussed in the guidance which has not been tested: specifying characteristics of the energy supply when issuing a tender. Public authorities are generally able to make specifications in procurement (e.g. for sustainability), but the difficulty highlighted by SFT arises when specifications "have the effect of creating unjustified obstacles to the opening up of public procurement to competition." The issue, then, appears to be whether a procurement process that restricts the number of eligible suppliers is objectively justified. SFT states there is no directly applicable precedent for energy supply. Where the NHS has been permitted to issue a tender that restricted the number of eligible suppliers to one this was justified on objective grounds relating to the needs of the contracting authority (in that case, only one supplier was able to supply equipment compatible with existing systems). The SFT guidance suggests the risk of challenge to a public authority whose tender for energy had the effect of restricting competition to one supplier (the district heating concession holder) would be that "the justification would not relate to the functionality or characteristics of the energy, but rather its means of production." This appears to be based on the assumption that the tender would specify the energy had to be supplied by district heating.

However, Scottish Government should explore what might be possible in this area, particularly in the context of socioeconomic assessment and long-run heat planning under LHEES. For example, would it be possible for public authorities to require energy supply to contribute to the objectives of an LHEES, or to demonstrate optimality in socioeconomic terms? This could include an estimate of the (socioeconomic) cost of heat decarbonisation in a zone without a proposed district heating network.