Performance Framework
Version 1
As Co-Chair of the Construction Leadership Council, I’m delighted to welcome you to ‘Construct Zero: The Performance Framework. The Prime Minister has set out the global importance of climate change, and the need for collective action from firms and individuals across the UK, to address the challenge of climate change and achieve net zero carbon emissions in the UK by 2050.

Never before has there been such a strong collective desire across the political spectrum, society, and businesses for us to step up to the challenge. We all have a responsibility to step up and take action now to protect the next generation, our children’s children. It is our duty to do so, as citizens, parents, and leaders to enable and provide a better world for our children.

The Prime Minister has been clear on the importance of the built environment sector in meeting his target for the UK to reduce its carbon emissions by 78% compared to 1900 levels by 2035. Put simply, the built environment accounts for 43% of UK emissions, without its contribution - we will not meet this target, and support the creation of 250,000 green jobs.

Therefore, I’m delighted the Construction Leadership Council (CLC) is leading the sector’s response to this challenge, through the Construct Zero change programme. Building on the success of the sector’s collaborations during COVID, the CLC has engaged the industry to develop the Performance Framework, which sets out how the sector will commit to, and measure it’s progress towards, Net Zero. The CLC’s success in building momentum behind Construct Zero is shown by the level of the industry’s response to the consultation, with over 2,500 comments from firms of all sizes.

Anne-Marie Trevelyan
Co-Chair of the Construction Leadership Council
Foreword

I was delighted to see this support for the proposed metrics, and today’s announcement also sets out a number of commitments made by the industry to reduce its carbon emissions. These include:

▪ Working with Government deliver retrofitting to 27 million homes by 2040
▪ 78% of diesel plant to eliminated from construction sites by 2035
▪ From 2022, we will give all our clients the chance to become net zero by offering alternative low carbon design options
▪ We will target 1,500 of the sector’s businesses and clients to sign up to a measurable carbon reduction plan (including Race to Zero, Science based Targets or Climate Hub) by 2025

However, we recognise that this is, and needs to be, a genuine partnership between the sector and Government. Through our consultation and wider discussions, we have heard and recognised the role of Government in providing the policy and regulatory environment that enables the whole sector and indeed the wider economy to succeed and flourish. We are responding to this challenge through the Government’s Heat and Buildings Strategy and the Industrial Decarbonisation Strategy, providing a sound, progressive, forward-facing policy environment that enables and recognises businesses who are working to reduce their carbon emissions targets.

What is clear is that we are not starting from an empty sheet of paper. The success of Construct Zero’s Business Champions programme has shown how companies of all sizes across the sector are already actively working to reduce their carbon emissions and delivering tangible progress. These range from Mitie, Saint Gobain, Mott MacDonald, McLaughlin &Harvey through to Peak, Costain, Mace and Travis Perkins. There are many others.

The work and commitment of our Business Champions is outstanding. However, we can’t rest on our laurels. We need to capitalise on this support during what will prove a vital decade in determining whether we can prevent significant climate change occurring, and embed Construct Zero’s metrics and commitments across the wider sector.

This is the start of the journey and together we will learn, develop and adapt. The important step now is taking that first step, together, as a partnership between the Government and the construction industry. Only by working together collectively, will we meet the challenge of achieving net zero carbon and truly build back better, faster and greener for future generations.

I would like to thank each of you for your support on the programme and look forward to continuing to work with you.
Section 1
Introducing the Performance Framework
The Performance Framework has been developed to provide the CLC with a sector level dashboard on our progress towards Net Zero aimed at motivating businesses to action and to help those outside the sector understand our progress.

We intend to collate data for the dashboard on a quarterly basis albeit not every metric will be available quarterly. The data itself will be drawn from sources which already aggregate it, known as data point owners.

In developing the sector level dashboard we have identified Project and Business Metrics which align to the sector level indicators. We don’t intend to measure these on a quarterly basis, they have been issued for guidance to businesses and projects to consider when developing their own plans.

