

The Construction Industry's Zero carbon change programme

Performance Framework Dashboard

November 2021



CLC 1st Performance Assessment Q3 2021

Background

The Construction Leadership Council (CLC) is leading the sector's response to the Net Zero 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 start to develop the Performance Framework, which sets out how the sector will commit to, and measure it's progress towards, Net Zero.



What is 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.

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. The current metrics and performance published today is a starting point so we can review, test and refine.

The framework is being published this quarter to provide early sight of the metrics available to enable the industry to comment. It will take multiple quarters before all metrics are available and longer to refine, to make this as effective as it can be for the industry, but we are keen to publish this version early for comment and reviews.



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Foreword

As Co-Chair of the Construction Leadership Council, I'm pleased to welcome you to 'Construct Zero Performance Framework: Progress Update Report: 1'. The Performance Framework, published in July 2021, set out how the sector will commit to, and measure its progress towards Net Zero. This included a set of metrics against which the Construction Leadership Council will track the sector's collective progress and provide Government with quarterly public updates.

We know this is going to take time and that such a significant transition won't happen overnight. Today's report is the first step in this journey, with progress illustrated against those metrics where the relevant data is available on a quarterly basis.

The data set being published today is a first attempt to develop a set of metrics to allow us to measure the progress to Net Zero. There is much work to be done to refine, improve and iterate this data but, we hope, that it still provides a useful first iteration for review by the industry. And, in publishing this early 'working version' of the data in one place, Construct Zero would welcome engagement from the sector about how to better iterate and improve it for future updates.

Since my appointment as Construction Minister on 16 September, I have been delighted to learn about how industry has welcomed and proactively engaged with Construct Zero, building on the strong collective desire across the political spectrum, society and businesses for us to step up to the challenge of climate change. I recently chaired my first meeting of the programme's Advisory Board, bringing together some of the industry's leading experts in this space. It was great to have their critical challenge, advice and input on the programme's development and the challenges that lie ahead.

In recent weeks, the Government announced both its Heat and Buildings Strategy and Net Zero Strategy. Together with the existing Decarbonisation Strategy, Industrial these provide a clearer framework and policy environment to reach Net Zero in the UK.

I am looking forward to working with the Construct Zero programme, our Partners and Business Champions to discuss, understand and learn how we can collectively translate these strategies into on the ground delivery in communities and businesses across the UK and bevond.

This is the next step of our collective journey to Net Zero, 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.

I would like to thank each of you for your support on the programme and look forward to continuing to work with you.



Lee Rowley Construction Minister



Executive summary

Real progress has been made against the Performance Framework following the recent publication of the **Heat & Buildings** and **Net Zero Strategies**, which have both given greater policy certainty to industry so they can plan to meet Net Zero.

This confidence is reflected in those areas where we currently have greater policy certainty, such as on **Heat Pumps**. Our analysis shows that we're making progress, with almost 3,500 trained installers spread across the whole of the UK, contributing towards our target of 30,000 installers by 2030 (metric 15). There is still more to do here but quarter on quarter uptake is increasing, driven by demand.

Looking at the historic trends, we can start to understand the impact that COVID has had on the sector's carbon footprint -such as fewer homes sold in 2020 with EPC A or B than in 2019 (metric 16). Overall, new home completions decreased by circa 30,000 homes during this period, suggesting a correlation between the pandemic and new home completions. This was solely anticipated as a temporary slow down in new home sales and so in the long term won't significantly impact on our delivery of energy efficient new homes.

There is also an interesting story to be told on **productivity** (metric 5). Looking at the quarterly figures for the last 12 months, there are clear peaks and troughs as a result of adapting our ways of working during COVID. Now it seems our productivity levels have settled at a higher level than pre-COVID, which is positive for our Net Zero journey; higher productivity means reduced wastage and fewer journeys to site. This is further supported by anecdotal evidence of firms having an increased focus on planning for site operations in order to manage Health and Safety and therefore delivering in a more productive manner.



