



BRIEFING PAPER

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Housing and Net Zero

By Ed Potton

Contents:

1. Government Policy on New Homes
2. Retrofitting and the wider Housing Stock
3. Assessments of Government Progress



Contents

Summary	3
1. Government Policy on New Homes	4
1.1 Zero Carbon Homes	4
1.2 The Clean Growth Strategy	4
1.3 Spring Statement 2019 commitments	5
1.4 Future Homes Standard	6
2. Retrofitting and the Wider Housing Stock	11
Energy efficiency	11
Heating	12
2.1 Budget 2020	13
3. Assessments of Government Progress	13
3.1 Committee on Climate Change Annual Report	13
3.2 BEIS Committee Energy Efficiency Inquiry	15

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Summary

The Government sets legally binding carbon budgets under the *Climate Change Act 2008*. Information on the Government's targets, the Government's Clean Growth Strategy and the progress that has been made against carbon budgets overall is set out in the [Library Briefing paper on UK Carbon Budgets](#). In 2019 the UK Government amended its targets and aims to achieve 'net zero' carbon emissions by 2050. Further detail is given in the Library Briefing: [Legislating for net zero](#).

The [Clean Growth Strategy](#) was published in October 2017 and sets out the last Government's decarbonisation policies. The Strategy includes several targets to improve energy efficiency; to upgrade all fuel poor homes to Energy Performance Certificate (EPC) band C by 2030; to upgrade as many homes as possible to be EPC band C by 2035 (where practical, cost effective, and affordable) and to improve business energy efficiency by 20% by 2030.

There are several policies to help meet these targets. The Energy Company Obligation is a requirement for energy suppliers to install insulation and other efficiency technologies in the homes of eligible vulnerable, low income, or fuel poor customers. More information is available in the Library briefing paper on [Help with Energy Bills](#), and from [Ofgem](#) (the energy regulator).

[The Green Deal](#) was an energy saving scheme launched by the coalition Government to incentivise and help fund energy efficiency and renewable energy technologies for homes. The Government [stopped funding](#) the Green Deal in 2015 citing low uptake, but it was relaunched through [private providers](#). The Government have introduced minimum energy efficiency standards for private rented homes, with some exemptions, such as if the necessary improvement measures cost the landlord more than £3,500. The Government have also consulted on '[Building a market for energy efficiency](#)' which looks at how to incentivise homeowners who are able to pay to invest in energy efficiency.

The major Government policy in this area is currently the development of the Future Homes Standard. The energy efficiency of new homes is controlled through building regulations, and a consultation on this part (part L) of the building regulations closed on 7 February 2020. It proposes a two-stage approach, with measures to achieve either a 20% or 31% reduction in carbon dioxide emissions in 2020 regulations and a 75-80% reduction in 2025. An outcome from the consultation has not yet been published.

However, past Government action has been criticised, most recently by the Business, Energy and Industrial Strategy (BEIS) Committee in their report on Energy Efficiency, and by the Committee on Climate Change in their 2019 report to Parliament, who amongst other things highlight the role housing will have to play in reducing emissions and noted that (in July 2019):¹

Policies are not in place to deliver the Government's ambitions on energy efficiency (i.e. to improve all homes to at least 'EPC band C'). Building standards are not sufficiently enforced across the building stock and will need to be strengthened to make UK homes fit for the future. Regulations for the private rented sector prioritise costs for landlords over running costs for renters. MHCLG must play its part, including minimum standards for social housing.

Energy efficiency is a devolved matter and this briefing broadly relates to policies in England.

¹ Committee on Climate Change, [2019 Progress Report to Parliament](#), July 2019, p12

1. Government Policy on New Homes

Note 'Government policy' in this section mostly relates to the Conservative Governments of 2015 and 2017. The consultation on the Future Homes Standard continued under the new 2019 Conservative Government and parliamentary questions indicate the same policy direction.

1.1 Zero Carbon Homes

Earlier Government proposals for 'zero carbon homes' were cancelled in 2016. The Labour Government set out the original plans for zero carbon homes in their consultation document 'Building a Greener Future' in 2006. The coalition Government amended the proposals with the aim of striking a balance between zero carbon goals and the stimulation of growth in the house building industry.

