

Submission to Environmental Audit Committee Possible Future Inquiries from High Speed Rail Group

Introduction & Executive Summary

1. The following is a response to the Environmental Audit Committee call for evidence on Possible Future Inquiries. It highlights the role high speed rail schemes, including HS2, could play in meeting the Government's environmental aims. It is submitted by High Speed Rail Group (HSRG).
2. The key points of our submission are:
 - High speed rail has an essential role to play in the delivery of the net zero carbon target;
 - HS2 should not be viewed on a stand-alone basis. To achieve the modal shift required, over the coming decades, we believe high speed rail should reach all nations and regions of Great Britain. HS2 is the next step towards this, but it should not be the end of the journey; and
 - This submission addresses the areas of carbon labelling, biodiversity and local authorities. In each of these areas, we believe there are improvements that could be made in government policymaking, and these are addressed in the full submission below.
3. We are happy to provide any further information that may be required.

About High Speed Rail Group (HSRG)

4. Representing companies with experience and an interest in high speed rail, the High Speed Rail Group (HSRG) is committed to supporting the successful delivery of a world-class high speed rail network in Britain. Our members have helped deliver major infrastructure projects in the UK and around the world, ranging from creating entirely new high speed networks through to maintaining and improving the UK's existing rail network. This gives us a unique insight into both the shortcomings in the current network, and the transformative capacity, connectivity and carbon benefits that high speed rail can bring. A full list of our membership can be found at www.rail-leaders.com.

Context

5. HS2 has an essential role to play in the UK achieving its net zero target. As the transport sector undertakes an irreversible shift towards zero emission mobility, a high capacity fully electrified railway such as HS2 is vital to making this happen.
6. Achieving net zero will require big changes to the way we travel. Longer journeys are the hardest to decarbonise, which is why we need to make rail the longer distance travel mode of choice. Only HS2 can deliver the capacity and journey times savings to shift many more people out of cars and planes by the 2030s, without causing a decade of disruption to our existing train services. HS2, combined with other high speed rail schemes including High

Speed North, will provide the rail capacity needed to significantly shift travel away from polluting road and air alternatives.

7. Our recent report, [HS2 – towards a zero carbon future](#) made clear the fundamental role HS2 has to play in the UK reaching net zero. Through its scale and adoption of the latest construction technologies, HS2 is catalysing innovation across supply chains, helping reduce its carbon footprint below previous forecasts. This is demonstrative of the industry's commitment to make HS2 the greenest major infrastructure project the country has ever seen, and as such, we believe high speed rail has an important role to play in the Committee's work during this Parliament.
8. HS2 should not be viewed on a stand-alone basis. To achieve the modal shift required, over the coming decades, we believe high speed rail should reach all nations and regions of Great Britain. HS2 is the next step towards this, but it should not be the end of the journey.

Response

9. Of the topics identified by the Committee, HSRG will seek to address the following themes:
 - Carbon labelling
 - Biodiversity and ecosystem services
 - Local authorities and net zero

Carbon labelling

What are the key issues that the Committee should consider?

10. Amounting to 23% of domestic emissions, greenhouse gas emissions from surface transport have increased since 1990 and are now greater than any other sector. The current restrictions to limit coronavirus have drastically changed travel patterns. When people are able to travel again, new patterns of movement will be established. This offers an opportunity to encourage people and businesses to rethink how they move in order to help address the climate emergency. Providing better, clearer information should play a key role alongside investment in transformative low carbon infrastructure.
11. Although rail is highly space and energy efficient, accounting for about 10% of freight and passenger miles with just 1.4% of transport carbon emissions, as an industry we recognise the need to go further and faster to help the UK meet the net zero target now enshrined in law. As our aforementioned report [HS2 — towards a zero carbon future](#) highlighted, the net zero challenge requires looking at all emissions across the whole lifecycle, including constructing and maintaining both infrastructure and vehicles. In its latest blog ([The path to net zero](#)), the CCC has also highlighted the importance of considering all emissions we are responsible for.

How effective is Government policy in this policy area?

12. Despite the impact of transport's emissions, Government policy is limited to labelling requirements for cars and dates back to the early 1990s. There are two major problems here. First the concept of labelling dates from the pre-internet era: now consumers increasingly expect bespoke data at the time of making a travel decision such as when

using apps. Although the DfT is promoting open data through its Future of Mobility workstream, this is focused on transport data (routes, speed limits etc.) rather than environmental impacts of transport data, such as carbon.

13. Second due to the inherent complexity, pace of change and lack of comparable data standards across modes, available information is increasingly misleading and does not represent real world impacts. For instance, the Department for Transport's (DfT) new consultation [Decarbonising Transport](#) sets out emissions for a journey from London to Edinburgh in its Figure 6. This suggests by train it is 29Kg but by electric car just 0Kg. However all trains on this route have operated as electric since 2019. As a large electricity user, Network Rail has contracted directly for its own dedicated low carbon electricity through a Power Purchase Agreement, as HS2 Ltd is now considering. By contrast an individual consumer may even on a green domestic tariff, increase UK consumption of higher carbon electricity.
14. With freight emissions being the hardest to decarbonise, providing consumers with information about the carbon cost of products would help spur more efficient logistics and a shift towards rail freight. This should not just be about labelling on products but enabling customers to obtain data from delivery as well as transport providers on emissions they are personally responsible for¹.
15. The key issues for an inquiry in the field of carbon labelling include:
 - How to account for emissions across the whole lifecycle and full global warming potential;
 - How to provide finer grained, real time data that helps shift consumers to both optimise their travel and shift to lower carbon modes;
 - The interaction with innovations such as Mobility as a Service, which by typically being city based ignores longer distance travel that makes up the majority of emissions; and
 - Avoiding unintended consequences by accounting for avoiding travel: comparable information should be available for home delivery services for instance.

