

## EEIG analysis of the Heat and Buildings Strategy

# Still waiting for the green light

### Introduction

The decarbonisation of our homes is one of the thorniest challenges for getting on track for net zero, representing a nationwide infrastructure programme involving nearly all households across the UK. Given the huge gap between current levels of action and investment – and what is needed to meet climate goals within the sector – the Heat and Buildings Strategy 2021 (H&BS) was always going to be one of the most demanding blueprints which the Government needed to set out.

In certain areas, H&BS goes some way to meeting the level of ambition needed. Against a politically fraught background, areas of ambition which have been confirmed or increased (such as the 2035 gas boiler phase-out) are to be welcomed. New policy tools like the proposed market-based mechanism to drive down costs of heat pumps and to increase UK manufacturing also have potential. However, in other important areas – particularly with regards to building energy and fabric efficiency among owner-occupiers – H&BS looks less like a strategy or investment plan, and more like a statement of intent for future examination. While recognising that decarbonising our homes is a politically challenging area, faster near-term progress among owner-occupiers will be essential for getting on track for net zero, rapidly building supply chains and stimulating demand at the scale required.

In April 2021, the Energy Efficiency Infrastructure Group (EEIG) set out a benchmark for success for the H&BS.<sup>1</sup> This briefing considers how the H&BS stacks up against these expectations, as well as future steps for Government departments to consider.

### Overview

The H&BS is clear on the importance of greener, energy efficient homes; recognising the many benefits they offer not just for net zero, but also for green jobs, reducing fuel bills and supporting the levelling up agenda. Despite this, the Strategy provides an incomplete set of policies for the national retrofit drive that the Government recognises is needed. This is particularly true for owner-occupiers – who represent around two thirds of the housing market and the largest share of emissions, but for whom there remains a shortage of near-term plans for regulations, incentives and subsidies related to energy efficiency. Energy efficiency and fabric improvements are key to reducing heating demand, regardless of the heating system in place, and should be a core part of any retrofit strategy.

Carefully introduced regulatory minimum energy efficiency standards for owner-occupiers could act as a major driver of action and investment. However, these still appear some way along the policy pipeline,

<sup>1</sup> See [https://www.theeig.co.uk/media/1106/eeig\\_heatbuildingsstrategy\\_thebenchmarkforsuccess\\_0521.pdf](https://www.theeig.co.uk/media/1106/eeig_heatbuildingsstrategy_thebenchmarkforsuccess_0521.pdf)

with tentative indications they may be considered in the 2030s or 2040s. There is an important need to signal the direction of travel and clarify the Government’s intention to regulate for an EPC C minimum target for owner-occupiers, as well as other tenures. This is necessary if we are to secure the 38% contribution that measures to boost thermal performance can offer towards net zero in UK buildings by 2030 (see BEIS chart to the left, titled ‘Figure 18’ in the H&BS).

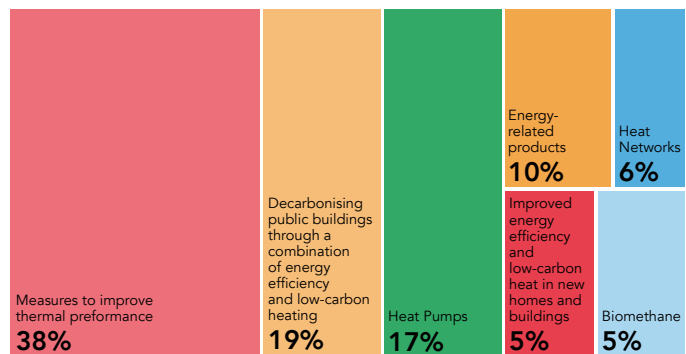


Figure 18 shows how current policies and projections seek to deliver emissions reduction by 2030 through using different technologies and heat sources.

Funding is the weakest link across all areas. Of the £9.2bn promised on heat and energy efficiency in the 2019 Conservative Manifesto, there remains a £2bn gap after the H&BS announcements, made up of £1.4bn for the Home Upgrade Grant, £0.4bn for the Public Sector Decarbonisation Scheme<sup>2</sup>, and £0.2bn for the Social Housing Decarbonisation Scheme.

EEIG analysis from earlier this year estimated that £11.8bn of public investment would be needed this Parliament (2020/2021 to 2024-2025) for domestic energy efficiency and heat pumps to get on track to meet the Climate Change Committee’s (CCC) ‘balanced pathway’ to net zero.<sup>3</sup> Even with the new funding commitments in the H&BS, there now remains a £9.75bn shortfall. The major missing component is £3.6bn for an energy efficiency subsidy scheme open to all households, helping make progress on decarbonising owner-occupier homes. This omission is particularly concerning in light of new analysis which finds that of those living in inefficient homes who are on mid- to low-incomes, 80% have no access to our only nationwide energy efficiency scheme, the Energy Company Obligation (ECO), which is targeted at fuel poor households.<sup>4</sup> On top of this, EEIG estimates £4.15bn is still needed for heat pumps.