The Government's intention to cancel implementation of the plans was announced in 2015 and implemented in 2016. Further information is given in the Library briefing: [Zero Carbon Homes](#), last updated May 2016.

1.2 The Clean Growth Strategy

The Government's [Clean Growth Strategy](#) (October 2017) sets out the Government's main policies for reducing emissions and meeting the fourth and fifth carbon budgets. As set out in the Strategy, housing is responsible for 13% of UK emissions (up to 22% if emissions from consumed electricity are included).

The Strategy includes key policies and proposals for housing in the section on *Improving our Homes*, largely in relation to improving energy efficiency and rolling out low carbon heating, as follows:

Improving the energy efficiency of our homes

11. Support around £3.6 billion of investment to upgrade around a million homes through the Energy Company Obligation (ECO), and extend support for home energy efficiency improvements until 2028 at the current level of ECO funding

12. We want all fuel poor homes to be upgraded to Energy Performance Certificate (EPC) Band C by 2030 and our aspiration is for as many homes as possible to be EPC Band C by 2035 where practical, cost-effective and affordable

13. Develop a long term trajectory to improve the energy performance standards of privately rented homes, with the aim of upgrading as many as possible to EPC Band C by 2030 where practical, cost-effective and affordable

14. Consult on how social housing can meet similar standards over this period

15. Following the outcome of the independent review of Building Regulations and fire safety, and subject to its conclusions, we intend to consult on strengthening energy performance standards

for new and existing homes under Building Regulations, including futureproofing new homes for low carbon heating systems

16. Offer all households the opportunity to have a smart meter to help them save energy by the end of 2020

Rolling out low carbon heating

17. Build and extend heat networks across the country, underpinned with public funding (allocated in the Spending Review 2015) out to 2021

18. Phase out the installation of high carbon fossil fuel heating in new and existing homes currently off the gas grid during the 2020s, starting with new homes

19. Improve standards on the 1.2 million new boilers installed every year in England and require installations of control devices to help people save energy

20. Invest in low carbon heating by reforming the Renewable Heat Incentive, spending £4.5 billion to support innovative low carbon heat technologies in homes and businesses between 2016 and 2021

21. Innovation: Invest around £184 million of public funds, including two new £10 million innovation programmes to develop new energy efficiency and heating technologies to enable lower cost low carbon homes

Page 77 of the report provides more detailed information on each of the policies and proposals.

1.3 Spring Statement 2019 commitments

In the then Chancellor's 2019 Spring Statement, the Government proposed to consult in 2019 on greening the gas grid and on the introduction of a Future Home Standard. The Written Statement stated:²

Greening the Gas Grid – Accelerating the decarbonisation of our gas supplies by increasing the proportion of green gas in the grid. To meet our climate targets, we need to reduce our dependence on burning natural gas to heat our homes. The government will consult on the appropriate mechanism to deliver this commitment later this year.

A press release from the Ministry of Housing, Communities and Local Government set out the following on [low carbon homes](#), including the announcement of a Future Homes Standard:

Emissions from heating existing homes is the single largest contributing factor to the UK's carbon footprint.

We recognise that combating climate change requires the construction of new build homes to feature more sustainable and efficient ways of heating, alongside other energy saving measures.

In the Spring Statement 2019, we have committed to adopting the Future Homes Standard by 2025 so new homes built are built with the latest green technology - driving down energy bills and reduce the impact on our precious environment.

² [HCWS1407 13 March 2019](#)

The Future Homes Standard will build on the Prime Minister's Clean Growth Grand Challenge mission to at least halve the energy use of new build property by 2030, and halve the cost of renovating existing buildings to a similar standard as new buildings, while increasing quality and safety.

Details of the new standard will be consulted on during 2019.

A parliamentary question from April 2019 provided further detail on the impact of the proposed Future Homes Standard and a proposed review of Building Regulations part L, which cover energy efficiency:

The Future Homes Standard will require all new build homes to have low carbon heating. Cooking appliances are not controlled under the Building Regulations, however, we expect that many developers will choose not to install new gas connections in developments adopting the Future Homes Standard. There are a range of alternatives, including modern electric and induction hobs, which are cleaner and safer to use than gas, cheaper to install and maintain, and better for the environment.

