
CO₂nstruct Zero Sprint Project: Championing and accelerating the switch to electric vehicles.

In November 2023 CO₂nstruct Zero announced a 'Sprint Project' to:

1. Understand how we could accelerate a transition in the construction workforce to Electric Vehicles and
2. Identify the sectors' role and capacity in delivering sufficient EV charging points, ensuring a sufficient charging point infrastructure.

The project was led by Eric Renfrew (Strategy & Business Development Director, Balfour Beatty) and sponsored by Matt Palmer (CLC Industry Sponsor for Net Zero and Biodiversity and Executive Director, Lower Thames Crossing). Balfour Beatty are a Construct Zero Partner.

The small project steering group consisted of CO₂nstruct Zero business champions and partners, from across the sector and government officials.

Background

['Taking Charge- The Electric Vehicle Infrastructure Strategy'](#) noted transport is the UK's largest emitting domestic sector, with 91% of UK transport CO₂ emissions coming from road transport. Analysis from the Committee for Climate Change 6th Carbon Budget illustrates the considerable input of the construction sector in those figures, as set out below:

- Cars are responsible for 67 million tonnes of carbon dioxide annually.
- Vans are responsible for 24 million tonnes of carbon dioxide annually.

From a UK economy wide perspective, decarbonisation of road transport (including construction) is key to achieving the Government's goal of becoming net zero by 2050.

The Government's target of 70% of vans sold to be electric vehicles by 2030, is a clear positive signal of the collective desire to change this narrative. The construction sector has a key role to play in meeting this target, second only to Domestic RMI. Today's report sets out how we, as a sector, can accelerate this transition and identifies its role and capacity in delivering sufficient EV charging points to ensure a sufficient, supporting infrastructure.

The scale of the issue has been laid clear by Construct Zero's latest [Performance Framework](#). We can see the growth in Electric Vehicle take-up across the sector has flat lined with 5.2% of the market share of vans (in the year to date), compared to 5.1% last year. However, as of 1st September, there were 67,980 public charging devices, which is a 41% increase year on year.

Government has re-affirmed its commitment to drive the take-up of Electric Vehicles as part of its decarbonisation mission. As a sector, we are committed to supporting this and are pleased, in partnership with Balfour Beatty, to present this report.

This project will seek to influence relevant policy.

Sprint Project findings and recommendations

The Construction sector has for some time been transitioning from diesel to alternative fuelled light commercial vehicles. However, the trajectory is impacted by suitable vehicle solutions that will credibly replace traditional diesel ICE vehicles.

Recently we have seen progress in vehicle options with realistic mileage ranges becoming available from original equipment manufacturers (OEM's). The opportunity to consider a more realistic programme of replacement across the industry is gaining momentum.

However, there remains significant hurdles to overcome as we look to achieve the removal of traditional diesel ICE vehicles.

Four main issues were identified by the group as impacting on businesses being able to transition from diesel to EV:

- Home Charging
- On Site Charging
- Legislation regarding LCV EV's
- Cost of ownership

Additionally, the Group also agreed there's a strong need to educate the sector on the operation of EV's and consideration could be given to establishing funding to enable industry to create a publicly available platform to keep businesses up to date on developments and solutions.

The Group also recognised a key focus should be on identifying appropriate travel options (public transport) as a mechanism to remove the number of journeys, particularly within city centre environments.

Home Charging Capability

The Challenge: The issue of employees taking vehicles home as part of their activity has identified the problem of home charging availability. Who pays for the installation and how we ensure fair compensation for i) the electricity used at home to charge and ii) the disruption caused, is resulting in delayed deployment of battery electric light commercial vehicles.

Action:

1. Improve Public Charge Network with integrated payment mechanism which will enable businesses to simply monitor expenditure. The discrepancy between VAT rates on Public Charge Networks vs home charging is also creating a barrier.
 2. A focus on the Public Charge network providers to ensure locations are capable for commercial vehicle use.
 3. Enable separate meter installation to households that will provide accurate costings of vehicle charging to be monitored and separated from household activity.
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On Site Charging Capability

The Challenge: When a new project commences, the priority is always to seek a mains utility connection for power. Increasingly, there is less availability for connections to the network resulting in the deployment of temporary generators (usually diesel generators). Recently, alternative fuelled generators (e.g. hydrogen powered generators) have become available but the price of hydrogen results in the charging EV vehicles becoming cost prohibitive.

