

House of Commons Environmental Audit Select Committee – CIOB submission

The Chartered Institute of Building submission to the House of Commons Environmental Audit Select Committee Inquiry on the 25-Year Environment Plan.

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1. About the CIOB

- 1.1. The Chartered Institute of Building (CIOB) is at the heart of a management career in construction. We are the world's largest and most influential professional body for construction management and leadership. We have a Royal Charter to promote the science and practice of building and construction for the benefit of society, which we have been doing since 1834. Our members work worldwide in the development, conservation and improvement of the built environment.
- 1.2. We accredit university degrees, educational courses and training. Our professional and vocational qualifications are a mark of the highest levels of competence and professionalism, providing assurance to clients and other professionals procuring built assets.
- 1.3. Professionalism at all levels and stages within the construction industry is at the core of our work. We play a leading role in the development and continued improvement of standards in the industry at a national and international level. We recognise the challenges facing the built environment, such as the unprecedented skills shortage in the professions, the ageing workforce and the complexity of developing policy that improves coordination, design and the overall decision-making process, and we work with government and industry to outline and implement solutions.
- 1.4. The CIOB is an advocate of sustainability and has its own sustainability special interest group made up of leaders in the built environment. We also run Carbon Action 2050, an action plan of simple, practical steps that can be taken by the CIOB, its members and the wider construction industry to reduce carbon emissions from the built environment.

2. Summary

- 2.1. The CIOB is encouraged by both the intent and a number of the ambitions of the Government's 25 Year Environment Plan. We welcome the positive commitments in the government's plan which would help drive further sustainability improvements and encourage planners and developers to further improve the environmental impact of their projects.

- 2.2. The government's intent must now be translated into action, targets and policy developed across government. The key opportunity for the government to improve the environmental impact of the built environment will be ongoing reviews of building regulations. The CIOB strongly believes these reviews should consider environmental concerns alongside and in equal measure to issues of fire-safety and new-build quality. Indeed, these aspects should not be seen as mutually exclusive.
- 2.3. The CIOB notes that the environment plan was an opportunity to present ambitious targets and plans but in many cases appears to reiterates previously established targets. Though reiterating cross-governmental commitment to strengthening environmental principles is welcome; the construction industry would better rise to the challenge of delivering bold targets for energy performance and low carbon solutions. However, there is a need for both medium and long term policy certainty to drive significant investment and catalyse innovation.
- 2.4. The CIOB highlights the need de-carbonising existing building stock, which would both contribute to government's economic objectives as well as environmental objectives. We strongly recommend government works closely with the industry, professional bodies, and established sustainable construction initiatives to develop evidence-based route-maps for achieving more ambitious environmental standards in our built environment.

Full Response

3. *Ambition and Reporting: To what extent does the Plan set a sufficiently ambitious agenda across Government?*

- 3.1. The CIOB is encouraged by both the intent and a number of the ambitions of the Government's 25 Year Environment Plan. The built environment accounts for between 40% and 50% of global carbon emissions and a carbon free world needs constructing. In recent years the construction industry has adopted a number of measures and projects to assess and improve the environmental impact of the built environment. These measures include BREEAM assessments, EPC and DEC certificates, and WRAP's Half Waste to Landfill programme. The industry has made notable improvements to both embodied and operational carbon cost of the built environment¹. Nonetheless, the CIOB welcomes the positive commitments in the government's plan which would help drive further sustainability improvements and encourage planners and developers to further improve the environmental impact of their projects. The government's intent must now be translated into action, targets and policy developed across government.
- 3.2. Specifically we welcome the commitment to maintain and strengthen environmental protections enshrined in national planning policy²; the ambitious goal of embedding an 'environmental net gain' principle for both

¹ UKGBC, [UKGBC's vision for a sustainable built environment is one that mitigates and adapts to climate change](#)

² DEFRA, [A Green Future: Our 25 Year Environment Plan to Improve the Environment](#), January 2018 - page 35

housing and infrastructure developments³, and ensuring high environmental standards for all new builds⁴.

- 3.3. There is scope here, however, for greater ambition. At least 70% of existing buildings will still be here in 2050 and the majority of emissions are from the operational use of those buildings. Therefore it is critical the government take a more ambitious stance to retrofitting, maintaining and repairing inefficient buildings to reduce their operational emissions and waste.
- 3.4. The CIOB welcomes policy interventions on resource efficiency, particularly the point made in the Plan that states: '*maximising the value and benefits we get from our resources, doubling resource productivity by 2050*'. We believe this to be a credible, and importantly tangible, means of tackling avoidable waste and embedding the principle of the circular economy into industry, taking further the previous 'halving waste to landfill' programme.
- 3.5. As a statement of intent, the plan sets a positive direction for ongoing reviews of building regulations. The CIOB strongly believes these reviews should consider environmental concerns alongside and in equal measure to issues of fire-safety and new-build quality. Indeed, these aspects should not be seen as mutually exclusive.

