

# Construct Zero Performance Framework Dashboard



Construction  
Leadership  
Council



Department for  
Business & Trade

**ConstructZERO**

The Construction Industry's Zero carbon change programme BIRMINGHAM COACH STATION

# CLC 5<sup>th</sup> Performance Assessment Q1 2023

## 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.



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# CLC 5<sup>th</sup> Performance Assessment Q1 2023

## 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.



# Executive Summary

We start our first report of 2023 with an update to the performance framework – taking stock of what we've learnt in year of measuring the sectors performance along with capturing the many changes to policy and measurement in recent months – not least the recently published CCC monitoring framework which gave us an even clearer link back to the 6th carbon budget.

Whilst the update may seem an administration task, it actually gives us cause to stand back and reflect on the many developments in policy and the evolution of the sector's maturity.

We're starting to look at asset type benchmarks in embodied and operational carbon; and in buildings we've developed a really strong suite a metrics to unpick performance from a systemic level (measuring heat sources) to a property level (measuring heat pump installations).

For the first time we've also defined sector level metrics around zero diesel sites – which will be adopted by companies across all four of the CLC sectors infrastructure, buildings, repairs and maintenance and housing.

All of these would have been impossible when we first designed the framework over two years ago – we are making progress!

For Construct Zero our focus in 2023 is on productivity, measurement and partnerships.



# Executive Summary

## Productivity

Thankfully, construction is continuing to buck the wider economic trend, with an increase in sector productivity. This has a directly positive impact on our carbon performance. To help demonstrate that link between productivity improvements and net zero ambitions in our industry, we need to help overcome the preconceived idea lower carbon will cost.

To this end, we're going to be launching a joint piece of work between this and our Next Generation Delivery workstream to show exactly how the link between lower carbon and increased productivity across all four of the CLC sectors.

## Measurement

The Performance Framework's measures and metrics have been a welcome guide for the sector, bringing consistency to how business and projects set targets and share their data.

The recent launch of PAS 2080 gives an updated framework for those in the infrastructure sector to understand the principles of measurement (priority 7), although our data shows only 10 businesses have become accredited so the rollout requires further focus. This year we will see an update to the RIC's Whole Life Carbon Assessment Standard and Net Zero Carbon Building Standard published, which together with PAS 2080 will define the end to end process for carbon measurement and quantification in the built environment.

## Partnerships

After domestic homes the next largest source of emissions in our sector comes from the vans and cars we drive in the course of our work (priority 1).

Unfortunately, today only 5% of vans sold to the sector are electric vehicles. This slow rate of change will mean the transition of the existing fleet will extend well beyond 2035. If we are to accelerate this we will require a true partnership with motor and plant industry – an area where we actively seeking out a partnership with the Motor Vehicle Manufacturers Council to develop a joint plan.

Similarly, progress on decarbonising construction materials (priority 9), requires us to collaborate across the economy – we cannot change the manufacture of glass or steel by ourselves. So to that end, the CLC will be championing partnerships with other sectors across the economy such as Steel Zero to bring consistency in the demand.

# Executive Summary

## To Conclude

Productivity, measurement and partnerships will be critical in the sector's journey to Net Zero. Through this lens, we can be assured that the Performance Framework will help us not only see the progress made, but also into where more action is needed.



Richard Robinson

Deputy Co-Chair of the  
Construction Leadership Council



Hannah Vickers

Programme Director of  
Construct Zero Programme



# Case Studies

## Forktruck Solutions

Civils & Lintels, national suppliers of building materials to housebuilders, groundworkers, civil engineers and commercial contractors identified Forktruck Solutions, a supplier and manufacturers of clean lithium electric power forklifts. Forktruck Solutions offered all the benefits of clean lithium power at a similar price point to their diesel & gas-powered forklift offerings.

Following extensive trials at one of Civils & Lintels busiest depots, operators found that the Forktruck's forklift lasted over a full day and a half working in the yard on a single charge! They could then be fully charged by a fast charge during a lunch break or a trickle charge overnight, either solution adding to our site's operational versatility.

