



Department
for Transport

From the Secretary of State
The Rt. Hon. Grant Shapps

Great Minster House
33 Horseferry Road
London
SW1P 4DR

Tel: 0300 330 3000
E-Mail: grant.shapps@dft.gov.uk

Web site: www.gov.uk/dft

Huw Merriman MP
Chair of the Committee
Transport Select Committee
House of Commons
London
SW1A 0AA

26 July 2021

Dear Huw,

Thank you for inviting me to speak to the Committee on 7 July. It was a pleasure to update you on my Department's major infrastructure projects work, and I look forward to the publication of the Committee's final inquiry report on the subject.

I am writing to provide you with the further information that I committed to provide on certain topics during the session, as well as additional detail on two further topics which I hope will assist the Committee's work. This material is set out in Annex A.

Yours ever,

Rt Hon Grant Shapps MP

SECRETARY OF STATE FOR TRANSPORT

Annex A: Further information for the TSC following the evidence session on Major Transport Infrastructure Projects, 7 July 2021

During the evidence session, further detail was promised in relation to 4 topics:

1. The Transport Infrastructure Skills Strategy (TISS) refresh
2. Electric Vehicle (EV) charging infrastructure
3. Alternative zero-emission fuels
4. Rail electrification

Additional information – with links to published sources – is also included for 2 other topics, to hopefully assist the Committee's work:

5. Project evaluation
6. Transport Appraisal Guidance (TAG) and the Green Book

The material below sets out this information.

1. The Transport Infrastructure Skills Strategy refresh

Publication of the Transport Infrastructure Skills Strategy (TISS) refresh

COVID-19 has had a significant impact on skills and employment across sectors. To ensure we take those impacts fully into account and ensure we respond appropriately, my Department is currently planning to publish a Transport Labour Market and Skills Discussion Paper in the coming months. This will cover the key labour market and skills challenges across the transport sector and act as the basis of a consultation with industry. We will then develop and refine our programme and strategy in this area to deliver the skills we need in the transport labour market. Our work will look to tackle the broader employment and skills challenges caused by COVID-19, as well as the legacy skills gaps that have existed.

Addressing the skills gap in commissioning and project management within DfT and its Arms-Length Bodies

Within my Department, the Project Delivery Improvement Programme (PDIP) has significantly strengthened project delivery capability. The Department remains committed to ensuring it has that capacity and capability to delivery its large investment portfolio, including amongst its senior project leaders. Work is underway to develop a more structured approach to assessing current and future project resourcing requirements and to identify opportunities for further action in areas such as succession planning and talent management to support delivery. In collaboration with the Infrastructure and Projects Authority, we also continue to support the development of our project delivery professionals through tailored programmes such as the Major Projects Leadership Academy.

2. Electric Vehicle (EV) charging infrastructure

The Government's approach to charging infrastructure roll out

To ensure national connectivity for all electric vehicle (EV) drivers, the Government has established the Rapid Charging Fund. This will provide £950m in funding to future-proof grid capacity along the Strategic Road Network to facilitate the installation of charging infrastructure in advance of 100% uptake of zero emission cars and vans. By 2023, we aim to have at least six high powered, open access charge points at all motorway service areas in England, with some larger sites having ten to twelve. By 2035, we expect the number to increase to around 6,000 high powered chargers across the network.

We also recognise the importance of on-street charging for drivers without access to off-street parking. This year the government announced that the On-Street Residential Chargepoint Scheme (ORCS) would continue, with £20m available to local authorities. We have made changes to the scheme to encourage ambition, including removing the maximum project size and increasing the amount of funding available per chargepoint to £13,000. More than 120 local authorities have taken advantage of the scheme so far, and we have seen an encouraging increase in applications this financial year.

We also want to address the challenges of providing EV charging for residents without off-street parking through a new £90m Local EV Infrastructure Fund. The new Local EV Infrastructure fund will be fully operational by the summer of 2022 and is currently undergoing policy development with stakeholders. The fund will be designed to help unlock private investment in the local EV charging sector.

