



## **Review of Net Zero: call for evidence**

G15 response

October 2022



## About the G15

The G15 is made up of London's largest housing associations. The G15's members provide more than 715,000 homes across the country, including around one in ten homes for Londoners. Delivering good quality safe homes for our residents is our number one priority. Every year our members invest almost £900m in improvement works and repairs to people's homes, ensuring people can live well. Together, we are the largest providers of new affordable homes in London and build around 15% of all affordable homes across England. It's what we were set up to do and what we're committed to achieving. We are independent, charitable organisations and all the money we make is reinvested in building more affordable homes and delivering services for our residents.

Find out more and see our latest updates on our website: [www.g15.london](http://www.g15.london)

The G15 members are:

- A2Dominion
- Catalyst
- Clarion Housing Group
- The Guinness Partnership
- Hyde
- L&Q
- MTVH
- Network Homes
- Notting Hill Genesis
- One Housing
- Optivo
- Peabody
- Southern Housing Group

For more information, please contact: [G15@mtvh.co.uk](mailto:G15@mtvh.co.uk)

## **Introduction**

Improving the sustainability of the homes we provide, and cutting costs for residents of heating and powering their homes, is a critical priority for all G15 members. When gas and electricity bills are taken together, those living in the least energy efficient homes will pay almost £2,000 extra per year compared to EPC C rated homes. Combined with the impact of increased carbon emissions from less energy efficient homes, these figures demonstrate the importance of continued investment in improving the energy efficiency of existing homes.

We welcome the government's commitment to achieving Net Zero by 2050, and the consensus across the political spectrum of the need to address climate change. Not-for-profit housing associations are already making good progress in improving the energy efficiency of the homes we provide. Around 71% of G15 members existing homes already meet EPC C, and all general needs homes are required to meet this level by 2030. However, to meet net zero across the homes we provide, significant further investment will be required, with G15 members currently estimating costs of between £10bn-£11bn.

Estimating the cost of achieving net zero by 2050 is currently extremely difficult. There are a range of parameters that are not yet known, or confirmed, such as what fabric standards will be necessary to support clean heat, and how we can accurately measure decarbonisation. The government has an important role to play in giving the policy certainty to allow housing providers to take long-term decisions to improve the sustainability of our homes. Alongside this, funding and ensuring the right skills are available in the workforce, are critical areas for the government to focus on.

## **Responses to consultation questions**

**Question 1:** How does net zero enable us to meet our economic growth target of 2.5% a year?

**Response:**

The UK Economy has several comparative advantages over other advanced economies that will enable it to simultaneously grow the nation's economy and decouple that growth from the CO<sub>2</sub> emissions needed to achieve net zero according to the modelling of the Climate Change Committee. Our overall strengths include access to and our technological expertise in harnessing tidal power, offshore wind and carbon capture and storage.<sup>1</sup> We are also, importantly, world leaders in the financial sector. The emergence of investment products in the ESG Category that reward net zero approaches to construction and asset management is a manifestation of capital management expertise in which the UK is close to unrivalled.

This so-called green finance is being leveraged by the G15, and we are leveraging this to build new homes and upgrade existing ones according to best practices and net zero pathways so they will consume less energy. These enhancements are helping people across the economic spectrum, some will avoid fuel poverty and others will have more disposable income.

This rapidly developing finance category is being channelled by the G15 to generate new highly skilled construction related jobs that are addressing the shrinking workforce and are a structural and demographic issue that will inhibit economic growth in the UK.<sup>2</sup>

Historically, action towards net zero has focussed on the supply side; seeing an increase in electricity generated from renewable sources and a phasing out of coal power stations. Measures focussing on the demand side are vital to reach net zero, particularly the mass rollout of insulation and heat pumps in homes.

Research and innovation will ensure UK PLC is best placed to develop technical solutions that can be scaled up and have a direct impact on economic growth.

The significant expansion of the supply chain associated with net zero, including design, manufacturing and installation of measures is also an area of considerable growth opportunity.

The green skills gap is already recognised in many areas, such as renewable energy, energy efficiency, retrofitting of buildings, construction, environmental services and manufacturing. The use of clean technology requires skills in

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<sup>1</sup> *Growing clean* – the 19<sup>th</sup> report for *The Economy 2030 Inquiry*, a collaboration with the LSE, funded by Nuffield Foundation

<sup>2</sup> Mark Farmer, 2016. [Construction labour market in the UK: Farmer review](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/544442/construction_labour_market_in_the_UK_Farmer_review.pdf) - GOV.UK ([www.gov.uk](https://www.gov.uk))

technology along with adaptation and maintenance, this is a real opportunity for economic growth at various academic levels which are accessible for all.

