

Detailed guide: An introduction to Heat Networks

What are heat networks?

A heat network – sometimes called district heating – is a distribution system of insulated pipes that takes heat from a central source and delivers it to a number of domestic or non-domestic buildings. The heat source might be a facility that provides a dedicated supply to the heat network, such as a combined heat and power plant; or heat recovered from industry and urban infrastructure, canals and rivers, or energy from waste plants.

Heat networks form an important part of our plan to reduce carbon and cut heating bills for customers (domestic and commercial). They are one of the most cost-effective ways of reducing carbon emissions from heating, and their efficiency and carbon-saving potential increases as they grow and connect to each other. They provide a unique opportunity to exploit larger scale – and often lower cost – renewable and recovered heat sources that otherwise cannot be used. It is estimated by the CCC that around 18% of UK heat will need to come from heat networks by 2050 if the UK is to meet its carbon targets cost effectively.

Available support

The Heat Networks Delivery Unit (HNDU)

The [Heat Networks Delivery Unit](#) was established in 2013 to address the capacity and capability challenges which local authorities identified as barriers to heat network deployment in the UK. The Unit provides funding and specialist guidance to local authorities who are developing heat network projects.

Heat Networks Investment Project (HNIP)

The [Heat Networks Investment Project](#) is delivering £320m of capital investment support to increase the volume of heat networks built, deliver carbon savings for carbon budgets, and help create the conditions for a sustainable market that can operate without direct government subsidy. The pilot phase of the Heat Networks Investment Project ran for six months and awarded £24m to nine successful Local Authority projects in March 2017.

Investing in heat networks

UK heat networks represent a significant investment opportunity across distribution, generation, storage, controls and customer interface. Various guides have been published for potential investors:

[Delivering UK Energy Investment: Networks 2014](#)

[Investing in the UK's heat infrastructure: Heat networks](#)

Tools and toolkits

The National Heat Map provides accessible high-resolution web-based maps of heat demand by area:

[National Heat Map](#)

Community Heat Network Toolkit provides guidance on community-led heat network projects:

[Community Heat Network Toolkit](#)

Regulation and consumer protection

The Heat Network (Metering and Billing) regulations 2014 implement the requirements in the Energy Efficiency Directive with respect to the supply of distributed heat, cooling and hot water:

[Heat network metering and billing regulations: compliance and guidance](#)

The government is supporting industry-led initiatives to improve consumer protections and technical standards. These include the [Heat Trust](#) and the [CIBSE Code of Practice](#).

Other Publications relating to heat networks

[The future of heating: meeting the challenge, March 2013](#)

[Low Carbon Cities evaluation](#)

[Summary evidence on district heating](#)

[Rural Community Energy Fund](#)

[Costs of heat networks](#)

[Heat network innovation competition \(25 June 2015\)](#)

[**Notice: HU12 9BJ, Mr M Westmorland and Mrs M Westmorland: environmental permit issued**](#)

The Environment Agency publish permits that they issue under the Industrial

Emissions Directive (IED).

This decision includes the permit and decision document for:

- Operator name: Mr M Westmorland and Mrs M Westmorland
- Installation name: Lowfield Farm
- Permit number: EPR/TP3930DP/A001

Notice: Michael Thompson: application made to impound water

The Environment Agency consult the public on certain applications for the abstraction and impoundment of water.

These notices explain:

- what the application is about
- which Environment Agency offices you can visit to see the application documents on the public register
- when you need to comment by

Notice: Team Van Oord Limited: application made to impound water

The Environment Agency consult the public on certain applications for the abstraction and impoundment of water.

These notices explain:

- what the application is about
 - which Environment Agency offices you can visit to see the application documents on the public register
 - when you need to comment by
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Notice: Squibb Group Limited: application made to impound water

The Environment Agency consult the public on certain applications for the abstraction and impoundment of water.

These notices explain:

- what the application is about
- which Environment Agency offices you can visit to see the application documents on the public register
- when you need to comment by