Tomorrow's Homes Today

Delivering Energy Efficient Homes and Buildings for All

Summary

Following the General Election, the Energy Efficiency Infrastructure Group (EEIG) is calling on the next UK government to put in place powerful tax incentives, alongside expanded green finance, to nudge and empower over 20 million building owners to improve the energy efficiency of their homes, and to increase support and funding for more than 7 million households in fuel poverty or on lower incomes.

These policies should form part of a comprehensive 25-year national plan to transform and modernise the UK's building stock, aspiring to help every type of household and building owner, in every part of the country, with an initial package of policy commitments made out to 2035.

Introduction

The UK can't afford another energy crisis or to let families waste hard-earned income on high energy bills in cold, draughty homes.

But we can afford to help people make their homes and businesses energy efficient, low carbon, comfortable, and modern, securing real, tangible benefits for the public. Benefits which make a difference to people's day-to-day lives.

Now is the time for the government to put in place a 25-year national buildings renovation plan to be proud of.

A plan which lays out how we will get the UK's 30 million buildings to net zero by 2050. A plan which reduces the UK's energy use in buildings by 20% or more by 2035, making the country significantly more energy secure. A plan which places people at its centre, reducing our energy costs and improving lives.

As a next step, the EEIG invites the government to commit to a ten-year package of policies which delivers seven important outcomes by 2035.

1. Delivers warm and comfortable homes for all by giving building owners powerful incentives to invest in insulation, energy efficiency measures and improvements to the building envelope¹, as well as clean heat, cutting energy demand and fuel bills for good. Building on existing policies and support, the EEIG is calling on the government to expand tax relief and green finance to incentivise



and enable more than 20 million homeowners and private landlords to upgrade their buildings sooner rather than later, getting ahead of future energy performance standards. A 'Rebate to Renovate' energy saving stamp duty initiative, and plans for income tax relief for landlords are EEIG costed and developed proposals ready to go. See more on Page 3.

- 2. Helps make fuel poverty a thing of the past by expanding and potentially unifying the successful energy efficiency funding schemes already running. Increasing public funding by at least three times the current level would help more than 7 million households in fuel poverty or on lower incomes to raise the energy performance of their homes to a good level², cutting their energy costs by hundreds of pounds every year a life-changing amount. See Page 6.
- **3.** Unblocks sector delivery by creating the right conditions for the buildings renovation plan to be a success. This means streamlining standards where appropriate, seeking to create greater flexibility in energy efficiency scheme eligibility requirements to avoid arbitrary winners and losers, and giving trained and skilled building retrofit teams on the ground greater flexibility to decide how to run their projects and secure quality outcomes. Importantly, the successful decarbonisation of buildings also means policies on fabric improvements and low carbon heat must work together: ensuring buildings retain heat efficiently, generate heat efficiently, and can consume heat flexibly. See Page 7.
- 4. Gives consumers confidence in retrofit projects by fully delivering on planned reforms to Energy Performance Certificates (EPC) to make them more accurate, trusted, and reliable; a 'true measure'³ of the performance of buildings. By supporting building owners in adopting innovative methods and technologies which measure the actual efficiency of their buildings we give people confidence they will receive the best possible retrofit experience, removing a barrier to action. Measurement of real building performance also underpins exciting 'pay as save' business models and market offerings relying on assured energy savings. See Page 9.
- **5.** Leverages local delivery by increasing practical and financial support for every local authority over ten years, empowering and creating greater capacity for councils to deliver successful building retrofit programmes in every part of the country. It means giving councils, who know their area best, greater autonomy to decide how to drive action on retrofit, and determining what local community initiatives, technical solutions, funding approaches, and timescales are best suited to them to meet national energy and decarbonisation targets. More details are on Page 10.
- 6. Enables experts to help catalyse action across the UK on the energy performance of buildings by setting up a new tailored national energy efficiency advice scheme for England providing free, impartial services, and by forming a country-wide network of hundreds of local retrofit facilitation hubs to proactively drive improvement works and accelerate action. The hubs would enlist and coordinate the expertise of a range of retrofit professionals in every local authority area. Both initiatives working together will empower building owners and better equip them to plan and deliver their building improvement projects. See Page 13.
- **7.** Locks in energy savings down the line by first setting and monitoring retrofit progress at the local level against national energy reduction and decarbonisation targets, and then where needed, securing those targets by bringing in new or increased minimum building energy performance standards. The Government should reinstate plans to raise standards in the private rented sector early in the new Parliament. See more on Page 15.

² Based on the government's definition, a household living in a home with an EPC rating of C or higher is not in fuel poverty.
³ Wording taken from the EPC Action Plan.



Achieving Outcomes

The section below expands on the introduction, setting out the rationale for key policies and how each could work.

1. Deliver Warm and Comfortable Homes for All

Key policies

- a. Announce a new energy saving stamp duty incentive for homeowners to start in 2025;
- b. Allow income tax breaks for private landlords making energy efficiency improvements to their properties; and
- c. Support the growth and uptake of green financial products.