The lithium solution appeared to tick many boxes including a reduction to service and repair costs as well as less vibration and fatigue for the operators after a day using forklifts. Operators also experienced no noise from the engine and reported they could now hear what was going on around them in a way that they never could with diesel engine operation.

Through this solution, Forktruck solutions were able to help Civils & Lintels save almost 10 tonnes of carbon emissions from every forklift truck each year of use, and with around 500 forklifts within the business this will soon add up.



# Performance Framework Data



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# Priority 1

## Transport

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**

**1** Performance framework metric  
Annual increase in non-diesel plant in use from plant hire firms

Data: Under Collection

**2** Performance framework metric  
Every construction or client business over 250 staff to trial one zero diesel site by end of 2023

Data: Under Collection

**3** Performance framework metric  
Phase out diesel generators on site by 2025 (target 500 firms signed up by 2025)

Data: Under Collection

**4** Performance framework metric  
Plant operator training launched in 2023

On track

**5** Performance framework metric  
Annual increase in electric vans in – new registrations of battery electric vans

**4.6%**  
Annual increase

YTD 2022 - 4297  
YTD 2023 - 4493

Data: SMMT

# Priority 2

## Transport

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**

**Eliminate all but hazardous C&D waste entering landfill by 2040**

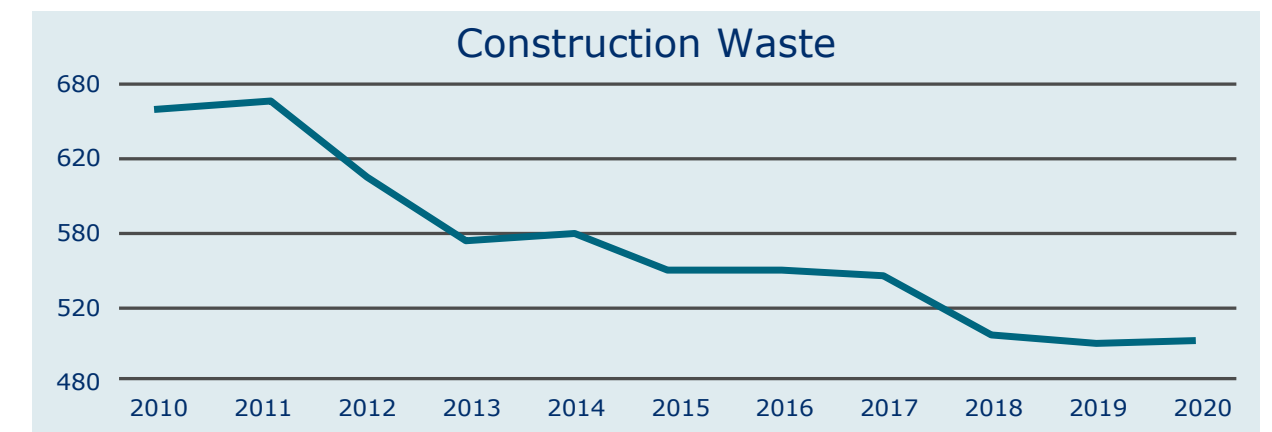


**TRANSPORT**

**6**

**Performance framework metric**

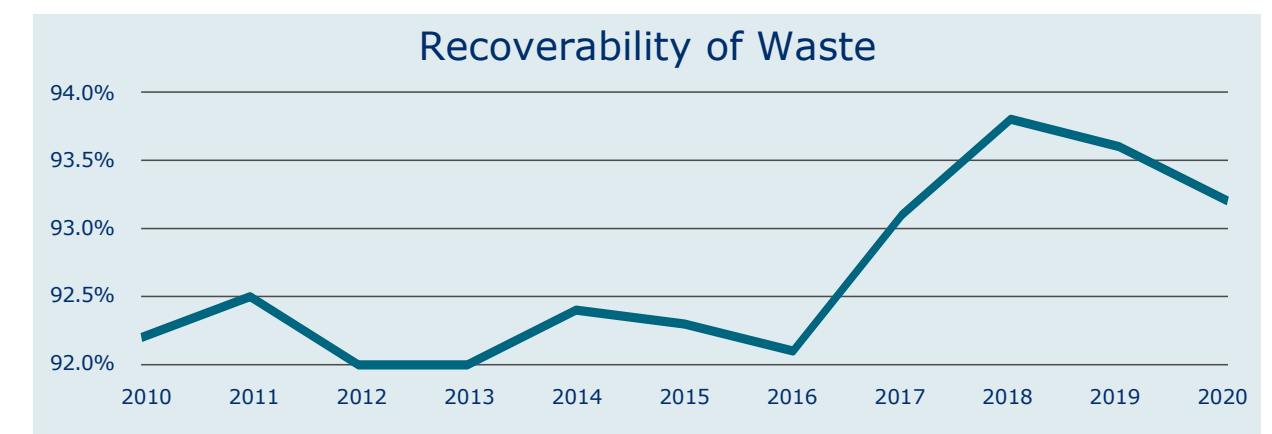
Annual reduction in construction and demolition waste and excavation waste tonnes/£m output