The Future Homes Standard is about building homes that are affordable to buy, affordable to run, and help to meet our climate change commitments. We will set out further details as part of our 2019 consultation on the energy efficiency requirements of the Building Regulations.³

1.4 Future Homes Standard

Building regulations

The specific energy efficiency of new homes is controlled through building regulations, and changes to these would be used to implement the Government's current policy of the 'Future Homes Standard'. At the current time building regulations would not require a new development to have 'net zero' emissions.

A short overview of the policy and expected changes is given in the article on the Library's website: [Building better in the next Parliament](#) (December 2019).

Building Regulations

Building work in England and Wales is governed by Building Regulations, under the [Building Act 1984](#) and the [Building Regulations 2010](#). The regulations are aimed at securing the health, safety, welfare and convenience of people using or affected by a building, and of conserving water and energy and reducing waste. The Building Regulations represent minimum standards.

The regulations are supported by [Approved Documents](#) which set out detailed practical guidance on compliance. Building regulations only apply to new construction (whether completely new or an alteration subject to building control), and not existing unaltered buildings.

Work is 'approved' through a monitoring and inspection process. Approval can come directly from local authority run building control services, or through private approved inspectors (PAIs). The role of

³ [HL 15084 4 April 2019](#)

building control inspectors is to ensure that the technical standards are met - i.e. they perform a compliance role. The inspectors are not responsible for monitoring build quality. A local authority has a duty to ensure that [building regulations](#) are being complied with in its area.

Future standards for housing

A parliamentary question in May 2019 set out the last Government's policies on energy efficiency in homes (in response to a question about meeting net zero):⁴

Homes in the UK represent 15% of carbon emissions and meeting the previous 2050 target would require largely eliminating emissions from our housing stock. With the Government's new legally binding target to achieve net zero greenhouse gas emissions across the UK economy by 2050, our current and future actions to encourage home energy efficiency have become all the more crucial.

Through the Energy Company Obligation, we have supported energy efficiency improvements to over 2 million homes since 2013, and in April 2018 introduced regulations setting minimum energy efficiency standards for privately rented homes. We have committed to extend support for energy efficiency out to 2028, driving more than £6 billion of investment in domestic energy efficiency over the next ten years.

In the Clean Growth Strategy we set out our aspiration for as many homes as possible to achieve EPC Band C where cost effective, affordable and practical by 2035. This provides a good basis for net zero, providing a cost-effective level of energy efficiency to provide the basis for decarbonisation of heating systems.

In order to meet this aspiration, we are working to build a vibrant and sustainable market for energy efficiency through introducing a suite of mutually supporting policies and measures that will drive uptake of energy efficiency amongst homeowners. These policies have been informed in part to responses we received to the 2017 Building a Market for Energy Efficiency Call for Evidence and the recently published Green Finance strategy sets out some of our current and future actions in this area.

By 2025 the Government will also introduce a Future Homes Standard for new build homes to be future-proofed with low carbon heating and world leading levels of energy efficiency, to create healthy homes that are fit for the future, have low energy bills, and are better for the environment. We will provide additional details of the planned introduction of the Future Homes Standard within the 2019 consultation on the energy efficiency standards of the Building Regulations.

The consultation on the new [Future Homes Standard](#) closed on 7 February 2020. It relates to changing building regulations on energy efficiency in the future, coming into force in two stages in 2020 and 2025. The consultation suggests a two-stage approach: measures to achieve either a 20% or 31% reduction in carbon dioxide emissions in the 2020 regulations compared to the 2013 rules; and a 75-80% reduction is the aim for 2025. The document promises further consultations on non-domestic buildings and for when work is

⁴ [PQ 270246 27 June 2019](#)

undertaken on existing housing. The consultation started under the last Government on 1 October 2019, and the closing date was extended to 7 February 2020 under the current Government.