There are multiple ways the Government could address these policy and funding gaps. These include forthcoming consultations on introducing regulations for owner-occupiers on energy efficiency standards; boosting funding to meet commitments on green public investment through the new UK green gilt (£16bn already raised this year); and mobilising capital through the UK Infrastructure Bank. Additionally, the Government can expand the scope and scale of existing and planned programmes, including the Boiler Upgrade Grant and Home Upgrade Grant.

The publication of the H&BS is without a doubt a step forward, but many more steps are needed on the journey towards net zero. The hard work is still to come to translate promising rhetoric and high-level commitments into action, investment and delivery.


## EEIG’s benchmark for success

The EEIG has six priority areas related to: governance; public capital; able-to-pay incentives; regulation; local and fair delivery; and advice and standards. The following table examines how the H&BS weighs up against the indicators of success that EEIG has established over a series of recent briefings and reports.

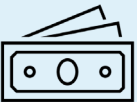
<sup>2</sup> Spending commitments on the Public Sector Decarbonisation Scheme were not included in the EEIG’s earlier analysis, which mainly covered housing.

<sup>3</sup> See <https://www.theeig.co.uk/news/2021-budget-and-spending-review-better-buildings-investment-plan/>


<sup>4</sup> <https://www.e3g.org/publications/responding-to-uk-gas-crisis/>

Area	EEIG expectation	How the H&BS performs against EEIG’s benchmark and recommendations for Government
 <p><b>Governance</b></p>	<p><b>1.i Reflect updated climate targets and carbon budgets:</b> The Strategy must be aligned with the UK’s new Nationally Determined Contribution to reduce emissions by 68% by 2030, and the CCC Sixth Carbon Budget:</p> <ul style="list-style-type: none"> <li>• Bring forward the EPC C target from 2035 to 2030</li> <li>• Set a new target to halve emissions from heating existing homes by 2030</li> <li>• Ensure affordability is centrally considered, and sustained through targets, particularly for the fuel poor</li> </ul> <p><b>1.ii Establish governance and delivery arrangements and architecture that support a locally led approach</b> for the Strategy’s implementation, learning and refinement, considering the respective roles and responsibilities for central government and local bodies. Take on board the role of the UK’s new <b>Infrastructure Bank</b> – focusing on local bodies and prioritising the built environment within its investment approach – and <b>establish local ‘zoning’</b> for area-based approaches to decarbonising heat and retrofits, beyond heat networks. Establish an <b>independent delivery body</b> working in close coordination with regional and local bodies.</p>	<p><b>1.i Reflect updated climate targets and carbon budgets</b> <span style="color: red;">●</span></p> <ul style="list-style-type: none"> <li>→ The Government has not bought forward the target to ensure as many homes as possible reach EPC C by 2030, nor has it set new science-aligned targets in line with the CCC’s Balanced Pathway.</li> <li>→ The Net Zero Strategy includes an ‘expected emissions reduction’ of 47-62% by 2035 from 1990 for the sector.</li> <li>→ The Government is committed to reviewing current sector-specific targets and goals, stating “we will continue to iterate and develop policies to ensure that our [climate] targets are met.”</li> <li>→ Affordability – particularly through reducing the costs of heat pumps – is a key theme of the H&amp;BS narrative principles. The Government has prioritised targeting public funding to support fuel poor and low-income households. However, public funding commitments continue to fall short across all areas. In particular, there is limited consideration of the affordability of energy efficiency measures for those classed as ‘able to pay’ but who, in reality may have little disposal income or means to pay.</li> <li>→ <b>Recommendation:</b> We encourage BEIS to review current targets and goals again, prior to the next update cycle, and engage with HM Treasury to ensure they are adequately capitalised.</li> </ul> <p><b>1.ii Establish governance, delivery arrangements, and architecture that support a locally led approach</b> <span style="color: orange;">●</span></p> <ul style="list-style-type: none"> <li>→ The H&amp;BS sketches out in useful detail a framework for how, where and when decisions will be made across different issues and jurisdictions. This includes mapping out which decisions will be made at a national, sub-national and local level.</li> <li>→ There is high-level recognition of the role and importance of local actors in spurring leadership and driving locally appropriate actions; and a tailored approach which includes individuals in decision-making.</li> <li>→ The Government has set itself the task of providing further details on decision-making in a coordinated way across these levels, potentially increasing the responsibilities of existing bodies and groups of organisations (such as local authorities, cities, Ofgem, system operators, network owners and operators, and markets). It has committed to “review the suitability of our current institutional arrangements required to meet this challenge as part of our work on strategic decisions”.</li> <li>→ There is only passing recognition of the role the UK Infrastructure Bank (UKIB) could play in supporting the transition.</li> <li>→ Zoning is recognised as a key means to support the development of heat networks. The Government is proposing the introduction of heat network zones in England by 2025, providing local authorities with the powers to identify and designate areas best suited for them. This is welcome, and we encourage the Government to consider how the principle can be applied more widely – for example to accelerate a ‘whole street’ approach to deep retrofits in order drive economies of scale.</li> </ul>