Action:

4. A more proactive approach is needed to mains connections, with the potential vision of permanent charge facilities that could be left on completion of the project. Early engagement between developers/Utility providers in advance of project mobilisation needs improving- could this be incorporated within planning requirements?
5. Create a working party with DNO funding to work with the Utility providers and unlock solutions within the current frameworks and legislation.
6. Interaction between developer and potential public charge network provider to create legacy infrastructure could be incorporated as part of impact assessments on projects. The creation of a wider public charge network across the UK would contribute towards the government's own targets.

Regulations around EV LCV's

The Challenge: There are still some regulations creating challenges, when considering operating them in place of 3.5t diesel vans. Although currently not in-scope of Goods Vehicle Operator Licence regulations, an electric van weighing more than 3.5t but not exceeding 4.25t, is still classed as an HGV in certain areas of legislation, such as MOT testing. They require an MOT test 12 months after first registration. Such vehicles will also be speed restricted to 56mph and require a tachograph installed.

Action:

7. Consideration to remove EV LCV from the HGV thresholds, thus removing any concerns around future legislation coming into force that would have a negative impact on operating EV fleets.
8. Create a similar category for hybrid LCV's, which could encourage the industry to invest in retrofit technology to remove the use of diesel in their fleets.

Cost of Ownership

The Challenge: The reality is there remains a cost implication, transitioning from traditional diesel vans to electric, with the higher capital or lease costs creating pressures on budgets.

Action:

9. Capital cost offset when investing in EV's- incentivising businesses to transition away from diesel fleets through taxation.
 10. Reduced MOT costs and timings for EV vehicles that would further offset running costs for businesses.
 11. Offsetting EV Fleet costs- create a means for businesses to offset the additional costs to run EV's removing the financial impact compared to traditionally fuelled vehicles.
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Action Plan

Action	Commitment
1	Improve Public Charge Network with integrated payment mechanism, enabling businesses to simply monitor expenditure. The discrepancy between VAT rates on Public Charge Networks vs home charging is also creating a barrier.
2	Recommend inclusions within planning consents that will ensure commercial vehicles are properly catered for.
3	Enable separate meter installation to households that will provide accurate costings of vehicle charging to be monitored and separated from household activity.
4	There needs to be a more proactive approach to mains connections with the potential vision of permanent charge facilities that could be left on completion of the project. Early engagement between developers/ Utility providers in advance of project mobilisation needs improving- consideration of this being incorporated within planning requirements?
5	Create a working party with DNO funding to work with the Utility providers and unlock solutions within the current frameworks and legislation.
6	Interaction between developer and potential public charge network provider to create legacy infrastructure could be incorporated as part of impact assessments on projects. The creation of a wider public charge network across the UK would contribute towards the government's own targets.
7	Consideration to remove EV LCV from the HGV thresholds thus removing any concerns around future legislation coming into force that would have a negative impact on operating EV fleets. Government is currently considering the policy proposals detailed in the consultation response on driving licence flexibilities for alternatively fuelled vehicles.
8	Create a similar category for hybrid LCV's which could encourage the industry to invest in retro fit technology that will remove the use of diesel in their fleets.
9	Capital cost offset when investing in EV's– incentivising businesses to transition away from diesel fleets through taxation.
10	Reduced MOT costs and timings for EV vehicles that would further offset running costs for businesses.
11	Offsetting EV Fleet costs – create a means for businesses to offset the additional costs to run EV's removing the financial impact compared to traditionally fuelled vehicles.

Acknowledgements

Eric Renfrew	Balfour Beatty
Stuart Young	Department for Business and Trade
Kayleigh Hyde	Department for Business and Trade
Alasdair Reisner	Civil Engineering Contractors Association
Paul Reeve	Electrical Contractors' Association
Simon Dawes	Environment Agency
Jim Miller	FES Group
Simon Smith	Fork Truck Solutions
Michael Heron	Gilbert-Ash
John Leader	IDE Systems
Karl Quigley	IDE Systems
Matt Palmer	Lower Thames Crossing
Caroline Holt	Lower Thames Crossing
Carl Rushton	McLaughlin & Harvey
Laura Capper	NatWest Group
Jon Hanson	NatWest Group
Joe Beavis	Office for Zero Emission Vehicles
Alex Warrington	Select Plant Hire
Adam Crossley	Skanska
Dan Seymour	Vertec
Spencer Ward	VolkerWessels UK
