The voice of our sustainable built environment

Consultation Response: Growing the market for low carbon industrial products

September 2025

The UK Green Building Council represents the voice of the UK's sustainable built environment industry. We are a charity powered by more than 600 members from banks, large estate owners, housebuilders, and manufacturers to innovative startups, universities, local councils and government departments - all working to transform the built environment in the face of the climate, nature and cost-of-living crises.

UKGBC welcomes this consultation on stimulating demand for low carbon industrial products. Scaling up production of low carbon materials, particularly steel and cement, is essential for reducing construction emissions. The consultation outlines various proposals to define carbon intensity, set product standards, leverage public procurement, encourage uptake, and improve market transparency. We have used our response as an opportunity to support measures that will enable the construction sector to make informed, low-carbon choices, and accelerate the transition to a sustainable built environment.

Heavy industries such as steel and cement are among the UK's most significant sources of industrial emissions, and decarbonising these sectors is essential if the UK is to meet its net zero by 2050 target. Embodied carbon from construction materials alone accounts for around one in ten tonnes of the UK's total greenhouse gas emissions and is set to make up over half of built environment emissions by 2035. Yet there is currently no national regulation to reduce these emissions, despite strong industry support and the urgency of our climate commitments.

UKGBC welcomes this consultation as a first step in developing the policy framework needed to grow the market for low carbon industrial products. We particularly support proposals on procurement guidance, mandatory reporting, and alignment with international and industry initiatives, which would provide market certainty, empower project teams to make more sustainable choices, and drive down embodied carbon.

Government should build on existing industry-led tools and initiatives, avoiding duplication, ensuring accuracy and verification of data, and providing support for SMEs to participate without undue cost. Taking this more ambitious, collaborative approach will accelerate progress and ensure the UK remains competitive in the transition to a low carbon built environment.

1. Cross-cutting considerations

1.1 Please indicate how relevant you think each primary assessment criterion is and explain your reasoning as well as any additional views, including whether there are other criteria not listed that should be included when considering policy options.

- Primary criterion 1: Incentivises decarbonisation - Very relevant
- Primary criterion 2: Enables product comparison – Quite relevant
- Primary criterion 3: Ensures measurement is robust and comprehensive – Quite relevant
- Primary criterion 4: Operationally ready – Moderately relevant
- Primary criterion 5: Minimises costs – Quite relevant

Our highest priority is incentivising decarbonisation. This should capture full life-cycle carbon and reward actions aligned with resource efficiency and circular economy principles (e.g. waste reduction, recycled content).

We also see value in:

- Product comparison – enabling clear market signals for low carbon choices.
- Robust, comprehensive measurement – ensuring credibility while balancing rigour with practical feasibility, particularly for SMEs.
- Cost minimisation – keeping reporting proportionate and accessible.
- Operational readiness – important for practical deployment, but this should not create barriers to innovation or early adoption.

Overall, we support a framework that is credible, comparable, and accessible, while driving meaningful carbon reductions.

1.2 Which environmental impacts should the government consider at this stage in its policies? Please explain your reasoning.

- Option 1: Global Warming Potential only (expressed in carbon dioxide equivalent)
- Option 2: Global Warming Potential and some environmental impacts and waste categories relevant to the production of steel, cement, and concrete (please specify)
- Option 3: Global Warming Potential and all the other core environmental impacts listed above
- Option 4: Other (please specify)

The government should consider global warming potential (GWP) alongside other core environmental impacts to ensure a holistic approach to sustainability and one that ensures a just transition to net zero. Focusing solely on embodied carbon risks driving trade-offs that increase other harms, such as water use, land degradation, waste generation, toxicity, or nutrient run-off.

We also encourage inclusion of wider social and system impacts, such as health, local employment, resilience to climate change, and alignment with circular economy goals (e.g. prioritising recycled/secondary materials, minimising resource depletion, and ensuring appropriate end-of-life reuse or recycling). These will support a just transition to net zero which is vital for truly sustainable development.

Practical implementation should build on existing standards such as BS EN 15804, ensuring consistent EPD data formats and capturing supply-chain impacts on nature and biodiversity. Embedding circularity data points (assembly, disassembly, repair, maintenance, and end-of-life options) would support longer material lifespans and waste reduction.

