

RIBA Response:

Treasury Committee - Decarbonisation and Green Finance

The Royal Institute of British Architects champions better buildings, stronger communities and higher environmental standards through the practice of architecture and our 40,000 members. We provide the standards, training, support and recognition that put our members – in the UK and overseas – at the peak of their profession. With government and our partners, we work to improve the design quality of public buildings, new homes and new communities.

The Royal Institute of British Architects (RIBA) welcomes the opportunity to respond to this inquiry. The built environment is responsible for around 40% of global carbon emissions and architects have a significant role to play in reducing UK greenhouse gas emissions. The RIBA joined the global declaration calling an environment and climate emergency on 29 June 2019; just two days after the UK government passed a law stipulating the UK end its contribution to global warming by 2050, by bringing all greenhouse gas emissions to net zero.

The RIBA welcomes the direction of travel signified by many of the measures proposed by Government in recent years to help the UK reach net zero. However, we believe that there is a need for greater ambition if we are to significantly improve the performance and reduce the environmental impact of the built environment.

Improving the energy efficiency of buildings is essential to helping the UK meet its long-term climate goals. At the same time, it provides the opportunity to stimulate the economy, create jobs and support a green economic recovery to the coronavirus pandemic.

The RIBA recommends prioritising additional public investment, announcing policies to stimulate private sector capital and reviewing tax mechanisms to incentivise energy efficient retrofits in existing homes.

HM Treasury should also ensure that publicly funded infrastructure projects are providing value for money by requiring the use of Post Occupancy Evaluation.

Improving the energy efficiency of existing homes

The UK has the least energy efficient housing stock in Europe, and it is expected that 85% of the current stock will still be in use in 2050.¹ In the UK 19% of carbon emissions come from heating buildings, 77% of which comes from heating homes.²

The Government's Clean Growth Strategy sets the target of bringing all homes to Energy Performance Certificate (EPC) band C by 2035, "where practical, cost-effective and affordable". Currently, only 29% of homes meet this standard; which leaves a remaining 71%, equating to around 19 million homes, to be retrofitted if the UK is to meet its energy efficiency target.³

Improving the energy efficiency of these 19 million homes must become a national infrastructure priority and Government must set more ambitious retrofit targets. To achieve this, Government must set out a National Retrofit Strategy which includes clear governance arrangements, targets, and a long-term action plan which identifies incentives and ringfences funding.

Stimulating investment and consumer spending

The RIBA welcomes the £2 billion announced by the Chancellor in the summer economic statement; however, this must be just the beginning. The Conservative Party earmarked £9.2 billion in their election manifesto for three energy efficiency programmes – the Social Housing Decarbonisation Fund, Home Upgrade Grants and Public Sector Decarbonisation Scheme. These must be confirmed in full and implemented as soon as possible.

In addition, the Government must implement additional policies that unlock private capital through public investment. Internationally, this has been very successful. For example, in Germany in 2016, their national infrastructure bank, KfW, invested €1.7 billion to incentivise energy efficient renovation through interest rate and capital subsidies. These incentives led to unlocking €8.4 billion from building owners – i.e. for every €1 invested, building owners were motivated to borrow and spend €6. The resultant VAT on these revenues alone (€1.6 billion) nearly covered KfW's own costs.⁴

Larger subsidy levels were dependent on achieving higher energy performance. Typically, improved performance is more expensive to achieve, requiring building owners to spend more. These measures, coupled with low-cost borrowing, incentivised building owners to spend six times more than the Government investment.⁵

The Government must also help unlock stimulus from the financial sector. The Green Finance Institute's report: *Financing energy efficient buildings: the path to retrofit at scale* provides a

¹ UK Green Building Council, *A housing stock fit for the future: Making home energy efficiency a national infrastructure priority*, <https://www.ukgbc.org/sites/default/files/A%2520housing%2520stock%2520fit%2520for%2520the%2520future%2520-%2520Making%2520home%2520energy%2520efficiency%2520a%2520national%2520infrastructure%2520priority.pdf>, pg. 5

² House of Commons Business, Energy and Industrial Strategy Committee, *Energy efficiency: building towards net zero*, <https://publications.parliament.uk/pa/cm201719/cmselect/cmbeis/1730/1730.pdf>, pg. 6

³ House of Commons Business, Energy and Industrial Strategy Committee, *Energy efficiency: building towards net zero*, pg. 13

⁴ EEIG, *Rebuilding for Resilience*, pg. 15

⁵ EEIG, *Rebuilding for Resilience*, pg. 16

series of financial innovation demonstrators designed to mobilise private capital to retrofit our housing stock.⁶ The Government should collaborate with the financial sector on, for example, green leases and Building Renovation Passports to promote private investment in energy efficiency.

