CRCBE
Summary of Commitments

Issue 4.1 December 2025

CSIC Cambridge Centre for Smart Infrastructure & Construction

Construction Leadership Council

ConstructZERO
The Construction Industry's Zero carbon change programme

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Introduction

Carbon reduction is more likely to happen when all organisations within a value chain are committed to reducing their footprint and saving costs. This **Carbon Reduction Code for the Built Environment (CRCBE)** forms part of the Construction Leadership Council's Construct Zero initiative. It is a first step to facilitate action and collaboration by relevant parties towards reducing carbon emissions (CO2eq)* related to design, construction, maintenance, operation and decommissioning of built assets. It is not intended to replace standards such as PAS 2080 (or equivalent), but it provides a framework for organisations to make a public commitment to and report on progress towards achieving Net Zero.

The CRCBE was drafted by the CSIC Achieving Net Zero Cross-Industry Working Group in 2020 and first issued in 2021. It is updated as carbon targets change and progress towards net zero carbon is achieved. A process for organisations to commit to the code is detailed separately. This document summarises the commitments of the CRCBE.

Levels and Streams

The CRCBE has three levels of compliance:
Pledger: entry level commitment, focused on organisational carbon
Signatory: intermediate level, focused on supply chain carbon
Champion: advanced level, focused on industry transformation
Furthermore, the CRCBE has two streams for Signatory and above**, "Client" and "Supply Chain".

Commitments are accumulated through the three levels of compliance:
Pledger + : commitment to 1.1, 1.2, 1.3 and 1.4
Signatory + : commitment to 2.1, 2.2, 2.3 and 2.4 (Client) **or** commitment to 3.1, 3.2, 3.3, 3.4 and 3.5 (Supply Chain)
Champion: commitment to 2.5, 2.6, 2.7, 2.8, 2.9, 2.10 and 2.11 (Client) **or** commitment 3.6, 3.7, 3.8, 3.9 and 3.10 (Supply Chain)

Organisational Involvement

Although, organisations are encouraged to sign up at a global or national level, it is possible for organisations to sign up at a regional or local level. It is also possible for large projects to sign up such as a joint venture with several partners. The level of sign-up must be clearly stated.

*Henceforth referred to as "carbon"
** i.e. "Signatory +" - Signatory and Champion compliant organisations/ commitments

CRCBE Commitments
Pledger + Commitments

Carbon Reduction Plan
1.1 We will set out our plans to meet net zero in alignment with national targets[1], including interim targets, recognising that the majority of cuts need to be made by 2030[2]. We will publish this, and our progress against it, annually.

Interim Targets
1.2 We will set an interim target to reduce our net direct and indirect carbon emissions for 2030 (Scope 1, 2 and – where appropriate – 3)[3], which aligns with or exceeds government strategy. For major projects that end before 2030, a suitable target will be set for the end date of that project instead.

Carbon Offsetting
1.3 We recognise that emissions reduction is essential. Where offsetting is used, we will publish our approach and the schemes that we are using.

Carbon Literacy
1.4 We will implement a carbon literacy programme which includes that in our leadership team who have influence over the built environment.

[1] 2050 in England, Wales and Northern Ireland, and 2045 in Scotland.
[2] See *Guidance and Information.*
[3] See www.ghgprotocol.com for further details.

Signatory + Commitments

Client Signatory +

Procurement

2.1 We will include carbon reduction targets and reporting commitments explicitly in all our procurement documents, as a deliverable of the procurement process, to move the 'cost-carbon' balance in favour of low carbon choices. This will include capital carbon (product, A1-A3, and construction processes, A4-A5, according to the quantification framework of PAS 2080). We will use an appropriate standard (e.g. PAS 2080 or RICS Whole Life Carbon Assessment Standard) as the reference document for this.

Data and Reporting

2.2 We commit to providing a carbon baseline for each of our projects and setting targets for carbon reduction against these, which will drive innovation. We will also include, where appropriate, progressive carbon reduction targets throughout the life of a project and appropriate financial incentives, having regard to the other commitments on the Code*. Carbon offsetting should be the last resort and only used when all other carbon reduction efforts are exhausted. Carbon offsetting should follow the Oxford offsetting principles** or equivalent.