A recent report by Capital Economics forecasts that the construction sector output will be 58% larger in 2050 than it was in 2021, which will require an additional 1.1 million construction jobs to be filled.

While overall demand for construction workers increases, the Construction Industry Training Board (CITB) estimates that for the built environment to achieve net zero, the construction industry will need an additional 350,000 workers.

When it comes to retrofitting older and protected buildings the green skills shortage is compounded with shortage of skills in the heritage sector. This makes reaching net zero in these buildings extremely difficult.

This level of growth requires a long-term plan. The quantity of expertise in the sector right now is not enough to deliver at pace in the short term. It takes time and investment to develop people with the specific skills required to deliver net zero and this is where the long-term growth opportunity lies.

Reducing the amount of energy and therefore cost it takes to keep homes warm will leave more money in people's pockets and enable an increase in discretionary spending, further growing the economy. We are working to keep bills down for our residents with our rents far below market average at £125 per week on average (around 50% of market rents). However, more support is needed to reduce the energy demand and therefore establish greater energy security for residents. With security comes greater spending which will feedback into the UK economy.

**Question 2:** What challenges and obstacles have you identified to decarbonisation?

**Response:**

Homes are responsible for about 20% of the UK's total CO<sub>2</sub> emissions<sup>3</sup> and heating in homes alone currently comprises 13% of the UK's total CO<sub>2</sub> emissions. Research carried out by The National Housing Federation has also demonstrated that, in England, emissions produced from homes is greater than the annual emissions produced by cars.<sup>4</sup> The residential sector is now targeted by the CCC to be carbon free earlier than industry and transport. The modelling recommends that the residential sector should be net zero by 2048 and shows it is feasible by 2044<sup>5</sup>.

Transforming the building fabric and the means of heating each home in the UK by 2050 is a monumental challenge that the G15 will play a key role in meeting with our ability to deliver at scale. However, one key obstacle that needs rectification is the

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<sup>3</sup> Climate Change Committee, Housing Fit for the Future, 2019 <https://www.theccc.org.uk/publication/uk-housing-fit-for-the-future/>

<sup>4</sup> National Housing Federation, 2022 [National Housing Federation - England's leaky homes are a greater threat to climate than all of its cars](#)

<sup>5</sup> [Sixth Carbon Budget - Climate Change Committee \(theccc.org.uk\)](#)

inaccurate and inadequate calculation methodology that remains too ensconced in the Standard Assessment Procedure for assessing the energy and carbon performance of homes. This method does not reliably predict energy use or carbon emissions but is mandated by government to set the balance on how much insulation and low to zero technology in each home that is built, sold or remediated. This is widely recognised across the built environment professions (RIBA and CIBSE) and acknowledged by government<sup>6</sup>. We are aware that changes are scheduled inside a 24-month horizon, but progress has been woefully slow.

Around 71% of G15 members existing homes already meet EPC C, and all general needs homes are required to meet this level by 2030. Research by the NHF and Savills has found the investment required to bring all housing association properties up to EPC Band C by 2030, and to replace gas heating in all homes by 2050 and therefore contributing to achieving net zero, would be £36bn<sup>[1]</sup>.

G15 members have well developed plans to achieve EPC C by 2030 for homes covered by the target. Members estimate that this will cost approximately £1.2bn. Across all homes covered by this target, the average cost per home of achieving EPC C ranges between providers from £667-£3,997, demonstrating the different challenges members face due to the profile of their stock. However, a more useful measure would be to look at the cost of bringing only those homes currently below EPC C up to this level, which is most likely to be in the range of £14,000-£18,000 per home.

Estimating the cost of achieving net zero by 2050 is currently extremely difficult. There are a range of parameters that are not yet known, or confirmed, such as what fabric standards will be necessary to support clean heat, and how we can accurately measure decarbonisation. Therefore, the estimates we are providing here should be treated as potential illustrations, rather than confirmed business plan assumptions. Nevertheless, G15 members currently estimate the cost of achieving net zero to be approximately £10bn-£11bn. The average cost per home of achieving net zero ranges from £6,730-£30,952, again demonstrating the different requirements of different types of homes, and the different stock profile of the homes members are responsible for.

Although private financing mentioned above is emerging with advantageous terms that reduce the cost of borrowing that allows the G15 to build lower and net zero carbon homes faster the creation of new social rent homes and upgrade of existing ones is still reliant on grant and the short term funding programmes, by this we mean one or two years funding horizons that do not afford the chance to optimise business cases for co-funded solutions and to mobilise at scale.

This lurching approach has been well demonstrated to prevent the construction sector from nurturing the people and small medium sized enterprises needed to

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<sup>6</sup> [Improving Energy Performance Certificates: action plan - progress report - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/674442/Improving_Energy_Performance_Certificates_action_plan_-_progress_report_-_GOV.UK_(www.gov.uk).pdf)

<sup>[1]</sup> <https://www.housing.org.uk/news-and-blogs/news/decarbonising-housing-associations-homes-cost-36bn/>

address this specific net zero and wider construction capacity issues that are affecting the country now and will only grow more severe in the future.