	<p><b>1.iii Institute a fabric and energy efficiency first principle:</b> The strategy should ensure that energy efficiency and heat policies are fully joined-up, ensuring that homes benefiting from a heat pump are properly insulated, and that the fabric is performing well in reality – a fabric first approach.</p> <p><b>1.iv Support a flexible, smart and efficient system;</b> with policy drivers that make the link between electricity demand side response and home heating (avoiding consumption at peak times), that can benefit occupants and make the transition to significant variable renewable energy on the grid.</p> <p><b>1.v Initiate establishment of a Heat Pumps Sector Deal;</b> mirroring Scotland, to build and attract investment to the market for efficient electric heating.</p>	<p>→ <b>Recommendation:</b> A good direction of travel has been set through H&amp;BS, but the hard work of establishing governance and delivery arrangements – as well as properly resourcing a locally led approach – will continue to be a pressing priority for Government over the next year, in order to ensure firm foundations for the transition to greener buildings. More detail on how the UKIB can support homeowners, landlords and local authorities is needed.</p> <p><b>1.iii Institute a fabric and energy efficiency first principle</b></p> <p>→ There is good high-level recognition of the importance of energy efficiency and fabric measures.</p> <p>→ The strategy acknowledges that how well a property is insulated plays a big part in the size of heat pump needed and how efficient it is going to be – but does not go on to propose a funding solution for non-fuel poor, uninsulated or partially insulated homes. Overall, insulation and fabric improvements are the key to reducing and stabilising heating demand, regardless of the type of heating system in place, and should be a core part of any retrofit strategy.</p> <p>→ <b>Recommendation:</b> It is important to fully enshrine support for fabric first and a ‘whole building’ approach into all programmes and funding schemes going forward, including the new Boiler Upgrade Grant. Funding should be made available to support minimum fabric requirements in the Boiler Upgrade Scheme.</p> <p><b>1.iv Support a flexible, smart and efficient system</b></p> <p>→ There is high-level recognition of the importance of building a smart, flexible and efficient system, joining up necessary actors (such as Ofgem and DNOs) needed for delivery. The role of smart and flexible technologies within a building is also recognised.</p> <p>→ There is a high-level commitment to consider <i>“smart systems and flexibility across all heat and energy efficiency policies.”</i> The Government has sought to support innovation by launching innovation projects designed to encourage new approaches that aid market development and encourage consumer take-up.</p> <p>→ <b>Recommendation:</b> BEIS is encouraged to continue work to scale up initiatives, research and projects to mainstream flexible, smart and efficient systems at an individual, local and national level, reflected in policy decisions and funding schemes.</p> <p><b>1.v Establish a Heat Pumps Sector Deal</b></p> <p>→ While the Government has not set up a formal Sector Deal, many of the plans to reduce the costs associated with heat pumps – including setting a <i>“clear ambition for industry to reduce the costs of installing a heat pump by at least 25-50% by 2025 and to ensure heat pumps are no more expensive to buy and run than gas boilers by 2030”</i>– align with our recommendations.</p> <p>→ A target has been set to grow UK manufacture and supply of heat pumps to over 300,000 units per year in existing homes by 2028. £60m has been provided for innovation to support this.</p> <p>→ A market-based mechanism for low carbon heat has been proposed to support these targets. The Government is consulting on an obligation on fossil fuel heating appliance</p>
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 <p><b>Public capital</b></p>	<p><b>2.i Confirm total investment requirement to meet 2030 targets</b> – including for a further £8.2bn of public capital for energy efficiency and £5.5bn for heat pumps to 2025, leveraging additional private finance – and map further investment needed to 2050. This public contribution to investment needs to be confirmed in this year’s Spending Review.</p>	<p><b>2.i Confirm total investment requirement to meet 2030 targets</b> ●</p> <p>→ The Net Zero Strategy sets out the additional investment requirements across a range of sectors, including heat and buildings, adding up to £100bn this decade. However, H&amp;BS only landed with an extra £3.9bn of public funds, leaving questions around how the rest will be mobilised. There is recognition of the important role of private finance, but it is currently assumed to do much of the heavy lifting without consideration of the wider ecosystem of measures needed for green homes finance to thrive (see Section 2ii).</p> <p>→ Analysis against the EEIG’s estimation of the level of public funding needed to get on track for net zero this decade finds that a further £9.75bn is needed this Parliament.<sup>5</sup> The most significant funding gap is for the so called ‘able to pay’ sector, for energy efficiency (£3.6bn) and heat pumps (£4.15bn), including support for fuel poor homes. Please see the table at the end of this document for a full breakdown of the investment gap.</p> <p>→ <b>Recommendations:</b> HM Treasury to close the investment gap, mobilising funds committed through the new £16bn green gilt and UK Infrastructure Bank.</p>				
<p>Table 1: Statistics from the Net Zero Strategy on investment needed for heat and buildings</p>						
<table border="1"> <tr> <td style="background-color: #e91e63; color: white; padding: 5px;"> <b>Carbon Budget 3 (2020-22)</b>                      £2bn per annum                 </td> <td style="background-color: #e91e63; color: white; padding: 5px;"> <b>Carbon Budget 4 (2023-27)</b>                      £12bn per annum                 </td> <td style="background-color: #e91e63; color: white; padding: 5px;"> <b>Carbon Budget 5 (2028-2032)</b>                      £12bn per annum                 </td> <td style="background-color: #e91e63; color: white; padding: 5px;"> <b>Carbon Budget 6 (2033-37)</b>                      £14bn per annum                 </td> </tr> </table>			<b>Carbon Budget 3 (2020-22)</b> £2bn per annum	<b>Carbon Budget 4 (2023-27)</b> £12bn per annum	<b>Carbon Budget 5 (2028-2032)</b> £12bn per annum	<b>Carbon Budget 6 (2033-37)</b> £14bn per annum
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	<p><b>2.ii Confirm full Manifesto pledges to underpin rapid decarbonisation of social housing</b>, scaling supply chains, jobs and skills across the country.</p> <p><b>2.iii Connect with the green finance agenda</b> to accelerate the launch and diffusion of new products and services to leverage private investment.</p>	<p><b>2.ii Confirm full Manifesto pledges to underpin rapid decarbonisation of social housing</b> ●</p> <p>→ H&amp;BS provided a top-up for the Social Housing Decarbonisation Scheme (£800m) and Home Upgrade Grant (£950m). However, after accounting for new funding for the Public Sector Decarbonisation Scheme, public investment still falls short by £2bn of what was included in the 2019 Manifesto.</p> <p>→ <b>Recommendation:</b> The Government must provide the remaining funding committed to in the Conservative Manifesto.</p> <p><b>2.iii Connect with the green finance agenda</b> ●</p> <p>→ There is good high-level recognition of the enabling role of green finance products and services. However, it appears the Government may still be relying too heavily on private finance to underpin action within the wide-ranging category of those classed ‘able to pay’, which ranges from those just above the breadline, through to very wealthy households.</p> <p>→ A new funding programme is set out to stimulate innovation in the green homes finance market. This may include support for UK retail lenders to design, develop and pilot a range of</p>				