Executive summary

Retrofit is a priority for the Construction Leadership Council, with a request for the Government to work in partnership with industry to develop and deliver a long-term national retrofit strategy to decarbonise the 29 million homes in the UK. This should build on the Social Housing Decarbonisation Fund and the Green Homes Grant scheme, and encompass both social housing and the owner-occupied market. The carbon impact of such a programme will only increase with the post-COVID shift towards home working-a fact we can begin to see by observing increased domestic energy usage during 2020 (metric 17).

Reflecting on the sector's efforts here, the publication of the Construction Leadership Council's Retrofit Strategy was a milestone in being able to set out our vision for how this could be delivered efficiently and effectively.

This vision is now turning into action; the required qualifications for retrofit are being rolled out, with over 412 Trustmark **Retrofit Co-ordinators** trained to date (metric 12).

Continuing on the theme of capability development, there has been excellent progress made within profession bodies, led by the Construction Industry Council. Over 32 organisations have committed to a combined action plan to build carbon literacy into their professional qualifications and provide carbon literacy training in their continued professional development for already qualified professionals (metrics 7,8,24,25).

This means that overall, 450,000 professionals in the sector will be upskilled. Already leading the way on this are the Royal Institute of British Architects and the Royal Town Planning Institute (RTPI) who have both put in place plans to meet the 2025 target. In addition, the RTPI is already offering it's members the CPD accreditation on carbon literacy.

Next, we look ahead to next quarter, where we can expect to see progress made to

establish common metrics and product measurements for carbon impact (metrics 27 & and 28)-unprecedented collaboration continues between the steel, timber and concrete industries.

Finally, the Association for Consultancy and Engineering is working with their members to capture an assessment of the **carbon** 'designed out' during the design phase of a scheme (metric 23).

Overall, there is much to be positive about as demonstrated by the figures and the qualitative feedback from our Business Champions. Following commitments made at COP26, there is still much to do.



Section 1 Performance Framework data



Priority 1

Accelerating the shift of the construction workforce to **zero emission vehicles** and **onsite plant**

Performance framework target

78% of diesel plant to eliminated from construction sites by 2035

Performance framework metric

1. Annual increase in non-diesel plant in use from plant hire firms¹





Performance framework metric

2. Every construction or client business over 250 staff to trial one zero diesel site by end of 2023¹





TRANSPORT

Performance framework metric

3. Annual increase in electric vans in construction fleet¹







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Priority 2

Optimise the use of Modern Methods of Construction and improved onsite logistics, in doing so reducing waste and transport to sites

Performance framework target

Close the productivity gap between Construction and economy average output per worker by 2035

TRANSPORT

Performance framework metric

4. Annual reduction in construction and demolition waste and excavation waste tonnes/£m output²

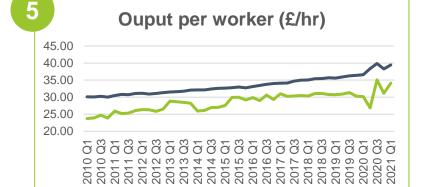
Data source: ONS

Construction Waste - tonnes/£m 1700.00 1600.00 1500.00 1400.00 1300.00 1100.00 1100.00 2010 2012 2014 2016 2018

Performance framework metric

5. Measure industry onsite productivity output/FTE²

Data source: ONS



--- Whole Economy --- Construction

Performance framework metric

6. Increase % of pre-manufactured Value (measurement of construction taking place off-site) across sector year-on-year

Data under collection

2. This has been drawn from a number of ONS data points



Priority 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

Performance framework target

From 2025, planning applications from the sector must connect to public / active transport and include EV charging where parking is provided



Performance framework metric

7. Target: 100% of relevant qualifying bodies by January 2025, to put in place entrance requirements that include threshold carbon literacy/competence test

Data source: Construction Industry Council

Performance framework metric

8. Target: 100% of relevant qualifying bodies by 2022, to put in place Continued Professional Development on climate change mitigation for all professional members