In short, a whole-systems approach that integrates carbon, environmental, and circularity impacts will ensure sustainable product choices that deliver true long-term value.

1.3 ~~Considering the objectives of this policy framework, to grow the market for low carbon products, which of the following do you think will be impacted? Please explain your reasoning with reference to specific policies.~~

- ~~Option 1: Large and multinational enterprises~~
- ~~Option 2: Small and medium enterprises, and/or micro businesses~~
- ~~Option 3: UK end consumers~~
- ~~Option 4: International trade~~
- ~~Option 5: Other (please specify)~~

- ~~For each option - [Strong positive impact; Moderate positive impact; Neutral impact/Depends on the situation; Moderate negative impact; Strong negative impact; I don't know]~~

- ~~[Open text]~~

1.4 ~~Are you taking embodied emissions into account when making purchasing decisions?~~

1.5 ~~If response to Question 1.4 was not 'Never' or 'Don't know' and you have accounted for embodied emissions at least sometimes, which of the products or product groups you buy does this apply to?~~

1.6 ~~If response to Question 1.4 was not 'Always' or 'Don't know' which factors prevent you from taking embodied emissions into account when making purchasing decisions?~~

1.7 ~~Do you agree or disagree that you have sufficient access to embodied emissions data to support your decision-making? Please explain your reasoning, including examples of existing sources for this data and additional data which you would find valuable.~~

1.8 Would you consider paying more for products with a lower embodied carbon content? Please explain your reasoning.

1.9 If you answered yes to question 1.8, on average, how much extra would you be willing to spend?

1.10 How likely are you to increase the proportion of low carbon products in your purchases in the future? Please explain your reasoning including what factors would support the increased proportion of low carbon products you purchase?

1.11 To what extent would a future of increased consumer demand for low carbon products would have the below impacts? Please explain your reasoning.

1.12 To what extent would improved information on the embodied emissions throughout the value chain help you achieve your decarbonisation goals, and implement any of the below measures and/or technologies? Please explain your reasoning.

1.13 Do you have existing relationships with lower carbon steel/cement/concrete producers? If so, please provide details.

2. The Embodied Emissions Reporting Framework: overview and cross-cutting considerations

2.1 Do you agree or disagree that producers and buyers of in-scope products are the main intended end users of the EERF? Are there any additional end users that should be considered? Please explain your reasoning.

- [Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree; Don't Know]
- [Open text]

2.2 What do you consider are the benefits of measuring and reporting embodied emissions?

Measuring and reporting embodied carbon is essential for achieving net zero, as the built environment contributes around 60 million tonnes of embodied carbon annually. Establishing a consistent framework provides multiple benefits:

- Accountability and comparability: Creates a level playing field, enabling products to be assessed against common standards and driving fair competition.
- Supports procurement and investment: Builds investor and client confidence, unlocking demand for low-carbon products and solutions.
- Drives innovation and efficiency: Better data encourages new approaches, resource efficiency, and circular economy practices.

- Transparency and digitisation: Standardised formats improve supply chain visibility and can feed into digital tools and databases, supporting industry-wide transformation.
- Lifecycle insight: Provides information on material composition, recycled content, installation, maintenance, repair, and end-of-life options—extending product lifespans and supporting reuse and recycling.
- Ease of reuse: Data on certifications, testing, and prior applications helps facilitate safe reuse and retention of products.

Embodied carbon measurement and reporting not only reduces emissions but also supports innovation, circularity, and resilience, while enabling the market to make informed, sustainable choices.

2.3 Do you believe that there are barriers to measuring and reporting embodied emissions?

While measuring and reporting embodied carbon is essential, several barriers must be addressed to ensure effective implementation:

- Data consistency and credibility: Inconsistent methodologies and data sources, combined with limited third-party verification, risk undermining trust and comparability.
- Cost and accessibility: Producing Environmental Product Declarations (EPDs) is already resource-intensive. This may be prohibitive for SMEs unless additional support is provided. Clear thresholds for inclusion are needed to avoid excluding smaller, innovative products.
- Ongoing data management: Robust processes are required to keep information current (e.g. product discontinuation, updated EPDs, company closures), with clear rules on data ownership and responsibility.
- System integration: Data must be easily interoperable with existing tools (LCA platforms, BIM software, material databases, and digital product passports). Without integration, uptake will be limited.
- Risk of gaming: Without clear, verified standards, there is a danger of selective reporting or manipulation that could undermine credibility and fair competition.