2.3 We commit to having our carbon data externally verified as part of our reporting requirements in compliance with ISO 14064-1 and to disclosing our environmental data through a public disclosure scheme such as the CDP (Carbon Disclosure Project).

Learning and Skills

2.4 We have implemented a carbon literacy programme. The majority of our leadership team and key decision makers in project management and procurement with influence over the built environment, have completed the programme within the last few years.

*Appropriate financial incentives might include contractual mechanisms/outcomes linked to low-carbon targets, such as bonus structures, KPI regimes, performance failure damages, shared supply-chain incentive regimes, contract price rebates/reductions, pain/gain mechanisms, testing/defect remedies being activated and the required target being a condition of handover/acceptance.

** See www.smithschool.ox.ac.uk/research/oxford-offsetting-principles

Supply Chain Signatory +

Data and Reporting

3.1 We will integrate and aim to automate production and delivery of CO2eq information through design and construction by using integrated approaches to data creation and management (in reference to commitment 3.3). This will inform optimal solutions through the build phase.

3.2 We will reduce the whole life carbon intensity of our projects, or our contribution to projects (for subcontractors), year on year, within the limits of our influence (to achieve the long-term targets set out in Commitment 1.2).

Design Philosophy

3.3 We will proactively recommend and adopt carbon measurement and carbon reduction methodologies in all our projects for both design and construction, including whole-life carbon approaches, and circular economy principles and practices, regardless of whether the clients are requesting them, to raise awareness and facilitate informed decision-making. We will use PAS 2080 (or another relevant standard) as the reference document for this and aim to build on integrated and automated data capture (ref. Commitment 3.1) to log carbon intensity and monitor progress in reducing it.

3.4 We will work in close collaboration with clients and with our supply chain partners to deliver on the clients' carbon requirements and inform the development of approaches and standards.

Learning and Skills

3.5 We have implemented a carbon literacy programme. The majority of our leadership team and key decision makers in project management and procurement with influence over the built environment, have completed the programme within the last few years.

Champion Commitments

Client Champion

Procurement

2.5 Together with our supply chain, we will develop outcome-based specifications and commercial arrangements, where possible, ensuring outputs are not constrained to current thinking but encourage low carbon innovations. We commit to ongoing support and engagement with the supply chain to accelerate achievement of the desired outcomes.

Data and Reporting

2.6 We have established consistent measurement of carbon on projects and in our organisation and share these on industry databases (e.g BECD and NACF Embodied Carbon Database) for the purposes of benchmarking and performance improvement. To achieve this, we commit to share our carbon data openly, through a national carbon integrator (where available) and through working with industry.

Learning and Skills

2.7 We commit to implementing approaches that improve our capability to measure and reduce embodied and operational carbon: (i) in the design and construction phase, (ii) during the life of existing assets; and (iii) during decommissioning and end-of-life.

Design Philosophy

2.8 We will align our capital and operational investment plans with the national net zero carbon obligation, including retrofitting decarbonisation to our existing asset operations and their use. We will use early-stage optioneering to prioritise no-build and low-build solutions, which optimise existing assets, systems and processes, before new build is considered. We will encourage multi-sector, system of systems approach, to seek integrated sustainable solutions and achieve a balanced outcome for the natural and built environment.

Knowledge Sharing

2.9 As clients, we will work together (with our peers, umbrella industry bodies and our supply chains) to proactively share best practice around our methodologies for carbon measurement and management. By also understanding where we have ‘common asset types and activities’ we will ensure we all measure and report on the carbon in these assets/activities consistently.

2.10 We will share knowledge and information on the benefits of circular economy principles and nature-based solutions for carbon sequestration and increased resilience instead of ‘hard engineering’ interventions.

2.11 We will share our decarbonisation roadmaps both for new and existing assets, with the aim of contributing towards the national net zero carbon transition.