The consultation also comments on how the proposals compare to the on-site requirements in the previously proposed zero carbon homes standard:⁵

Both options [for 2020] outlined deliver a greater improvement in carbon dioxide emissions than the 19% improvement on the 2013 Part L requirements which was proposed as the minimum on-site energy efficiency requirement of the former Zero Carbon Homes policy. We would expect both the proposed 2020 uplift options to lead to fabric standards that are better than the Fabric Energy Efficiency Standard (FEES) recommended by the Zero Carbon Hub.

A parliamentary question (on 21 January 2020) outlined the expected outcomes from the Future Homes Standard ([PQ2615](#)):

To ask the Secretary of State for Housing, Communities and Local Government, whether he has made an assessment of the potential effect of the Future Homes Standard on the UK's commitment to achieve net zero carbon emissions by 2050.

Answered by: Esther McVey

The Government has committed to introduce a Future Homes Standard by 2025. This means new homes will be future proofed, with low carbon heating and lower energy use through high levels of energy efficiency. We propose that new homes built to the Future Homes Standard from 2025 should have carbon dioxide emissions up to 80 per cent lower than those built to current building regulations standards.

We are currently consulting on a meaningful and achievable increase to the energy efficiency standards for new homes to be introduced through the Building Regulations in 2020, as a stepping stone to this commitment. The preferred option is to set a standard that should result in a 31 per cent reduction in CO₂ emissions. The consultation is open until 7 February and we welcome further evidence.

1. Our consultation includes estimates as described above, and also includes a 'roadmap' that provides an indicative vision of how the 2025 standards will be achieved. We will undertake further modelling and analysis as we prepare the detail of the changes that will be needed in 2025.
2. We are consulting on proposed minimum standards for carbon dioxide emissions, primary energy use, and building fabric. We will issue a response to the consultation later this year after analysing responses received.
3. Requiring householders to disclose the energy use of their homes once occupied sits outside the scope of the Building Regulations and its enforcement regime. We have not proposed a post-occupancy monitoring system as part of the Future Homes Standard consultation.

⁵ MHCLG, [The Future Homes Standard 2019 Consultation on changes to Part L \(conservation of fuel and power\) and Part F \(ventilation\) of the Building Regulations for new dwellings](#), October 2019, para 2.5

4. To consider embodied carbon at a building-level would require a standardised method of calculation supported by a robust evidence base and underpinned by widely adopted product standards. There is currently no widely agreed standardised method for certifying the embodied carbon of building products, so it was not included the Future Homes Standard consultation.
5. The Future Homes Standard consultation is considering local planning authority powers in respect of energy efficiency. We will issue a response to the consultation later this year after analysing responses received.

A recent article in *The Guardian* noted criticism of the proposed changes by a group of engineers and architects ("[Proposed changes to regulations 'will make buildings less energy efficient'](#) ", 24 January 2020). This criticism is broadly based around concerns raised by the [London Energy Transformation Initiative \(LETI\)](#), a "network of over 1000 built environment professionals that are working together to put the UK on the path to a zero carbon future" and others. Responses to the consultation have also been published by groups such as [RIBA](#).

Some of the concerns raised with the consultation include:

- Plans to remove the 'Fabric Efficiency Standard' from regulations means that the targets for 2020 could be met through more energy efficient heating and water systems, and some indicate this may even see a reduction in reduction in the energy efficiency measures used in the building fabric compared to previous measures;
- That proposals around energy efficiency should include the measure of operational energy (kWh/m²/yr) as a way of demonstrating energy use intensity (EUI), and that this should be measured after occupation;
- The proposed restriction (para 2.23 onwards) on local authorities from setting higher energy efficiency requirements. This is currently allowed, although a 2015 Written Statement set an expectation that a defined limit would be used. The ability to restrict higher rates is in an uncommenced part of the Deregulation Act 2015.
- That the time taken to move to higher standards is too long.

