

Royal Institute of British Architects

House of Commons Business, Energy and Industrial Strategy
Committee: Net zero governance
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The Royal Institute of British Architects is a global professional membership body driving excellence in architecture. We serve our members and society in order to deliver better buildings and places, stronger communities and a sustainable environment. Being inclusive, ethical, environmentally aware and collaborative underpins all that we do.

The Royal Institute of British Architects (RIBA) welcomes the opportunity to respond to this inquiry. Around 40% of global carbon emissions stem from buildings 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.

We believe that there are several areas that are critical to success in achieving the UK's net zero ambition, and with the right decisions, the UK can demonstrate global leadership and create a world-leading built environment sector.

To help the built environment reach net zero, the RIBA recommends the Government:

- Ensure that energy efficiency improvements are coordinated through a HM Treasury led infrastructure approach
- Ensure that improving the energy efficiency of England's building stock becomes a national infrastructure priority
- Introduce a National Retrofit Strategy – a long-term plan and investment programme for upgrading the energy efficiency of our housing stock
- Introduce a sliding scale of Stamp Duty, where the most energy efficient homes pay significantly less than the least
- Utilise effective procurement procedures, which includes social value.

1. What are the key requirements for a governance structure that can deliver cross-Government climate action at the pace, scale and over the duration required to meet the carbon budgets and the 2050 net zero target?

a) Are the Government's existing net zero governance structures effective in this role, both in terms of coordination across Whitehall, and coordination with the devolved administrations and local and regional authorities?

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. In the UK 19% of carbon emissions come from heating buildings, 77% of which comes from heating homes.

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.

However, 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. For the built environment, this is especially acute as energy efficiency is led through the Department for Business, Energy and Industrial Strategy (BEIS), but housing is led by the Ministry of Housing, Communities and Local Government (MHCLG).

Improving the energy efficiency of the housing stock has for too long fallen on the list of Government priorities. The rise in home and flexible working mean that there is no longer any time to waste if the UK is to achieve the emissions reductions required to meet its climate goals.

b) What alternative governance structures could be established to coordinate and deliver cross-Government action on climate change more effectively?

To ensure that energy efficiency improvements receive adequate funding and long-term policies, we suggest that coordination across departments could be more effective through a HM Treasury led infrastructure approach.

We suggest that improving the energy efficiency of England's building stock must become a national infrastructure priority. To date, buildings have not been seen as part of the nation's infrastructure and have therefore been on the receiving end of less funding on the basis that energy efficiency improvements have not been funded as part of the Government's infrastructure investments portfolio. Infrastructure projects by HM Treasury are valued more highly on the basis that they are deemed to have higher private sector multiplier effects, meaning they are seen to offer better returns on investment.

Making energy efficiency a national infrastructure priority would have real benefits. It would lead to energy efficiency improvement investments to be considered, as is the case with other infrastructure priorities, on a longer time horizon than the 5 to 10-year cycles that dominate current policy discussions.

Broadening the time horizon on which the Government are considering energy efficiency investments would send a clear signal to the private sector of the direction of travel and would begin

to help eradicate the stop-start nature of policy in this area which has often led to boom-and-bust cycles in the mostly SME retrofit construction sector.

2. What governance structures would enable HM Treasury to give greater priority to the net zero target and the carbon budgets in its financial and economic decisions?

a) How could HMT better ensure that spending decisions contribute to achieving net zero in the long term?

Previous Government policies, including the Green Deal, have not been successful at incentivising homeowners to improve their energy efficiency. This is for several reasons, including high interest rates and homeowners not being convinced to improve energy efficiency based on energy bill savings alone. The start-stop nature of funding for energy efficiency improvements, which has been the norm to date, has also not helped the situation.

After an extended period of declining financial support and ineffective policymaking towards energy efficiency improvements in England, the Government's Clean Growth Strategy, which sets targets for improving energy efficiency was a welcome development. Troubling, however, is the continuing absence of a comprehensive, cross-departmental plan for achieving these targets. Therefore, the RIBA recommends that the Government bring forward a National Retrofit Strategy – a long term policy and investment programme for upgrading the energy efficiency of England's housing stock. Such a strategy would need to be based on substantial and sustained government funding. The RIBA is calling for the £9.2 billion pledged for retrofit in the Conservative manifesto to be brought forward over the next five years.

Critical to a successful National Retrofit Strategy will be a series of policies trying to build up demand amongst homeowners who are 'able to pay', an area where past efforts have fallen short. We recommend the Government use the tax system to embed energy efficiency in the housing market.

Stamp Duty Land Tax should be tied to the energy efficiency of a property, providing an incentive for homebuyers and owners to invest. A sliding scale of stamp duty, where the most efficient homes pay much less tax than the least, could be capped at £25,000 to avoid large and potentially punitive increases on expensive homes. We also recommend a time-limited rebate period, to encourage homeowners to make their own energy efficient improvements.