Supply Chain Champion

Procurement
3.6 (Contractors) We will proactively support our supply chain to adopt carbon measurement and carbon reduction and will require them to report on carbon.

Data and Reporting
3.7 We are committed to the collation and sharing of carbon reduction data across the industry. We will contribute data, for example, into a publicly available carbon measurement database (e.g BECD and NACF Embodied Carbon Database) or provide carbon data to clients who will enter the data to such a database for the purposes of benchmarking and performance improvement.

Design Philosophy
3.8 (Consultants) We will work with clients to consider the carbon hierarchy options before a new build is committed to. Where possible, we will integrate nature-based solutions and circular economy principles in the design development and delivery of projects.

Knowledge Sharing
3.9 We will proactively share our own best practice across the supply chain and our learning from adopting others best practice where possible, for example with reference to the Supply Chain Sustainability School*, and annual reports of the Infrastructure Carbon Review**.

Learning and Skills
3.10 We commit to implement approaches that improve our capability to measure and reduce embodied and operational carbon in the design and construction phase, including reducing the carbon footprint of materials, reducing waste and decarbonizing construction operations.

*See www.supplychainschool.co.uk
**See www.gov.uk/government/publications/infrastructure-carbon-review

Guidance and Information

2030 Interim Target

In 2026, we will be 20% of the way to 2050 from 2019 (when the UK and Scottish governments wrote climate commitments into law). It is anticipated that we will need to make most of our carbon reductions with existing technologies*, rather than relying on new technologies to emerge.

According to the Pareto principle, we need to reach 80% reduction vs 2019 by 2026 in order to reach net zero by 2050 (current UK government law). This implies emissions reductions of approximately 20% per year:

Table 1 Residual annual emissions in given year, at given rate of reduction, vs. 2019 emissions.

Residual Annual Emissions, T (%)		**Reduction Rate, R (%/year)**					
		10	**12**	**15**	**18**	**20**	**25**
Year	**2025**	53	47	38	31	27	18
	2026	48	41	32	25	21	14
	2027	32	25	17	12	9	4

* See www.eng.cam.ac.uk/news/absolute-zero

Wider Context

This initiative sits within a wider context and on its own it is not sufficient to deliver a Net Zero UK, but it does enable individual organisations to publicise their annual progress, and thereby collaborate and share best practice on their journey to Net Zero with the intention of accelerating progress across the industry. Additional guidance and structures which may help you to achieve the commitments of the Code include:

1. Infrastructure Carbon Review (2013) and the ICR Seven Years On Report
2. PAS 2080:2023 (available from BSI) and the accompanying guidance document
3. Construction Leadership Council's CO2nstruct Zero programme with its nine priorities and related signposting
4. Construction Playbook 2022
5. Supply Chain Sustainability School's Carbon Reduction Code Resource Mapping Table
6. Science Based Targets Initiative (SBTi)
7. CIH Value Toolkit
8. SteelZero and ConcreteZero
9. The Netherlands Carbon Performance Ladder: used in the Netherlands to reward improved carbon performance through procurement
10. HMG Green Book
11. ICE Carbon Project
12. The Five Client Carbon Commitments
13. RICS Whole life carbon assessment for the built environment. 2nd Edition, Version 3 August 2024
14. Transition Plan Taskforce
15. Built Environment Carbon Database (BECD) - becd.co.uk
16. UK Net Zero Carbon Buildings Standard

Further Guidance

Further guidance concerning the CRCBE is available at: www.crcbe.org
Alternatively, contact us: carboncode-enquiries@eng.cam.ac.uk

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CSIC Cambridge Centre for Smart Infrastructure & Construction

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Contact Us
Centre for Smart Infrastructure and Construction (CSIC)
University of Cambridge
Department of Engineering
Civil Engineering Building
7a JJ Thomson Avenue
Cambridge CB3 0FA

CSIC website: www.centreforsmartinfrastructure com
CRCBE website: www.crcbe.org
Code enquiries: carboncode-enquiries@eng.cam.ac.uk
General enquiries: csic-admin@eng.cam.ac.uk