Utilising existing tax mechanisms to incentivise retrofitting

HM Treasury should review how current tax mechanisms can be amended to incentivise homeowners to improve the energy efficiency of their home. The review should include a differential that ties Stamp Duty Land Tax, inheritance tax and capital gains tax to the energy efficiency of the home being sold. This work should be undertaken in conjunction and consultation with the built environment. The RIBA are producing a report on how this could work in practice and will share with the Committee in due course.

Creating skilled employment opportunities across the country

As part of the National Retrofit Strategy, the Government should support training and education through ringfenced funding. In their response to COVID-19, New Zealand allocated NZ\$1.1 billion (£0.55 billion) as part of an environmental jobs package, and a further NZ\$1.6 billion (£0.8 billion) over four years for trades and apprenticeship training.⁷ Investing in skills and training for retrofitting will help “level up” opportunities across the UK.

Coordinating energy efficiency financing through a HM Treasury led infrastructure approach

In the past, the cross-departmental nature of energy efficiency has meant that crucial elements of its policy have been lost between departmental remits, allowing departments to shift accountability amongst one another. Coordination of the National Retrofit Strategy across departments could be more effective through a HM Treasury led infrastructure approach.

Recommendations:

- Improving the energy efficiency of homes must become a national infrastructure priority and Government must set more ambitious retrofit targets.
- The Government must set out clear retrofitting policies as part of a National Retrofit Strategy, including incentives to stimulate private capital and funding for training and education.
- The £9.2 billion earmarked in the Conservative Party’s election manifesto must be confirmed in full and implemented as soon as possible.
- HM Treasury should work with the built environment to review how the tax system can incentivise improvements in the energy efficiency of the existing housing stock.
- Coordination of the National Retrofit Strategy should be through a HM Treasury led infrastructure approach.

⁶ Green Finance Institute, *Financing energy efficient buildings: the path to retrofit at scale*, <https://www.greenfinanceinstitute.co.uk/wp-content/uploads/2020/05/Financing-energy-efficient-buildings-the-path-to-retrofit-at-scale.pdf>

⁷ EEIG, *Rebuilding for Resilience*, pg. 17

Verifying buildings are energy efficient through Post Occupancy Evaluation

It is vital that building owners and users gain a better understanding of how their building performs compared to the design intention. Even when a building's design has energy efficiency at its heart, the promised energy efficiency standards are not always met.

Undertaking Post Occupancy Evaluation (POE) is key to ensuring that a building is as energy efficient as intended. POE is the process of obtaining feedback on a building's performance in use after it has been built and occupied. POE accurately measures factors such as energy consumption, water usage, maintenance costs and user satisfaction.

Some Government departments are embracing POE, mainly driven by the Government Soft Landings policy – a mechanism for ensuring a smooth transition from the design and construction phase to the operational phase of a built asset.

However, the implementation has not been widespread. The Ministry of Housing, Communities and Local Government, for example, does not require POE on housing projects that receive public funding. This must change and Government should require any building which receives public funding to conduct POE. From housebuilders who receive Help to Buy support to commercial and industrial developers seeking public sector clients, the Government can and should demand more from those it supports.

This is essential for the transparency of how public money is spent, but also provides data that can be shared and learnt from, allowing for continuous improvement on energy efficiency within the built environment.

The construction industry is one of the few sectors where a large sum of money is spent, yet there is no assurance that the building is performing as intended. Measuring building performance confirms that a building is not negatively impacting the environment and providing value for money for the owner.

Recommendations:

- The Government must endorse and promote that all buildings undertake POE.
- The Government should require POE as a condition of procurement of public funding for building projects.