

**RISE**

Retrofit information,  
support & expertise

# Advice Pack

# Low carbon heat networks

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[www.riseretrofit.org.uk](http://www.riseretrofit.org.uk)

## Overview

To ensure large scale retrofit projects meet the intended outcomes of the works, it is recommended that installers of low carbon heat systems must be certified to Microgeneration Certification Scheme (MCS) standards for the technology they are installing.

MCS certification requires an installation company to be assessed by an affiliated certification body, and to have demonstrated suitable competency against relevant technology standards, as well as conduct installations in accordance with MCS installation standards.

Where a communal heat network or district heating scheme is to be installed, this must be done in accordance with the Heat Trust Consumer Protection Scheme. Once regulations introduce mandatory minimum heat network technical requirements, expected in 2025, the installation of communal and district schemes must comply with these requirements and follow the processes set out under the Heat Network Technical Assurance Scheme (HNTAS) (see below).

Prior to technical standards regulation, whilst not a formal requirement, the installation of communal and district heating systems should aim to be in accordance with CIBSE's Code of Practice 1 (2020).


## The Heat Trust Consumer Protection Scheme

The Heat Trust's voluntary Scheme sets minimum standards of customer service and consumer protection for heat suppliers in Great Britain (England, Wales and Scotland).

When a heat supplier applies to register a heat network with Heat Trust, they check that there are processes in place for that heat network which comply with the Heat Trust Scheme's rules. Once it has been verified that their processes are compliant, the supplier signs a legal undertaking to abide by the Scheme on an on-going basis for that heat network. The process is applied for each individual heat network that registers with Heat Trust.

## The Heat Network Technical Assurance Scheme (HNTAS)

The UK government is introducing regulatory technical requirements and a Heat Network Technical Assurance Scheme (HNTAS) to help heat network operators demonstrate compliance with these requirements. HNTAS is due to launch in 2025



and aims to ensure that heat networks meet a minimum level of performance and reliability.

HNTAS will be a performance-based assurance scheme and applies to different identifiable elements of a heat network, (e.g. the energy centre, district distribution network, communal distribution network). For each element, assessments against minimum standards are made at various design and delivery stages of a heat network. In the design and construction stages, assessments will be made to validate any claims of particular performance outcomes. Upon commissioning, assessments will verify that performance outcomes have been achieved and maintained.

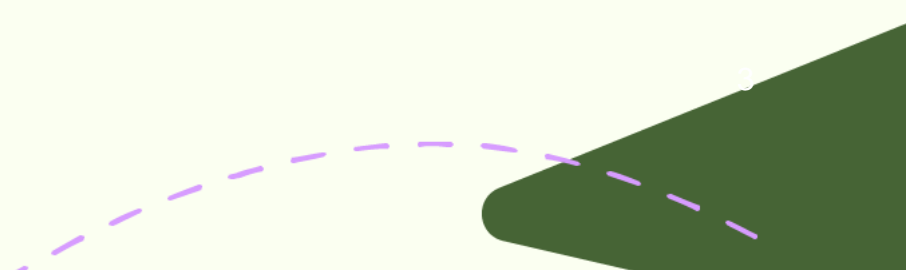
## **CIBSE's Code of Practice 1 (2020)**

The purpose of the Code of Practice CP1 (2020) is to:

- Improve the quality of feasibility studies, design, construction, commissioning and operation by setting minimum requirements for projects and identifying best practice options.
- Deliver energy efficiency and environmental benefits.
- Provide a good level of customer service.
- Promote long-lasting heat networks, in which customers and investors can have confidence.

This Code of Practice applies both to heat networks designed to supply new developments and to heat networks that are retrofitted to supply existing buildings. Although many issues are common, networks for new buildings require careful design to keep heat losses low (in percentage terms) whereas the design of networks for existing buildings is often constrained by the existing heating systems in the buildings.

The high-level strategic aims of this Code of Practice are achieved through the following broad themes, which run throughout the whole document and need to be considered at each stage of the project.

- A. Correct sizing of plant and network
  - B. Achieving low network heat losses
  - C. Achieving consistently low return temperatures and optimising flow temperatures
  - D. Use of variable flow control principles
  - E. Optimising the use of low-carbon heat sources to supply the network
  - F. Delivery of a safe, high-quality scheme where risks are managed and environmental impacts controlled
  - G. Providing customers with affordable heat and a reliable service
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## Useful links

You can access additional resources to support retrofit project planning and delivery [here](#).

You can view the Heat Trust Consumer Protection Scheme [here](#).

You can view the Heat Network Technical Assurance Scheme (HNTAS) [here](#).



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