

Performance Framework Dashboard

Q3 2022

CLC 3rd Performance Assessment Q3 2022

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 develop the Performance Framework, which sets out how the sector will commit to, and measure its progress towards, Net Zero.



Construction
Leadership
Council

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.

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Foreword

The pressure for industry transformation in the construction sector to address carbon emissions and operate in a more productive, sustainable way has never been stronger.

As we approach the beginning of the second quarter of 2022 and our second regular reporting of construction metrics around the transition to Net Zero, we're pleased to report progress on a number of significant areas for the industry.

Since our second progress report (published on 16 March 2022), we have continued to see steady progress against our metrics. Making progress on this important agenda continues to be a priority for us, both within industry and across Government.

Construct Zero's purpose is to

accelerate the pace of change and monitor progress through a measurable and quantifiable framework.

Alongside this report we are pleased to see the publication of the Green Construction Board's policy map. This document sets out the existing Government policy in place against the CZ 9 priorities. It is invaluable as a reference for those operating in the industry to understand how this might change their markets and for us as the CLC to keep track of the Government's commitments. This will be particularly important as we head into the newly commissioned Skidmore review looking at ensuring the UK's fight against climate change maximises economic growth which is likely to change the policy landscape.

Across the next quarter we will: i) publish a zero diesel construction site strategy to shift the industry (in conjunction with HS2); ii) promote the great work of our growing network of Business Champions and Partners, through an industry awards programme; and iii) develop our plans to mark the collective achievements of the sector, one year on from COP26.

We would like to thank each of you for your support and look forward to continuing to work with you.



Richard Robinson,
Deputy Co-Chair of the
Construction Leadership Council



Hannah Vickers
Programme Director of
Construct Zero Programme

Executive Summary

Priorities

With energy price increases, the impact of inflation and the growing concern around fuel poverty, one of the most important focus areas needs to be making the case for retrofitting to complete insulation and retrofit works on homes across the UK.

The Government has a legally binding target to end fuel poverty by 2030 – but as it stands there are still 3.2 million homes classified as in fuel poverty.

Whilst the Social Housing Decarbonising Programme will tackle the majority of the 1.26m social houses there is still a need to jointly develop the detail of a long term plan to retrofit the entire housing stock. This is an area where Construct Zero will be focussing on options to increase

demand across the different market segments as part of our 2022 work programme in support of the CLC's Retrofit Strategy which covers the supply side delivery approach.

Industry investment in retrofit skills

This quarter there has been moderate progress in relation to retrofit skills, with a new industry accreditation scheme for PAS 2035 (retrofit installers) to be launched in October, against which we will measure progress. We have also seen a positive increase in the number of retrofit co-ordinators (to a total of 506), from the second report. It's clear that accelerated progress is needed to meet the 30,000 target by 2028. This contrasts with heat pump installers, where we are already ahead of the target with 3,812 trained to date. If

industry progress continues at this rate we will be delivering a projected 55,000 heat pump installers by 2030 against a target of 30,000.

This moderate progress underlines the need for a long-term plan to stimulate demand and industry investment in whole house retrofit; as there is already on heat pumps.

Executive Summary

Industry wide Carbon Measurement

One of the key metrics that we are reporting in this quarter's metrics relates to PAS 2080 compliance around carbon measurement in infrastructure projects, where we have recorded a moderate increase in the number of businesses accredited, with 10 organisations now holding compliance.

Going forward we will look to refresh our metrics here to reflect a number of new standards coming online across the sector; including the RICs Professional Statement in Whole Life Carbon Assessment for the Built Environment and the UK Net Zero Carbon Buildings standard. we will look to work with both of these to include

their metrics within the overarching performance framework.

Decarbonising our manufacturing processes

Confidence in the feasibility of this element of our transition has increased over the last quarter with the publication of the UK's Energy Security Strategy. The commitments here to expand renewables and new nuclear in systematic way are critical if we are to make long term plans and investments in decarbonising our manufacturing processes.

We are also seeing progress more directly, with BEIS announcing in August a number of shortlisted projects

that will be invited to take part in the due diligence stage of Phase 2 of Track 1 of the Cluster Sequencing process before government considers offering them further support. This will enable carbon capture, usage and storage, with the target to be operational on construction product manufacturing plants by the mid-2020's.

Next steps

Looking forward we are going to be working more closely with Government around the Skidmore review to settle the Net Zero policy landscape in the Built Environment and celebrating our progress on the 7th November with the one year on from COP 26 event.

