

Energy Security Starts At Home

The Energy Efficiency Investment Imperative

Spring Statement Briefing March 2022

Soaring global gas prices are fuelling a cost-of-living crisis in the UK, with economy-wide impacts. Energy bills will rise to £1,971 per year from April in a price hike which is untenable for most households, and a disaster for those already in fuel poverty – with numbers set to soar from 4 to 6.5m fuel poor households across the UK from October 2021 to April 2022.¹ The immediate priority is emergency measures for households, particularly the most vulnerable. However, with gas prices likely to remain elevated for years, we must also invest now in long-term solutions to reduce exposure to an international market over which the UK government has very little control. The crisis is a wake-up call to make domestic energy efficiency measures a long-term national infrastructure investment priority.

The Energy Efficiency Infrastructure Group (EEIG) has long noted the essential role of home efficiency as the permanent solution for lower fuel bills, with new research finding that improving the least efficient homes currently rated 'D' or worse for energy performance to 'C' would save households over £500 per year, an aggregate saving of £8bn.² Previous energy efficiency schemes have been successful in reducing gas demand, contributing to nearly a 30% reduction in domestic gas use – weather adjusted – between 2005 and 2013.³ Green home retrofits offer social, environmental and economic co-benefits, and stand out as a 'no regrets' solution to the energy crisis, climate crisis, and levelling up agenda.⁴

The Office of Budget Responsibility has been asked to give an updated economic and fiscal forecast on 23 March 2022. This is a chance for the Chancellor to present new or revised spending plans for the year alongside the anticipated Spring Statement.⁵ Alongside the Ofgem price cap increase, some support for vulnerable households has been announced, but more will be needed to prevent a fuel poverty emergency.⁶ The Spring Statement also presents an opportunity to begin to address the long-standing issue of underinvestment in the renovation and restoration of the UK's cold and leaky housing stock, as part of a long-term strategy. This briefing sets out the case for action, with key recommendations to fast-track progress.

¹ <https://www.nea.org.uk/news/government-plans-for-energy-crisis-woefully-inadequate/>

² <https://www.e3g.org/publications/responding-to-uk-gas-crisis/>

³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/437093/National_Energy_Efficiency_Data-Framework_NEED_Main_Report.pdf

⁴ These benefits are described in full in our recent report:

https://www.theeeig.co.uk/media/1099/eeig_report_turning_stimulus_into_recovery_pages_web.pdf

⁵ For example, Secretary of State Kwasi Kwarteng has spoken publicly about the anticipated Spring Statement:

<https://www.bloomberg.com/news/articles/2022-01-21/u-k-likely-to-wait-until-march-to-announce-help-on-energy-bills>

⁶ <https://www.nea.org.uk/news/government-plans-for-energy-crisis-woefully-inadequate/>

Summary of recommendations

A sustained drive to boost home efficiency can reduce household energy expenditure by £8bn per year, support 190,000 jobs across a range of trades to 2030, and avoid pressures placed on the NHS by cold, unhealthy homes – potentially preventing 10,000 excess winter deaths every year and saving £1.4bn.⁷ Few infrastructure projects can do so much for economic growth: with £2 put in the economy for every £1 spent on a national retrofit strategy.⁸ The EEIG has published a Better Building Investment Plan, outlining measures to effectively mobilise public, private and blended capital.⁹ While there has always been a compelling case for making efficiency a long-term national infrastructure priority, the gas crisis has made this imperative. All measures should be introduced and scaled in close collaboration with industry and local delivery partners, ensuring funds and projects can be effectively delivered on the ground.