The Performance Framework is very closely aligned with Government policy and draws on emerging thinking on carbon measurement and assessment, as such it will evolve over time and we will no doubt update and improve the metrics. Those that are published today are a starting point so we can review, test and refine.
How has it been developed?

Version 0 Performance Framework

- Nine priorities modelled from CCC Carbon Budget
- Metrics and milestones from existing documents

Industry Consultation

Over 2500 responses from industry
- Are these achievable?
- What would be needed to deliver them?

Version 1 Performance Framework
(Section 1)

Government/regulatory enablers of business action
(Section 3)
The Framework is based on measuring performance against the nine priorities

<table>
<thead>
<tr>
<th>Transport</th>
<th>Buildings</th>
<th>Construction activity</th>
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<tbody>
<tr>
<td>1. Accelerating the shift of the construction workforce to zero emission vehicles and onsite plant</td>
<td>2. Optimise the use of Modern Methods of Construction and improved onsite logistics, in doing so reducing waste and transport to sites</td>
<td>3. Championing developments and infrastructure investments that both enable connectivity with low carbon modes of transport and design to incorporate readiness for zero emission vehicles</td>
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<td>4. Work with Government to deliver retrofitting to improve energy efficiency of the existing housing stock</td>
<td>5. Scale up industry capability to deliver low carbon heat solutions in buildings, supporting heat pump deployment, trials of hydrogen heating systems and heat networks</td>
<td>6. Enhancing the energy performance of new and existing buildings through higher operational energy efficiency standards and better building energy performance</td>
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<td>7. Implementing carbon measurement, to support our construction projects in making quantifiable decisions to remove carbon</td>
<td>8. Become world leaders in designing out carbon, developing the capability of our designers and construction professionals to design in line with circular economy - shifting commercial models to reward measurable carbon reductions</td>
<td>9. Support development of innovative low carbon materials, as well as advancing low carbon solutions for manufacturing production processes and distribution</td>
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</table>
Structure of the Framework

The headline commitments are the top level ‘outcome’ measures of success, one aligned to each of our 9 priorities. Progress against each will be reported on a quarterly basis and will be determined from the metrics for measurement (below).

Metrics for measurement are the sector level indicators of progress towards the headline commitments, they will be collated by the CLC on a quarterly basis by drawing data together from the data point owners to tell the sector’s story.

Business and project metrics are provided for guidance on preparing aligned plans at a business an project level, these will be looked at ad-hoc by the CLC if required to better understand progress on the metrics for measurement.
<table>
<thead>
<tr>
<th></th>
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<td>2</td>
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<td>Close the productivity gap between Construction and economy average output per worker by 2035</td>
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<td>Work with Government to <strong>deliver retrofitting</strong> to improve energy efficiency of the existing housing stock</td>
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<td>5</td>
<td>Scale up industry capability to deliver <strong>low carbon heat solutions in buildings</strong>, supporting heat pump deployment, trials of hydrogen heating systems and heat networks</td>
<td>From 2025 all new buildings will be designed with low carbon heating solutions</td>
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<td>6</td>
<td>Enhancing the <strong>energy performance</strong> of <strong>new and existing buildings</strong> through higher operational energy efficiency standards and better building energy performance</td>
<td>From 2025 we will deliver new homes and buildings which will minimise energy demand and reduce emissions in operation by 75% (dwellings) and at least 27% (commercial buildings) compared to current standards</td>
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# Headline commitments

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<td>Support development of innovative <strong>low carbon materials</strong>, as well as advancing low carbon solutions for <strong>manufacturing production processes and distribution</strong></td>
<td>By 2035 we will have reduced construction product emissions down by 66% from 2018</td>
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**Business carbon measurement** – we will target 1,500 of the sector’s businesses and clients to sign up to a measurable carbon reduction plans (including Race to Zero, Science based Targets or Climate Hub) by 2025
## Transport

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<td>Annual reduction in construction and demolition waste and excavation waste tonnes/£m output</td>
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<td>Measure industry onsite Productivity output/FTE</td>
<td>2. Continued Professional Development on climate change mitigation for all professional members (100% by 2022)</td>
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**Metrics for measurement**