The goal is to encourage over 20 million property owners⁴ to investigate, plan and invest in work to raise the energy performance of their buildings over the next ten years and beyond.

Building owners need powerful incentives to invest in insulation, clean heat and other energy efficiency measures, helping to cut energy demand and fuel bills for good, and make homes warm and comfortable. Incentives must encourage owners to look at their buildings as a whole, rising to the retrofit challenge while avoiding inadvertently raising energy bills, exacerbating problems with meeting peak heat demand, or adding to electricity grid reinforcement costs.

By creating robust policy frameworks to incentivise and reward those who have some means to pay for energy efficiency measures to invest now, more of the UK's public funding remains available to go to those who need it most.

Incentive frameworks must be complemented by public communications campaigns which show building owners that energy efficient properties are already starting to be valued more highly than poor performers, and how this value difference is expected to continue to grow as the country moves towards net zero.

Box 1 Energy Efficiency and House Values

Government-backed research from 2017 suggests that houses rated EPC B/C typically sell for around 5% more than those assessed at EPC band D. There is also evidence that energy efficiency upgrades which improve the comfort and affordability of properties improves their rentability. Reducing tenants' energy bills also reduces the risk of rent arrears. Do prices and rents in PRS reflect energy efficiency levels? (publishing.service.gov.uk)

The Government can strengthen the link between property values and energy performance by bringing in targeted incentives for energy efficiency, encouraging owners to invest in the same way they might for roof repairs or an extension to drive up asset values.

⁴ Totalling up statistics for each UK country suggests around 24 million dwellings are privately owned, and a proportion will be in fuel poverty or on low incomes and so benefit from direct funding.



For owner occupiers, the EEIG, alongside many other organisations, recommends that the government announces and then brings in an energy saving stamp duty tax incentive in 2025. This 'Rebate to Renovate' initiative would nudge home buyers to carefully consider the implications of the energy performance of the property they are purchasing, whilst offering the opportunity for all home buyers to pay less stamp duty.⁵

The incentive acts at a key 'trigger point' – during the house buying process - where the motivation and capacity to upgrade a home's energy performance is greatest, and coinciding with agreeing finance for the purchase of the property and the planning of other renovation work.

It would work by lowering stamp duty for high performing homes, and those buying a less efficient home would pay more. However, provided the home is improved within two years of purchase, a rebate would be paid covering the difference between the stamp duty paid and the stamp duty that would have been paid had the work already been done. This would move energy improvements into the category of other upgrade works such as fixing old electrics or a leaky roof. And just like other problems with a property, the issues are often reflected in the asking price.

Rebate to Renovate can be revenue neutral. For those buying lower value homes, paying little or no stamp duty, an enhanced version of Rebate to Renovate could be paid after making improvements – using the rebate mechanism to very efficiently channel a form of grant funding to support the costs of energy efficiency measures.

Box 2 Rebate to Renovate Example

In 2025, under the Rebate to Renovate initiative, a family is thinking of buying, with the help of a mortgage, an end terrace house with cavity walls, on the market for £320,000. The house has uninsulated walls, some insulation in the loft, and an old inefficient boiler, and so relatively poor energy performance overall. Making use of a new online calculator, they determine that buying the house would mean paying £1,200 extra in stamp duty compared to a similar more efficient property – an increase equivalent to 0.4% of the asking price.

The seller agrees to reduce the purchase price by the value of the extra stamp duty to be paid. The online calculator also allows the family to explore the benefits, rebate impacts and costs of other energy saving measures – including a heat pump. They discuss with their mortgage provider having a slightly larger mortgage and replacing the old boiler with a heat pump at the same time as upgrading the insulation.

They decide to go ahead and the addition to their mortgage, offset by the reduced energy bill, represents a 1% increase in their monthly outgoings for a warm,

Loft insulation top-up Cavity wall insulation Heat pump Energy performance monitoring Total cost of works	f f f f f	
Heat pump grant 'Rebate to Renovate' Additional mortgage	£	-£3,500 -£2,150 4,600
Net additional outgoing (monthly)	£	10

comfortable, net zero ready home with increased protection built in from energy price rises.

When they come to sell the house down the line, the property's increased energy efficiency would mean lower stamp duty for the new purchasers, making it an attractive choice.

Scenario assumptions: 25-year mortgage term, 5% interest, October 2023 energy prices with social charges moved to gas bills, and future Heat Pump grants assumed at £3,500 (so real upfront costs to the householder may be lower than shown in reality).



The goal is to nudge homeowners into action every time a property is purchased at incentive levels which invite thought and change without impeding housing sales. With around 1.2 million house sales in the UK each year⁶, there is great potential to reduce energy costs and emissions, as well as to create a sustainable and thriving low energy retrofit market worth £8 billion per year in energy efficiency and low carbon installations alone⁷. The EEIG estimates that by 2035 the policy would directly drive measures in more than 5 million homes, with an even larger indirect influence on the general home improvement market.

