Heat and Buildings Strategy Summary Briefing

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Reaction from NIBE Energy Systems

The Government has today set out its plans to support low carbon heating technologies. This landmark strategy has been long awaited and it sends out a clear message that heat pumps are a core part of the solution.

Key proposals within the Heat and Buildings Strategy include:

- Plans to phase out fossil fuel heating by 2035
- Increased financial support for homeowners through a £5,000 Boiler Upgrade Scheme with up to £450 million available.
- A commitment to consult on reducing the price of electricity

Phil Hurley, Managing Director at NIBE Energy Systems, said:

"Today marks an important day for our industry. The Heat and Buildings Strategy provides a clear signal that we must transition to low carbon heat and creates the right foundations for action.

"After calls from industry, the government has confirmed a new funding scheme to help homeowners switch from fossil fuels to heat pumps. I believe a clear phase out date for fossil fuel heating is essential, so I am delighted to see this. Not only will it drive consumer behaviour, it will also encourage investment. Fossil fuel installers will need to upskill and retrain to deliver the scale required. With our new training scheme, innovative products, and support services, NIBE are here to help.

"It is an exciting time to be in the heat pump industry and we look forward to working with BEIS, our partners and the wider heating sector to support the transition to net zero."

Overview

Ahead of COP26, the long-awaited Heat and Buildings Strategy has been published, alongside the Government's Net Zero Strategy. The Heat and Buildings Strategy sets out details of a £3.9 billion package of support to decarbonise heat for buildings.

In order to meet net zero, virtually all heat in buildings across the UK will need to be decarbonised. Ultimately, net zero will mean completely moving away from burning fossil fuels for heating. This is a challenge of monumental proportion, fraught with challenge and risk, however it is recognised that the buildings transition also presents huge opportunities for jobs, growth and levelling up.

The Government has put fairness and affordability at the heart of their approach, adopting five core principles to guide action over the next decade:

1. A whole-buildings and whole-system approach is required to minimise the costs associated with decarbonisation.
2. Innovation is essential to driving down costs, improving options and informing future decision making.
3. There is a need to accelerate 'no- and low-regrets' action now.
4. Government will look to balance certainty and flexibility to provide stability for investment whilst creating an enabling environment to allow different approaches to be taken for different buildings.
5. Support will be targeted towards those most in need.

This briefing provides an overview of the key highlights of the Heat and Buildings Strategy divided into three sections:

1. **Fabric Efficiency**
2. **Low Carbon Heat**
3. **Supporting the Transition**

Fabric Efficiency

The Strategy has a core principle entitled '***The journey to Net Zero buildings starts with better energy performance***'. Within this pillar the Government reaffirms commitment to a **'fabric first'** approach. Priorities are set out as follows:

- Improving buildings with low energy performance and high-carbon emissions
- Futureproofing new-builds to avoid the need for later retrofitting,
- Adopting a fabric-first approach to improve building thermal efficiency,
- Increase the performance of products and appliances, ensuring climate change resilience by mitigating risks of overheating and poor air quality,
- Building the market by developing our technical expertise and expanding the UK's manufacturing capacity and capability.

Low income and vulnerable households will be supported with the cost of installing energy efficiency via schemes such as the Social Housing Decarbonisation Fund (SHDF) and Home Upgrade Grant (HUG). Of the £3.9 billion new funding proposed for decarbonising heat and buildings over 2022-2025,

- Home Upgrade Grant (HUG) will benefit from £950 million over 2022/23 to 2024/25

- Social Housing Decarbonisation Fund (SHDF) will benefit from £800 million over financial years 2022/23 to 2024/25.
- Public Sector Decarbonisation Scheme which will benefit from £1.425 billion of additional funding over 2022/23 to 2024/25 bringing the scheme value to £1 billion
- The next iteration of ECO will run from 2022 to 2026 with an increase in value from £640 million to £1 billion per year. ECO will primarily focus on improving the worst quality homes across Great Britain, helping as many to achieve EPC band C as is cost effective and suitable for the property.
- Local Authority Delivery (LAD) scheme provides funding to local authorities across England, supporting low-income households in all English regions.

New build

The Future Homes Standard will be introduced for **England by 2025**. As a stepping-stone to the Future Homes Standard, there will be an interim uplift in standards for England, **effective from June 2022**, that will result in a 31% reduction in carbon emissions from new homes compared to current standards.

