

Environmental Audit Committee | Call for Evidence: The Seventh Carbon Budget Response from Historic England

November 2025

About Historic England

Historic England is the Government's statutory adviser on all matters relating to the historic environment in England. We are a non-departmental public body established under the National Heritage Act 1983 and sponsored by the Department for Culture, Media and Sport (DCMS).

We champion and protect England's historic places, providing expert advice to local planning authorities, developers, owners, and communities to help ensure our historic environment is properly understood, enjoyed, cared for, and contributes to thriving places. Historic England is firmly committed to supporting national and local government, and homeowners/occupiers and their advisors to deliver energy and carbon efficiency improvements in historic buildings.

Summary of response

- Historic England is supportive of the ambition from the Climate Change Committee (CCC) in their Balanced Pathway up to, and including, the Seventh Carbon Budget.
- We note that the current pace of decarbonisation in the building and industry sectors is not on track to deliver the carbon savings projected by the CCC during this Parliament and into the 2030s.
- Clear, supportive policy mechanisms and incentives are needed over the next five years to recognise the levers needed to achieve the necessary carbon reductions and build the momentum for decarbonisation in the 2030s.
- Heritage and the historic environment have a key role to play in this Net Zero journey, central to existing building stock and landscapes, so must be appropriately leveraged for their capacity to deliver Government priorities.
- Historic England understands the term 'retrofitting' to mean *the improvement of an existing building to ensure that it is energy/carbon efficient, well-adapted, and resilient to our changing climate*.
- To help deliver the necessary retrofitting required to achieve climate goals within the building and industry sectors, Historic England proposes the following policies could be adopted:
 - (I) Develop a National Retrofit Strategy that covers traditional and modern buildings
 - (II) Accelerate the heat pump rollout as a low-carbon and cheaper heating solution for old and new buildings
 - (III) Introduce a 'reuse/repurpose first' policy for existing buildings as part of the UK's transition to a low-carbon circular economy

(I) Develop a National Retrofit Strategy that covers traditional and modern buildings

- The development of a comprehensive and holistic approach to retrofitting existing building stock would be advantageous. Historic England would be keen to work with Government on any such strategy, to ensure traditional buildings are part of the national retrofit vision.
- A long-term National Retrofit Strategy co-produced by DESNZ, public sector bodies, and industry stakeholders would outline:
 - (1) the role that a healthy built environment has toward maintaining other critical services (e.g., wellbeing, cultural activities, quality of life, health and wellbeing);
 - (2) the need and evidence-based benefits to deliver net zero retrofit to existing building stock (e.g., emission mitigation, climate impact minimisation, energy/resource efficiency, tackling fuel poverty, etc);
 - (3) how retrofit work is delivered to the highest quality, protecting the consumer against poor workmanship through a plan towards skills, training, funding, standards, advice, research, and provisions for different methods and materials that recognise building types (i.e., new build, historic and traditional buildings (i.e., pre-1919)).
- The Strategy would ideally recognise that early adaptation action can reduce future costs, providing confidence and investment is good value for money. A long-term strategy would be beneficial to businesses, training providers, and local authorities to sustainably build capacity and invest in both retrofit delivery and a skilled workforce. This would thus lead to an acceleration of high standard retrofitting to support net zero and climate resilience.
- This policy recommendation is supported by many industry stakeholders including the National Retrofit Hub, and the Mission Zero Coalition's 'Mission Retrofit' report, which calls for a National Retrofit Strategy as well as a National Retrofit Delivery Agency (Mission Zero Coalition, 2023). Much groundwork has been developed thus far, such as the 'Greening our Existing Homes' consultative document (Construction Leadership Council, 2021), and the 'Heritage and Carbon: Addressing the Skills Gap' report (Grosvenor et al., 2023).