Addressing these barriers through standardisation, support for SMEs, strong verification, and interoperability will be crucial to building a reliable, scalable system.

~~**2.4** If you are a producer or practitioner, do you currently measure embodied emissions? If so, please provide details of the processes, methodologies and standards that you follow, as well as any secondary data that you may use.~~

~~**2.5** If you currently measure embodied emissions, what are the costs of this activity? Please provide context.~~

2.6 Do you agree or disagree with the government's proposal to initially introduce the EERF on a voluntary basis? Please explain your reasoning.

- [Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree; Don't Know]

We disagree with introducing the EERF on a purely voluntary basis. Voluntary reporting risks uneven participation, undermining transparency, comparability, and market confidence. Mandatory reporting is essential to ensure fairness and usefulness of the data. A phased approach could address capacity issues, for example, starting mandatory reporting with larger organisations while allowing SMEs or other entities with limited capacity to report voluntarily - ensuring inclusivity without compromising integrity.

2.7 Do you agree or disagree that a potential transition to a mandatory approach to reporting embodied emissions of products in the longer-term could be beneficial? Please explain your reasoning and whether you see any risks or opportunities.

- [Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree; Don't Know]

See above.

2.8 Should there be a common methodology and standard for EERF guidance and should this represent best practice or minimum requirement? Please explain your reasoning.

- Option 1: Prescriptive minimum requirement guidance
- Option 2: Prescriptive best practice guidance
- Option 3: Permissive minimum requirement guidance
- Option 4: Merit order of methodologies and standards
- Option 5: Methodology and standard agnostic guidance
- Option 6: Other (please specify)

We support a prescriptive, best-practice approach (Option 2) as it ensures high-quality, consistent, and integrity-focused data across the sector. While some flexibility for smaller producers (as in Option 4) may improve accessibility, we believe Option 2 can accommodate differing capacity levels if the guidance includes tiered approaches or clear thresholds. This would maintain rigorous standards while providing incentives for all producers to improve and aspire to higher performance levels.

2.9 Do you agree or disagree that the initial EERF guidance should focus on life cycle assessment (LCA) based approaches to reporting? Please explain your reasoning.

- [Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree; Don't know]

We agree that the initial EERF guidance should focus on life cycle assessment (LCA) approaches. LCA provides rigour, credibility, and consistency, aligning with UK and international best practice. It is a widely recognised methodology for assessing

embodied carbon and whole-life environmental impacts, and its use supports comparability across sectors. UKGBC has long advocated LCA and Environmental Product Declarations (EPDs) for robust embodied carbon reporting, providing guidance and tools to help industry implement these methods consistently. An LCA-based approach ensures transparency and verifiability, underpinning trust, fair procurement, and incentives for low-carbon innovation. It also future-proofs the framework, making it easier to expand coverage to additional products, standards, and circular economy considerations.

2.10 Is there anything else that the government should consider regarding maximising use of existing data?

To maximise use of existing data, the government should prioritise alignment with established standards such as EN 15804 and the UK Net Zero Carbon Building Standard. Existing tools and platforms, such as One Click LCA, eTool, Emidat, and Pathways, already support life-cycle assessments and EPD generation, so the focus should be on supporting uptake rather than creating new tools.

Databases of reused materials already exist (e.g., Material Index, Excess Material Exchange, Material Reuse Portal) and could be integrated to align with industry practice, avoiding duplication and ensuring longevity. Digital product passports would further enhance these databases by providing traceable, accurate information on products, lifespans, and compliance with standards, giving buyers certainty and supporting market growth.