Low Carbon Heat

OVERVIEW

The Strategy places a significant focus on plans to drive down the cost of clean heat and incentivise consumers to install low carbon heating systems in a simple, fair and cheap way. Proposals to support low carbon heat are set out in line with the Government's new target for all new heating systems by 2035 to either be using low carbon technologies, such as heat pumps or low carbon ready technologies such as hydrogen ready boilers where the Government are confident that they can supply clean, green fuel.

The Strategy takes a 'no or low regrets' approach, focusing on building the market for proven, scalable solutions such as heat pumps and heat networks now which will play a role in all net zero scenarios, whilst continuing to invest in research and innovation on future heating systems, including hydrogen.

A number of consultations have been published alongside the strategy, seeking views on how progress in different segments of the market can be encouraged. The key consultations include:

- Ending the installation of high carbon fossil fuels to heat homes that are not connected to the gas grid in England from 2026 and non-domestic buildings not connected to the gas grid from 2024 (see here and here).
- A new market-based regulation on manufacturers to phase out fossil fuel boiler installation (see here).
- There have also been some important updates regarding the Boiler Upgrade Grant (previously termed the Clean Heat Grant), see here. The below sections provide further detail regarding support for specific technologies.

HEAT PUMPS

Highlights for heat pumps include an increase in funding under the Clean Heat Grant, now being dubbed the Boiler Upgrade Scheme, and wider proposals to support cost reductions for heat pumps. The Clean Heat Grant will provide an upfront sum of £5,000 for Air Source Heat Pumps £6,000 for Ground Source Heat Pumps to encourage homeowners to install low carbon heating systems, with the total funding pot increased to £450 million, over three years. It is hoped that the increased level of grant from the £4,000 originally proposed will drive uptake and support efforts to achieve cost parity between heat pumps installed under the scheme and traditional gas boilers.

The Government have published their Response to the Clean Heat Grant Consultation. Some of the key highlights to note regarding the Boiler Upgrade Scheme (previously called the Clean Heat Grant) have been outlined below:

- Ofgem confirmed as the scheme administrator, with day-to-day running responsibility.
- Domestic custom builds will be eligible, but not new builds and social housing.
- The scheme will support systems up to a capacity limit of 45 kWth.
- With the exception of custom-build properties, heat pumps will only be eligible where they replace existing fossil fuel systems or direct electric systems and must have a minimum SCOP of 2.8.
- All installers participating in the scheme must be MCS certified.
- There will be a voucher-based delivery mechanism led by the installer for grant application and redemption.
- To minimise non-compliance, fraud, and gaming on the scheme, robust upfront checks will be conducted before vouchers are issued and grants paid out.

The strategy outlines an expectation that significant cost reductions of between 25-50% will occur by 2025 as the market expands. There are several key proposals to supporting cost

reductions alongside the market scaling anticipated by the Clean Heat Grant (Boiler Upgrade Scheme):

- Options to reduce the price of electricity by shifting levies from electricity to gas e.g. via an expansion of carbon pricing and removal of costs from electricity bills. Decisions are expected to be made in 2022, following a Fairness and Affordability Call for Evidence.
- A £60 million Heat Pump Ready innovation programme will be launched to drive technology innovation to make the systems smaller, easier to install and cheaper to run. For further details on the innovation programme, see here.
- Aim for a 30-fold increase in heat pumps manufactured and sold within the UK by 2028 to increase the rate of installation, grow exports, and create more than 10,000 manufacturing-related UK jobs.
- Consulting on ending the installation of high carbon fossil fuels to heat homes that are not connected to the gas grid in England from 2026 and non-domestic buildings not connected to the gas grid from 2024.

Domestic Properties

- The assumption off the gas grid is 'heat pump first', with regulation ensuring the installer chooses a low temperature heat pump unless certain key criteria cannot be met. It is expected that this criteria would consider factors such as heat loss, potential to upgrade energy efficiency, if necessary, availability of appropriate space, and any legal constraints.
- It is proposed that if the criteria is not met, financial assistance could be considered and following this, high temperature heat pumps or biomass can be considered, though biomass would need to meet very strict criteria.

Non – Domestic Properties

- Phased approach with the largest buildings first (from 2024 at the earliest), followed by smaller buildings (from 2026). Under the proposals, technology would be replaced at end of life and due to the diverse nature of these buildings the solutions will not be simple, with perhaps a wider use of biomass, bio-fuels, energy networks and hybrid systems.