**7**

**Performance framework metric**

Target recoverability of Construction and demolition waste to increase to 95%.



**8**

**Performance framework metric**

Demolition waste reused and recycled

Data: Unavailable

# Priority 2

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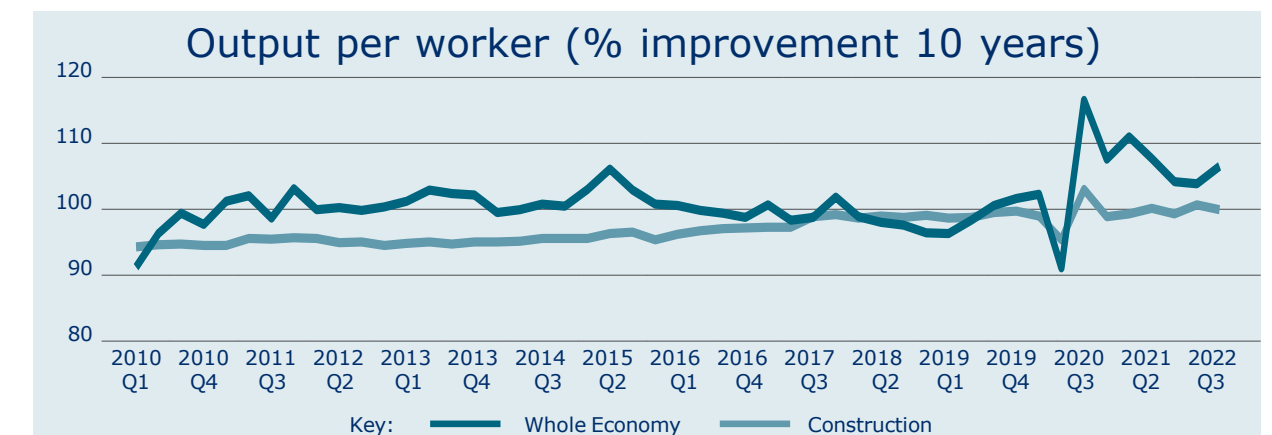


**TRANSPORT**

**9**

**Performance framework metric**

Measure industry onsite productivity output/FTE



**10**

**Performance framework metric**

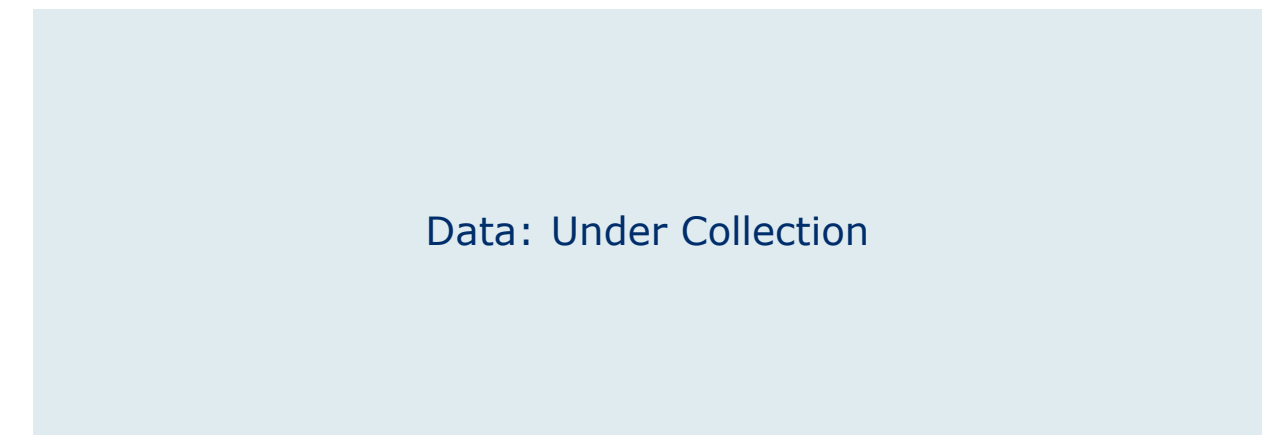
Increase % of pre-manufactured value across sector year on year