(II) Accelerate the heat pump rollout as a low-carbon and cheaper heating solution for old and new buildings

- Historic England agrees with the CCC's emphasis on the importance of heat pumps for delivering building decarbonisation. There are several policy levers that the government can utilise to further accelerate the heat pump rollout:
 - Encourage heat pump installation in traditional buildings: research has shown suitability of heat pumps across architectural types, and by installing this compatible technology, pre-1919 buildings will have a huge positive impact to the Net Zero journey (Energy Systems Catapult, 2021);

- A lower price of electricity would make heat pumps a more attractive option than fossil fuel heating systems – affordability is a major barrier to the retrofit of traditional buildings, lower costs would therefore be expected to spur greater uptake of heat pumps in the pre-1919 built environment.

(III) Introduce a ‘reuse/repurpose first’ policy for existing buildings as part of the UK’s transition to a low-carbon circular economy

- Leveraging the potential of existing building stock presents an excellent opportunity to deliver the Government’s plan to build 1.5m homes during this Parliament. The CCC’s Balanced Pathways already proposes ‘resource efficiency’ for emission reductions for the industrial sector and recommends a variety of measures including “refurbishing existing buildings to avoid new builds” as part of reducing the construction industry’s need for cement. Adaptive reuse is not only a low carbon, circular economy aligned alternative – it also supports other Government priorities such as connecting communities and regeneration without greenfield loss, bolstering tourism/place identity, and optimising land use.
- Heritage thus has a major role to play. Historic England’s research shows that 560,000 to 670,000 new homes in England could be produced by repairing and repurposing vacant pre-1919 buildings (Historic England, 2025). Historic England notes that the prioritisation of adaptive reuse of buildings over building new and believes that giving a new life to historic buildings can make a significant contribution towards major government priorities, including delivering 1.5m new homes by 2030 and achieving Net Zero by 2050.

Responses to specific questions

Part 1: CCC's assumptions behind the budget

- **How adequate and deliverable are the CCC's headline assumptions underpinning the 'balanced pathway' (e.g. sectoral reductions, technology deployment, economic circumstances, public behaviour) in ensuring compliance with the UK's statutory carbon budgets under the Climate Change Act, including in light of the new Carbon Budget Delivery Plan?**
 - **Are there critical interdependencies (e.g. between aviation, agriculture, and energy) that could affect delivery of the statutory targets?**
 - **How could the CCC communicate uncertainties and flexibilities in its modelling, while maintaining confidence in the headline pathway and its adequacy for meeting legal requirements?**
- 1.1 The Balanced Pathway assumes a steep reduction of built environment emissions over the next fifteen years. The CCC has estimated that residential building emissions will drop from 52.2 MtCO₂e (2023) to 17.7 MtCO₂e (2040), a 66% reduction; meanwhile, non-residential building emissions are estimated to fall from 20.8 MtCO₂e (2023) to 2.7 MtCO₂e (2040), an 87% reduction.
- 1.2 To deliver these results by the start of the Seventh Carbon Budget, far greater levels of retrofitting than has been achieved to date is required. In evidence submitted by the Regulatory Assistance Project to the ESNZ Committee, it was stated that “deployment of heat pumps, heat networks and energy efficiency measures such as insulation, the three critical technologies to retrofit homes for net zero, are all “way off-track”” (ESNZ, 2025).
- 1.3 Delivering built environment decarbonisation will require a greater appreciation of the composition of the country's building stock. In England, 21% of domestic buildings and 32% of non-domestic buildings were built before 1919 (VOA, 2023; Whitman et al, 2016). The size of these proportions shows clearly that traditional buildings will need to play a significant part of the solution.
- 1.4 Hence, Historic England recommends the co-development of a National Retrofit Strategy that sets out a long-term plan for delivering the decarbonisation of both modern and traditional buildings, as an effective way of tackling the complexities of retrofit in a joined-up way. When considering the traditional building stock, this strategy ought to draw from the 2024 government review into the barriers when adapting historic homes for energy efficiency. This report sets out the hurdles that must be overcome to effectively galvanise the retrofit of pre-1919 buildings, not the least of which will be high costs, “which stakeholders have identified as a key barrier to adapting historic homes” (DCMS, DESNZ, DLUHC, 2024). By working to remove these barriers, the historic environment can be decarbonised faster, thus delivering the built environment carbon reductions that are projected by the CCC – in this way, traditional buildings can avoid becoming ‘stranded assets’ and can instead make a meaningful contribution to the UK's net zero journey.
- 1.5 The calculations for industry within the Balanced Pathway omit consideration of the impact of the Government's ambition to build 300,000 homes per year during this Parliament, as construction isn't given due consideration in the Balanced Pathway. This