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- **Annual increase in electric vans in construction fleet**
- **Every construction or client business over 250 staff to trial 1 zero diesel site by end of 2023**

**Measure % of relevant planning qualifying bodies to put in place:**

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<td>Every client of the sector will be provided carbon data by 2030 to make informed lower carbon choices</td>
<td>Measure % of relevant qualifying bodies to project carbon measurement put in place:- 1) Entrance requirements/ membership assessments to include threshold carbon literacy/competence test by January 2025. 2) CPD on climate change mitigation for all members to be available from January 2022 and mandatory from January 2024</td>
<td>Work with Government to have CCUS operational on 2 clusters by 2028</td>
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<td>From 2022, we will give all our clients the chance to become net zero by offering alternative low carbon design options and advice to clients, even if not scoped</td>
<td>All businesses or clients over 250 staff to identify, specify and trial a relevant low carbon alternative product on a project by the end of 2023</td>
<td>Establish 2018 baseline and target annual reduction in energy used in production kWh/Tonne for key product lines</td>
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<td>By 2035 we will have reduced construction product emissions down by 66% from 2018</td>
<td>Measurement of total MtCO2 emitted based on client Net Zero advice and designs accepted</td>
<td>Establish 2018 baseline and target annual reduction in embodied carbon CO2/Tonne for key product lines</td>
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<td>Every business or client over 250 staff in infrastructure to achieve PAS 2080 accreditation, monitor % coverage, target 100% by 2025</td>
<td>Measure % of relevant qualifying bodies to put in place:- 1. Entrance requirements include threshold carbon literacy/competence test (100% by January 2025). 2. Continued Professional Development on climate change mitigation for all members (100% by 2022)</td>
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**Metrics for measurement**

- **40% of product portfolios to have EPDs by 2025 with 100% by 2030, targeting a baseline and annual updates from 2025.**
- **Every business or client over 250 staff in infrastructure to achieve PAS 2080 accreditation, monitor % coverage, target 100% by 2025.**
- **From 2022, we will give all our clients the chance to become net zero by offering alternative low carbon design options and advice to clients, even if not scoped.**
- **By 2035 we will have reduced construction product emissions down by 66% from 2018.**

**Headline commitment**

- **Every client of the sector will be provided carbon data by 2030 to make informed lower carbon choices.**
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Section 2
How the CLC and businesses will use the Performance Framework
How will Construct Zero’s metrics be used?

Process

• Plan to collate the Sector metrics for measurement from industry quarterly, by drawing together the data points from each of the data point owner organisations

• Where there are anomalies/trends this will be investigated in discussion with the relevant industry leads to draw out a narrative and explore any action required

• On an ad-hoc basis the Project & Business Metrics will be monitored to better understand any variances and anomalies

• The PF metrics will be constantly under review and will be updated as better sources of data are developed – for example reform of the EPC process for buildings
How will Construct Zero’s metrics be used?

Publication
- Reported to Government to demonstrate the sector’s progress
- Published on CLC website
- Used by the Advisory Board to assess progress & challenge back
- Feedback to the Programme Board & Task Force on performance and areas of focus
How will businesses and clients use them?

• The project and business commitments and metrics are published for guidance.
• They are aimed at providing direction for businesses and clients in how to establish their Net Zero plans in an aligned way to the 9 priorities, in doing so understanding they are targeting the areas the sector can have the most impact on Net Zero.
• Furthermore they will instil consistency in approach and pace of change where we have common supply chains across the sector for example this could be around aligning client requirements or common construction product supply chains.
Section 3
What are the enablers for the sector to reach Net Zero
Summary of key enablers

Government

Work with industry to establish the funding, capability and regulatory environment to deliver the substantial domestic retrofit programme required in the Built Environment, as set to in the CLC Retrofit Strategy.