The Committee on Climate Change wrote to the Secretary of State on 18 February 2020, welcoming the Future Homes Standard but noting that the proposals "...do not go far enough to reduce carbon emissions, or address the growing risks of overheating, flooding and water stress – key climate risks facing the UK. Stronger standards will serve future occupants better." They raise a number of specific points, including:

- Setting the requirements now and legislating ahead of 2024, and encouraging the date of implementation to be brought forward;
- Concern that without a replacement for the fabric energy efficiency standard, energy bills could rise;

10 Housing and Net Zero

- Noting that onsite renewables like solar PV could act as an 'offset' to continued fossil fuel use;
- That local authorities should be able to set higher targets;
- That the Standard should include a framework for assessing the significant emissions in buildings materials;
- That unless fabric efficiency, overheating and ventilation are considered jointly when retrofitting or building new homes, there is a high risk that poor ventilation and air-tightness will lead to overheating and poor indoor air quality.

It also raises broader concerns around compliance and measuring performance, as summarised on their website:⁶

Fundamental issues around compliance and performance need tackling. This means first driving a shift towards monitoring actual energy consumption and second, broadening the current buildings safety work programme beyond its current focus on fire safety. This must also build on proposals for tightening planning loopholes – making sure that homes must comply with the latest standards unless they are substantially completed – along with further documentation and widespread testing and adequate funding for Building Control Bodies.

More generally, the Library paper [Building Regulations and Safety: Review and Reforms](#) sets out Government plans for building regulations and recent consultations.

⁶ Committee on Climate Change, [Letter: Future Homes Standard and proposals for tightening Part L in 2020](#), 18 February 2020

2. Retrofitting and the Wider Housing Stock

Energy efficiency

Successive Governments have supported schemes to upgrade the energy efficiency of existing homes by retrofitting them with new insulation or heating systems:

- **ECO:** The focus of the current main scheme, known as the Energy Company Obligation (ECO), is on supporting low income, vulnerable, and fuel poor homes, rather than on decarbonisation. Further information on the Government's support for fuel poor homes is available in the Library briefing paper on [Fuel Poverty](#). The ECO scheme, like most other energy schemes, is paid for through a levy on consumer electricity bills.
- **Green Deal:** The coalition Government also launched a Green Deal scheme to incentivise and help fund energy efficiency and renewable energy technologies for homes. While the Government [stopped funding](#) the Green Deal in 2015 citing low uptake, loans may still be available under the Green Deal framework through [private providers](#).
- **Rented sector regulations:** The Government have also introduced minimum energy efficiency standards for private rented homes. The [Energy Efficiency \(Private Rented Property\) \(England and Wales\) Regulations 2015](#) require rented properties to be a minimum of EPC Band E. There are some exemptions to the regulations, such as if the necessary improvement measures cost the landlord more than £3,500.

None of these schemes have mandatory targets for energy efficiency of a non-rented property, or for mandatory changes to heating systems.

A parliamentary question in April 2019 asked about retrofitting existing homes with energy efficiency measures. The Government provided an overview of their approach:⁷

The Clean Growth Strategy set out our aspiration that as many homes as possible will be upgraded to an Energy Performance Certificate (EPC) Band C by 2035, where practical, cost-effective and affordable. BEIS estimate that the total investment cost of meeting this aspiration is in the order of £35-65 billion (undiscounted), with the actual cost dependent on a range of factors including the technology mix used in particular properties.

Further innovation in home energy efficiency measures could lead to cost reductions which reduce these estimates significantly. A key component of the Buildings Mission announced last year, is to halve the cost of retrofitting existing homes to a similar standard of new homes. We recently approved a £10 million innovation project for whole house retrofit, to demonstrate a cost reduction trajectory through retrofitting similar properties at scale.

Improving the energy efficiency of our homes reduces the overall energy system costs of heat decarbonisation. The level of

⁷ [PQ 245876 18 April 2019](#)

additional energy efficiency required is dependent on the heat decarbonisation scenario.

Given the scale of investment required, financing these improvements will require funding from both public and private sources. In the Clean Growth Strategy, we committed to extend support for home energy efficiency improvements to 2028 at least at current levels of support through the Energy Company Obligation. This is equivalent to around £6 billion of investment. Additional investment in cost-effective energy efficiency measures will be needed from private sources, including owner occupiers, social landlords and private landlords. For example, landlords of the worst performing properties are already required to invest up to £3500 in improving their homes to a minimum EPC Band E before they let their property, where no third party funding is available.