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Case Studies

John A Stephens Ltd

John A Stephens Ltd has been proactive since joining Construct Zero. Their work in reducing carbon largely aligns with the first Construct Zero priority. For example, the company have invested over £1.5m in the electric forklift trucks-28 Linde X series Li ION forklift trucks and further invested in a new on-site 500kVA energy grid to provide power to charge the trucks overnight.

They are currently running a testing programme of electric delivery vans from Mercedes and Fuso for local emission free deliveries within the City of Nottingham. They have completed the installation and energization of a

further 160 solar panels feeding four inverters taking their generation output to 270kWp.

Next steps

Looking ahead in the future their plan involves a battery storage scheme on the site using a Tesla battery and they are working with Manitou to be the first builder's Merchant in the UK to trial an EV truck mounted Manitou forklift in 2023.



Case Studies

EvoEnergy

EvoEnergy designed, constructed and now maintain two new Hyperhubs next to Park and Ride locations around York. Their client, the City Of York Council, wanted to find a solution to reduce carbon emissions throughout the region whilst also supporting the next generation of electric vehicles. This project aligns with Construct Zero priority three.

Evo Energy provided a 5-way solution, which sees energy imported and exported via the five following ways; consumption, PV generation, grid import, battery charging and battery discharging. Each HyperHub site will contain 4x Ultra-Rapid (150kW), 4x

Rapid (50kW) vehicle chargers and a number of 7kW chargers, covered by a solar canopy supported by a Tesla battery system.

This pairing means the sites will be able to generate a large portion of their own energy requirements for the chargers without having to import it from the grid, which will allow the Council to provide a lower tariff than commercial operators can offer.



Case Studies

National Highways' Lower Thames Crossing

National Highways has designated the Lower Thames Crossing (LTC) a pathfinder project for carbon neutral construction. This project aligns with Construct Zero priority eight-designing out carbon.

While the Lower Thames Crossing is still a proposed project, and construction has not yet started, LTC intend to publish annual reports in line with PAS 2080. Their supply chain will need to have their own net zero targets and conform to the PAS 2080 carbon management standard.

As a major project, becoming a 'green road' will help to leave an important legacy of green skills and new ways of working as a model of good practice for future infrastructure projects.



Section 1

Performance Framework data

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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



TRANSPORT

Performance framework metric

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

1



Performance framework metric

2. Every construction or client business over 250 staff to trial one zero diesel site by end of 2023

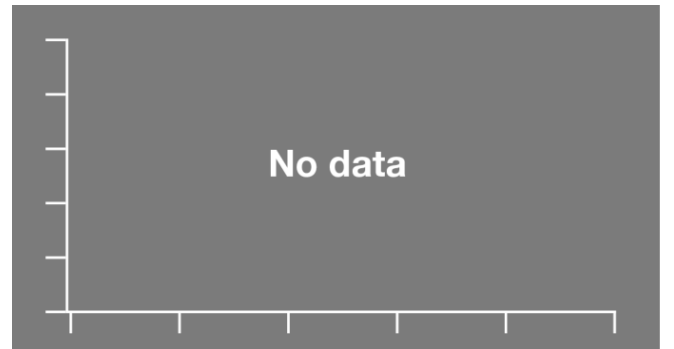
2



Performance framework metric

3. Annual increase in electric vans in construction fleet

3



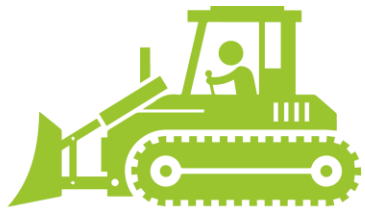
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Priority 2