We need to move from supporting an emerging infrastructure market, to accelerating the transition to a mature market that supports mass market uptake of EVs. Later this year we will publish an EV Infrastructure Strategy, which will set out the vision and action plan for delivering the charging infrastructure needed to achieve the 2030/35 phase out successfully. This will set out the expected roles for different stakeholders and how government will intervene to address the gaps between the current market status and our vision. It is critical that Government's focus is on enabling the market to deliver, rather than distorting the market by creating a public infrastructure network.

Accessibility and availability across the charging network, particularly for rapid charging, and including for zero-emission commercial vehicles

The Government has been clear that it expects rapid and higher powered chargepoints to offer credit and debit payment to improve and simplify the charging experience. We acknowledge the improvements that have been made in this area, with the majority of newly installed rapid chargepoints now providing contactless card payment. To increase confidence in the public charging network, the Government recently consulted on measures to improve the consumer experience of public charging.

The consultation included proposals on opening public chargepoint data, improving the reliability of the network, streamlining the payment methods offered to drivers, and increasing pricing transparency. We would also like to see operators work together to introduce roaming across the charging network that would allow commercial or private drivers to use any public chargepoint through a single smartphone app or card. We will announce our decisions in the summer, and will then seek to introduce legislation later in 2021.

Additionally, as part of the consumer experience consultation, the Office for Zero Emission Vehicles (OZEV) will work to open public electric vehicle (EV) chargepoint data and parking data. It will also work with local authorities, to enable innovative solutions to be developed and used by drivers who have larger towing vehicles, and to understand the change in consumer behaviours.

Preparing our electricity networks for EV uptake

We are confident that the grid will be able to cope with the additional capacity required for EVs. Electricity network companies are responsible for ensuring there is sufficient network infrastructure to support demand, and they are incentivised to do so efficiently via the price control set by Ofgem, the independent energy regulator.

To support the integration to the energy system, on 14 July the Government confirmed its intention to mandate that home and workplace EV chargepoints sold in Great Britain must be capable of smart charging and meet minimum device-level requirements, and re-committed to bringing forward legislation to deliver this by the end of the year. Smart charging is where EV owners shift their charging to times when renewable energy is plentiful or demand for electricity is lower. This will help reduce the need for costly new energy infrastructure to power the EV transition, and could deliver up to £1.1bn in benefits to the energy system and consumers by 2050.

The Government has consulted on proposals to introduce a requirement for every new home to have a chargepoint, where there is an associated car parking space. We will be publishing the outcome of the consultation and regulations later this year. The impact on housing supply and demand is uncertain and could vary depending on location and investment timeframe. We anticipate for most instances that cost impacts will be small relative to wider housebuilding costs (in the region of a 1% impact). We will monitor and gather evidence around the impact of this regulation on housing demand and supply, with this being a key consideration in the post implementation review.

Additionally, the Government has welcomed Ofgem's recently announced Green Recovery Scheme with the Distribution Network Operators (DNOs), which has included investment of £300 million to fund low carbon technology (LCT) projects. Forty-one motorway service areas will benefit from these improvements which translate into reduced connection costs and therefore make installing high-powered chargepoints more commercially attractive. This will expand the UK's EV charging

network, including supporting the installation of 3,550 chargepoints across Britain and launching 1,800 new ultra-rapid chargepoints at motorway service areas.

The EV charging network as Critical National Infrastructure

The EV charging network is not currently considered Critical National Infrastructure (CNI). Officials in OZEV and the Department of Business, Energy and Industrial Strategy are considering the potential impacts that designating EV chargepoints as CNI would have. It should be noted that there is sufficient capacity in the grid to handle any potential destabilisation from the EV charging network for the foreseeable future.