Different parts of the UK have taken different approaches, reflecting the devolved nature of energy efficiency policy. In Scotland, for instance, zero interest loans are available to homeowners for energy efficiency improvements as well as equity loans where interest is repaid on sale of the property.

In other EU countries a range of approaches have been taken to support home energy efficiency improvements. These include low and zero interest loans, mortgage incentives, capital subsidies, tax credits and reduced VAT on the installation of energy efficiency measures. We are always looking to learn from international experience in developing policies which are right for the UK.

Given the importance of low cost financing, our Call for Evidence on Building a Market for Energy Efficiency sought evidence on different ways of financing energy efficiency, and other fiscal incentives. Different approaches will be appropriate for different consumer groups and tenure types and there is no one size fits all approach. We are currently analysing responses to this.

Financing these improvements presents real opportunities for green finance innovation, for example around green mortgage products or green bonds. The UK's first ever Green Finance Strategy will also be published in the summer. This strategy will build on the recommendations of the Green Finance Taskforce report: Accelerating Green Finance and will set out the steps required to attract the investment we need into our clean economy, including around financing residential energy efficiency.

We will set out further details on how we will catalyse the market for energy efficiency later in the year and stimulate the required investment. This will take account of responses to our Call for Evidence alongside recommendations from the National Infrastructure Commission, and Committee on Climate Change.

Heating

The Committee on Climate Change have also said that the way homes are heated will need to be decarbonised to meet the [UK's 2050 net-zero decarbonisation target](#).⁸

In addition to energy efficiency, there are various options for decarbonising the heat supplied to existing homes, such as heat pumps,

⁸ Committee on Climate Change, [Net Zero. The UK's contribution to stopping global warming, May 2019](#), Page 26

electric heating, district heat networks, and gas grid alternatives such as biogas and hydrogen.⁹

Some alternative heating systems are already supported by the Government's Renewable Heat Incentive Scheme, which provides payments for generators of renewable heat. Background information is available in [the Library briefing paper on the RHI \(2017\)](#).

The Government have also said they will publish a [Heat Strategy](#) in 2020.

2.1 Budget 2020

The Government has announced that the Budget will take place on 11 March 2020. There has been speculation that this will contain announcements of funding to support energy efficiency projects. *The Times* reported on 10 February 2020 that a range of policies were being considered by the Treasury to support the net zero target and the Government's hosting of the COP26 conference. It cited potential policies such as funding for social housing, schools and hospitals to meet energy efficiency targets, and other incentives for households. It speculated that the Government would commit £9 billion to schemes to upgrade household energy efficiency to energy performance certificate band C by 2035 (see Government targets above).¹⁰

The Local Government Association (LGA) called, in its Budget submissions, for the National Infrastructure Strategy to provide "capital funding for the delivery of environmentally friendly homes and commercial buildings", including retro-fitting existing homes.¹¹

3. Assessments of Government Progress

Two recent reports to Parliament have assessed the Government's work in this area and highlighted priorities for the future.

3.1 Committee on Climate Change Annual Report

The [Committee on Climate Change](#) (CCC) is an independent statutory body set up to advise the Government on climate change. On 10 July 2019, the CCC published its annual assessment of UK progress in reducing greenhouse gas emissions: [2019 Progress Report to Parliament](#). The Report's headline finding was that "*UK action to curb greenhouse gas emissions is lagging behind what is needed to meet legally-binding emissions targets. Since June 2018, Government has delivered only 1 of 25 critical policies needed to get emissions reductions back on track.*" One of the Report's key messages to

⁹ POST, [Decarbonising the Gas Network](#), 15 November 2017

¹⁰ *The Times*, "[Households offered perks to go green](#)", 10 February 2020 [subscription required]

¹¹ [LGA 2020 Budget submission](#), 7 February 2020

Government is to embed net-zero policy across all levels and departments of government, with strong leadership at the centre, with the Committee making a number of specific recommendations across policy areas. In relation to buildings and the Ministry of Housing, Communities and Local Government (MHCLG) the executive summary highlights:

Policies are not in place to deliver the Government's ambitions on energy efficiency (i.e. to improve all homes to at least 'EPC band C'). Building standards are not sufficiently enforced across the building stock and will need to be strengthened to make UK homes fit for the future. Regulations for the private rented sector prioritise costs for landlords over running costs for renters. MHCLG must play its part, including minimum standards for social housing.