~~3. Guidance in the Embodied Emissions Reporting Framework (EERF)~~

~~4. An Embodied Emissions Reporting Framework IT system~~

~~5. Product classifications for embodied~~

6. Green procurement for low carbon products

~~**6.1** If you are a procurer, does your organisation already practice any product level green procurement policies? If so, please provide details.~~

~~**6.2** If you are a procurer, do you already require embodied emissions data to be provided by potential suppliers? If so, please provide details.~~

~~**6.3** If you are a procurer, do you already use any examples of product classifications in your policies? If so, please provide details.~~

6.4 Do you agree or disagree with our overview of the barriers and possible limitations of the current green procurement landscape? Please explain your reasoning, including any others that the government should consider.

- [Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree, I don't know]

Our members broadly agreed with this list, but suggested additional points on the lack of technical knowledge in procurement teams, higher costs, and inconsistent standards and data.

6.5 Do you agree or disagree with our proposal to develop green procurement guidance for buying low carbon products? Please explain your reasoning, and if you disagree, please provide any suggestions for alternatives.

- [Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree, I don't know]

We strongly support developing dedicated green procurement guidance for low carbon products, with clear timelines and training. Procurement is a key leverage point in reducing supply chain emissions, and tailored guidance will help embed sustainability norms in design and construction. UKGBC's ongoing work and published frameworks on embodied carbon and renewable energy demonstrate how sector-wide guidance can effectively support practitioners. Robust guidance will empower procurement teams, particularly those with less experience and capacity, to translate low carbon policy into everyday decisions, accelerate industry uptake, and drive meaningful reductions in the built environment.

6.6 Do you agree or disagree with the proposal to introduce best practice, voluntary green procurement standards into the Government Buying Standards? Please explain your reasoning, including whether there are any other procurement guidance documents that should be considered.

- [Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree, I don't know]

See above.

6.7 Would you agree or disagree with the prospect of the best practice guidance being made mandatory for government departments through the Government Buying Standards in future? Please explain your reasoning.

- [Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree, I don't know]

See above.

~~**6.8** Do you agree or disagree with the above proposal to develop stage 1: core guidance as set out above? Please explain your reasoning.~~

- ~~[Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree, I don't know]~~
- ~~[Open text]~~

~~**6.9** Do you agree or disagree with the above proposal to develop stage 2: expanded guidance as set out above? Please explain your reasoning.~~

- ~~[Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree, I don't know]~~
- ~~[Open text]~~

~~**6.10** Do you agree or disagree with our proposal to develop stage 3 'high ambition guidance' as described above? Please explain your reasoning.~~

- ~~[Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree, I don't know]~~
- ~~[Open text]~~

~~**6.11** Do you agree or disagree with the proposed types of evidence outlined, or are there other sources of evidence that should be considered? Please provide details and explain your reasoning.~~

- ~~[Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree, I don't know]~~
- ~~[Open text]~~

6.12 What would be the cost implications of procuring low carbon products? Please provide details, including how this might change over time.

- [Definitely yes; Probably yes; Maybe/Undecided; Probably no; Definitely no, I don't know]

  Expectation that low-carbon products will initially cost more due to investment needs, but costs may fall as markets scale.

6.13 Do you agree or disagree with including circular economy principles alongside advice in the GBS on procuring low carbon products? Please explain your reasoning.

- [Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree, I don't know]

  Incorporating circularity delivers significant whole-life carbon reductions by prioritising reuse, refurbishment, and minimising virgin material use. It also enhances resource efficiency, reduces construction and demolition waste, and generates economic and social value through innovation, secondary materials markets, and new jobs in reuse, recycling, and refurbishment. Embedding circular economy principles alongside low carbon standards ensures that procurement guidance is both climate-aligned and resource-resilient, maximising environmental and societal benefits.

~~**6.14** Are there other public procurement guidance documents where circular economy principles should be included? Please explain your reasoning.~~

- ~~[Yes, Strongly agree; Yes, Agree; Maybe/Undecided; No, Disagree; No, Strongly disagree, I don't know]~~

7. Longer term policy options

7.1 Is there anything else that the government should consider in terms of its objectives, audiences, and possible use cases for any future work on product ecolabelling? If so, please provide details.