- 1) **Fulfil Conservative manifesto pledges.** The 2019 manifesto promised £9.2bn of investment in green homes and buildings, but the Spending Review in 2021 fell £2bn short.¹⁰ The Government should plug the gaps in the Home Upgrade Grant (£1.4bn), Social Housing Decarbonisation Fund (£200m) and Public Sector Decarbonisation Fund (£400m).
- 2) **A nationwide energy efficiency scheme:** Long-term certainty provides consumers and industry confidence to plan and invest in their homes and supply chains. EEIG recommends a new long-term, nationally available energy efficiency scheme, and calculates that a subsidy worth £3.6bn is needed across 2022-25 to get on track for climate, fuel poverty and levelling up targets. This implies £1.2bn for 2022/23. Lessons can be applied from previous schemes to ensure smooth administration and effective delivery. There are opportunities to funnel funding through existing and planned schemes (i.e., Boiler Upgrade Scheme, Sustainable Warmth competition) or through new structural incentives, such as blended finance offered through UK Infrastructure Bank loans or Energy Saving Stamp Duty.
- 3) **A set of measures to spur private investment:** Pave the way to green homes finance at scale with attractive incentives that spur action and investment, including:
 - a) Make the built environment a priority of the UK Infrastructure Bank, reducing financing costs and drawing in capital markets, offering concessional loans to households and SMEs
 - b) Energy Saving Stamp Duty to support a shift from subsidies, introducing an incentive at a key 'trigger point' where a homeowner is likeliest to take action to retrofit their home
 - c) 0% VAT on retrofit measures to lower the costs and incentivise investment.
- 4) **Support a wider suite of measures needed to drive and underpin a nationwide retrofit drive,** announcing the intention to bring in minimum energy performance standards for owner occupiers, focus on green skills, an impartial consumer advice and support service which offers tailored advice, and public engagement and communications campaigns.¹¹

⁷ <https://www.bregroup.com/press-releases/bre-report-finds-poor-housing-is-costing-nhs-1-4bn-a-year/>

⁸ <https://www.constructionleadershipcouncil.co.uk/wp-content/uploads/2021/05/Construction-Leadership-Council-National-Retrofit-Strategy-Version-2.pdf>

⁹ https://www.theeeig.co.uk/media/1109/eeig_2021-budget-and-spending-review_0721.pdf

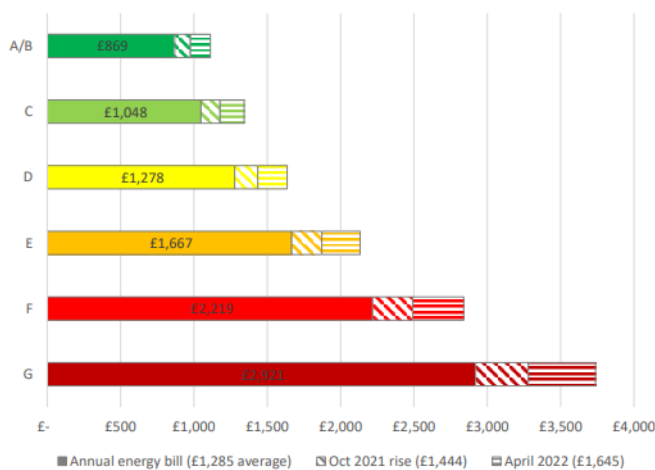
¹⁰ https://www.theeeig.co.uk/media/1114/eeig_analysis-of-the-heat-and-buildings-strategy_03.pdf

¹¹ These have been set out here: https://www.theeeig.co.uk/media/1114/eeig_analysis-of-the-heat-and-buildings-strategy_03.pdf and here: <https://electrifyheat.uk/wp-content/uploads/2021/12/Electrify-Heat-Briefing-December-2021-Training-Trust-and-Tariffs.pdf>

1 Energy efficiency is a triple-win: addressing costs of living, net zero and levelling up

There are many factors contributing to the cost-of-living crisis, but a root cause is the UK’s exposure to and reliance upon international gas markets – which have seen prices soar in recent months, with price volatility expected to persist into the coming years.¹² The gas crisis is causing economy-wide and systematic impacts and costs, driving up inflation. Extraordinary times require decisive action and course-correction to protect the interests of UK households, businesses, and the wider economy.

The majority of UK homes remain highly exposed to gas price shocks due to the leaky nature of our housing stock, and with over 85% of homes connected to the gas grid. Home efficiency is a major factor in determining how exposed homes are to price shocks – with figure 1 illustrating how homes in England with lower EPC ratings are more affected by energy price rises. Analysis from 2021 found that improving the energy efficiency of homes currently rated ‘D’ or worse for energy performance to ‘C’ would save households over £500 per year: an aggregate saving of £7.8bn per year – disposable income that could then be spent elsewhere in the economy, especially in local retail and services.¹³



Despite the benefits associated with home retrofits, action has plateaued in recent years. The Climate Change Committee identifies residential buildings as one of the key areas where the UK’s current approach falls short of what is needed to get on track for a climate-safe future.¹⁴ The last time energy bills surged in 2013, the Warm Front programme to insulate low-income homes was abolished and the Energy Company Obligation (ECO) was cut in half. This led to a 90% cut in loft and cavity wall insulation measures. The Government continues to underfund home decarbonisation, with EEIG analysis estimating a public investment gap of around £10bn over the next three years for getting on track for net zero.¹⁵