For owners renting to private tenants, the energy performance of properties is governed by regulation, with all private rentals currently required to have a minimum energy efficiency rating of E.

In lieu of raising these standards, and to help landlords get ahead of new regulation and cut energy costs for tenants in the short term, the EEIG recommends that the Treasury makes changes to allow the cost of energy efficiency work to be deductible on annual tax returns, reducing the income tax payable. When coupled with the recent and welcome changes to VAT⁸, these policies will drive progress in the sector and make retrofit work more affordable.

Box 3 Income Tax Relief for Private Landlords

E3G have done more extensive analysis on how the income tax proposal for private landlords could work, and the costs and benefits of introducing this incentive. See <u>Autumn-Budget-briefing_-private-rented-sector.pdf (e3g.org)</u>

Their analysis highlights research from the National Residential Landlords Association which finds that 72% of landlords who were not planning to make investments to improve their property in the next two years would reconsider with a change to tax deductibility rules.

On top of the two incentives above, and to enable more and more people to fund their own energy efficiency projects at the right time for them, it will be increasingly important for a wide range of green financial products such as low interest loans to be made available. Green finance will support people to meet any further minimum energy efficiency standards applying in future, and to carry out extensive energy efficiency work alongside other planned renovations. It also means homeowners having funds to allow them to make a major dent in their household's carbon footprint sooner rather than later.

All kinds of organisations, banks and retailers are preparing for net zero, and EEIG member, the Green Finance Institute, has set out in recent publications the many innovative green finance offerings already on the market, and those that could be developed given the right market conditions i.e. a clear government commitment to delivering net zero buildings with a detailed plan for how this will be achieved.⁹ We would also encourage the government to work with the UK Investment Bank to introduce a concessional, attractive loan scheme for building retrofit projects.

⁷ Supported by grants via an enhanced rebate for lower value homes

⁹ See <u>REPORT (greenfinanceinstitute.co.uk)</u>

⁶ See <u>UK Stamp Tax statistics 2021 to 2022 - Commentary - GOV.UK (www.gov.uk)</u> noting that the number of transactions fluctuates

⁸ See Changes to the VAT treatment of the installation of Energy Saving Materials in in Great Britain - GOV.UK (www.gov.uk)



2. Help make fuel poverty a thing of the past Key policy

a. Expand and potentially unify existing energy efficiency schemes for fuel poor and low-income households, raising publicly funded investment by least three times the current level.

With the right policies, fuel poverty can be a thing of the past.

Although there is no silver bullet solution to fuel poverty, energy efficiency improvements which cut people's heating costs for good, are always recommended. Insulating solid walls, for example, can reduce energy bills by around £380 per year in a semi-detached house¹⁰ and £270 per year for full loft insulation. Installing a heat pump can also cut energy use for heating by around a third, and alongside efforts to equalise electricity and gas prices over time, could also reduce people's energy costs significantly.

Box 4 Green Retrofits Alleviate Fuel Poverty

A number of government-led or supported energy efficiency programmes exist, which are already helping the UK to tackle fuel poverty. For example, the Social Housing Decarbonisation Fund in England seeks to raise the energy performance of as many as possible of the 1.2 million social homes below EPC Band C. The Optimised Retrofit programme in Wales is retrofitting over 1,700 homes in the social housing sector, helping to make the homes more affordable while decarbonising them. See <u>Home - Optimised Retrofit (optimised-retrofit.wales)</u>

Most public funding for energy efficiency is currently targeted at those on low incomes or in fuel poverty, and the EEIG believes this continues to be a sensible approach. However, existing schemes are only reaching a fraction of the households who need help.

Due to reductions in household incomes, surging energy prices and relatively modest energy efficiency installation levels in recent years, EEIG member National Energy Action estimates that the number of households actually in fuel poverty across the UK is over 6 million¹¹, around double the official estimates. Adding up the estimated impact of existing and newly announced funding schemes, including those for social housing, suggests that at most 2 million lower income households will benefit from energy efficiency measures by 2028 – well short of the number that need help.

¹⁰ See <u>Advice on insulating your solid walls - Energy Saving Trust</u>

¹¹ The NEA bases its projections on the '10% definition' of fuel poverty which gives a realistic picture of the scale of fuel poverty in periods of volatile energy prices. See <u>What is fuel poverty? - National Energy Action (NEA)k</u>



Box 5 Insulation Critical to Tackling Fuel Poverty

The social rented sector in England alone is made up of around 4 million households. As would be expected, social renters are concentrated in the lowest two income quintiles: 47% are in the lowest income quintile, 28% in the second lowest. See English Housing Survey 2021 to 2022: headline report - GOV.UK (www.gov.uk)

The social housing sector has a large proportion of properties with solid walls. When solid walls are insulated households are around half as likely to be fuel poor compared to those in similar, uninsulated properties. Those with cavity walls follow a similar pattern. See <u>Annual Fuel Poverty</u>. <u>Statistics LILEE Report 2023 (2022 data) (publishing.service.gov.uk)</u>

Those on low incomes or in fuel poverty will very likely be unable to afford the significant upgrade work needed to get their homes to a decent standard of energy performance; homes which are either net zero or are net zero ready in the next ten years.

