Development Management Guidance: Heat Networks and District Heating

Why we comment on this issue

The Scottish Government has estimated that heat accounts for around half of all the energy we use, using it for our homes, offices, hospitals, businesses, schools, other buildings and industries. The Scottish Government's Heat Policy Statement was published in June 2015 and brings together a number of the Government's policy positions supporting the development of heat in Scotland. The Scottish Government Energy Strategy, published in 2017, builds on the Heat Policy Statement and strengthens the focus on decarbonising heat in Scotland while increasing heat storage and reducing heat poverty. The Government's position regarding district heating and low carbon heat is that it will, until decisions are made on a UK wide basis, continue to provide support for low carbon heat supply and heat demand reduction through existing funding programmes, and work to promote low carbon heat via low regrets options including district heating projects where appropriate, delivering affordable, low carbon heat efficiently.

There are clear links between district heating and climate change. The Expert Commission on District Heating recommendations to the Scottish Government (November 2012) sets out the benefits that district heating can have on a number of policy areas, including heat poverty, and reducing emissions. In the Heat Policy Statement the Government has established a Heat hierarchy, illustrating the preferred approach to reducing carbon emissions and delivering low carbon and renewable heat.

Key Scottish Government targets and ambitions relating to heat include:

- A largely decarbonised heat sector by 2050, with significant progress made by 2030;
- Delivery of 11% of non-electrical heat demand by renewable sources by 2020;
- 40,000 homes to benefit from affordable low carbon heat from district heating by 2020; and,
- 1.5TWh heat to be delivered by district heating by 2020 to both domestic and non-domestic properties

SEPA's Energy Framework (November 2018) reiterates our position that we will support Scotland in the decarbonisation of the energy system, reduce the impacts that can be associated with electricity and heat generation, transmission and use, and create economic opportunities for communities and industry driving innovation and investment. Through actions outlined in our Energy Framework, we will encourage a diversity of energy sources that integrate energy supply and demand, especially supporting efficient use of surplus heat, and heat from low carbon sources, and seek to inform and influence decisions made now so that they do not unduly lock Scotland into a higher than necessary carbon future, and support policy and legislative certainty to reduce project risk.

Creating centralised heating, and potentially using low or zero carbon heat sources, will support the Scottish Government's aims to prevent and reduce significant adverse effects on the environment resulting from carbon emissions as part of the development, and also identify how the

proposed development will support the Government's targets to decarbonise the heat sector in Scotland by 2030. Creating links between heat producers and heat users is essential to create heat networks.

In order to deliver the Scottish Government's heat targets, new developments need to be designed to incorporate district heating. Where substantial new developments are planned, the opportunity arises for providing a heat network within the site and for this to be required and designed in at the earliest stages. New developments have a role to play in not only establishing and creating these networks, but also in connecting to networks to make use of heat that is being captured.

SEPA's planning objectives for this topic

- To encourage new developments to make an effective contribution to national targets relating to heat.
- To encourage use of heat maps to maximise opportunities for the use of waste heat in new development.

Links to other development management topic tables

Other related development management guidance includes: consentability, water environment and soils.

Using the development management guidance

The table on page 3 outlines our recommendations for development management relating to district heating and heat networks in more detail. We strongly encourage new developments to consider the contribution they can make towards reducing their environmental impacts and minimising their carbon impact. The inclusion of district heating and heat networks is one way in which this can be achieved.

This approach has been developed to help implement policy provisions in Scottish Planning Policy and support the delivery of Scottish Government's Energy Strategy.

Further detail on the implementation of the requirements and recommendations and supporting information can be found in the District Heating and Heat Network Background Paper.

Development management recommendations	Information requirements
Development management recommendation 1: Designing new developments to enable connection to low carbon energy distribution heat networks and district heating All significant/anchor developments or substantial developments* (allocated sites and non-allocated sites) should strongly consider the potential to meet their heat demand through district heating networks, subject to the outcomes of a feasibility statement. Where the relevant Local Development Plan has a policy position on district heating, we will object if the proposed development is inconsistent with this. All other developments should aim to meet their heat demand through district heating networks, subject to a feasibility statement. *'Substantial' developments may consist of new towns, urban extensions, large regeneration areas, or large development sites subject to master planning, or large mixed use developments. There is, however, an element of judgement that will need to be applied here and it might be that some sites offer significant potential for heat networks due to their location, support from the local authority and 'buy in' from developers. Where there is clear opportunity or context of district heating being developed adjacent to or near the proposed development, we will strongly support the assessment of district heating feasibility as part of the development.	Applications should consider how the potential for district heating within the site can be supported by an Energy Statement or feasibility statement demonstrating how the proposal has considered district heating. The findings of the Statement should be informed by national and, where available, local heat maps, and should be reflected in a section of the Environmental Statement and used to influence the site layout and design.
Development management recommendation 2: Development Adjacent to heat networks or heat sources All new developments, including linear infrastructure developments, that are located adjacent to an existing or proposed heat network or heat source should be designed to enable connection to such networks our sources unless suitable justification can be provided to demonstrate that this would not be technically feasible. For sites that include district heating networks as part of their infrastructure and design, the land required for heat network infrastructure within the site should be protected.	Applications should consider how the potential for district heating within the site can be supported by an Energy Statement, demonstrating how the proposal has considered district heating. The findings of the Statement should be informed by national and, where available, local heat maps, and should be reflected, where appropriate, in a section of the Environmental Statement and used to influence the site layout and design.