Currently, petrol stations are not designated as CNI, and there may be sufficient parallels with the EV charging network to suggest that it does not need to be classed as CNI. It is worth noting that the EV charging network does not need to be considered CNI to benefit from advice from the Centre for Protection of National Infrastructure and the National Cyber Security Centre to improve its resilience.

3. Alternative zero-emission fuels

Consideration of other forms of alternatively fuelled vehicles

Decarbonising transport will require the sector and users to embrace new technology and innovation, such as hydrogen and electric road systems. The technologies on sale and the market share of those technologies must be compatible with achieving our 2050 net zero climate change target and long-term air quality goals. The Government is taking a technology neutral approach to meeting our ambitions, but we are not outcome neutral: the end goal must be zero emissions from the tailpipe.

The recently published [Transport Decarbonisation Plan](#) (TDP) to decarbonise transport in the UK sets out how we intend to reduce emissions and forge a realistic pathway to net-zero by 2050. A key aspect of the plan is setting out the role different technologies, like hydrogen fuel cells, could play across all areas of transport, including Heavy Goods Vehicles (HGVs), buses, rail, shipping and aviation.

The latest thinking from industry and academia suggests that various technologies will play a role in decarbonising road transport. Hydrogen could be well placed to support the transition to a zero-emission future for larger, heavier vehicles/vessels, focusing in the areas 'that batteries cannot reach'. These include the heavy road freight, maritime and aviation sectors, where energy density requirements or refuelling times make it the most suitable low carbon energy source.

The TDP will be accompanied shortly by the Department for Business, Energy & Industrial Strategy led publication of the UK Hydrogen Strategy, which will bring together the UK Hydrogen story, showcasing activity to date and setting out an action plan for its decarbonisation and expansion into the 2020s.

My Department is exploring options for using hydrogen in transport. The Government's £23 million Hydrogen for Transport Programme is increasing the uptake of fuel cell electric vehicles (FCEVs) and growing the number of publicly accessible hydrogen refuelling stations. The programme is delivering new refuelling stations, upgrading some existing stations as well as deploying hundreds of new hydrogen vehicles. The Government has also been supporting public and private sector fleets to become early adopters through the £2 million FCEV Fleet Support Scheme.

The UK has one of the largest hydrogen refuelling station networks in Europe. There are currently fourteen publicly accessible hydrogen refuelling stations in the UK that provide hydrogen suitable for use by cars and buses. A further three provide hydrogen suitable for buses only.

On 17 March 2021 the Government announced £3 million investment in the Tees Valley multi-modal hydrogen transport hub. A first of its kind, the transport hub will bring together leading figures from government, industry and academia to focus research, testing and trials across all transport modes.

There is no straightforward alternative technology for zero emission HGVs in the highest weight classes. Instead, decarbonising HGVs requires the sector to embrace new technology and innovation. On 14 July my Department launched a [consultation on when to end the sale of new non-zero emission HGVs within the UK](#). Currently the three principle technology options for zero emission HGVs are pure battery electric, hydrogen fuel cell and catenary enabled HGVs, where battery EVs are dynamically charged via overhead catenaries.

Our approach to delivering zero emission HGVs is technology neutral and we are investing in R&D across the range of technological solutions so that road freight reaches net zero in 2050. This includes £20m this year in planning for zero emission road freight trials which will support UK industry to develop cost-effective, zero-emission HGVs and their refuelling infrastructure in the UK. These will advance R&D in the technologies of hydrogen fuel cell, catenary electric and battery electric HGVs, allowing us to begin the commercial roll out of these new technologies before the end of the decade (subject to funding).

The UK's primary mechanism for promoting low carbon fuels is the Renewable Transport Fuel Obligation (RTFO), which is a certificate trading scheme. We have recently set out our plans to raise the RTFO renewable fuel target, whilst strengthening the sustainability and emissions criteria such fuels must meet. To boost RTFO scheme uptake we will introduce rewards for recycled carbon fuels, and plan to extend existing financial incentives to suppliers in rail, construction and maritime. The TDP also outlines our plans to introduce E10 petrol, and explore further what additional measures may be required to promote the uptake of low carbon fuels in the freight, maritime and aviation sectors and working with industry to develop a long-term strategy for 2050 by 2022.