<sup>5</sup> Based on analysis contained in EEIG’s Better Buildings Investment Plan: <https://www.theeeig.co.uk/news/2021-budget-and-spending-review-better-buildings-investment-plan/>

		<p>finance propositions that encourage domestic energy efficiency and low carbon heat.</p> <ul style="list-style-type: none"> <li>→ There is no indication of the results of the recent “lenders” consultation, and whether the Government will introduce new EPC targets for mortgage portfolios.</li> <li>→ Examples of future areas the Government is keen to explore include pay-to-save models, wider use of energy service contracts, and offerings such as ‘heat- or comfort-as-a-service’, which provides customers with an agreed heating or comfort plan.</li> <li>→ <b>Recommendations:</b> While still in the early stages, there are some good initiatives outlined that can be built on to support the scaling of green building finance products and services. However, green finance isn’t a silver bullet and cannot thrive in a vacuum. Additional government incentives and subsidies should also be considered for those classed ‘able to pay’ but with little disposal income or means to pay in reality.</li> </ul>
 <p><i>Able to pay incentives</i></p>	<p><b>3.i Establish successor arrangements for the Green Homes Grant voucher scheme.</b> Grants will remain a crucial part of the mix for ‘able to pay’ homes, alongside new <b>fiscal incentives</b> – such as Green Stamp Duty, capital allowances for landlords and zero rate VAT for renovations introduced by Treasury; and financing offers from the new UK Infrastructure Bank, for example 0% interest loans.</p> <p><b>3.ii Establish long-term arrangements through Clean Heat Grant and Green Homes Grant, supporting heat:</b> Ensure continued availability of a grant for heat pumps to meet new Government targets and deliver a mass market by 2030.</p> <p><b>3.iii Use behavioural science approaches to promote action and uptake;</b> ensuring adequate opportunities</p>	<p><b>3.i Establish successor arrangements for the Green Homes Grant voucher scheme</b> ●</p> <ul style="list-style-type: none"> <li>→ The Strategy contains no long-term successor scheme for the Green Homes Grant, marking the largest gap in the overall approach – with nothing in the mix for the vast majority of owner-occupiers to improve the energy efficiency of their homes.</li> <li>→ There is no recognition of the potential role for structural incentives such as Green Stamp Duty or 0% VAT, and only passing consideration of the role the UKIB could play in offering concessional finance.</li> <li>→ <b>Recommendations:</b> HM Treasury should close this gap in terms of subsidies and incentives for so-called ‘able to pay’ owner-occupiers in order to address the most significant shortcoming in the new strategy. Funds can be mobilised through the new £16bn green gilt and UK Infrastructure Bank. New grant funding for energy efficiency could be delivered through existing schemes, for instance by expanding the scope and scale of the Boiler Upgrade Scheme or Home Upgrade Grant.</li> </ul> <p><b>3.ii Establish long-term arrangements through Clean Heat Grant and Green Homes Grant, supporting heat</b> ●</p> <ul style="list-style-type: none"> <li>→ Through establishing the new £450m Boiler Upgrade Scheme, the Government has increased its funding commitments for clean heat. £5,000 will be provided to households for an air-source heat pump, and £6,000 for a ground source heat pump. However, these funding commitments remain significantly below the levels the EEIG considers necessary to get on track for climate goals.</li> <li>→ <b>Recommendations:</b> HM Treasury to close this gap with an additional £4.1bn for heat pumps, mobilising funds committed through the new £16bn green gilt and UK Infrastructure Bank.</li> </ul> <p><b>3.iii Use behavioural science approaches to promote action and uptake</b> ●</p> <ul style="list-style-type: none"> <li>→ There is some welcome recognition of the need to consider ‘trigger points’ and consumer behaviour when introducing new regulations on fossil boilers and energy efficiency, with the</li> </ul>