It is important to recognise that some social houses will be considerably harder to retrofit than others, and in some cases, it will not be economically viable.<sup>7</sup> We need a clear approach agreed with Central Government and Local Authorities on how to address this pool of properties, especially in areas like London where the stock is older but also harder to replace in the same area due to land costs.

**Question 3:** What opportunities are there for new/amended measures to stimulate or facilitate the transition to net zero in a way that is pro-growth and/or pro-business?

**Response:**

Pursuing net zero in the residential built environment presents a very good value for money opportunity to create jobs, fight inflation and enhance wellbeing of millions of Britons.

A more robust and coherent regulatory framework setting out a forward plan for implementation would incentivise investment in climate positive solutions and would ensure that businesses have long term certainty over future regulations. For example, setting a clear regulatory pathway to net zero that landlords are expected to follow for reduction in energy demand from the homes they provide.

It is important to understand that whilst the majority of existing homes will still be around in 2050, we know that some of our stock simply isn't viable to retrofit. This may be where the property has challenging characteristics which make it technically, logistically and economically unviable or where there are specific constraints such as location or planning issues. In these instances, we could save residents money, improve conditions and house people more efficiently if we were to replace this stock with new build properties.<sup>8</sup> Current funding does not support replacement of regeneration units and this need to be given careful consideration moving forwards.

**Question 4:** What more could government do to support businesses, consumers and other actors to decarbonise?

**Response:**

A clear strategic unwavering commitment to the amended Climate Change Act that manifested in long-term rolling funding programmes underpinned by SME support and education and training for trades would stimulate growth and support business.

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<sup>7</sup>National Housing Federation, 2022. [National Housing Federation - Hard to decarbonise social homes](#)

<sup>8</sup>Inside Housing, 2022. <https://www.insidehousing.co.uk/news/news/grant-funding-should-be-refocused-to-include-regeneration-mps-told-76579>

A public awareness campaign is needed alongside regulation to provide individuals and businesses with the information they need to make the right choices. Along with supporting individuals and helping businesses transition into net zero (gas boilers to hydrogen boilers), The Government need to be advocates in the agenda.

**Question 5:** Where and in what areas of policy focus could net zero be achieved in a more economically efficient manner?

**Response:**

The built environment sector needs the EPC and SAP methodology updated urgently using a more robust science-based method for setting energy and carbon performance in the built environment. What the Building Research Establishment may be purporting, we and the industry at large has ample evidence that the current SAP method simply is not good enough. This method makes considerable assumptions about a property, can be subjective and heavily reliant on the accuracy of the assessors' inputs into the software. It does not reliably predict energy usage, carbon emissions or the actual impact of energy efficiency interventions. A more accurate and reliable method would enable a faster and more efficient means to achieving net zero.

A move away from asset-based regulation to operational, energy in use regulation would see a more results driven approach. The current regulatory framework incentivises compliance driven design that does not always deliver the best outcomes. Targeting performance in use will identify those measures and approaches that deliver real reductions in energy use and carbon.

A clear, stable and consistent policy with targets over a long term (to 2050) with inclusion of rate of progress to help businesses plan and develop robust investment plans. Policy needs to be developed and informed by bodies such as LETI, STBI, RICS, RIBA, BRE, UKGBC.

Policy that is consistent between social housing and the private sector. Outlining ultimate goals so landlords can understand risks associated with properties that may never meet the 2050 target, offering opportunity to offset emissions in an ethical manner.

**Question 6:** How should we balance our priorities to maintaining energy security with our commitments to delivering net zero by 2050?

**Response:**

Focussing on reducing energy demand in homes will see an increase in energy security as the UK will no longer need to rely on importing the 8% of electricity from Europe that it currently requires to meet demand.



Understand that heat demand is the best way to reduce energy consumption, not SAP. Government funding without the criteria of a reduction in heat demand does not help us meet net zero, it simply reduces running costs for residents which is not guaranteed as can be currently seen in the energy crisis. This agenda is costly but the risk of not doing enough is far greater than the risk of doing too much.

Achieving net zero is about more than eliminating fuel poverty, it is to achieve energy security and remove social, economic harm which will occur if this agenda is reduced or removed. Global warming should be a priority for all and without clear leadership and focus we will experience more extreme weather events, with more power outages and energy insecurity for the UK.

This can also be achieved by investing in green, sustainable and renewable energy and by reducing energy consumption through improvements to existing homes, and by providing sustainable financing.