Utilise the buying power on Gov estate to create the market capability to develop and deliver low carbon solutions

Publication of Heat & Buildings strategy to give long term policy direction to the market including:

• Consistent subsidy policy for heat pump installation for consumers

Conditionality on city and devolution deals to include development of city wide NZ plans across infrastructure and built environment assets

Introduce grants for workplace EV charging infrastructure

Progressing a full-scale CCUS & Hydrogen network in the UK

Legislation/regulation

Faster grid connections to sites to enable diesel free sites (currently take circa 16 weeks)

Regulation to accelerate decarbonisation of the grid and increase in options for renewable energy to meet industry demand

During the implementation of Planning for the Future consider the following:

• Provide an uplift in investment in planning departments to join up infrastructure and planning decisions

• Alignment of National and Local Transport Investment strategies and the Local Develop Plans

• Introduction of a Whole life carbon assessment for buildings (as per current London requirements)

Products labelling and data base with a simple consumer facing EPD, similar to white goods currently.

Tax

Introduce an EV scrappage scheme for light commercial vehicles (vans)

Maintain existing OLEV

Consider changes to parity of refurbishment vs. new build VAT to encourage recycling and reuse

Expand the scope of the super deduction to cover plant hire capital costs in order to accelerate replacement of diesel plant
Summary of key enablers

CLC members

Produce a productivity and PMV league table for the main contractors (similar to prompt payment code)

Development of business champions case studies on:-

- What construction companies can/are doing on their own business premises
- Trials of Zero Diesel Construction sites

Collective engagement with plant manufacturers to drive the market for zero diesel onsite plant (such as buying clubs to aggregate demand)

Develop and publish standards and definitions for PMV, recognising this might be different for different sub-sectors

Create a sector wide products & actual performance data base with embodied carbon data

Support SMEs to understand and measure carbon impacts by creating a Construction sector business carbon calculator based on the CZ metrics

Update to relevant British Standards to include low carbon materials

Market led innovation

Support for sector deal continuity to establish platform rules/standards and support for SMEs and government departments to deliver on the Construction Playbook

Digital tools to support development of Building Renovation passports for direct to consumer assessment and conversations around retrofit potential, financing, modelling and an industrialised approach

Support for cross-sector innovation and research to reduce costs of all aspects of retrofit and evidence performance to drive demand and bridge to a self-financing situation faster
Section 4
Next steps
Next steps

- First quarterly report expected in autumn
- CZ to work with each of the data point owners to determine clear definitions and the process for data collection
- Encourage CLC Taskforce & CZ Partners to work with their members on adopting the business and project metrics
Appendices

1. Project and business metrics and commitments (for guidance)
2. Construct Zero business champions and partners list
3. Full list of consultee organisations who responded
Annex 1

Guidance on business and project commitments
<table>
<thead>
<tr>
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<td><strong>78% of diesel plant to eliminated from construction sites by 2035</strong></td>
<td>Annual increase in non-diesel plant in use from plant hire firms</td>
<td>Set a date to phase out diesel plant and fleet</td>
<td>For larger projects consider installing EV charging points at site establishment</td>
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<td>Metrics for measurement</td>
<td>Every construction or client business over 250 staff to trial 1 zero diesel site by end of 2023</td>
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<td>Annual increase in electric vans in construction fleet</td>
<td>Set a year on year business mileage reduction target from 2022 – 2025</td>
<td>Measures site miles / £m of project costs to reduce year on year</td>
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Accelerating the shift of the construction workforce to zero emission vehicles and onsite plant.
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<td><strong>Close the productivity gap between Construction and economy average output per worker by 2035</strong></td>
<td>Annual reduction in construction and demolition waste tonnes/£100k output</td>
<td>Annual reduction in business waste tonnes/ £m turnover</td>
<td>Annual reduction in project waste tonnes / £m project costs</td>
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<tr>
<td>Metrics for measurement</td>
<td>Measure industry onsite Productivity output/FTE</td>
<td>Measure business Productivity onsite with £m revenue/FTE</td>
<td>Measure project Productivity onsite with £m project cost/FTE</td>
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<td>Increase % of pre-manufactured value across sector year on year</td>
<td>Define and increase % of pre-manufactured value within the business year on year</td>
<td>Define and target increase % of pre-manufactured value within a project year on year or across a portfolio</td>
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Optimise the use of Modern Methods of Construction and improved onsite logistics, in doing so reducing waste and transport to sites.
**From 2025, planning applications from the sector must connect to public / active transport and include EV charging where parking is provided**