4. How far do the objectives, targets and indicators set out in the plan reflect a higher level of ambition than existing targets (including European Union targets and the Sustainable Development Goals) and current performance?

- 4.1. Overall the 25 Year Plan appears to be a statement of intent, rather than clear articulation of specific quantifiable targets or KPIs. We welcome that the plan reiterates and reconfirms the government's commitment to previously established government targets; however it is not clear that this plan reflects higher ambition or more detail than these targets. Arguably more important than setting overly ambitious targets will be specific and achievable targets that have clear guidance and measurable KPIs.
- 4.2. The government has set a clear target (in the Construction 2025 strategy document⁵ as well as recent statements regarding the Construction Industry Sector Deal⁶) of a 50% reduction in greenhouse gas emissions in the built environment by 2025. The ambition of the 25 Year Environment plan to '*ensure high environmental standards for all new builds*' and strengthen environmental protections in planning would contribute to this target. This sets a positive direction for reviews of building regulations, however provides no new details or timeline. The construction sector would rise to the challenge of delivering bold targets for energy performance and low carbon solutions. However, there is a need for both medium and long term policy certainty to drive significant investment and catalyse innovation.

³ DEFRA, [A Green Future: Our 25 Year Environment Plan to Improve the Environment](#), January 2018 - pages 32 - 33

⁴ DEFRA, [A Green Future: Our 25 Year Environment Plan to Improve the Environment](#), January 2018 - page 35

⁵ HM Government, [Construction 2025](#), July 2013

⁶ Department for Business, Energy & Industrial Strategy (BEIS), [Government and industry cement deal to give UK construction the edge](#), November 2017

- 4.3. Additionally, while setting stringent and ambitious emissions targets for the built environment, the government must also address challenges of measurement and reporting emissions. There is a well-documented ‘performance gap’ between calculated and actual energy performance of both residential and commercial buildings.⁷⁸ The CIOB recommends that one route to addressing this and ensuring the overall quality of new homes particularly would be to subject all new homes to a thermographic survey.
- 4.4. To take an evidence-based approach to setting new building regulations and standards, the government should look at evidence based standards already in use in the construction market. Standards like Passivhaus have been shown to be an achievable, but still rigorous, approach to quality assurance and compliance. There are numerous pathfinder projects now in the UK, including the largest to date at Little Kelham in Sheffield by Citu⁹. With regards to the effect of planning decisions on environmental targets, the government may wish to consider minimum energy performance and air tightness standards for the whole building as an integral part of planning consent for extensions above a specified size.
- 4.5. Furthermore, when looking to implement these standards, the government should look for a simple but more impactful approach than previous policy. For instance the CIOB supported the government pledge for zero-carbon homes and was disappointed to see this pledge cut. Though this government policy was criticised for being over-ambitious, leaders in the construction industry had invested heavily in expectation of targets for zero-carbon homes and zero-carbon buildings being put into place. Policy reversals of this nature undermine the manufacturing base and discourage future investment. The failings and subsequent withdrawal of the Green Deal is also evidence of the need for more achievable and evidence based approaches to government policy and incentives for the industry and consumers.
- 4.6. The Committee on Climate Change – the government’s official advisory body on meeting our carbon targets – recommends that new build standards should be tightened. To achieve this, it is imperative that government signals a commitment for new buildings to be ‘net zero carbon’, which means reducing all energy actually used as far as technically possible, with remaining demand met through renewables. This in itself would position the UK as a leader in this field, presenting trade, manufacturing and export opportunities for the wider economy.
- 4.7. The 25 Year Environment Plan’s goal of a thriving forestry industry better able to support the construction industry is welcome. Given that up to 80% of timber used in UK Construction is imported¹⁰, these measures will assist the already established goal of 50% reduction in the trade gap between total exports and total imports of construction products and materials¹¹.

⁷ Jones Lang LaSalle, [A Tale of Two Buildings, Are EPCs a true indicator of energy efficiency?](#), 2012

⁸ Construction Manager, [Cost, clients and skills to blame for ‘performance gap’](#), February 2018

⁹ Citu, [Little Kelham](#)

¹⁰ Construction Manager, [UK construction can’t see the wood for the trees](#), March 2015

¹¹ HM Government, [Construction 2025](#), July 2013 -page 38

4.8. CIOB members involved in water infrastructure have commented that despite the Ofwat targets for 2025, over the last 5 years, water leakage has remained constant at 121L of leaked water per household per day.¹² The carbon footprint associated with water leakage is considerable and seriously undermines the greenhouse gas emission reductions we have achieved through the progressive iterations of Part 'L' (AD'L') of the Building Regulations.

4.9. The CIOB notes that the environment plan was an opportunity to present ambitious targets and plans but in many cases appears to reiterate previously established targets. Though re-iterating cross-governmental commitment to strengthening environmental principles is welcome; the construction industry would be better willing and able to help meet environmental targets if government could provide specific and achievable targets with clear guidance and next steps.