**11**

**Performance framework metric**

New stat from Construction Productivity Taskforce



# Priority 3

## Transport

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**

12

### Performance framework metric

Uptake on Continued Professional Development on climate change mitigation for all professional members targeting 100% by 2025

Data: Under Collection

13

### Performance framework metric

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

30%

Data: DfT



TRANSPORT

# Priority 4

## Buildings

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**

**14** **Performance framework metric**

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

**15** **Performance framework metric**

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

**16** **Performance framework metric**

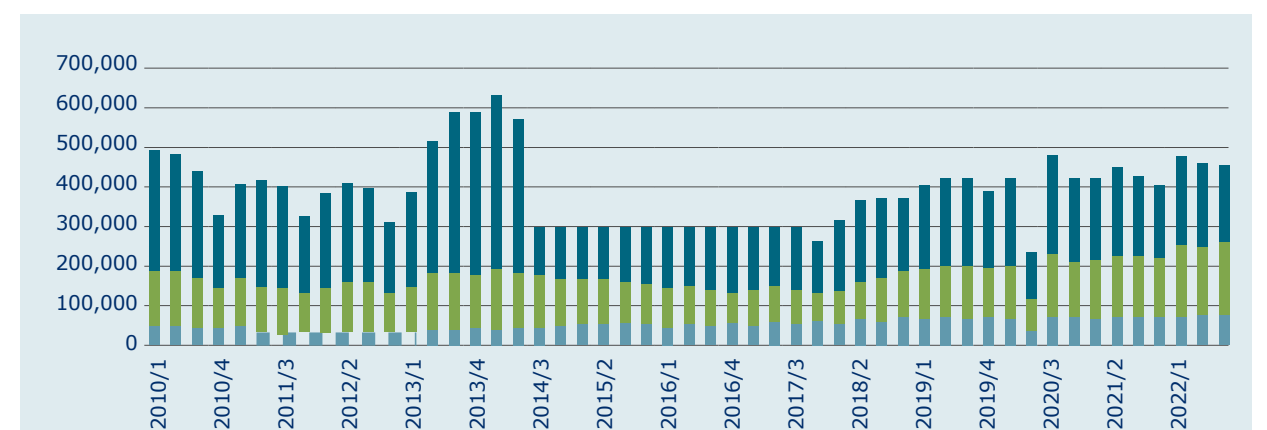
Number Trustmark Retrofit Coordinators targeting 30,000 by 2028

**17** **Performance framework metric**

Annual reduction in average energy requirements for new dwellings and existing (EPC based) A to C EPC rated buildings

Data: Under Collection

Scheme launched in Q1 2023



# Priority 5

## Buildings

Scale up industry capability to deliver **low carbon heat solutions in buildings**, supporting heat pump deployment, trials of hydrogen heating systems and heat networks