The upfront cost of energy efficiency retrofits for such households, some of which will be extensive in nature, will almost certainly need to continue to be covered by public funds. As a result, in order to meet fuel poverty targets, we anticipate that public funding for lower income households needs to increase by at least three times current levels.

3. Unblock Sector Delivery

Key policy

- a. Streamline standards where appropriate;
- b. Create greater flexibility in energy efficiency scheme eligibility requirements;
- c. Significantly increase the number of trained, skilled and accredited retrofit workers; and
- d. Properly link policies to ensure buildings retain heat efficiently, generate heat efficiently, and can consume heat flexibly.

As the country moves towards net zero not only must the standard of energy and carbon performance of the building stock be high, but buildings must be safe, comfortable, and cost-effective to live and work in.

Low energy, zero carbon buildings should have consistently good indoor air quality, be able to be kept at comfortable temperatures, help shield people from outside noise, and be fire safe. When buildings are upgraded or constructed, they should also perform as designed so that the energy and carbon savings intended are realised.

These outcomes are achieved by having appropriate standards and a skilled workforce and supply chain in place to deliver them.

There is an urgent need to address the vicious cycle of loss of investment, skills and capacity from the energy efficiency industry, as installation rates for energy efficiency measures have fallen dramatically. Recent analysis by EEIG member, the Installation Assurance Authority, suggests there are now fewer than 10,000 workers involved in delivering publicly funded energy efficiency schemes compared 54,000 in 2012.¹²

¹² See <u>eeig_eco-briefing-autumn-2023.pdf</u>



Skills gaps are a major blocker to success, but by addressing them, the government and industry, can create hundreds of thousands of new, rewarding jobs in every area of the country.

The EEIG welcomes funding to date for energy efficiency skills and training, but there are deep systemic issues to be tackled. A stable energy efficiency policy and funding environment is necessary for a thriving, sustainable market in which firms feel able to take on extra workers and invest in increasing capacity overall.

The EEIG also believes that successful delivery over the long-term will require policymakers and standard-setters to allow skilled, expert workers greater flexibility in deciding the right quality assurance approaches and solutions for their individual retrofit projects. If future standards demand clear outcomes, and reward projects teams for verifying the real performance of their buildings, it should be possible to limit prescription in standards and policy frameworks. A true net zero building stock means that the energy and carbon savings predicted are delivered in reality. Project teams should be encouraged to measure the performance of buildings. See Page 9.

Complex, process-heavy standards hamper effective delivery. The risk is that it becomes cheaper and faster for retrofit projects to be delivered outside of official frameworks, with little or no quality assurance, and therefore greater potential for poor quality and damage to the industry overall. Streamlining where appropriate is therefore beneficial.

And in terms of funding scheme eligibility criteria, introducing greater flexibility means fewer people wanting to do upgrade work on their property and asking for government help, only to be turned away.

Lastly, and importantly, polices on building fabric improvements and low carbon heat must work effectively together. Energy demand reductions through building insulation and fabric improvements are often needed alongside heating solutions. A building which requires 15,000 kWh of energy to heat it each year uses more energy and puts significantly more pressure on energy generation and distribution systems, than one with a heating demand of 8,000 kWh.

Properties with high energy demand that haven't been retrofitted struggle to retain heat so may have no choice but to run their heating at peak times. If the energy used for heating is electricity, every unnecessary unit of energy consumed will come at a higher price than gas at present.

Investment in energy demand reduction is just as important as increasing clean energy generation capacity. To stabilise energy costs and drive energy security the UK needs less energy waste overall. Accelerated deployment of net zero technologies could cut gas demand by 65% by 2035, and net imports by 55%.¹³

¹³ See Energy & Climate Intelligence Unit | Government's energy independence... (eciu.net)



4. Give Consumers Confidence

Key policies

- a. Fully deliver on planned reforms to Energy Performance Certificates (EPC); and
- b. Support building owners in adopting innovative technologies which measure the actual efficiency of their buildings.

In a world with high energy costs, and where there is an urgent imperative to cut energy demand and greenhouse gas emissions, it is more important than ever that new and retrofitted properties perform as intended. This means the building fabric and low carbon heating systems must perform well in reality.

Consumers thinking about upgrading their homes need to feel assured they will get the performance they pay for. The 'real' performance of buildings matters.

The EPC Action Plan and wider reforms have set the UK on the right track, and the planned actions now need to be fully delivered if the UK's transition to a net zero building stock is to be a success.