	<p>and capabilities, with interventions at ‘trigger points’ when property owners may consider retrofits.</p>	<p>Government seeking to “follow natural replacement cycles to work with the grain of consumer behaviour.” It is further noted the “approach to raising minimum standards will work with the grain of the market, using natural trigger points to help minimise disruption to consumers”.</p> <ul style="list-style-type: none"> <li>→ The Government also notes research that it is supporting to better understand these drivers.</li> <li>→ <b>Recommendations:</b> While it is welcome that the Government is considering triggers and drivers, more could be done to embed this through the introduction of new incentives and subsidies. For example, Green Stamp Duty could trigger action at point-of-sale, a popular time for people to consider retrofits.</li> </ul>
 <p>Regulation</p>	<p><b>4.i Minimum Energy Efficiency Standards (MEES): Publish the trajectory for MEES required for the private-rented sector</b> based on the stretch ambition that requires both energy and carbon efficiency ratings to be met. Propose equivalent standards for <b>social housing</b>. Crucially, introduce MEES for the <b>owner-occupied sector</b> – modelled on timelines proposed in Scotland, and introduced as part of a holistic suite of incentives and support to protect against risks of ‘mortgage prisoners’.</p> <p><b>4.ii Set a trajectory for the phase-out of fossil heating system sales,</b> with a backstop ban for fossil gas boilers. Limit the prospect of ‘hydrogen ready’ boilers to industrial clusters where surplus green hydrogen will be available.</p>	<p><b>4.i Minimum Energy Efficiency Standards (MEES)</b></p> <ul style="list-style-type: none"> <li>→ While the Government is yet to publish the response to the Private Rented Sector (PRS) consultation, they signal strong intent for all homes in this tenure to meet an EPC C rating by 2025 for new tenancies and by 2028 for all tenancies. They are aiming to publish a response to this consultation by the end of the year.</li> <li>→ The Government will also consider setting a long-term regulatory standard to improve social housing to EPC band C, consulting with those in the sector. A stronger approach would have been to accelerate progress in this sector.</li> <li>→ Regulation for owner-occupiers is the weakest area in terms of MEES proposals, despite this tenure representing the largest proportion of housing emissions. The H&amp;BS contains only tentative language around plans for such households – including to “consult further, to gather views on a broad range of options to upgrade homes in this sector” and monitor the pace of voluntary action to consider whether minimum energy performance standards in the 2030s and 2040s can support the decarbonisation of housing stock for this tenure.</li> <li>→ It will also consider “whether, when and how to introduce an ultimate backstop date to ensure that all homes meet a Net Zero minimum energy performance standard before 2050”. The Government will also consult on minimum standards for commercial and industrial buildings.</li> <li>→ <b>Recommendations:</b> An accelerated approach to regulating the carbon performance of all tenures should be considered, emulating the ambition shown in Scotland’s recent Heat in Buildings Strategy. The Government should set an ambition for owner-occupier homes in England to hit EPC band C by 2030. Such regulation should be introduced as part of a holistic suite of incentives and support to mitigate risks of unintended social consequences.</li> </ul> <p><b>4.ii Set a trajectory for the phase-out of fossil heating system sales</b></p> <ul style="list-style-type: none"> <li>→ H&amp;BS sets out an ambition to “phase out the installation of new natural gas boilers by 2035”. While this is a significant stride forward in a country where over 85% of homes are connected to the gas grid, it is not legally binding.</li> <li>→ For off-grid buildings, the Government proposes phasing out the installation of new fossil fuel heating systems and switching to low-carbon alternatives from 2026 (2024 for non-domestic properties).</li> <li>→ <b>Recommendations:</b> These signals are welcome, and provide a pathway ahead for households and industry, and can significantly</li> </ul>