affects the underpinning assumptions of the Balanced Pathway, because the 1.5m new homes target would thus have an impact on the UK's Net Zero target, as indicated by recent research (Ermgassen et al., 2022). This is due not only to operational emissions but also the embodied carbon cost of construction and materials. However, adaptive reuse is a low carbon approach to construction, and is mentioned in the Balanced Pathway as a solution to the issue of cement's high carbon footprint: "Resource efficiency reduces emissions in this subsector by 26% by 2035, through a combination of various measures: [...] refurbishing existing buildings to avoid new builds; reducing construction waste [...] and reusing components." This piece of advice needs to be brought to the fore, as it offers not only a solution to reduce construction emissions, but it also gives an insight into the role that traditional buildings can play.

- 1.6 There is a considerable opportunity, that, instead of creating all 1.5m homes from scratch, Government should achieve a significant part of its housing target by reusing existing buildings. For example, recent research found that 560,000 to 670,000 new homes in England could be produced by repairing and repurposing vacant pre-1919 buildings (Historic England, 2025). By "refurbishing existing buildings", the Government could deliver vast numbers of houses without consuming the resources, land, and carbon that are demanded by new builds.
- 1.7 This Balanced Pathway advice regarding resource efficiency is also aligned with the Government's shift towards a circular economy. The championing of the historic environment through its reuse, repurposing and making it fit for climate scenarios is clearly aligned with 'circularity principles' (Ellen MacArthur Foundation, 2013). Heritage assets are generally a product of resource efficiency and resilience thinking, and heritage skills and insights are sustainable and supportive of nature regeneration. The Government is due to produce a Circular Economy Strategy soon, and this will be a key vehicle for embedding circularity in the built environment. Historic England's approach to the reuse of existing building stock will not only support the Government's work to create new homes but also addresses retrofitting in an efficient way to (a) avoid maladaptation; (b) promote the growth of a skilled workforce, thus boosting the economy; (c) provide guidance on maintenance and repair to ensure healthy homes. This all supports future Carbon Budgets.

Part 2: Technology choices

- **What is the right balance between proven solutions (e.g. EVs, heat pumps) and emerging technologies (e.g. CCUS, engineered removals) to deliver both the scale of ambition required whilst being confident that the measures proposed are deliverable and realistic to meet the obligations of the Climate Change Act?**
 - **What contingency or resilience measures are needed if anticipated technologies or behavioural changes do not deliver at the pace assumed, in order to remain compliant with the statutory trajectory?**
- 2.1 Historic England agrees with the major role given to heat pumps by the CCC, as heat pumps are a technology that is compatible with traditional buildings – therefore pre-1919 buildings can be a major driver for decarbonising the built environment.
 - 2.2 The Balanced Pathway sets out a highly ambitious target for heat pump rollout – for residential buildings, the rate of heat pump installations per annum will have to multiply

by a factor of 7.5 from 2023 (60,000) to 2030 (450,000). This rollout is not accelerating as needed – in their 2025 Progress Report to Parliament, the CCC reported that “Heat pump installations in existing homes increased to 73,000 per year in 2024 but are still below the trajectory needed to meet required emissions reductions” (CCC, 2025). To drive up this installation rate and enable this technology to deliver its promised carbon savings, two policy measures for accelerating heat pump rollout could be undertaken.