Box 6 EPC Reform and Real Building Performance

The EPC Action Plan 2020 states: "In future EPCs will need to move from a reflection of the features of a building to the true measure of 'in-use' building performance...The Committee on Climate change specifically recommended in their 2018 and 2019 progress reports that EPCs need to reflect real-world performance." See Energy Performance Certificates for buildings: action plan (publishing.service.gov.uk)

There are a growing pool of technologies and tools available which measure the actual efficiency of buildings or measures, before or after retrofit, and which can give people the confidence to press ahead with a project knowing they will get a quality outcome. These tools are gradually being validated, and can offer low-cost, low-disruption ways of verifying performance.

Supporting building owners in adopting such technologies removes a barrier to action and also gives the government greater assurance at the national level that new policies will deliver the energy and carbon savings the country needs.

Measurement of real performance also underpins exciting 'pay as save' business models and market offerings relying on assured energy savings, such as green mortgages.



5. Leverage Local Delivery

Key policies

- a. Give local authorities greater autonomy to decide how to drive action on building retrofit in their area;
- b. Increase the practical and financial support for every local authority over ten years, with councils sharing up to £4.5 billion per year for energy efficiency programmes to help households in fuel poverty or on low incomes; and
- c. Expand platforms for councils to share energy efficiency best practice and case studies.

A net zero building stock in 2050 means constructing new buildings to world-class standards, and importantly, the retrofit of around 30 million existing homes and businesses to raise their energy performance.

A transformation project on this scale is certainly challenging for any country, but for the UK in particular, it provides an opportunity to carefully upgrade our ageing, leaky buildings, to reduce and stabilise energy costs for consumers, promote energy security, and to grow and safeguard the green economy.

Box 7 The Net Zero Opportunity

The 2022 Mission Zero report presented evidence of a global market opportunity from net zero worth £1 trillion by 2030 for UK businesses, supporting 480,000 jobs. See <u>MISSION ZERO -</u> Independent Review of Net Zero (publishing.service.gov.uk)

The IPPR's 2022 'Retrofit Revolution' report also calculated that a £7 billion investment in retrofit per year would sustain 2.7 million jobs to 2050. See <u>Plan for a retrofit revolution: how more than</u> two million new jobs would boost levelling-up and also tackle energy crisis I IPPR

To realise the economic opportunities, and in line with plans for greater devolution, the EEIG believes now is the time for the government to step up its support for local authorities, gradually increasing the practical help and funding available to them for upgrading the energy performance of their local building stock.

The long-term goal is to ensure every council has the capacity to, or can partner with organisations, to deliver quality retrofit programmes matched to the needs of their residents and suitable for the types of buildings in their area.

Local authorities understand their building stock, maintenance programmes, supply chains, and residents wishes. And locally-led retrofit programmes better enable area-based delivery and projects on multioccupancy buildings such as apartments. This means upgrading whole areas or buildings at the same time, driving economies of scale.

A local focus also helps to avoid one-size-fits all policies. A predominantly rural community, with many older buildings with solid walls will need very different strategies for engaging residents, and types of energy efficiency measures, compared to a dense, major city.



Some councils already have experts in key positions such as architects and retrofit coordinators who can help to deliver quality projects cost-effectively and without needless delay. Many are underfunded and expanding this capacity will be critical for national success.

Fortunately, there are a growing number of trail-blazing councils already delivering and planning new large-scale retrofit programmes, such as Greater Manchester, Oxfordshire, Leeds, Bristol, Exeter, and Milton Keynes.

Box 8 Support for Local Authorities is Key

Greater Manchester aims to be carbon neutral by 2038, and as part of that work established the Greater Manchester Retrofit Taskforce in 2021.

Its renovation plan, 'retrofitGM', sets out the achievements it has made already on building energy efficiency and recognises the scale of the challenge ahead with over "880,000 homes, 2700 public buildings and as yet unknown number of commercial buildings that will need some form of renovation by 2038".

The plan stresses the importance of government support and recognises that to "reach these sorts of numbers, we will need to employ innovative finance solutions to significantly scale up our activities, building the skills and jobs needed to grow the supply chain in the process". See <u>retrofit-GM - Greater Manchester Combined Authority (greatermanchester-ca.gov.uk)</u>

Importantly, most current centrally funded energy efficiency schemes, such as the Home Upgrade Grant are either led by local authorities, or local authorities contribute to their delivery.

The Energy Company Obligation, for example, is primarily delivered through regulatory obligations on energy suppliers to achieve set levels of energy or cost savings. It now has an 'LA Flex' element to it. This means that local authorities can advise that certain households get ECO upgrade work done even if they fall outside the normal eligibility criteria.

Overall, the EEIG is recommending the government develops a fully costed plan to devolve more aspects of energy efficiency and low carbon heat delivery to the local level.