**Question 7:** What export opportunities does the transition to net zero present for the UK economy or UK businesses?

**Response:**

Decarbonising existing buildings will reduce energy bills, and fuel poverty. Green heating using proven technologies and using UK manpower, generates some £80b cost savings in grid infrastructure peak capacity. This will be needed to support power generating companies to achieve the decarbonisation needed and move the UK towards energy independence. This makes UK generated renewables available as a valuable UK export revenue earner, instead of a cost burden on UK households and businesses.

Other opportunities include:

- Research and development.
- Sustainable technology
- Manufacturing

## **Questions for businesses**

**Question 7:** What growth benefits/opportunities have you had, or do you envisage having, from the net zero transition?

### **Response:**

There is a huge realm of green training and job opportunities to help grow the economy in areas such as retrofit, renewables and technology. The Retrofit Academy has been a front runner in establishing an educational platform to support people into this area for growth.

The built environment is one of the biggest carbon emitters of GHG's in the UK. The opportunity and economic, social and environmental need to cleanse this sector is huge.

## **Questions for local government, communities and other organisations delivering net zero locally**

**Question 24:** What are the biggest barriers you face in decarbonising / enabling your communities and areas to decarbonise?

### **Response:**

The policy framework for non-consumable costs on utilities and the outdated carbon figures used in RdSAP (SAP 2012) are disincentivising the transition away from fossil fuel based domestic heating solutions. Setting out a pathway for when and how the non-consumable costs will be transferred from electricity to gas will enable social landlords to plan for decarbonising their heating systems in a way that will not increase costs for their residents.

Too much emphasis is based on SAP and not enough on heat demand. We cannot decarbonise using SAP, and funding opportunities need to reflect this in their criteria. Having a clear Net Zero policy back with SBT funding is needed.

Other barriers include:

- Long term Government financing and grants
- Sustainable finance
- Technology
- Materials
- Skills

**Question 26:** How does the planning system affect your efforts to decarbonise?

**Response:**

The abandoning of the net zero target for new homes in 2016 removed the regulatory pressure on our supply chain to deliver net zero. The planning system currently still allows for gas boilers to be installed. This will ensure we are still being offered homes through s106 that require significant investment to meet net zero. Requirement for planning permission in particular areas for specific measures presents additional risks, costs and delays.

Heritage properties

21% of England's domestic building stock pre-dates 1919 and hundreds of thousands are either protected by statutory listing or situated in a conservation area. These protections cover many different types of buildings including blocks of social housing.

Insulating these older properties is substantially harder than a newer home. This is due to cost, uncertainty, and lack of clarity around what is allowed according to planning frameworks and policies.

The National Planning Policy Framework (NPPF, 2019) and the Planning (Listed Buildings and Conservation Areas) Act 1990 are the key national regulations for historic buildings. Neither of these make specific reference to retrofitting for net zero. Instead, the guidance is to assess the balance between the 'harm to heritage significance' and public benefit. Although climate change mitigation is undoubtedly a public benefit, this is not stated explicitly and can be interpreted differently by different planning officers.

Ultimately, there is a need for a closer alignment of heritage protection and environmental sustainability in the National Planning Policy Framework as well as policies for carbon reduction in relation to all designated heritage sites. Explicit reference to climate mitigation as a public benefit in these documents would allow greater certainty around what is allowed and improve investor confidence.

**Question 27:** How can the design of net zero policies, programmes, and funding schemes be improved to make it easier to deliver in your area?

**Response:**

- A longer-term funding plan would enable social landlords to incorporate measures to decarbonise their stock in their long-term capital works programmes.

- A clear pathway setting out the phasing out of gas boilers in existing housing will give social landlords clarity around investment decisions being made now.
- Longer term funding arrangements that allow for development of new solutions and innovation.
- More funding for research and development.
- More funding for improvement of skills.
- The short delivery time to deliver schemes causes bottlenecks in supply chain and creates an uplift in material costs. We need a stable and committed fund to support financial plans and robust programmes of work to achieve net zero.

**Question 28:** Are there any other implications of net zero or specific decarbonisation projects for your area that the Review should consider?

**Response:**

In November 2021, DLUHC suspended social housing providers (SHP)'s ability to retrieve their RdSAP data from EPC accreditation schemes. Since the suspension, the majority of the housing sector has been unable to receive essential RdSAP data from the energy accreditation schemes relating to UK homes.

This data is essential for the purposes of:

- Helping identify tenants in fuel poverty especially given the current cost of living crisis
- Accessing government funding to improve the energy efficiency of stock e.g., BEIS Wave 2.1 SHDF (Social Housing Decarbonisation Fund) scheme criteria
- Designing accurate programmes of investment based on this high-quality data to meet government net zero and band C targets
- Fulfilment of government regulatory data returns.