	<p><b>4.iii Set a roadmap for a phased introduction of the Future Homes Standard from 2023</b></p>	<p>help scale the market for heat pumps. The Government must ensure a careful approach to the deployment of hydrogen-ready boilers to ensure these are not being encouraged in areas unlikely to be connected to a secure green hydrogen supply.</p> <p><b>4.iii Set a roadmap for a phased introduction of the Future Homes Standard from 2023</b></p> <ul style="list-style-type: none"> <li>→ The Future Homes Standard will implement a 75-80% reduction in carbon emissions from new homes compared to current standards, from 2025, with <i>“low-carbon heating and very high fabric standards”</i>.</li> <li>→ The timeline and roadmap for the introduction of the Future Homes Standard appear unchanged.</li> <li>→ BEIS are planning to consult on whether it is appropriate to prevent new-build homes from connecting to the gas grid in England from 2025.</li> <li>→ <b>Recommendations:</b> Phase in the Future Homes Standard ahead of 2025 with a full technical consultation taking place in 2021/22 and an official preparatory period for the supply chain. Support the proposal to prevent new homes from being connected to the gas grid by 2025, or sooner.</li> </ul>
<p>Local and fair delivery</p>	<p><b>5.i Set out long-term successors to the Local Authority Delivery (LAD) scheme and planned support for Local Energy Hubs-led delivery.</b> Clarity is required on how the LAD scheme will evolve into a Local Authority-led delivery programme, with a role for SMEs and large companies. We welcome that BEIS seeks to consult on <b>‘zoning’</b> as an approach to inform heat decarbonisation, and hope to see this reflected in the Heat and Buildings Strategy, setting out a systematic approach to equip all Local Authorities with the <b>funding, obligations and coordination capacity</b> required.</p> <p><b>5.ii Build investable local propositions:</b> Through the <b>UK Infrastructure</b></p>	<p><b>5.i Set out long-term successors to the Local Authority Delivery (LAD) scheme and planned support for Local Energy Hubs-led delivery.</b></p> <ul style="list-style-type: none"> <li>→ The Home Upgrade Grant will act as the long-term successor to the LAD scheme, although we note as present this remains underfunded by £1.4bn against the Conservative Manifesto commitment.</li> <li>→ Government support has been targeted to run five Local Net Zero Hubs (previously referred to as Local Energy Hubs) across England – which provide access to expertise to help develop and secure investment in low-carbon projects. The Net Zero Strategy announced the continuation the Local Net Zero Programme to support local areas with their capability and capacity to meet Net Zero.</li> <li>→ Zoning is recognised as a key means to support development of heat networks. The Government is proposing the introduction of heat network zones in England by 2025, providing local authorities with the powers to identify and designate areas best suited for heat networks as the lowest cost, low-carbon solution. This is welcome, and we encourage the Government to consider how the principle can be applied more widely – for example to accelerate a ‘whole street’ approach to deep retrofits, in order drive economies of scale.</li> <li>→ <b>Recommendations:</b> Despite recognition of the central role local actors can play in spurring and delivering the transition, more detail is needed on the funding, obligations and coordination capacity needed to ensure this succeeds in practice. Government can flesh out plans and look to ramp up existing schemes and programmes, including delivering fully on funding pledged for the Home Upgrade Grant and Social Housing Decarbonisation Fund, rolling out best practice throughout the country.</li> </ul> <p><b>5.ii Build investable local propositions</b></p> <ul style="list-style-type: none"> <li>→ There is good recognition of the role that zoning could play in supporting local authorities to develop investable local</li> </ul>



	<p><b>Bank</b> and working alongside <b>Local Energy Hubs</b>, support Local Authorities and other local actors to prepare investable local heat and energy efficiency plans.</p> <p><b>5.iii Coordinate local delivery approach in close alignment with the new Fuel Poverty Strategy</b> by requiring local plans to prioritise low income and vulnerable households living in inefficient homes.</p> <p><b>5. iv Put forward an update of consumer protections</b> to ensure that the rights of consumers are protected through the transition.</p>	<p>propositions for heat networks. However, this needs to be rolled out more widely across other areas of home decarbonisation, including through ‘whole street retrofit’.</p> <ul style="list-style-type: none"> <li>→ There is limited consideration of the role UKIB could play in helping draw up local investment plans.</li> <li>→ <b>Recommendations:</b> Further consideration is required regarding how local authorities can access the finance needed to spur action and leadership in decarbonising the built environment, with more support to help local actors access public, private and blended finance.</li> </ul> <p><b>5.iii Coordinate local delivery approach in close alignment with the new Fuel Poverty Strategy</b></p> <ul style="list-style-type: none"> <li>→ It is recognised that local authorities are already playing a central role in supporting the delivery of fuel poverty schemes and noted that the Government seeks to ensure effective use of funds to “<i>deliver targeted action to tackle the worst performing buildings and address fuel poverty</i>”.</li> <li>→ Additionally, it is noted that local authorities can play an important role to support the levelling up agenda: “<i>targeting support where it is most needed, and where the opportunities are greatest, to ensure a green economic recovery from the impacts of COVID-19</i>”. More details are set out in the Net Zero Strategy and the forthcoming Levelling Up White Paper.</li> <li>→ <b>Recommendations:</b> There is much positive recognition of the role of local authorities play in supporting fuel poverty and levelling up. This must be matched with nationwide capacity-building and resources for local authorities to ensure locally led action on fuel poverty is not defined by a postcode lottery, ensuring a consistent level of high quality delivery across the country.</li> </ul> <p><b>5.iv Put forward an update of consumer protections</b></p> <ul style="list-style-type: none"> <li>→ It is recognised that consumer protection is a key part of enabling the transition to net zero. The Government will continue to ensure “<i>rigorous technical standards regime to provide households and businesses with assurance of high-quality decarbonisation measures</i>” – including the continued roll-out of AS 20235 and 2038, and MCS standards, as well as other Consumer Codes and protections. For more details, see section 6.ii.</li> <li>→ <b>Recommendation:</b> Government to continue to work with industry to ensure that the PAS 2035 and PAS 2038 are practical and implementable, with a sufficient number of installers and Retrofit Coordinators certified against them. This may require more resources to support training, upskilling and accreditation.</li> </ul>
 <p><i>Advice and standards</i></p>	<p><b>6.i Ensure EPCs are fit for purpose through the EPC Action Plan</b>, including real fabric performance measurements of new and existing homes. A roadmap for moving to <b>measured energy and carbon performance</b> should be set out.</p>	<p><b>6.i Ensure EPCs are fit for purpose through the EPC Action Plan</b></p> <ul style="list-style-type: none"> <li>→ H&amp;BS notes that work continues through the EPC Action Plan, published earlier in 2020, which set out 35 actions to improve EPCs. Methodologies such as the Standard Assessment Procedure (SAP) will continue to be refined to ensure they appropriately assess whole-building energy performance and environmental impact.</li> <li>→ There is a welcome commitment to “<i>move to a performance-based approach for some buildings</i>” in the commercial sector. However, there are no references to substantial plans to transition to an energy performance framework based on real, measured</li> </ul>