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<td><strong>Sector – CLC to monitor</strong></td>
<td>Measure % of relevant qualifying bodies to put in place:- 1. Entrance requirements include threshold carbon literacy/competence test (100% by January 2025). 2. Continued Professional Development on climate change mitigation for all members (100% by 2022)</td>
<td>For businesses with planning professionals ensure they are undertaking relevant CPD put in place a plan for and monitor delivery of it</td>
<td>Include carbon literacy requirements in procurement appointments for planning professionals</td>
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<td>Annual increase in number of EV charging points installed by the sector</td>
<td>Annual increase in number of EV charging points installed by the business on projects per £1m turnover</td>
<td>Factor connectivity with public/active transport links and EV charging in project and investment appraisals</td>
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Work with Government to deliver retrofitting to improve energy efficiency of the existing housing stock.

- **Deliver retrofitting to 855,000 homes by 2024, 12,300,000 homes by 2030, and 27,300,000 homes by 2040.**

- **Establish industry 'quality scheme' routes and licensing consistent with PAS2030/35 and target annual increase in businesses registered.**

- **Number TrustMark Retrofit Coordinators targeting 30,000 by 2028.**

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<td>Deliver retrofitting to 855,000 homes by 2024, 12,300,000 homes by 2030, and 27,300,000 homes by 2040.</td>
<td>Businesses to measure and increase their % revenue from the Repair, Maintenance &amp; Improvement of buildings which resulted in an improved EPC grading.</td>
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<td>Establish industry 'quality scheme' routes and licensing consistent with PAS2030/35 and target annual increase in businesses registered.</td>
<td>Businesses with a role in retrofit to register with an approved Quality Scheme consistent with PAS2030/35.</td>
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<td>Number TrustMark Retrofit Coordinators targeting 30,000 by 2028.</td>
<td>Businesses to assess their role in retrofit and accordingly develop a skills training plan and monitor delivery of it.</td>
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<td>Commit to developing a digital Building Passport, making future retrofits easier and more efficient.</td>
<td>Specify PAS2035 roles on retrofit projects.</td>
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<td>Specify TrustMark Retrofit Coordinators on retrofit projects.</td>
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Scale up industry capability to deliver **low carbon heat solutions in buildings**, supporting heat pump deployment, trials of hydrogen heating systems and heat networks.

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<td>Increase in Heat Pump installations per year to exceed Government target of 600,000 per year by 2028</td>
<td>Commit to offering all customers who are offered low carbon heat solutions and target a % annual increase in uptake</td>
</tr>
<tr>
<td>Number buildings connected to low carbon heat networks and heat pumps installed as % of overall building stock</td>
<td>Businesses involved in designing, constructing and installing low carbon heat solutions to develop a skills training plan aligned with agreed competence standards for relevant roles.</td>
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<td>Trained Heat Pump Installers (MCS Registrations) aiming for 30,000 by 2030</td>
<td>Introduce low carbon heat installations into project and investment appraisal processes and design briefs</td>
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<td>No. buildings connected to low carbon heat networks and heat pumps installed as % of buildings constructed or owned on a project</td>
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**Enhancing the energy performance of new and existing buildings**

through higher operational energy efficiency standards and better building energy performance

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**Headline commitment**

From 2025 we will deliver new homes and buildings which will minimise energy demand and reduce emissions in operation by 75% (dwellings) and at least 27% (commercial buildings) compared to current standards.