The progress report provides further detail around buildings:¹²

All of the key buildings policy gaps identified in our 2018 progress report remain unaddressed or only partially met. It remains unclear how the Government will deliver its target for all houses to be made EPC band C by 2035. In contrast, Scotland provides a good example of setting trajectories across the existing building stock (Box 3.2). In other areas there has been progress, but it falls short of what is needed:

- Government published Clean Growth – Transforming Heating in December 2018, committing BEIS to the publication of a Heat Roadmap in summer 2020 and leading to a planned £16.5m demonstration project heat the electrification of heat, expected to launch in 2019. In the Spring Statement, the Government committed to increasing the proportion of green gas in the grid. Further detail is needed on the support framework, including the types of gas (e.g. biomethane, hydrogen) to be included. Work is planned or underway on market framework arrangements for heat networks, including regulatory consumer protections, enabling investment and supporting low-carbon networks. However, plans for phasing out fossil fuel heating in properties off the gas grid and support for heat pumps from 2021 remain unclear.
- How the Government's target for all houses to be made EPC band C by 2035 will be delivered remains largely unclear. BEIS are undertaking a number of supply-chain demonstrators focused on 'able-to-pay' households (i.e. close to two-thirds of all homes below EPC band C) along with a £9.4m Whole House Retrofit Competition.
- Amendments to the domestic private rented sector (PRS) regulations introduced a £3,500 cap on costs to landlords for energy efficiency improvements. While a higher cap than originally proposed, it still materially limits the scope and impact of the policy, with only 48% of F- and G rated properties in scope expected to reach Band E. This limits costs for landlords at the expense of higher running costs for renters - including many fuel poor households. A trajectory for future tightening (as in Scotland – Box 3.2) has yet to be set.

¹² Committee on Climate Change, [2019 Progress Report to Parliament](#), July 2019, p58

- The Government plans to review Building Regulations alongside reviewing a method for reducing overheating risk. In the Spring Statement a strong commitment was made to “introduce a Future Homes Standard by 2025, so that new build homes are future-proofed with low-carbon heating and world-leading levels of energy efficiency”. Policy is needed and must ensure that regulations are set now, which require all homes to meet our recommended standards (including on climate adaptation). All new homes built from 2025 at the latest should be ultra-energy efficient and should not be connected to the gas grid, instead relying on low-carbon heating.
- Whilst good headway has been made on fire safety, there has been limited progress to suggest the lessons learned from the Hackitt Review will be used to develop stronger compliance and enforcement procedures that extend beyond fire safety, to make material improvements to enforcement of building regulations across the stock.

Further detail is given in the report on the developments that the Committee consider are needed to reach net zero by 2050.

3.2 BEIS Committee Energy Efficiency Inquiry

On 12 July 2019 the [Business, Energy and Industrial Strategy Committee published their report on Energy Efficiency](#). In the report the Committee criticised the current level of public investment in energy efficiency recommending that BEIS make the case for greater public investment if needed, and noted that it should be considered a national infrastructure priority. It also notes a drop in insulation rates in recent years and lower funding per household to support energy efficiency in England compared to the other devolved nations.¹³

The report also highlights the previous zero Carbon homes policy, and criticises the Government for scrapping the policy, arguing that it has resulted in additional homes that are not as efficient as possible, whilst at the same time boosting housebuilder profits.¹⁴

On the Future Homes Standard the report says:

122. When already faced with the challenge of upgrading the energy performance of the entire housing stock, it is nonsensical to be continuously making the problem worse by allowing new homes to be built that will also need to be retrofitted. Housebuilders receive billions of pounds in taxpayer support through the Help to Buy scheme. These funds should not be used to build dwellings that will need to be retrofitted later at up to five times the cost of designing-in appropriate standards from the start. The CCC warned that for ultra-energy efficient fabric measures, the “prohibitively high retrofit costs (£20,000+) mean that this is unlikely to be done in practice.” Thus, designing efficient homes from the outset is a one-time opportunity. We therefore welcome the announcement in the 2019 Spring Statement that new homes will have to be built with low carbon heating systems and meet “world-leading levels of efficiency” by 2025. It is vital that the Government delivers this policy in full. Any

¹³ BEIS Committee, [Energy efficiency: building towards net zero](#), 9 July 2019, para 13-47

¹⁴ Para 120-1

efforts by housebuilders to dilute the standards need to be rebuffed by the Government.