The plan would:

- Instigate a ten-year programme to gradually increase capacity, funding and support for energy
 efficiency retrofit at the local level. It would see more and more projects delivered locally over time.
 Councils would gain greater autonomy, flexibility and resources to implement programmes as they
 see fit, looking for the best way for them to catalyse local action, engage residents, allocate public
 funds, increase supply chain capacity, and tackle the building stock.
- Expand platforms for councils to share best practice, including from those already delivering major retrofit programmes. Local authorities could also use the platform to share views on which elements of existing national programmes have worked well, how to emulate that, and the pros and cons of bringing future funding schemes under one umbrella with streamlined rules and criteria; and



• Ring fence and secure budget allocations appropriate for each council based on their size and other relevant factors. Ideally funds would be committed for at least ten years so that proper planning and investment decisions can take place.

Box 9 Local Authority Funding

Local authorities already lead on, or have a role in delivering government energy efficiency programmes focused on improving the energy efficiency of fuel poor and low-income households.

In terms of public funding, it is estimated that an equivalent of £6 to £7 billion needs to be invested in the building stock per year for the next ten years to raise its energy performance sufficiently, with public funds primarily earmarked for low income and fuel poor households. Assuming greater devolvement of energy efficiency delivery, if around two-thirds of the total funding were allocated for grant schemes or programmes led by local authorities, this equates to around £4.5 billion per year.

In addition to the Energy Company Obligation funded by energy companies, around £2 to £2.5 billion per year of public funding would be invested in national programmes – around one-third of the total annual public spend. Again, the support would be directed to fuel poor and lower income households and homeowners, including through the proposed stamp duty Enhanced Rebate Mechanism for those with lower-cost homes. The stamp duty initiative should generate four times the amount invested in energy bill savings.

For housing decarbonisation as a whole, a similar amount of public funding, around £8 billion per year for zero carbon heating such as heat pumps, for ten years should stimulate three to four times the level of private investment.

As public funding on energy efficiency incentivises substantial levels of private investment, it should be possible to design a suite of policies which largely pay back public spending over time through cumulative energy savings, reduced energy supply infrastructure costs, reduced impacts of sub-standard housing on the NHS, and increased tax-take and GDP. Treating people affected by poor housing is costing the NHS alone £1.4 billion per year. See <u>The cost of poor housing to the NHS - BRE Group</u>

Preliminary retrofit scenarios run by the EEIG suggest that broadly cost-neutral energy efficiency programmes are possible in terms of public spend over the long-term. And importantly, investment in building improvements and energy demand reduction reduces pressure on the public purse for energy bill support for consumers should unit prices spike again.

Estimates and assumptions based on preliminary EEIG retrofit calculations, (the then) BEIS estimate of £35 to £65 billion to achieve the 2035 EPC C target, and analysis from the 2022 report <u>CHEAPER BILLS WARMER</u> <u>HOMES.2022.pdf (squarespace.com)</u>

For more detail on how locally-led retrofit can work, see the recent report by EEIG member E3G, carried out in consultation with local authorities and emphasising their broad support for the approach.¹⁴



6. Enable Experts to Help Catalyse Action

Key policies

- a Ensure free, impartial energy efficiency advice is available to all households in the UK, by setting up a new tailored national energy efficiency advice scheme for England; and
- b. Form a country-wide network of hundreds of local retrofit facilitation hubs to proactively drive improvement works and accelerate action on energy efficiency.

Research has shown that people who are engaged with the net zero agenda and want to act can still struggle with knowing where to start with improving the energy efficiency of their buildings or where to find trusted suppliers. People often need help in deciding which measures are right for their property, finding suitable local installers, and identifying what financial help is available for their project.

Others may be unaware of national goals to decarbonise buildings and the need to invest in building upgrades, or do not have the money or time to undertake the work. Retrofit projects may feel daunting.

With this in mind, the UK's buildings upgrade programme will need to have in place robust support and advice, making it as easy as possible for people to plan and implement their retrofit projects.

The EEIG is recommending the government adopts two complementary approaches:

- Establish a free, impartial, and tailored national energy efficiency advice service in England; and
- Form a country-wide network of local retrofit facilitation hubs to catalyse action in every area.

At the national level there are currently excellent energy efficiency advice services available – but coverage across the UK is patchy with a particular gap in England. Services include Home Energy Scotland¹⁵ delivered by EEIG member, the Energy Saving Trust, NEST¹⁶ in Wales, with general advice and signposting including from the Citizens Advice Consumer Service¹⁷, the government and Ofgem. Initiatives such as the National Retrofit Hub¹⁸ will also work to drive progress on upgrading the building stock at a national level.

An essential next step to ensure everyone can access advice is to invest now in a national advice service for England which mirrors the model in Scotland. It would mean more comprehensive support for people, as well as an acceleration of retrofit activity and adoption of net zero technologies. It means access to free, impartial advice for all, either online, or tailored to individual needs through a helpline, and potentially in person.¹⁹

We estimate that the cost of delivering a national advice service for England would be £3.7 to £5 million per year for each million people served with a digital-first service (plus initial set-up costs). This would also include expert or specialist technical telephone advice given to an estimated 50,000 to 100,000 who would need it.