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**Metrics for measurement**

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<td>Annual reduction in average energy requirements for new dwellings and existing (EPC based)</td>
<td>Appraise and deliver all cost viable retrofit solutions on business premises</td>
<td>Understand the industry average energy requirements for your asset type and target a reduction</td>
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<tr>
<td>Annual reduction in actual energy usage in Buildings (ECUK based)</td>
<td>All new build permanent business offices to be Net Zero ready</td>
<td>Specify accurate design stage estimates of total energy usage for all building types, followed by post-occupancy evaluation and data disclosure.</td>
</tr>
</tbody>
</table>

**Target an annual reduction in actual energy usage in business premises and set a date to switch to a renewable energy supplier.**
Implementing carbon measurement, to support our construction projects in making quantifiable decisions to remove carbon

Every business or client over 250 staff in infrastructure to achieve PAS 2080 accreditation, monitor % coverage, target 100% by 2025

Measure % of relevant qualifying bodies to project carbon measurement put in place:
1) Entrance requirements/membership assessments to include threshold carbon literacy/competence test by January 2025.
2) CPD on climate change mitigation for all members to be available from January 2022 and mandatory from January 2024

40% of product portfolios to have EPDs by 2025 with 100% by 2030
Every business or client over 250 staff in infrastructure to achieve PAS 2080 accreditation, monitor % coverage, target 100% by 2025

Measure % of estimators in a business who have completed carbon literacy training in order to be able to carry out embodied carbon assessments alongside bills of quantities

If you produce or distribute construction products understand current % with EPD and target an annual increase up to 100%

Businesses over 250 staff in infrastructure supply chain to plan for and achieve PAS 2080 accreditation

Include carbon literacy requirements in procurement appointments for project management professionals

Specify accurate design stage estimates of embodied and operational carbon requirements to be provided to inform decision making

Consider PAS 2080 accreditation if infrastructure project

Headline commitment

Every client of the sector will be provided carbon data by 2030 to make informed lower carbon choices
Measurement of total MtCO₂ emitted based on client Net Zero advice and designs accepted

From 2022, we will give all our clients the chance to become net zero by offering alternative low carbon design options and advice to clients, even if not scoped.

**Metrics for measurement**

**Sector – CLC to monitor**

- All businesses or clients over 250 staff to identify, specify and trial a relevant low carbon alternative product on a project by the end of 2023.
- Measurement of total MtCO₂ emitted based on client Net Zero advice and designs accepted.
- Measure % of relevant qualifying bodies to put in place:
  1. Entrance requirements include threshold carbon literacy/competence test (100% by January 2025).
  2. Continued Professional Development on climate change mitigation for all members (100% by 2022).

**Business – for guidance**

- Identify relevant embodied carbon asset standards and compare your team’s design performance against these, targeting an annual % reduction.
- Measurement of total MtCO₂ emitted based on client Net Zero advice and designs accepted.
- Measure % of designers in a business who have completed carbon literacy training in order to be able to carry out embodied carbon assessments alongside design.

**Project – for guidance**

- All businesses or clients over 250 staff to identify, specify and trial a relevant low carbon alternative product on a project by the end of 2023.
- Set an embodied carbon baselines and structure commercial arrangements to incentivise and reward designers who exceed these.
- Include carbon literacy requirements in procurement appointments for design professionals.

Become world leaders in designing out carbon, developing the capability of our designers and construction professionals to design in line with circular economy - shifting commercial models to reward measurable carbon reductions.
Understand the embodied carbon CO2/Tonne for key product lines and target an annual reduction for the supplier.

Support development of innovative low carbon materials, as well as advancing low carbon solutions for manufacturing production processes and distribution.

<table>
<thead>
<tr>
<th>Headline commitment</th>
<th>Sector – CLC to monitor</th>
<th>Business – for guidance</th>
<th>Project – for guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>By 2035 we will have reduced construction product emissions down by 66% from 2018</td>
<td>Commit to trialling low carbon concrete or steel within your business portfolio</td>
<td>Work with Government to have CCUS operational on 2 clusters by 2028</td>
</tr>
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<td>If you procure, specify or distribute concrete or steel monitor and target an annual reduction in energy used in production kWh/Tonne for the supplier</td>
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</tr>
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<td>Establish 2018 baseline and target annual reduction in energy used in production kWh/Tonne for key product lines</td>
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<td></td>
</tr>
</tbody>
</table>
Annex 2
Construct Zero
business champions and partners list
Construct Zero business partners

