

Heat network assets

A quick guide to energy centre, in-property and other heat network equipment.

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Already attended our CPD certified 'Heat network essentials' training?
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Energy centre assets

Everything in the plant room; where heat is generated, treated, and pumped out to the network.

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Boiler

Generates heat by burning fuel, usually gas. One of the main heat sources in the energy centre.

Energy centre
Annually



Combined heat & power (CHP) unit

Generates heat and electricity simultaneously from one fuel source; more efficient than generating separately.

Energy centre
Annually



Air source heat pump (ASHP)

Extracts heat from outside air to generate heating & hot water; an increasingly common low-carbon heat source.

Roof
Annually



Pumps (mains & secondary)

Circulate heated water around the primary (energy centre) and secondary (network) circuits.

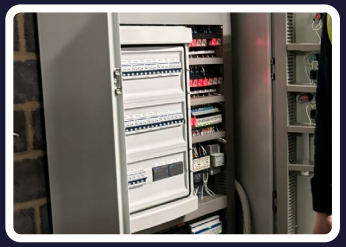
Energy centre
Annually



Thermal store / cylinder

Store hot water so supply can meet demand peaks without over-sizing generation plant.

Energy centre
Annually



Building management system(BMS) controller

The control and monitoring 'brain' of the energy centre; automates and logs plant operation.

Energy centre
Annually

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De-gasser

Removes dissolved air and gas from system water to protect efficiency and reduce corrosion.

Energy centre
Quarterly



Dosing pot

Introduces water-treatment chemicals into the system to protect against corrosion and scale.

Energy centre
Quarterly



Air & dirt separator

Removes air pockets and debris from circulating water, protecting pumps and heat exchangers.

Energy centre
Quarterly



Expansion vessel

Absorbs the expansion of heater water and helps maintain safe system pressure.

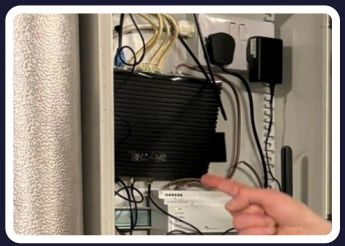
Energy centre
Annually



Data logger

Collects and stores readings from all the heat meters on the network.

Energy centre
Annually



Router

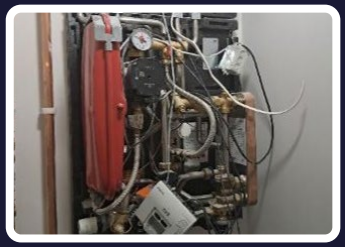
Links the data logger's local network to the outside world via the fixed internet connection.

Energy centre
Annually

In-property assets

What sits inside (or just outside) each home.

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Heat interface unit (HIU)

Connects the property to the shared heat supply and delivers heating & hot water into the dwelling.

In-dwelling (utility cupboard)
Annually



Plate heat exchanger

The core component inside the HIU; transfers heat between two fluid circuits via thin metal plates without mixing them.

Inside HIU
Annually



Cooling interface unit (CIU)

The cooling equivalent of a HIU; used where the network also supplies cooling.

In-dwelling (utility cupboard)
Annually



Fan coil unit (FCU)

Delivers heating or cooling to a room by blowing air over a heated/ cooled coil.

In-dwelling (ceiling/wall)
Annually



Mechanical ventilation heat recovery (MVHR) unit

Ventilation system that recovers heat from extracted air before it leaves the building.

In-dwelling (utility cupboard)
Annually



Heat meter

Measures the heat used by an individual dwelling; legally required in every heat network property.

In-dwelling (on/around HIU)
Annually

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In-home display

Small screen or web portal showing usage and remaining credit for pay-as-you-go residents.

In-dwelling/portable device
Annually

Other network assets

Everything outside the energy centre and properties that loops the network together.

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Flow & return pipes

Carry heated water out to properties (flow) and back to the energy centre (return).

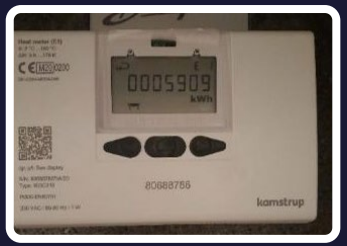
Across the network
Annually



Block meters

Measure heat delivered at block level, used to spot losses between energy centre and dwellings.

Risers
Annually



Landlord meters

Measure heat used in communal, landlord areas rather than individual homes.

Communal areas
Annually



Building network meters

Sits on the output of each energy source to help identify network inefficiencies.

Energy centre
Annually





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