LOW CARBON HEAT NETWORKS

The Strategy targets growth of the heat network market via the Heat Network Transformation Programme which will receive £338 million of the £3.9 billion new funding proposed between 2022 to 2025 to scale up low carbon heat network deployment.

The second half looks to develop regulations and market mechanisms to support the increased deployment of heat networks. These are namely regulations surrounding standards, statutory

rights, and carbon emission caps on the market. The programme is believed to increase recruitment pool and capability of the workforce, creating between 20,000 and 35,000 direct additional jobs by 2050.

The fund from the Heat Network Transformation Programme also enables the development of a heat network zoning approach to be deployed in England by 2025. This aims to identify the areas of lowest cost low carbon heat solution.

- Heat network often being suitable in high density areas.
- The Government is currently piloting the practicalities of zoning through their City Decarbonisation Delivery Programme.
- It is expected that zoning can also provide flexibility in timings up to 2050 which could support buildings to delay their low carbon heating transition if needed.

The Government is also launching the Heat Network Efficiency Scheme (HNES) demonstrator programme which will support existing heat network projects to ensure they are running at optimal efficiency levels to maximise both carbon savings and heating services.

Supporting the Transition

PEOPLE

The Government's approach will mean that consumers will have to make voluntary choices in order for Net Zero to be achieved, and therefore public engagement is key.
Aims for public engagement include:

- the use of public consultation and advisory groups,
- increasing awareness, acceptance and understanding of the need to transition heating for Net Zero and the changes involved,
- providing information about required changes in good time to the public and industry, and
- providing advice and information to allow informed decisions and effective behaviours.

Low current levels of public awareness and understanding of the need to transition heating for Net Zero are recognised, with this strategy considered to be a step to improving this. Lack of advice has been noted as a main barrier to the installation of heat pumps.

SKILLS

The strategy builds upon the Prime Minister's 10 Point Plan which outlined that decarbonising households and workplaces could support up to 240,000 jobs across the UK by 2035, with many thousands more beyond this date in areas including manufacturing, developing, and installing low carbon technologies. Job creation opportunities are evidenced through examples of current schemes, including the Local Authority Delivery Scheme and Public Sector Decarbonisation Scheme.

It is predicted that the need for current fossil fuel installers will reduce, and as such, the importance of reskilling this workforce is noted alongside the need for low carbon heating skills from entry-level. The independent Green Jobs Taskforce will be used to inform an action plan of the specific skills and timeframes required for the Net Zero transition. Current schemes and funding for retraining and skills include the National Retraining Scheme (alongside the National Skills Fund), Skills Bootcamps, the Skills Training Competition (launched alongside the Green Homes Grant Voucher Scheme) and the Public Sector Low Carbon Skills Fund.

The need for entry-level skill is also seen as an opportunity to increase diversity of this workforce. To attract entry-level skill, the apprenticeship framework for heating and plumbing is being reviewed and a Heat Network Skills Programme developed. A sustainability advisory group is intended to encourage and highlight green apprenticeships. The Lifetime Skills Guarantee provides a route for adults without an A-level equivalent qualification to attend a free college course.

STANDARDS

Standards protect consumers through both requiring quality of products and/or installations, and good customer practices. Implemented standards include the TrustMark scheme for energy efficiency measure installations (the new scheme includes the newest version of Publicly Available Specification (PAS) standards), the Microgeneration Certification Scheme (MCS) for small-scale renewable products and installations, and Building Regulations for all heating system installations. For installers to participate in government installation schemes, they are required to comply with relevant standards.

There is currently a gap in standards like MCS for larger (over 45kW) heating systems and installations, and uncertainty around standards for hydrogen heating, should that be deployed on a large scale. Heat network regulation has been consulted on, as have changes to Building Regulations on heat pump installations.

Timeline of key policy decisions

USEFUL LINKS

- Government Response to Clean Heat Grant Proposals, Setting Out a Boiler Upgrade Scheme
- Heat Pump Ready Innovation Programme
- Consultation on introduction of a Market Based Mechanism to Support Investment and Innovation in Transforming the Consumer Proposition on Heat Pumps
- Consultation On Phasing Out the Installation of New Fossil Fuel Heating In Domestic Properties Off the Gas Grid, With a Heat Pump First Approach to Replacing Those Heating Systems
- Consultation on Phasing Out the Installation of Fossil Fuel Heating Systems in Businesses and Public Buildings Off the Gas Grid
- List of all Public Sector Organisations Which Signed Up to the Voluntary Emissions Reduction Pledge