Data source: Construction Industry Council

Performance framework metric

9. Annual increase in number of EV charging points installed by the sector³









Priority 4

Work with Government to **deliver retrofitting** to improve energy efficiency of the existing housing stock

Performance framework target

Working with Government deliver retrofitting to 27 million homes by 2040

Performance framework metric

10. National Retrofit Strategy: Deliver retrofitting to 855,000 homes by 2024, 12,300,000 homes by 2030, and 27,300,000 homes by 2040

10



Performance framework metric

11. Establish industry 'quality scheme' routes and licensing consistent with PAS2035 and target annual increase in number of businesses registered⁴





Performance framework metric

12. Number TrustMark Retrofit Coordinators targeting 30,000 by 2028



412

Data source: TrustMark

30k

BUILDINGS



Priority 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

Performance framework target

From 2025 all new buildings will be designed with low carbon heating solutions

Performance framework metric

13. Increase in Heat Pump installations per year to exceed Government target of 600,000 per year by 2028





Performance framework metric

14. Number of buildings connected to low carbon heat networks and heat pumps installed as % of overall building stock⁵





BUILDINGS

Performance framework metric

15. Annual increase in trained Heat Pump Installers (MCS Registrations) aiming for 30,000 by 2030





Data source: MCS

30k



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Priority 6

Enhancing the energy performance of new and existing buildings through higher operational energy efficiency standards and better building energy performance

Performance framework target

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



Performance framework metric

16. Annual reduction in average energy requirements for new dwellings and existing (EPC based)

Data source: ONS

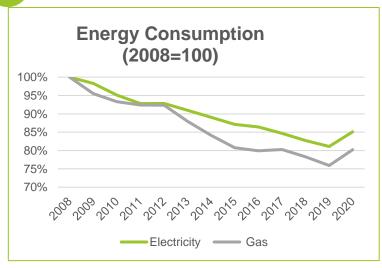
Performance framework metric

17. Annual reduction in actual energy usage in Buildings

Data source: ONS



17





Priority 7

Implementing **carbon measurement, t**o support our construction projects in making quantifiable decisions to remove carbon

Performance framework target

Every client of the sector will be provided carbon data by 2030 to make informed lower carbon choices



Performance framework metric

18. Measure % of relevant qualifying bodies to put in place entrance requirements/membership assessments to include threshold carbon literacy/competence test by January 2025. Data source: Construction Industry Council

Performance framework metric

19. Measure % of relevant qualifying bodies to put in place CPD on climate change mitigation for all members to be available from January 2022 and mandatory from January 2024

Data source: Construction Industry Council

Performance framework metric

20. 40% of product portfolios to have EPDs by 2025 with 100% by 2030, targeting a baseline and annual updates from 2025⁶

Performance framework metric

21. Every business or client over 250 staff in infrastructure to achieve PAS 2080 accreditation, monitor % coverage, target 100% by 2025⁶

14%

00%





Priority 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

Performance framework target

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



Performance framework metric

22. 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 2023⁷

Performance framework metric

23. Measurement of total MtCO2 emitted based on client Net Zero advice and designs accepted⁷

Data under collection

Performance framework metric

24. Target: 100% of relevant qualifying bodies to put in place, by January 2025 entrance requirements include threshold carbon literacy/competence test

Data source: Construction Industry Council



Performance framework metric

25. Target: 100% of relevant qualifying bodies to put in place, by 2022, Continued Professional Development on climate change mitigation for all members

Data source: Construction Industry Council





Priority 9

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

Performance framework target

By 2035 we will have reduced construction product emissions down by 66% from 2018

Performance framework metric

26. Work with Government to have CCUS operational on 2 clusters by 2028

26

0%

Data source: Government Construction Strategy

Performance framework metric

27. Establish 2018 baseline and target annual reduction in energy used in production kWh/Tonne for key product lines⁸







Performance framework metric

28. Establish 2018 baseline and target annual reduction in embodied carbon CO2/Tonne for key product lines⁸