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



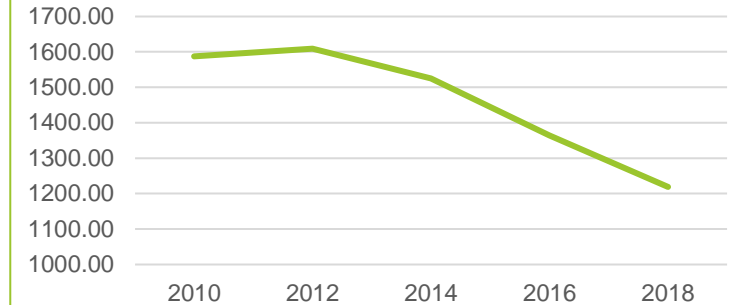
TRANSPORT

Performance framework metric

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

4

Construction Waste - tonnes/£m

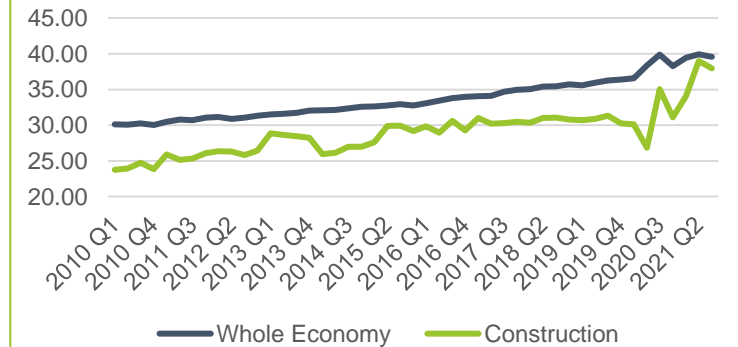


Performance framework metric

5. Measure industry onsite productivity output/FTE

5

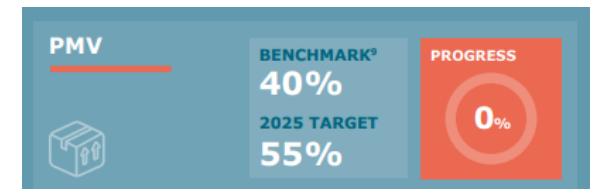
Output per worker (£/hr)



Performance framework metric

6. Increase % of pre-manufactured value across sector year on year

6



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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



TRANSPORT

Performance framework metric

7. Measure % of relevant qualifying bodies to put in place:- Entrance requirements include threshold carbon literacy/competence test (100% by January 2025).

7

92%

Performance framework metric

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

8

92%

Performance framework metric

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

9

37%

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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



BUILDINGS

Performance framework metric

10. 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 registered

11



Performance framework metric

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

12

506

30k

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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



BUILDINGS

Performance framework metric

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

13

55,000

600k

Performance framework metric

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

14

No data

Performance framework metric

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

15

3,812

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

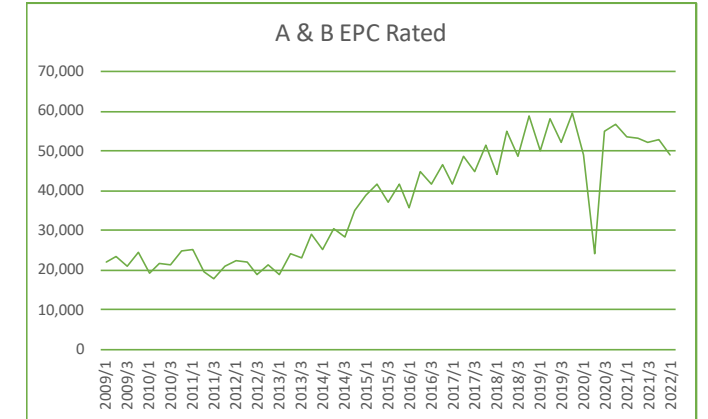


BUILDINGS

Performance framework metric

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

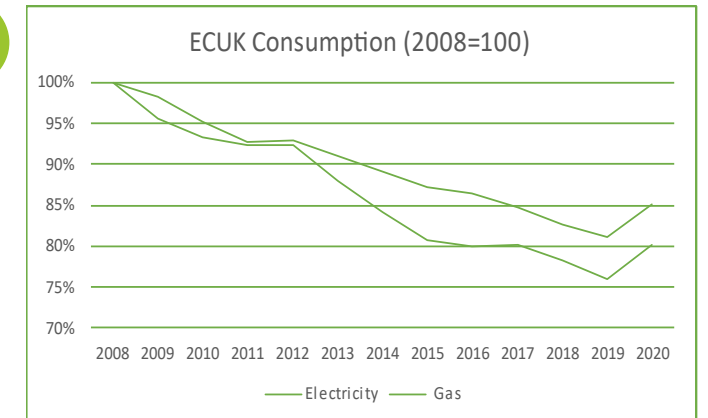
16



Performance framework metric

17. Annual reduction in actual energy usage in Buildings (ECUK based)

17



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Priority 7

Implementing **carbon measurement**, to 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



**CONSTRUCTION
ACTIVITY**

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.

18

86%

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

19

93%

Performance framework metric

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

20



Performance framework metric

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

21

10 accredited

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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



CONSTRUCTION
ACTIVITY

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 2023.

Performance framework metric

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

Performance framework metric

24. Measure % of relevant qualifying bodies to put in place:- Entrance requirements include threshold carbon literacy/competence test (100% by January 2025).

Performance framework metric

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

22

23

24

25



100%

100%

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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



CONSTRUCTION
ACTIVITY

Performance framework metric

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

26

0 of 2

Performance framework metric

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

27

No data

Performance framework metric

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

28

No data



C₂nstructZERO

The Construction Industry's Zero carbon change programme



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