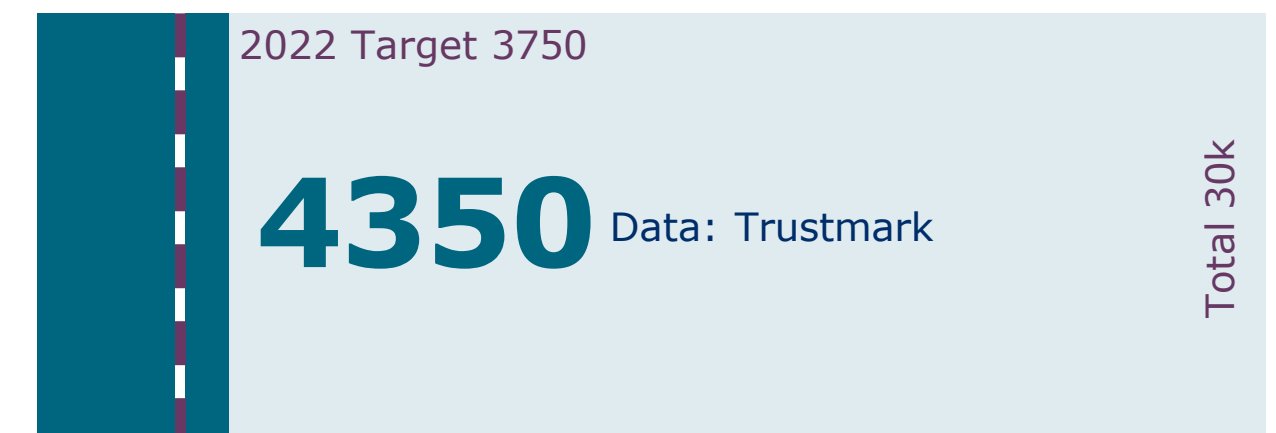
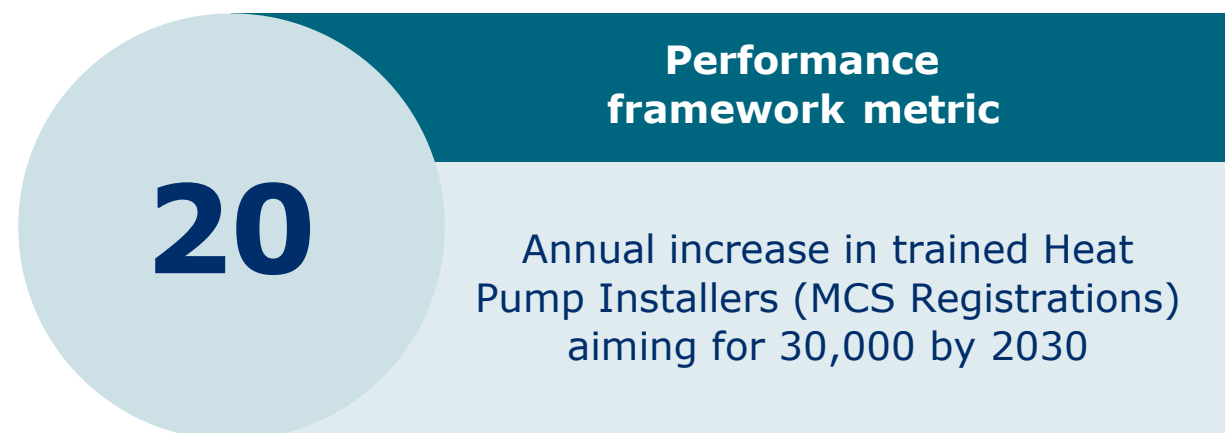
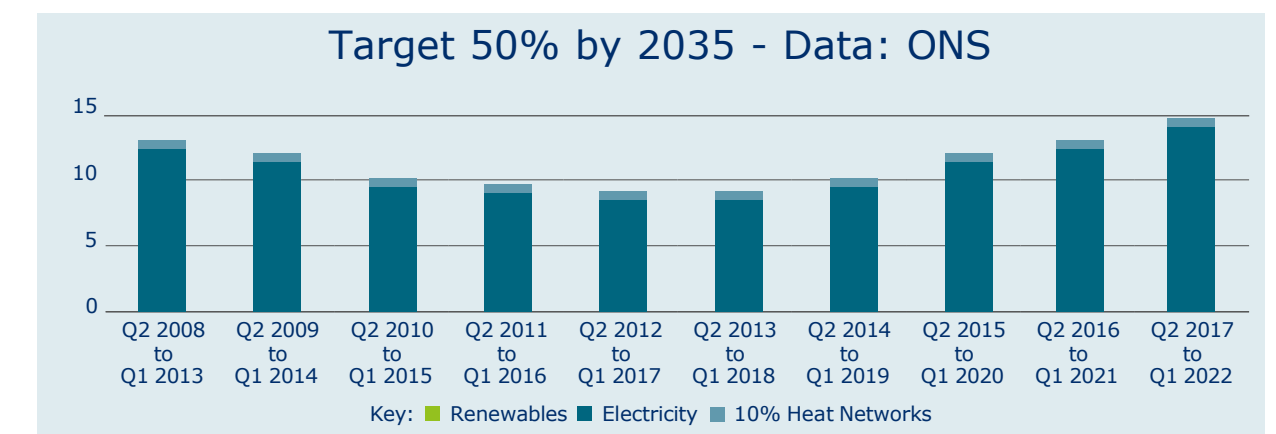