Figure 1: The impact of energy price increases (October 2021 and April 2022) by EPC (calculated in October 2021)

¹² <https://www.bbc.co.uk/news/uk-northern-ireland-60142325>

¹³ <https://9tj4025o153byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/Responding-to-the-UK-gas-crisis-E3G-Briefing.pdf>

¹⁴ <https://www.theccc.org.uk/publication/independent-assessment-the-uks-net-zero-strategy/>

¹⁵ https://www.theeig.co.uk/media/1114/eeig_analysis-of-the-heat-and-buildings-strategy_03.pdf

The government's recent levelling-up white paper rightly recognises that "the net zero transition could create huge opportunities for many of the UK's left-behind places."¹⁶ Energy efficiency is one such opportunity. The harmful effects of inefficient housing are distributed disproportionately in both income and regional terms. Households living in the least efficient homes (rated EPC D and worse) are more likely to be on low incomes, and the least efficient homes in England are concentrated in the North West, North East and West Midlands. Poor quality housing can have significant health impacts, and households spending more on energy bills means they have less to spend in their local economies. Analysis of new data from the Office for National Statistics (ONS) shows the parts of the country that have the highest fuel bills – mainly in rural areas with homes which are least efficient to heat (see figure 2).



Clearly, energy efficiency has a major role to play in boosting the energy security of UK households – particularly those most vulnerable to price shocks. It is also a vital step in creating a net-zero economy. Direct emissions from homes currently account for around 14% of total UK greenhouse gas emissions. Reducing the amount of energy we need to comfortably heat our homes will both lower gas demand and make it easier to shift affordably and conveniently to cleaner forms of heating. An ambitious domestic plan would strengthen the negotiating hand of the UK in its COP26 Presidency year, providing an example of domestic sectoral ambition to leverage greater ambition from partner governments.

Figure 2 Analysis of ONS data (Data visualisation: Sky News)

¹⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052060/Levelling_Up_White_Paper.pdf

2 A Better Buildings Investment Plan for long-term energy bill savings and boosted productivity

The 2022 Spring Statement is an opportunity for the Government to invest in Britain's energy security for the long-term. EEIG's Better Buildings Investment Plan sets out a long-term package to spur action and investment for a nationwide green home retrofit drive.¹⁷ Together, these complementary measures will unlock billions in private investment from households and businesses. Public investment is required to support those on mid- to low-incomes, as well as to pump-prime the market and unlock billions in private investment from the so called 'able to pay' sector, while providing a clear signal to industry to invest.¹⁸

Following the Spending Review and Heat & Buildings Strategy announcements last autumn, a major public investment gap remains.¹⁹ The major missing component is £3.6bn for a nationwide energy efficiency subsidy scheme (forming the basis of a long-term programme). This is necessary to make vital progress on decarbonisation in the owner-occupier sector, which represents the largest proportion of UK homes and emissions, but within which the majority of households are not eligible for existing energy efficiency schemes. New analysis finds that of those living in inefficient homes who are on mid-to low-incomes, 81% have no access to our only nationwide energy efficiency scheme, the Energy Company Obligation (ECO), which is targeted at fuel poor households.²⁰ Following the wake-up call of the gas crisis, the Spring Statement presents an opportunity for course-correction.

1. Fulfil Conservative pledges on energy efficiency and clean heating

The 2019 manifesto promised £9.2bn of investment in green homes and buildings, but the Spending Review in 2021 fell £2bn short.²¹ The Government should plug the gaps in the Homes Upgrade Grant for low-income households (£1.4bn), Social Housing Decarbonisation Fund (£200m) and Public Sector Decarbonisation Fund (£400m).

It is crucial that the Government continues to support energy efficiency for fuel poor and low-income households. The economic toll of the pandemic – combined with the ongoing cost-of-living crisis – has left many households less financially secure. The updated definition of fuel poverty has provided a more realistic insight into the number of people struggling to pay to keep their homes at healthy temperatures – with more than one million households newly defined as fuel poor.²² Investing in Local Authorities and social housing can also act as a launch pad to achieve scale of skills and supply chains which can subsequently be rolled out to serve other tenures, including owner-occupied.