ACE
Arcadis
Atkins
Barratt Developments
Bennetts Associates
BPF
Build UK
Builders Merchants Federation (BMF)
Cambridge Centre for Smart Infrastructure & Construction
Cast
CBI
CBRE
CECA
Centre for Digital Built Britain (cdbb)
CIC
CIH
CIOB
CIRIA
CITB
Considerate Contractors Scheme
Constructing Excellence
Construction Employers Federation
Construction Products Association
CPA UK
EDF Energy
Electrical Contractors’ Association
Electrical Distributors’ Association
Federation of Master Builders (FMB)
Good Homes Alliance
Health & Safety Executive (HSE)
Home Builders Federation (HBF)
I3p
ICE
Imperial College
Infrastructure and Products Authority (IPA)
Infrastructure Client Group (ICG)
Institution of Structural Engineers
Laing O’Rourke
Mace
Mixergy
Mott MacDonald
NASC
National Federation of Builders (NFB)
National Home Improvement Council (NHIC)
Powell Dobson Architects
QA Scheme Support Services
Rider Levetts Bucknall
Saint-Gobain
Scottish Futures Trust
Skanska
Sustainable Energy Association
Tideway
TUC
Turner & Townsend
UKRI
Construct Zero business champions

ACO
Adair
AICO
APP Wholesale
Arcadis
Atkins
Bradfords
Buro Happold
Cast
CEF

Cocuun Ltd
Costain
Faithful & Gould
Hanson UK
Ibstock Plc
Imtech
Jackson Civil Engineering
Keltbray
Knauf Insulation

Knights Brown
Laing O'Rourke
MACE
McLauglin & Harvey
Mid Group
Mitie
Mott MacDonald
Multiplex
Peak
RDM Electrical and Mechanical

Rider Levett Bucknall
Saint-Gobain
SES
Signify
Steel Blue
The Clarison Group
Travis Perkins
Turner & Townsend
Wavin
Annex 3
Full list of consultee organisations who responded
Full list of consultee organisations who responded

Accelar Limited, as part of the TIES Living Lab
ACE
Actuate
AD Construction Group
AECB
Aico Ltd
Arcadis
Argent
Arup
Balfour Beatty
BAM UK (BAM Construct & BAM Nuttall)
BCSA
Bradfords
Bradford
Brick Development Association
British Board of Agreement (BBA)
British Ceramic Confederation
Building Engineering Services Association
BESA
Buro Happold
CAST
CBRE
CITB
Considerate Contractors Scheme
Constructing Excellence
Construction Industry Council
Construction Plant Hire Association
CORGI Fenestration Scheme Limited
Corgi Services Limited
CPA
Derwent London
East West Rail
ECA
Electrical Distributors’ Association
F M Conway
Finishes and Interiors Sector
Glass and Glazing Federation
Good Homes Alliance CIC
Graham
Green Construction Board
Heat Pump Federation
HIES
Home Builders Federation
Innovate UK
Jackson Civil Engineering Group Ltd
Keltbray
LABC
Laing O’Rourke
Legrand
Mace
Melius Homes
Mineral Products Association
Modulos
Morgan Sindall
Multiplex
NCVC
NHIC
Passivhaus Trust, 5 Baldwin Terrace, London N1 7RU
Project Etopia UK
RetrofitWorks
RICS
Rider Levett Bucknall
Royal Institution of Chartered Surveyors
Saint Gobain
Skanska UK
SmartCarbon Ltd
Structural Timber Association
Sustainable Energy Association
Tarmac
TFT
The British Constructional Steelwork Association Limited
Timber Development UK (formally TTF / TRADA)
Tilbury Douglas
Travis Perkins plc
Turner & Townsend
UKRI
University of Cambridge (Department of Engineering; Laing O’Rourke Centre for Construction Engineering and Technology)
Wates Group
WSP in the UK
xsite architecture LLP