Future work should explore integration with material passports and embodied carbon limits in Building Regulations (e.g., Part Z), as well as circularity measures such as deposit-refund systems, spare part requirements, and manufacturer take-back or end-of-life plans to prioritise refurbishment, reuse, and recycling. Eco-labels should also look to take a holistic approach that considers biodiversity and ecological impacts.

~~**7.2** Do you agree or disagree that either approaches A or B, to (A) utilise existing ecolabels, or (B) develop new forms of ecolabel could be beneficial? Please explain your reasoning and specify if there are any options within these approaches that the government should consider.~~

- ~~Option 1: Approach A only~~
- ~~Option 2: Approach B only~~
- ~~Option 3: Both approaches A and B~~
- ~~Option 4: Neither approach~~
- ~~[Open text]~~

~~**7.3** Do you believe that the EU's development of Digital Product Passports (DPPs) for steel and cement will create opportunities or challenges for UK businesses and the government's objectives for ecolabelling? Please explain your reasoning and provide details of any specific opportunities or challenges that the government should consider.~~

- ~~Presents many challenges~~
- ~~Presents some challenges~~
- ~~Unsure / Presents neither challenges nor opportunities~~
- ~~Presents some opportunities~~
- ~~Presents many opportunities~~

- ~~[Open text]~~

~~**7.4** Should the government consider any additional information or developments since the previous consultation as the government continues to explore whether there is a role for mandatory product standards (MPS) from the late 2020s?~~

- ~~[Open text]~~

7.5 Which of the proposed strategic approaches to expansion do you prefer? Please explain your reasoning.

- Option 1: Other Construction-Related Sectors
- Option 2: The next largest emitting sectors
- Option 3: Sectors which would enable expansion to downstream products (please specify any suitable downstream products)

We support both Option 1 (Other Construction-Related Sectors) and Option 2 (the next largest emitting sectors).

Our priority is the built environment, which is the largest source of climate emissions after surface transport and has a critical role in achieving the UK's climate commitments. Rapid, systematic action is needed to reduce emissions at scale, and UKGBC is committed to working with members, the sector, and government to drive this transition.

While Option 1 aligns directly with our mission to decarbonise the built environment (construction), we also support Option 2 as a means to accelerate net zero across sectors, ensuring the benefits of low-carbon products are maximised throughout the economy.

7.6 Regardless of overall strategic approach, please note any specific sectors you think should be a priority in any future expansion of low carbon product market policies. Please explain your reasoning.

- Option 1: Aluminium
- Option 2: Asphalt
- Option 3: Ceramics
- Option 4: Chemicals
- Option 5: Food and Drink
- Option 6: Glass
- Option 7: Other non-ferrous metals
- Option 8: Non-metallic minerals
- Option 9: Paper and Pulp
- Option 10: Plastics
- Option 11: Other (please specify)

These are the future priority sectors suggested by our members as those most closely associated with the decarbonisation of the built environment: aluminium, glass, asphalt, and ceramics.

7.7 Should the government explore any of the long-term policies suggested in this section? Please explain your reasoning.

- Option 1: Collaborative procurements and buyers' alliances
- Option 2: Near-zero emission material mandates or quotas, and minimum content regulations
- Option 3: Embodied carbon limits on end products
- Option 4: Other (please specify)
- Option 5: None of the above

The government should regulate embodied carbon through building regulations, as in the Part Z proposal. Around one in ten tonnes of the UK's total greenhouse gas emissions come from embodied carbon in construction materials (more than aviation and shipping combined) and by 2035, these emissions are projected to form over half of built environment emissions. Regulation would create consistency, clarity, and a level playing field across the construction industry, standardising reporting, saving

time and money for developers and local authorities, and supporting uptake of tools like EPDs and the BECD.

Additionally, regulation would provide the economic signal for industry-wide investment in low-carbon construction products, stimulating market growth, innovation, and skilled jobs, while reducing costs as production scales. It would also encourage the use of domestically produced materials, lowering transport-related emissions. By mandating embodied carbon reporting and reduction, the UK can align construction practice with climate targets, drive innovation, and accelerate the transition to a low-carbon built environment.

For any questions relating to the content in this consultation please contact policy@ukgbc.org.