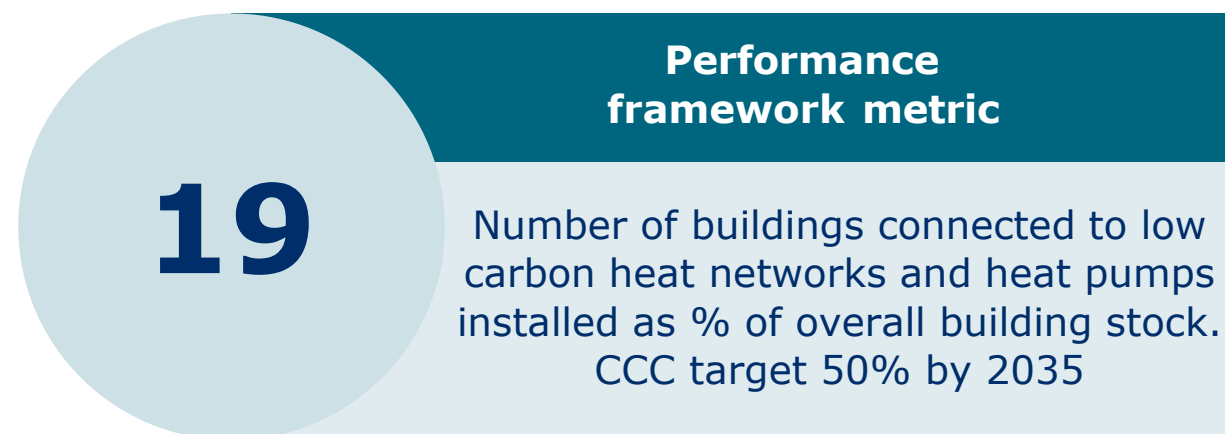
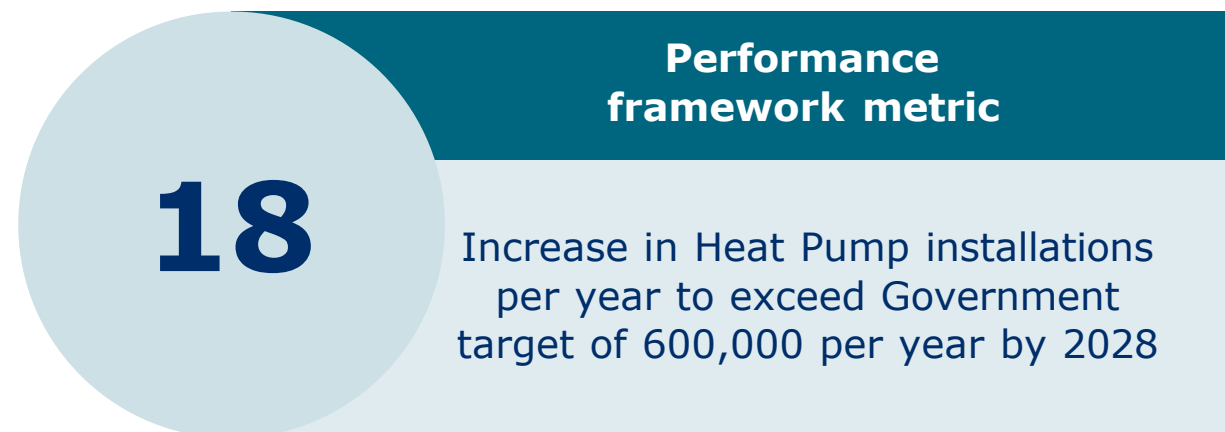
## Performance framework target

