

Next generation of heat networks to power UK's green revolution

- Latest round of heat network funding in England will only support low-carbon technologies, such as heat pumps
- £270 million Green Heat Network Fund will help make towns and cities greener, building on the 480,000 consumers already benefiting from this technology
- new heat networks will play a key role in cutting carbon emissions from heating buildings, which accounts for 21% of UK total

Homes and businesses will be made greener as low-carbon energy is today placed at the heart of the latest round of funding for heat network projects across England.

The new £270 million Green Heat Network Fund, announced by the government today (Tuesday, 7 September), will only support low-carbon technologies like heat pumps, solar and geothermal energy in the roll out of the next generation of heat networks which will enable more towns and cities to take up this tried and tested technology from 2022.

Heat networks supply heat to buildings from a central source, avoiding the need for households and workplaces to have individual, energy-intensive heating solutions – such as gas boilers. At present, there are over 14,000 heat networks in the UK, providing heating and hot water to around 480,000 consumers.

Heat networks have the potential to be a cost-effective way of reducing carbon emissions from heating. They are the only way that larger-scale renewable and recovered heat sources – like the heat from large rivers and urban recovered heat, such as from the London Underground – can be utilised.

The previous Heat Networks Investment Project (HNIP) has provided more than £165 million of funding for schemes across England and Wales since 2018.

The new Green Heat Network Fund (GHNF) successor scheme will go even further, with applications only being supported if they include low-carbon heat-generating technologies, such as heat pumps, waste heat and energy from geothermal sources.

The successor scheme is set to play a significant role in kick-starting market demand for heat pumps, which will drive down costs for consumers and delivering a mix of low-carbon heating solutions as we incentivise people to gradually transition away from fossil fuel boilers over the next 15 years.

With heat in buildings being one of the largest sources of UK carbon emissions, accounting for 21% of the total, there is an urgent need to deliver a mix of new, low-carbon heating solutions to meet our legally-binding target to end the UK's contribution to climate change by 2050.

Energy Minister Lord Callanan said:

Finding a mix of innovative solutions to how we heat our homes in the most affordable way is going to be vital as we support people to gradually transition away from gas boilers over the next 15 years.

Today's announcement shows we are going even further in our goals to expand this tried and tested heat networks technology, making even more use of the likes of recovered heat from the London Underground to heat our homes.

The Green Heat Network Fund will also allow us to drive forward the new, cost-effective and low-carbon technologies we need to kick-start new industries and support new jobs in the low-carbon technology sector as we build back greener from the pandemic.

Although heat networks currently meet approximately 2% of the overall UK demand for heating, the independent Committee on Climate Change (CCC) has estimated that, with continued support, they could provide 18% by 2050 – which is why the government is driving investment through the Green Heat Network Fund.

The Heat Networks Investment Project had focused on accelerating the growth of the heat network market and has permitted fossil fuel sources of heat provided they offer carbon reductions and will be replaced by low-carbon alternatives over time.

However, the successor scheme will incentivise new and existing heat networks in England to move away from high-carbon sources, as well as exploiting waste-heat opportunities while bringing down costs for consumers.

The Green Heat Network Fund is expected to fund the delivery of an estimated 10.3Mt of total carbon savings by 2050 or the equivalent of taking 4.5 million cars in England off the road for a year.

Also being published today is an assessment of the potential for future heat networks to be sited across England, Scotland, Wales and Northern Ireland. The study identifies opportunity areas that could be best-placed to support future heat network projects and how much heat could be supplied by them.

It identifies areas for district heating in each of the four nations separately across the UK by combining heat demand data and potential sources of waste heat to determine where heat networks could be commercially viable.

- the GHNF is a capital grant programme that aims to stimulate the growth of low-carbon heat networks that will support the delivery of the UK's 2050 climate change commitments and expand the current heat networks supply chain
- the £270 million GHNF scheme was announced by the Chancellor in the March 2020 Budget

- it will be open to public, private and third sector applicants in England, will open for applications in April 2022 and is anticipated to run to 2025
- the GDNF will be a key part of plans to reduce carbon emissions from heating homes and businesses by 2050 as it succeeds the HNIP scheme when it closes next year and facilitates heat networks across England from 2022 to 2025
- the new scheme will incentivise the transition to low-carbon heat sources by targeting financial support to projects and by enabling the development of low-carbon technologies at an increased scale while driving down costs
- the Department for Business, Energy and Industrial Strategy (BEIS) is investing £320 million into heat networks in England and Wales up to March 2022 through the Heat Networks Investment Project (HNIP)
- anyone wishing further information on the GDNF can contact the GDNF team via their mailbox: ghnfcorrespondence@beis.gov.uk
- carbon savings figures for the GDNF are current estimates and subject to revision