	<p>performance.</p> <p>→ <b>Recommendations:</b> The Government should accelerate progress on implementing the EPC Action Plan, and gradually introduce policies to ensure verification of energy and carbon performance standards.</p>	
	<p><b>6.ii Roll out the remainder of the Each Home Counts and Hackitt reviews’ recommendations</b> as the supply chain and infrastructure scales up.</p>	<p><b>6.ii Roll out the remainder of the Each Home Counts and Hackitt reviews’ recommendations</b></p> <p>→ The Each Home Counts Review considered what is needed to encourage and enable consumers to decarbonise their buildings safely and confidently. The Government has implemented recommendations made in the review, including the TrustMark government-endorsed quality scheme, supported by a Code of Practice and Consumer Charter, and the Simple Energy Advice online platform.</p> <p>→ PAS 2035 covers how to assess dwellings for retrofit, identify improvement options, design and specify energy efficiency measures, and monitor retrofit projects.</p> <p>→ <b>Recommendation:</b> Continue to prioritise high standards to ensure robust, high quality installations, working with supply chains to boost capacity in terms of skills and certification, working with industry to ensure that the PAS 2035 and PAS 2038 are practical and implementable – with a sufficient number of installers and Retrofit Coordinators certified against them.</p>
	<p><b>6.iii Boost innovation, supply chains and skills</b> – focused on scaling up capacity for <b>PAS 2035</b> and other relevant standards, <b>TrustMark accreditation</b>, and end-to-end quality assurance processes – tapping into the Lifetime Skills Guarantee and the Green Homes Grant Skills Training Competition.</p>	<p><b>6.iii Boost innovation, supply chains and skills</b></p> <p>→ There is welcome recognition on the need to boost skills, jobs and supply chains to deliver green buildings. A significant skills gap across both fabric and energy efficiency measures, and heat pumps is identified.</p> <p>→ H&amp;BS notes that the Government is working to ensure installers “have up-to-date, high-quality training and that they are not undercut by installers who offer cheaper, low-quality installations”. This involves developing new core competencies and agreed training criteria for installing low carbon heating systems and ensuring energy efficiency improvements are delivered to high standards. Pots of funding are available to support this, including the Lifetime Skills Guarantee.</p> <p>→ Focus is put on skills and training, for example the nationally accredited Retrofit Co-ordinator course by the Retrofit Academy. New support is also offered for innovation, mainly for low carbon heating. Money from the £1bn Net Zero Innovation Portfolio will support this.</p> <p>→ <b>Recommendation:</b> There is plenty of welcome activity and investment on jobs and skills, but given the scale of the challenge to upskill the workforce, sustained action and Government support will be needed. It is important the Government listens to the voices of workers to ensure that green jobs are fair, secure and attractive, as part of a just transition.</p>
	<p><b>6.iv Drive digitalisation forwards</b> – leveraging Trustmark’s data warehouse and establishing official protocols for <b>metered</b></p>	<p><b>6.iv Drive digitalisation forwards</b></p> <p>→ It is noted that “<i>data constitutes a key element of our strategy</i>”. The Government will build an evidence base and collect and use new data to inform and refine its approach. It will work with stakeholders to improve access to transparent, accessible, interoperable and accurate data.</p>