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

**50% of all housing stock connected to low carbon heat sources (heat networks, heat pumps & PV) by 2035 (CCC target)**



**BUILDINGS**



# Priority 6

## Buildings

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**

21

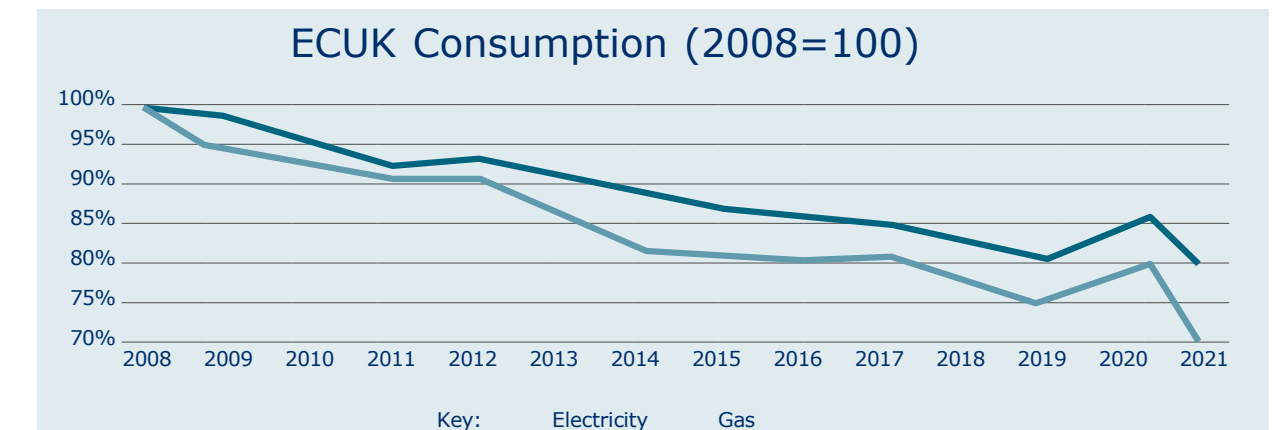
### Performance framework metric

Annual reduction in actual energy usage in Buildings (ECUK based). Heat demand in buildings needs to fall by over 25% from 2019 to 2035 in the CCC pathway.

22

### Performance framework metric

Milestone on commercial buildings standard & future homes standards (date TBC)



Data: Under Collection

# Priority 7

## Construction

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**

23

#### Performance framework metric

Uptake on Continued Professional Development on climate change mitigation for all professional members targeting 100% by 2025

Data: New Metric Under Collection

24

#### Performance framework metric

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

Data: New Metric Under Collection

25

#### Performance framework metric

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

10

Accredited



CONSTRUCTION  
ACTIVITY



# Priority 8

## Construction

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

26

#### Performance framework metric

Uptake on Continued Professional Development on climate change mitigation for all professional members targeting 100% by 2025

Data: New Metric Under Collection

27

#### Performance framework metric

Commercial models to reward low carbon, new metric TBC

Data: New Metric Under Collection

28

#### Performance framework metric

Building type benchmarks on embodied carbon

Data: New Metric Under Collection

# Priority 9

## Construction

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

**29**

**Performance framework metric**

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

**On target**  
Data: DBT

**30**

**Performance framework metric**

Energy consumption - Establish 2018 baseline and target annual reduction in energy used in production kWh/Tonne for key product lines. CCC target is 47%

Data: New Metric Under Collection

**31**

**Performance framework metric**

CO2 emissions intensity. Establish 2018 baseline and target annual reduction in embodied carbon CO2/Tonne for key product lines. By 2035 we will have reduced construction product emissions down by 66% from 2018

Data: New Metric Under Collection



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