¹⁷ <https://www.theeeig.co.uk/news/2021-budget-and-spending-review-better-buildings-investment-plan/>

¹⁸ https://www.theeeig.co.uk/media/1109/eeig_2021-budget-and-spending-review_0721.pdf

¹⁹ https://www.theeeig.co.uk/media/1114/eeig_analysis-of-the-heat-and-buildings-strategy_03.pdf

²⁰ <https://www.e3g.org/publications/responding-to-uk-gas-crisis/>

²¹ https://www.theeeig.co.uk/media/1114/eeig_analysis-of-the-heat-and-buildings-strategy_03.pdf

²² <https://www.gov.uk/government/publications/sustainable-warmth-protecting-vulnerable-households-in-england>

It is welcome that the Government remains committed to the ECO 4 uplift, providing £1bn per year from April 2022 – helping an extra 305,000 families with green measures such as insulation, with average energy bill savings of around £300 a year.²³ However, with the number of fuel poor homes set to rise to 6.5m, it is clear that the additional support pledged in the Conservative manifesto will also be critical to begin to scratch the surface of the problem.

As with all measures, effective and pragmatic delivery will be key. This means working closely with industry to ensure smooth administration and processes, as well as providing timely guidance and clarity to give suppliers the confidence to contract for this period, which in turn will allow the supply chain to plan and maintain momentum.

2. A new nationwide energy efficiency scheme

The main source of support for investment in energy efficiency in UK homes is the ECO. However, 81% of mid- to low-income households living in the least energy efficient homes are not eligible for ECO support. There is no nationally available policy or programme to support these households, following the scrapping of the Green Homes Grant last year. The Sustainable Warmth competition launched to bring together two fuel poverty schemes (Local Authority Delivery Phase 3 and Home Upgrade Grant Phase 1) provides extra funding to successful Local Authorities who bid into a central pot of funding. This means access to this support is a postcode lottery and is unavailable in most areas.²⁴

Many will therefore slip through the net under the current suite of measures – particularly concerning in light of the growing pressure on household's financial security with soaring energy prices. While millions of households are classed as "able to pay", the reality is that many are not able to afford home retrofits, nor incentivised to do so. Recent English Housing Surveys found that around one third of owner occupiers have no savings, and in 2019 around half of owner occupiers were in the lowest three income quintiles, meaning they earned around or less than £35,700.²⁵ Owner occupiers with the lowest levels of savings and wealth - and least energy efficient homes - live disproportionately in the North of England and the Midlands. These are the regions in which owner occupiers most need grant funding.

A long-term commitment to a well-designed subsidy/ grant scheme, worth £3.6bn this Parliament, has a crucial role to play in a package of measures. This implies allocating £1.2bn for 2022/23 and committing to similar yearly amounts for the rest of this Parliament. Grants are popular with the public and can help boost jobs and supply chains, while leveraging private investment. Polling shows that two-thirds of homeowners in England (62%) were interested in the Green Homes Grant,²⁶ and 110,000 applications were made in a short period of time – with 50,000 issued.²⁷ A survey by the Insulation Assurance Authority found that businesses that participated in the voucher scheme on average spent £87,000 getting set up.²⁸

²³ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052307/Cost_of_living_factsheet_energy_.pdf

²⁴ <https://9tj4025ol53byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/The-energy-bills-crisis-Rebuilding-for-long-term-resilience1.pdf>

²⁵ Based on average English Housing Survey data between 2019 and 2021

²⁶ ECIU (2020) Green Homes Grant demand set to outstrip supply

²⁷ GHG_Vouchers_release_-_February_2022.xlsx (live.com)

²⁸ <https://www.theiaa.co.uk/news/post/is-the-future-of-the-green-homes-grant-voucher-scheme-at-risk/>

A grant or subsidy scheme with a clear, longer-term timeline would give businesses the confidence to invest. In designing a new scheme, the Government should work with industry to avoid replicating the administrative barriers that made the application process needlessly complex and payments frequently delayed. EEIG has provided detailed analysis on the key recommendations in a separate paper.²⁹

There are opportunities to funnel additional investment through existing schemes (i.e., expanding the scale and scope of the Boiler Upgrade Scheme and Local Authority Delivery Scheme) or through new structural incentives, such as blended finance offered through UK Infrastructure Bank loans or Energy Saving Stamp Duty (see below).