123. However, we are disappointed that we may have to wait until 2025 for homes to be built with “world-leading levels of efficiency” when the UK’s two largest housebuilders confirmed they do not require a long lead in time to deliver higher standards. Barratt and Persimmon said that higher standards could viably be delivered within 18 months. But with profit margins and shareholder returns the overriding priority for the majority of large housebuilders, they will not upgrade their standards without being required to do so by regulation. We recognise that there are some more progressive housebuilders who have indicated willingness to deliver higher standards at scale, but there is no commercial case to do so without a level playing field among all developers.

124. If new homes are to be built with “world leading” energy efficiency standards by 2025, legislation needs to be passed by 2022 at the very latest. This is because new standards only apply to buildings that do not have planning permission. If planning permission is already granted, builders can go on developing a site to previous standards as long as development begins within three years (discussed further below).

125. The Government should utilise a range of policy drivers at its disposal to encourage early uptake. At a minimum the Government should put in place a compulsory ‘learning period’ from 2022 in a subset of properties in preparation for full-scale deployment by 2025, to avoid the standard being haphazardly introduced. The future changes should comprise an obligation on the bigger housebuilders to undertake regional demonstration projects to show how they will achieve the standard. Scaling up before 2025 could drive down costs and drive learning for industry before full deployment as well as signal to housebuilders that the Government is not going to blink this time round. The sooner the skills and materials are required at scale in the new build sector, the sooner costs will fall across the entire housing sector.

126. We welcome the announcement of a Future Homes Standard. Any attempts by housebuilders to water down the standard should be blocked by the Government. The only barrier precluding housebuilders developing to higher standards before 2025 is a preoccupation with profit margins and shareholder returns. Despite receiving billions in taxpayer funds, most housebuilders will only raise the energy standards of their stock if forced to do so. Progressive housebuilders who want to go further are being held back by the laggards who actively lobby the Government to boost their profits, rather than help meet carbon reduction obligations.

127. We recommend that the Government legislates for the Future Homes Standard as soon as practically possible—and by 2022 at the very latest—to guarantee that no more homes by 2025 are built that need to be retrofitted. We recommend that the Government considers policy drivers at its disposal to drive early uptake. At a minimum, the Government should put in place a compulsory ‘learning period’ from 2022 in a subset of properties in preparation for the full-scale deployment. The Government should oblige bigger housebuilders to undertake regional

demonstration projects to show how they will achieve the standard.

In concluding, the Committee also raises concerns with the way building regulations are applied, with standards often being based on around the time permission was granted rather than built, while also raising concerns with how EPCs are assessed:

132. It is unacceptable that new developments are not always built to the latest building standards. The classification of what counts as a commenced building project is too lax. This provides developers with a loophole that allows them to claim a project is too far advanced to meet changes to Building Regulations. As a result, a substantial number of new homes are being built to outdated standards. If loopholes are not closed it will almost certainly be much later than 2025 before we actually see houses with “world leading” levels of energy efficiency built. The Government cannot continue pandering to housebuilders’ claims that delivering the latest standards would stall development. We recommend that the Government urgently closes those existing loopholes that allow homes to be built which do not meet the current minimum standards for new dwellings. The Government must ensure that the most recent building standards are complied with in all but exceptional circumstances.

133. Those who purchase homes that are built to outdated standards should not be provided with EPCs that are based on outdated modelling. This typically results in their energy efficiency rating being overstated, so when the home owner goes to renew their EPC they will find that they have been misled. We recommend that the Government requires that the EPC provided to the home purchaser must be the most current version.

The full set of conclusions and recommendations are available on [the Committee’s webpage](#).

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