¹⁸ See National Retrofit Hub

¹⁵ See <u>Home Energy Scotland HUB (est.org.uk)</u>

¹⁶ See <u>Home - Nest Wales - nest.gov.wales</u>

¹⁷ See Make your home more energy efficient - Citizens Advice

¹⁹ See National or local retrofit advice? To cut bills, carbon and improve energy security, we need both - Energy Saving Trust



Box 10 Home Energy Scotland Advice Service

Home Energy Scotland (HES) is a network of advice centres covering all of Scotland which helps tens of thousands of people every year, providing tailored advice specific to the home, and checking people's eligibility for financial support including for Warmer Homes Scotland and the Home Energy Scotland Grant and Loan.

The 2021/22 evaluation of the service found that after receiving advice from a HES adviser, 47% of customers had installed at least one energy efficiency, low carbon heat or renewable energy improvement and 38% of customers were planning to install at least one improvement in the next 12 months. See <u>Supporting Scotland's Green Ambitions - Energy Saving Trust</u>

At the local level, and to complement national advice services, the EEIG recommends the government instigates the creation of a network of hundreds of local retrofit facilitation hubs to catalyse action and proactively drive building performance improvements in every area of the country.

The hubs would enlist and coordinate the expertise of retrofit professionals in every local authority area, bringing together community groups, local authority officials, energy companies, manufacturers, researchers, finance providers, energy assessors, installers and others to work collaboratively and concertedly to facilitate progress on energy efficiency in their area, delivering to clearly defined targets.

Manufacturers, for example, can provide much expertise and information about their products and how to install them. Local finance providers can talk people through different ways they might fund works over the years, what tax breaks they might be able to take advantage of, or grants.

It would also be possible for the hubs to trial or pilot exciting new policies. This could include arranging for consumers to have a one-to-one consultation with local experts to agree a bespoke plan for getting their home, portfolio, or business to net zero, staggering upgrade work through time where appropriate. The plans would quantify the benefits of the work to be undertaken, setting out options for how to ensure these are fully realised or verified, and suggest how to share this information with future buyers and renters through 'smart' property ratings and valuations.

Similarly, the hubs working in partnership with national advice services, can put building owners in touch with accredited local suppliers and installers, as well as other relevant experts, including green finance providers and tax experts. Private landlords could, for example, receive advice about the energy efficiency standards applying to them, as well as on new tax breaks, specialised financial products and payment plans available to help them spread upgrade costs over time.

The network could link to the Local Net Zero Hub model²⁰ already in place with a dedicated local retrofit facilitation hub or unit for every local authority, as well as coordinating with advice on the delivery of new buildings.

The EEIG stands ready to develop a detailed options appraisal covering different ways to deliver the network, but we estimate that a single hub would require a budget of around £600,000 per year, gathered through a combination of public funding, expanded local authority budgets, advertising by local suppliers, and potentially optional paid-for consultancy services.

²⁰ Almost £22 million has been invested in the Local Energy programme to date, including funding for the creation and continuing support of 5 Local Net Zero Hubs. See <u>net-zero-strategy-beis.pdf (publishing.service.gov.uk)</u>



7. Lock in Energy Savings

Key policies

- a Signal now the potential for new or raised minimum energy efficiency standards and regulation down the line in all housing sectors, helping to drive and build the retrofit market in the short-term;
- b. Secure national energy and decarbonisation targets through new or raised minimum standards if monitoring suggests progress through other policies is slower than anticipated reinstating plans to raise standards in the private rented sector early in the new Parliament; and
- c. Ensure any new minimum standards have long lead-in times and are introduced alongside an ecosystem of practical advice and financial support for consumers.

Past government policies have driven significant progress on building energy performance.

For example, the proportion of English housing in the highest energy efficiency rating bands A to C, increased considerably between 2011 and 2021 from 16% to 47%.²⁰ In Scotland in 2021, 52% of homes were rated as EPC band C or better compared to 39% in 2016.²¹

In addition, the Energy Company Obligation alone has saved low-income customers £17.5 billion in lifetime energy bills since 2013, and the average home improved under the scheme saved £290 per year.²²

Efforts to date saw domestic energy consumption in the UK fall by a huge 21% between 2002 and 2021²³, in part due to making homes more energy efficient.

But progress has stalled and the UK now needs to repeat this scale of drop in energy consumption, but over ten years rather than nearly twenty, if we are to get on track with the Climate Change Committee's Balanced Pathway Scenario²⁴ and for longer-term net zero goals.