Evidence shows that people are more likely to pursue energy efficiency improvements at certain trigger points or moments of change, such as moving home, since they are already prepared for disruption at these times. In 2017-18, there were 1.1 million residential transactions, so reforming stamp duty creates an opportunity to incentivise a large proportion of homes each year. However, a stamp duty differential is not a silver bullet. It must be implemented as part of a suite of measures, through a National Retrofit Strategy, that includes adequate funding and green finance options.

HM Treasury should then look at extending the principle of embedding energy efficiency across the tax system, including incentives for those paying Inheritance Tax, Capital Gains Tax and Council Tax on domestic properties. Ensuring consumers have access to the right information and low-cost credit is also essential in facilitating able to pay demand.

Public procurement should prioritise good design outcomes and maximise the social, environmental, and economic benefits of development

Sometimes as a result of poor procurement practice or lack of in-house expertise, public clients don't get what they expected, and communities don't get the quality they deserve. Government should take an outcomes-based approach and invest in the right design skills, briefing and design process when setting project budgets and fee levels. Consultants should not solely be appointed on the lowest fee, as they may not be able to properly resource the level of service required. This can lead to low quality outcomes which do not deliver long-term value to the taxpayer.

The Government should also consider social value during the procurement process. The *Social Value Act 2012* legislated to introduce better accountability of social value through government spending. However, there is scope for more to be done, and we welcome Government moves to support this. The RIBA supports the development of more explicit award criteria to consider social value (covering areas such as community cohesion, health and wellbeing, access and inclusion, social sustainability, innovation and resilience).

3. What signals and support does business need from the Government in order to deliver cross-economy decarbonisation in line with the carbon budgets and the net zero target? What delivery function should Government provide itself and are relevant regulatory bodies mandated and resourced effectively to deliver on Government priorities?

a) How do policy and regulatory signals and support vary between Government Departments (and how have they varied over time)? How is this affecting business activity on climate change?

The RIBA welcomes the direction of travel signified by many of the measures proposed by Government in recent years to help the UK's building stock reach net zero.

Several consultations from BEIS including introducing a performance-based policy framework in large commercial and industrial buildings, non-domestic private rented sector minimum energy efficiency standards and improving home energy performance through lenders have been a step in the right direction. 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.

It was positive to see MHCLG consult on the Future Homes and Buildings Standards, which suggest changes to Part L (conservation of fuel and power) and Part F (ventilation) of the Building Regulations. However, the changes are not ambitious enough to ensure our new homes and buildings do not negatively impact the environment.

To ensure our new buildings are on track to reach net zero, we must start regulating the amount of energy used by a building. The current calculations for measuring energy efficiency do not reflect the actual energy used by a building. Measuring energy at the meter, known as operational energy, should become the principal metric for energy efficiency.

Using operational energy as the key metric would also allow for benchmarking and minimum standards to be easily established based on building type, driving further innovation within the built environment.

Currently, the Building Regulations suggest a reduction in performance relative to a prescribed notional building. The notional building does not reward efficient building form and orientation. Instead, we must move towards setting actual energy consumption requirements, measured in energy use intensity (EUI), in kWh/m²/yr.

The carbon emissions from a building's operational energy use make up only a portion of the carbon emitted across its entire lifecycle. There are significant carbon emissions embodied in the materials used to produce, operate and maintain buildings. However, disappointingly the Future Homes and Buildings Standards consultations make little reference to the importance of reducing embodied carbon. As the grid decarbonises and buildings become more efficient in their energy use, embodied carbon is making up an ever-greater percentage of a building's total carbon footprint. Therefore, Government must start regulating and setting embodied carbon targets for buildings.

The Government has an important role to play in setting adequate standards to reach net zero. This will also help drive business and consumer confidence to invest in and work towards net zero.

To improve our building stock we must measure how buildings perform in reality

We have known for many years there is a gap between anticipated and actual performance of buildings. The current tools used to assess a building's compliance, such as Simplified Building Energy Model (SBEM) and Standard Assessment Procedure (SAP), do not accurately predict actual operational energy or carbon performance. Therefore, they are an inappropriate methodology to reduce the climate impact of the built environment.

To close the performance gap, we must use design for performance tools and verify this through Post Occupancy Evaluation (POE). POE is the process of obtaining feedback on a building's performance in use after it has been built and occupied. POE collects information on building and energy use and user satisfaction and is the only way of accurately measuring if a building is as energy efficient as anticipated.

The data collected through POE must also be used to improve predictive energy modelling through verification and comparison in use. Without checking how buildings actually perform, the industry is relying on unverified predictions of performance.

The RIBA recommends that the Government should require POE as a condition for all publicly funded buildings and housebuilders receiving Help to Buy payments. This is essential for 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, saving time and money in the long-term.

For a National Retrofit Strategy to be successful, it needs to avoid the pitfalls of previous efforts

These efforts were characterised by stop-start funding that led to boom and-bust cycles, ultimately leaving the largely SME suppliers of construction for retrofit with unsustainable business models. If these poor outcomes are to be avoided moving forward, the Government will need to bring forward a plan to ensure that consumer demand is built up and is sustainable.

The Green Homes Grant was a welcome measure to help boost to demand, however, the axing of the scheme may have resulted in industry losing further confidence in investing in the skills and supply chain needed to retrofit the UK's housing stock.