Low carbon fuels, including biofuels, will increasingly be needed in instances where decarbonisation is more challenging, for example use in heavy goods vehicles (HGVs) or in the aviation sector. The Government recognises this and is seeking ways to mitigate this. For example, this year we have:

- Launched a public awareness campaign in advance of rolling greener E10 fuel in September 2021.
- Consulted on amendments to the RTFO, which will increase the carbon savings from low carbon fuels and support their future deployment in sectors where there are limited options to reduce carbon emissions.
- Begun a £15m Green Fuel, Green Skies competition for sustainable aviation fuels, building on previous successful competitions to support new plants capable of producing advanced fuels for the HGV and aviation sectors.

The Porsche-Siemens alternative fuels joint venture in Chile

We note the Porsche-Siemens alternative fuels joint venture in Chile with interest. Chile is a key partner for the Government, and is a co-lead of the Mission Innovation Clean Hydrogen Mission. The Department for Business Energy and Industrial Strategy are engaging with them closely and in June, Minister Trevelyan met with the Chilean Minister for Energy and Mining to discuss UK-Chile collaboration on low carbon hydrogen.

4. Rail electrification

Scale of rail electrification

The Office of Rail and Road's (ORR) infrastructure statistics state 1110 miles of track in Great Britain have been electrified, from new electrification projects for passenger traffic, between financial years 2010-2020. This compares to 63 miles between financial years 1997-2010 from Network Rail's Annual Return in 2020.

We are committed to the construction of new lines to meet growing demand for rail travel. The Government is already proceeding with building HS2 Phase One and 2a, which will create 170 miles of new electrified track between London, Birmingham and Crewe by the early 2030s. In line with the Prime Minister's announcement in February 2020, the Integrated Rail Plan, to be published in due course, will set out how we will do the later stages of HS2, and Northern Powerhouse Rail, differently to deliver benefits for passengers, including carbon savings, sooner.

5. Project evaluation

My Department uses monitoring and evaluation to collect evidence about the effectiveness of our interventions in achieving their intended outcomes. This activity informs the development of ongoing interventions, and the options appraisal and

planning for new initiatives. We seek to embed evaluation in programme delivery to ensure evidence is planned from an early stage.

We maintain a Monitoring and Evaluation Programme of priority evaluation projects and publish periodic updates, most recently [in 2018](#) and with a further update due this year. We have also published approximately 40 evaluation reports in the past 5 years. For example, these include:

- [Local Sustainable Transport Fund: final meta-analysis](#)
- [20mph speed limits impact and process evaluation](#)
- [Economic impact of new and improved rail lines: case studies and method](#)

In addition, Highways England publishes evaluations of strategic roads through its [Post-Opening Project Evaluation](#) series.

6. Transport Appraisal Guidance (TAG) and the Green Book

In May, my Department published a report and updated guidance on transport appraisal [TAG: appraisal and modelling strategy update report](#) which sets out the work we are doing to incorporate the HM Treasury's Green Book Review and ensure our appraisal framework supports the delivery of the Government's strategic priorities.

As part of this, we published an Uncertainty Toolkit [TAG: uncertainty toolkit](#) which provides practitioners with a set of tools and techniques for analysing uncertainty, including a set of scenarios which test the uncertainty around future travel demand and emissions. The TAG changes also provided scope for promoters to reflect the very long-term nature of some transport investments, whilst acknowledging the increased uncertainty that comes with a longer time horizon.

Additionally, we will shortly be publishing revised Transport Business Case Guidance. This will set out how best to develop all dimensions of transport business cases, including the strategic and economic dimensions, in line with the 2020 Green Book changes.