3. A set of measures to spur private investment

A number of measures can help pave the way to green homes finance at scale, with attractive incentives that spur action and investment:

- **Making markets through the UK Infrastructure Bank (UKIB):** The UKIB can help underpin the green homes finance market through supporting market-making and transformative financial instruments and projects, as well as through providing technical assistance and coordination capacity.³⁰ This could include offering concessional loans to households and SMEs via financial intermediaries – including 0% interest loans – or blended concessional loans with those intermediaries, learning from the successful German KfW model.³¹
- **Energy Saving Stamp Duty:** By introducing incentives at key ‘trigger points’ where a homeowner is likeliest to take action to retrofit their home – such as when buying, selling, or undertaking another renovation project (i.e. to upgrade a kitchen) – the Government can maximise potential positive outcomes, driving additionality. Analysis demonstrates how a modest adjustment to Stamp Duty Land Tax could catalyse and drive the market to deliver both energy efficiency improvements and low carbon heat and power, whilst revenue neutral to HM Treasury.³²
- **Zero Rating VAT:** A 0% VAT on green home retrofit products and services could also trigger action and investment, with an independent research report conducted on behalf of the Federation of Master Builders and RICS finding that the benefits of cutting VAT on home improvement works to 5% for the period 2021 – 2025 would result in a £51bn stimulus at a £2.7bn cost to Government, supporting nearly 350,000 jobs.³³ Supporting a major ramp up of additional activity, Treasury could gain additional revenue from this measure.

4. Support a wider suite of measures needed to underpin a nationwide retrofit drive

The EEIG recognises there is no silver bullet solution for a green home retrofit drive and recommends a broad ecosystem of measures under 6 key areas: governance; public capital; able-to-pay incentives; regulation; local and fair delivery; and advice and standards. Investing in skills, innovation, public

²⁹ For EEIG’s full analysis of the Green Homes Grant, including what happened, what lessons need to be learnt, and what comes next; please see the following position paper: https://www.theeeig.co.uk/media/1107/eeig_learning_lessons_green_homes_grant.pdf

³⁰ <https://www.e3g.org/publications/making-markets-through-the-uk-infrastructure-bank/>

³¹ https://www.kfw.de/About-KfW/Newsroom/Latest-News/Pressemitteilungen-Details_403200.html

³² <https://www.ukgbc.org/ukgbc-work/a-housing-market-catalyst-to-drive-carbon-emission-reductions/>

³³ <https://www.fmb.org.uk/resource/cut-the-vat.html>

engagement and trusted advice will be key for effective delivery. For the EEIG's full recommendations to Government, see EEIG analysis of the Heat and Buildings Strategy: Still waiting for the green light.³⁶

Following previous boom-bust policy making, it is important for Government to restore industry confidence by providing long-term certainty over the direction of travel. Delivering on climate goals will require skilled energy efficiency supply chains across the country, with support to ensure jobs in retrofit are secure and attractive.

Efficient delivery of public funds requires effective delivery of the ground, working to overcome certain 'blockers' which can currently stand in the way of installers and local delivery partners. This includes addressing practical issues with the implementation of PAS 2035 standards, moving towards a streamlined approach, as well as addressing concerns around scheme administration (please refer to EEIG's previous paper on lessons learnt from the Green Homes Grant).³⁴

3 Summary

Now is the time to invest in the long-term solutions to the cost-of-living crisis. ONS data in January showed that UK public borrowing was £12.9bn lower than forecast in 2021, which means there is unexpected fiscal headroom available to the Chancellor.³⁵ Existing pots of funding can be mobilised: the Government has raised £16bn for green investment through the green gilt, and the UK Infrastructure Bank has £22bn of infrastructure finance available. Existing and planned schemes can be expanded in scope and scale, including the Boiler Upgrade Scheme and Home Upgrade Grant, as effective delivery schemes. Investing today will pay off long into the future – insulating households from future price shocks, lowering bills, and boosting green jobs and industries.

For further information please contact EEIG advocacy co-ordinator, Juliet Phillips at juliet@theeeig.co.uk or EEIG Chair, Sarah Kostense-Winterton at sarah@theeeig.co.uk.

Please note the position taken by the Energy Efficiency Infrastructure Group (EEIG) does not necessarily reflect the views or priorities of all members.

³⁴ <https://www.theeeig.co.uk/news/learning-lessons-from-the-green-homes-grant-an-eeig-position-paper/>

³⁵ <https://www.ft.com/content/7e4b9e78-1ea0-4966-9e94-929fa100085c>

³⁶ https://www.theeeig.co.uk/media/1114/eeig_analysis-of-the-heat-and-buildings