4.10. Indeed, beyond strategies set by the UK Government or the EU, the construction industry has shown great ambition itself. In the last decade, the construction industry, notably championed by product manufacturers and principal contractors, has positively engaged with responsible sourcing. Following the UK Government's 2008 'Strategy for Sustainable Construction' the industry created a new product standards such as, BRE's BES 6001, and many UK product manufacturers have achieved official certification for their products. It is now possible for contractors to procure most typical buildings solely using certified, responsibly-sourced goods. Schemes like WRAP's Halve Waste to Landfill project had over 700 signatories and the industry made significant progress to reducing its generation of landfill waste. CIOB has been heavily involved in the development of relevant standards, implementation of responsible sourcing in practice, and ensuring awareness throughout the industry.

4.11. With regard to the plan's goal for 'Putting in place more sustainable drainage systems' The CIOB highlight that the construction industry, in particular house builders, have embraced SuDS since the early 1970s. Recent studies have shown that an element of SuDS infrastructure has been provided on around 80% of new housing developments. This does not presume that there is not further room for additional science-based guidance and planning requirements that might improve the use and effectiveness of SuDS.

5. Are there any major gaps?

5.1. As highlighted above, the 25 Year Plan appears to be a statement of intent, and provides a broad strokes view of many ongoing environment related projects ongoing in other government departments without a great deal of detail. The biggest gap in the plan is therefore the clear route-maps and strategies for how these targets will be achieved. In addition, the CIOB would like to highlight a number of specific gaps in the plan and wider government policy which are critical to improving the sustainability and environmental impact of our built environment.

¹² Discover Water, [Leaking pipes: Getting water to your home](#)

- 5.2. Firstly, while commitment to strengthening building regulations and planning decisions for new developments are welcome (pg. 35), 85% of buildings which will be in use in the UK in 2050 have already been built¹³ therefore a major priority needs to be de-carbonising our existing building stock. A third of the carbon emissions cuts that need to be made to meet the government's current carbon budget come from heating these buildings¹⁴. Retrofit, repair and maintenance of existing buildings not only improves their environmental impact but provides more 1.5 times more employment than new housing developments, per £million of work value¹⁵. Investment in energy performance drive retrofit, maintenance and repair therefore would contribute to government's economic objectives as well as environmental objectives.
- 5.3. The current government measures to incentivise improvements to existing homes remain deficient - as evidenced by the failure of the Green Deal to translate Green Deal assessments into active Green Deal Plans. The CIOB would like to reiterate our concern that the Electricity and Gas (Energy Companies Obligation) Order 2012, and the related ECO guidance from Ofgem, specifies that only a Chartered Surveyor, with unambiguous reference to the Royal Institution of Chartered Surveyors (RICS), can recommend energy efficiency measures and produce reports under the ECO. This prevents other equally qualified and competent building surveyors, including those who are members of other professional bodies or indeed unaligned to any body, from carrying out this work. We believe it would be beneficial to home-owners if the ECO Order were amended to allow qualified, professional building surveyors to undertake assessment and reporting work under the scheme.
- 5.4. Many of the goals to reduce waste and improving resource efficiency are welcome. Although the industry has done much already to reduce waste (for instance through the 'half landfill to waste' developed by WRAP¹⁶) there are gaps in the 25 Year Environment plan and wider government guidance which require attention. In 2014, 120Mt of waste was generated from construction, demolition and excavation, which was 59% of the total UK waste.¹⁷ Re-use of excavated soil is often the biggest factor in project waste reduction strategies and effective re-use can offer some of the biggest cost savings. However attempts to re-use risk assessed excavation arisings, either on site or on other projects, are often undermined by limited guidance on the re-use capability of these secondary raw materials and the challenges of getting an Environmental Permit. Despite the high costs, there is still a dependence on landfill disposal of excavated materials which could be challenged by the Government.

¹³ UKGBC, [UKGBC's vision for a sustainable built environment is one that mitigates and adapts to climate change](#)

¹⁴ BBC, [UK 'must insulate 25 million homes'](#), February 2017

¹⁵ Homes & Communities Agency, [Calculating Cost Per Job | Best Practice Note 2015](#), 2015

¹⁶ WRAP, [The Construction Commitments: Halving Waste to Landfill, Signatory Report 2011](#)

¹⁷ UKGBC, [UKGBC's vision for a sustainable built environment is one that eliminates waste and maximizes resource efficiency](#)

6. *What would success or failure look like for the Plan? To what extent will the Government's proposals for reporting on the Plan allow for proper scrutiny of its performance against its objectives?*

- 6.1. For the Construction Industry, the success or failure of this plan and its positive intent will be determined by the extent to which environmental protections are strengthened in upcoming reviews of building regulations, planning systems and in government supported training and development for the sector.
- 6.2. The industry requires further detail and timelines for specific objectives which are relevant to the built environment. As these details emerge, it should work alongside the CIOB and the wider membership of the Construction Leadership Council (CLC) to ensure targets are ambitious yet achievable and to help disseminate messages and targets to the industry.