- 2.3 The first is for Government to encourage the installation of heat pumps in traditional buildings (i.e., pre-1919). Despite misinformation to the contrary, heat pumps are compatible with traditional construction, as demonstrated by the findings of the Government-funded ‘Electrification of Heat’ project, which proved that no property type or architectural style is unsuitable for a heat pump (Energy Systems Catapult, 2022). Furthermore, Historic England has produced several pieces of research recently on installing different types of heat pumps in historic buildings, including air source heat pumps (Historic England, 2023) and ground source heat pumps (Historic England, 2025), which finds them to be an efficient technology for traditional buildings if designed, installed and used well. It is essential that funding mechanisms, workforce training, and owner guidance is put in place to encourage the installation of heat pumps in historic buildings, thus driving up national installation rates – all of these elements can be knitted together under an overall vision in a National Retrofit Strategy.
- 2.4 The second crucial policy measure for accelerating heat pump installation is lowering the cost of electricity relative to gas. The justification and methods for doing this are set out clearly by the CCC: “Our highest-priority recommendation is to remove policy costs from electricity prices. This will... ensure the underlying lower running costs of heat pumps compared to fossil fuel boilers are reflected in household bills [...] Our analysis shows that doing this could reduce the ratio of domestic electricity to gas prices from around 4:1 currently to between 2:1 and 3:1. This would... ensure that households installing a heat pump would see savings from its greater efficiency” (CCC, 2025). This latter point about making a heat pump more cost-effective is particularly important for traditional buildings because, as mentioned in our answer to Question 1, cost is a major barrier to the retrofit of such buildings. If a heat pump offers cheaper bills due to the lower cost of electricity, then installation will become more financially viable for traditional building owners. The same logic will also apply to modern buildings, thus delivering the higher installation rates projected by the Balanced Pathway while also reducing bills for owners and occupiers.

Part 3: Costs, policy choices and economic implications

- **How will the costs of delivering CB7 be distributed between households, businesses and regions, and what policies are needed to ensure fairness, resilience, and public support?**
- **What are the costs of inaction across different sectors and how can these be factored into policy-making? What are the potential cost savings and positive economic impacts of tackling climate change in the long-term (up to 2042 under CB7)?**
- **What policy choices and governance structures are most critical for ensuring that CB7 both meets the UK’s legal requirements under the Climate Change Act 2008 and interacts effectively with the UK’s Nationally Determined Contribution (NDC) under the Paris Agreement?**

- 3.1 In order to better drive the sectoral emissions reductions required by future Carbon Budgets, the current approach ought to be altered. As noted by the CCC in their 2025 Progress Report to Parliament, UK emissions fell 50.4% from 1990 to 2024, but the reductions over this period “have been mainly driven by the electricity supply sector, with smaller contributions from the industry, fuel supply, and waste sectors” (CCC, 2025). While the UK has overachieved on its Carbon Budgets so far, this CCC report makes clear that emission reductions will increasingly have to come from other sectors, which have not decarbonised at the pace of the energy sector.
- 3.2 Setting sectoral carbon budgets would create greater accountability and clear targets for the sector that individual organisations can align their Net Zero pathways with. In the case of the building sector, this would then help to catalyse the retrofit and reuse of traditional buildings, as the carbon budgets for residential and non-residential buildings and for industry could not be met without decarbonising the country’s traditional building stock (i.e., pre-1919), or without prioritising the reuse of existing buildings over the creation of carbon-intensive new builds. Therefore, this policy measure could help to accelerate heritage’s contribution to several UK priorities – tackling both the climate and housing crises.

Appendix: References

References (Summary of response)

- Construction Leadership Council (2021). [*Greening Our Existing Homes – National retrofit strategy – A consultative document.*](#)
- Grosvenor, Historic England, Peabody, The Crown Estate, The National Trust (2023). [*Heritage and Carbon: Addressing the Skills Gap.*](#)
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References (Part 1 ‘CCC’s assumptions behind the budget’)

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- Whitman et al, 2016 (2016). [*Correlating Maintenance, Energy Efficiency and Fuel Poverty for Traditional Buildings in the UK – A scoping study funded by Cadw, Historic Environment Scotland and Historic England.*](#)

References (Part 2 ‘Technology choices’)

- Climate Change Committee (2025). [*Progress in reducing emissions 2025 report to Parliament.*](#)

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- Historic England (2023). [*Heat Pumps in Historic Buildings – Air Source Heat Pump Case Studies – Small-scale Buildings.*](#)
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References (Part 3 ‘Costs, policy choices and economic implications’)

- Climate Change Committee (2025). [*Progress in reducing emissions 2025 report to Parliament.*](#)