	<p><b>energy savings, energy performance verification and building renovation passports.</b></p> <p><b>6.v Connect the adaptation, resilience and circular economy agendas</b> by setting standards for sustainable construction materials and techniques to manage climate impacts in buildings and heating systems across their lifecycle. This could include a review of embodied carbon; circular design and construction; a review of potential toxic or harmful chemical and substances; and accelerated phase-out of F-gases in heat pumps.</p> <p><b>6.vi Make public engagement a vital part of the Heat and Buildings Strategy.</b> This should include the launch of a public engagement campaign, informing consumers about the UK's long-term vision and consumers' role in the transition. Consumers should be provided with impartial, localised and accessible advice on green home retrofit options and access to finance.</p>	<p>→ <b>Recommendations:</b> While light on details, it is welcome that the Government supports the important enabling role that data can play. More solid announcements and plans are needed on the different elements of establishing a comprehensive data infrastructure – including on the roll-out of Building Renovation Plans and other tools.</p> <p><b>6.v Connect the adaptation, resilience and circular economy agendas</b> ●</p> <p>→ At a high level, there is recognition that cooling, resilience and wider sustainability issues need to be built into future delivery of 'net zero ready' homes. For example, it is noted <i>"When developing policies to future-proof buildings, we will consider our current and possible future scenarios, including overheating risk, indoor air quality risk, flood risk and water scarcity"</i>. It will be important to fully implement these goals through the planning system and buildings regulations.</p> <p>→ There are no references to tackling embodied carbon in buildings.</p> <p>→ The Government is taking action to ensure products are more energy efficient, sustainable and resource efficient through its commitment to new product standards and better consumer information, and will publish a policy framework in due course.</p> <p>→ The H&amp;BS encourages industry to explore how to address barriers to the deployment of heat pumps that use alternative refrigerants to HFCs. However, it sets out no Government actions to accelerate the phase-out of refrigerants with a high global warming potential.</p> <p>→ <b>Recommendations:</b> A more comprehensive review and action plan is needed to make the connections between adaptation, resilience, and broader safety and sustainability issues, making sure they are better mainstreamed into Government plans and regulation for heat and buildings.</p> <p><b>6.vi Make public engagement a vital part of the Heat and Buildings Strategy</b> ●</p> <p>→ The Strategy makes the welcome statement that <i>"public engagement is a vital element of successful decarbonisation, since the public will need to take action to change the way they heat their homes and workplaces. We will ensure that all consumers are made aware of the actions they should be taking, the specific changes that will affect them, and the support available."</i> There is recognition of the role local authorities can play in achieving this.</p> <p>→ Some existing initiatives are in place, including support through Citizens Advice, and the new Simple Energy Advice online platform.</p> <p>→ The Government will continue to research how to best engage with consumers and tackle barriers to low uptake. However, commitments contained in the Strategy fall short of kickstarting a nationwide awareness raising campaign.</p> <p>→ <b>Recommendation:</b> Significantly scale-up existing engagement programmes, launching a new nationwide awareness raising campaign rooted in local and trusted communication channels.</p>
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HEAT AND BUILDINGS STRATEGY	GOVERNMENT PLEDGES / TARGETS	GAP TO GOVERNMENT PLEDGES / TARGETS	NEEDED FOR NET ZERO
Home Upgrade Grant: £950m committed to 2024/25	<b>£2.5bn</b> 2020 to 2025	£150m committed previously, so £1.1bn total committed to 2025 (with H&BS) <b>Gap: £1.4bn</b>	Gap is the same: £1.4bn
Social Housing Decarbonisation Fund: £800m committed to 2024/25	£3.8bn 2020 to 2030  Of which <b>£1.2bn would be a proportionate amount to commit in the first 5 years</b> while ramping up	Just over £200m committed previously, so £1bn total committed to 2025 (with H&BS) <b>Gap: £0.2bn</b>  <i>[Only around a quarter of the funding will have been brought forward by 2025.]</i>	Gap is the same: £0.2bn
Public Sector Decarbonisation Scheme: £1.425bn committed to 2024/25	<b>£2.9bn</b> 2020 to 2025	£1.075bn committed previously, so £2.5bn total committed to 2025 (with HABS) <b>Gap: £0.4bn</b>	Gap is the same: £0.4bn

HEAT AND BUILDINGS STRATEGY	GOVERNMENT PLEDGES / TARGETS	GAP TO GOVERNMENT PLEDGES / TARGETS	NEEDED FOR NET ZERO
Heat pumps	<p>600,000 installed per year by 2028</p> <p><b>At least 300,000 of these installed in existing homes per year by 2028</b> [the remainder of the heat pumps target is due to come from the new build housing]...</p> <p>...for which £450m is committed to 2024/25 – estimated to deliver 90,000 heat pumps over 3 years to 2025, which is similar to the existing installation rate</p>	<p>To get on track for 300,000 installed in existing homes per year by 2028, we need:</p> <p>A £1.3bn scheme over 3 years with a £5,000 starting grant: nearly 3 times bigger, delivering 277,000 heat pumps to 2025, not 90,000</p> <p><b>Gap for Boiler Upgrade Scheme is £850m</b></p> <p>For low-income households, an additional £1.5bn scheme over 3 years is needed with a £10,000 starting grant, delivering 163,000 heat pumps to 2025</p> <p><b>Gap for low-income household heat pumps is £1.5bn</b></p> <p>TOTAL: This would deliver 440,000 heat pumps by 2025, or 146,000 per year – half-way to the 2028 target</p> <p><b>Total gap is £2.35bn</b></p>	<p>For net zero we actually need 500,000 heat pumps installed in existing homes per year by 2028. This means:</p> <p>A £2.1bn scheme over 3 years to 2025 with a £5,000 starting grant: nearly 5 times bigger, delivering 462,000 heat pumps over this time</p> <p><b>Gap for Boiler Upgrade Scheme is £1.65bn</b></p> <p>For low-income households, an additional £2.5bn scheme to 2025 is needed with a £10,000 starting grant, delivering 277,000 heat pumps</p> <p><b>Gap for low-income household heat pumps is £2.5bn</b></p> <p>TOTAL: This would deliver 739,000 heat pumps by 2025, or 246,000 per year – half-way to the net zero requirement</p> <p><b>Total gap is £4.15bn</b></p>
Energy efficiency: successor to Green Homes Grant scheme available to all	n/a	Nothing	Gap of £3.6bn to 2024/25 [EEIG estimate]

For more information, please contact Juliet@theeig.co.uk or sarah@theeig.co.uk