Biodiversity and ecosystem services

What are the key issues that the Committee should consider?

16. Despite continuing decline in nature, the ecological emergency has not received as much political attention as climate. With measures to tackle this crisis often taking years to show an impact, action is required now and, with the forthcoming UN biodiversity COP in Kunming, an inquiry by the Committee could help focus attention domestically.
17. In 2020 HSRG is undertaking research in this area, seeking to learn from how High Speed 1 has fitted into the landscape to inform HS2 and other potential rail improvements. With the CCC calling for a step change in investment in tree planting, the green ambitions of megaprojects such as HS2 could provide a lifeline for the domestic

¹ Existing powers contained in section 89 of the Enterprise and Regulatory Reform Act 2013 similar to those used for Open Banking could easily enable this.

arboriculture sector (e.g. [We'll burn 750,000 young oak trees, warn growers](#), The Times 30 March 2020).

How effective is Government policy in this policy area?

18. Transport infrastructure has particularly complex interactions with biodiversity, as it can sever habitats but also deliver enhancements through green infrastructure², such as HS2's proposed green corridor and ambitious programme of green bridges. At the strategic level, shifting travel to rail can reduce the land take needed for transport and new development, leaving more space for nature, as well as lowering traffic levels, reducing disturbance to habitats and species. This is barely recognised in existing Government policy, however.
19. The key issues for an inquiry in the field of biodiversity include:
- How biodiversity should be considered in strategic infrastructure decisions in terms of:
 - Planning at the strategic and local level to shift travel to more space efficient modes of travel
 - Integrating transport networks with nature networks
 - Minimising negative impacts from operating transport infrastructure
 - How to learn from previous infrastructure projects at different scales and in different sectors when designing and constructing new projects
 - How to enable more people to benefit from access to nature (cultural services) without increasing motor traffic and its related disbenefits
 - How to support domestic supply chains in the green economy through infrastructure investment.

Local authorities and net zero

What are the key issues that the Committee should consider?

20. Local authorities will have a crucial role to play if the UK's ambitious net zero targets are to be met by 2050, and various local authorities across the UK have already responded to the Government's targets by stating their intentions to become net zero and declaring climate emergencies. Labour Mayor of London, Sadiq Khan and Conservative Mayor of the West Midlands, Andy Street have both written for the need for greater resources and powers, as part of what some have called a 'green new deal' to address climate change and restore nature at a local level.
21. Given the connectivity and capacity benefits that HS2 delivers, the support it has received at a local authority level has been marked, particularly in the Midlands and the North of England. HS2 underpins a new national rail spine and is closely connected to complementary schemes including High Speed North / Northern Powerhouse Rail and Midlands Connect. Along with released capacity benefits for passenger services and rail freight, HS2 is therefore helping to support the goals and ambitions of local authority net zero plans via transport strategies and other related areas.

² For instance see [Review of literature: how transport's soft estate has enhanced green infrastructure, ecosystem services, and transport resilience in the EU](#) (Natural England, 2014)

22. In our recent report [HS2 North West Voices](#), local government figures restated the importance of the scheme to net zero goals. Cllr Liam Robinson of Liverpool City Region writing of HS2's impact on freight 'the movement of goods by rail will support a reduction in carbon emissions and congestion, contributing to the City Regions' and the UK's sustainability and policy objectives.'
23. It should also be noted that green transport is a pathway to reduced particulate emissions, and consequentially improved air quality.

How effective is Government policy in this policy area?

24. In the context of the ongoing devolution agenda, it is clear that some policy areas are working better than others in terms of funding and coordination. An inquiry on this topic would present an opportunity for the Committee to explore the integration of net zero plans and remits across local, regional and national Government. For example, some but not all local authorities are already implementing clean air zones. Better coordination mechanisms are needed across different types of body, for example local planning authorities, local transport authorities, rail franchises and Sub-National Transport Bodies, which may all be working on different cycles when adopting plans and strategies. This can hinder maximising the net zero benefits of transformational schemes like HS2, such as by unlocking higher density housing or making best use of freed up rail capacity.
25. In addition, whilst the Government's Decarbonising Transport framework talks to the role of local authorities in addressing emissions at a local level, there is a lack of detail regarding longer distance travel, despite journeys over 10 miles amounting to 63% of UK transport carbon emissions. The role of high speed rail is critical in this context but not mentioned, and closely connected to local Government given it will be a new national transport spine.
26. The key issues for an inquiry in the field of local authorities include:
- Ensuring that devolution can and will make a real difference on environmental matters;
 - Unlocking the potential of local government to play its part in tackling climate change;
 - How to enable the coordination of planning by different levels and sectors of government to meet net zero;
 - How the Government must take action, and empower regions to do the same, in order to tackle the environmental crisis head on; and
 - High speed rail's role, given its scale, as an agent of change in reorienting the economy and kickstarting green innovation.

ENDS