Box 11 The Installation Gap

New research finds that a 20% reduction in energy use by 2030 from residential buildings in Great Britain alone requires an additional:

- 6.8 million installations of loft insulation
- 3 million installations of floor insulation
- 4.6 million solid wall and cavity wall installations
- 2 million solar panel installations
- 2.5 million homes with heat pumps
- 2.1 million homes connected to a heat network
- 9.3 million homes with draught proofing and hot water tank insulation

Net zero will require substantially more. See Filling The Gap Full Report June 2023 (wwf.org.uk)

²⁰ See English Housing Survey 2021 to 2022: headline report - GOV.UK (www.gov.uk)

²¹ See <u>Scottish House Condition Survey 2021 (www.gov.scot)</u>

²² See <u>Energy-Company-Obligation-Briefing-E3G.pdf</u>

²³ See Table C5, temperature adjusted ECUK_2022_Consumption_tables_27102022.xlsx (live.com)

²⁴ See <u>https://www.theccc.org.uk/publication/sixth-carbon-budget/</u>



As described above, enablers and incentives such as green finance and tax incentives for homeowners and private landlords, coupled with direct grant support for households on lower incomes, will take the UK a long way towards its energy, fuel poverty and climate goals, but it is possible this does not get us exactly to where we need to be.

Monitoring the combined effect of all new policies will be key - not only individual schemes.

With this in mind, the EEIG recommends that each local authority as part of their expanded role officially tracks its progress on green buildings and reports this back to the government on an agreed and regular basis – so it is always clear what policies are adding up to in terms of national progress against targets. The reporting process will also help to identify if any regions are struggling, triggering discussions on whether further support is needed.

Monitoring progress at a high-level – across tenures - already happens, and concerns about the average performance of homes in the private rented sector triggered the introduction of regulatory minimum building energy performance standards from 2018. The policy is proving to be an important tool in the government's arsenal for securing outcomes. However, there are enforcement and other issues which need to be addressed to make a real success of the policy, and further support for local authorities should help with this.

Concerningly, a high proportion of private renters in England still live in fuel poverty - at least a quarter, and tightening minimum regulations on energy efficiency to a C rating could save renters £570 per year on their energy bills - an aggregate saving of ± 1.75 billion²⁵. The EEIG urges the government to reinstate evidence-based plans to raise standards in this sector early in the new Parliament, alongside providing appropriate support for landlords, including income tax relief discussed in Section 1.

The EEIG believes it continues to be important to use regulation, where necessary, to secure energy efficiency upgrades and the associated energy and emissions savings.

In the short term, signalling an intention to bring in regulation down the line, if needed, is an important part of driving early take-up of green finance and tax incentives. If building owners can get ahead of regulation, it is possible that widespread mandatory requirements become unnecessary.

Where minimum standards are to be introduced, it will remain important to provide long-lead in times so that building owners can plan improvements and spread costs. Bespoke advice and a suite of funding options will need to be in place to help people meet the standards.

About the Energy Efficiency Infrastructure Group (EEIG)

The EEIG is a broad-based coalition of over 25 industry groups, NGOs, charities and businesses asking for rapid improvement in energy efficiency policy for UK homes and buildings. Massive improvements in energy efficiency are the litmus test for a credible pathway to net zero emissions and ending fuel poverty. While it represents the views of the EEIG as a whole, this briefing does not necessarily represent the views of its individual members.

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Annex

Summary of Outcomes and Key Policies

С	Outcome Wanted	Key Policies
1	Deliver warm and comfortable homes for all	 Announce a new energy saving stamp duty incentive for homeowners to start in 2025; Allow income tax breaks for private landlords making energy efficiency improvements to their properties; and Support the growth and uptake of green financial products.
2	Help make fuel poverty a thing of the past	• Expand and potentially unify existing energy efficiency schemes for fuel poor and low-income households, raising publicly funded investment by least three times the current level.
3	Unblock sector delivery	 Streamline standards where appropriate; Create greater flexibility in energy efficiency scheme eligibility requirements; Significantly increase the number of trained, skilled and accredited retrofit workers; and Properly link policies to ensure buildings retain heat efficiently, generate heat efficiently, and can consume heat flexibly.
4	Give consumers confidence in retrofit projects	 Fully deliver on planned reforms to Energy Performance Certificates (EPC); and Support building owners in adopting innovative technologies which measure the actual efficiency of their buildings.
5	Leverage local delivery	 Give local authorities greater autonomy to decide how to drive action on building retrofit in their area; Increase the practical and financial support for every local authority over ten years, with councils sharing up to £4.5 billion per year for energy efficiency programmes to help households in fuel poverty or on low incomes; and Expand platforms for councils to share energy efficiency best practice and case studies.
6	Enable experts to help catalyse action across the UK on building energy performance	 Ensure free, impartial, and tailored energy efficiency advice is available to all households in the UK, by setting up a new tailored national energy efficiency advice scheme for England; and Form a country-wide network of hundreds of local retrofit facilitation hubs to proactively drive improvement works and accelerate action on energy efficiency.
7	Lock in energy savings down the line	 Signal now the potential for new or raised minimum energy efficiency standards and regulation down the line in all housing sectors, helping to drive and build the retrofit market in the short-term; Secure national energy and decarbonisation targets through new or raised minimum standards if monitoring suggests progress through other policies is slower than anticipated - reinstating plans to raise standards in the private rented sector early in the new Parliament; and Ensure any new minimum standards have long lead-in times and are introduced alongside an ecosystem of practical advice and financial support for consumers.