

Meeting: Transport for the North Board
Subject: Approval of the Decarbonisation Strategy
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Sponsor: Tim Foster, Strategy and Programme Director
Meeting Date: Wednesday, 24 November 2021

1. Purpose of the Report:

1.1 Approval of the TfN Decarbonisation Strategy following the public consultation.

2. Recommendations:

2.1 The Board is asked to consider the content of this report in relation to the outcomes of the public consultation and endorse the updates made to the Strategy.

2.2 The Board is asked to approve TfN's Decarbonisation Strategy.

3. Main Issues:

3.1 TfN's draft Decarbonisation Strategy for consultation was agreed by TfN Board at the end of March 2021. The 12 week public consultation period launched at the beginning of June and ran till the 31st August.

3.2 The public consultation was supported by a dedicated consultation website and a series of roundtables and webinars.

3.3 The consultation received 240 responses, 140 of which were received from the general public which reflects the high level of interest and awareness in relation to climate change and decarbonisation within our local communities. Remaining responses were fairly evenly split between business groups, public bodies and environmental groups.

3.4 The consultation responses have been collated, coded and analysed by a specialist independent consultancy. The main findings are presented within this report.

3.5 TfN has updated the Decarbonisation Strategy to reflect, where possible, the main themes emerging from the public consultation.

3.6 Updates include:

- Adding further detail / clarifications where requested.
- The identification of those policies and activities of greatest priority to respondents.
- Where gaps in our approach have been identified, we have set out the actions we intend to take to address this ahead of the next Decarbonisation Strategy Update (2025). This has led in some cases to the identification new priority activities within Chapter 9.

3.7 Where appropriate and feasible, we have updated our modelling assumptions and approach to take into account both feedback from the public consultation and also the policies and aspirations of DfT's transport decarbonisation plan, which was published after TfN's Draft Strategy was launched for consultation.

3.8 The main updates are signposted and explained within this report. Appendices 1a to 1c of this report are the final versions of the updated Strategy and its annexes

(n.b. annex 1c is still to be revised following a detailed proof-reading process). Appendix 2 of this report presents the draft Consultation Analysis Report.

- 3.9 The updates were presented to TfN's Scrutiny Committee on the 4th November 2021. The three key themes that emerged from the resulting discussion were:
- The need to ensure that when turning to the actions and activities defined within the Strategy, due focus was needed on the specific challenges to transport decarbonisation found in rural areas.
 - The importance of promoting public transport as an attractive travel choice by increasing it's quality, variety and reliability, whilst also ensuring that journeys by public transport are competitively priced when compared to the same journey by private car.
 - The need to consider and avoid potential wider adverse impacts related to Transport Related Social Exclusion resulting from transport decarbonisation measures.

4 TfN's Draft Decarbonisation Strategy Consultation

Due to the nature of public consultation, respondents were self-selecting. Going forward, it will be important that any engagement required as part of the activities proposed, is focussed on those groups likely to be most affected by transport decarbonisation measures, including those at risk of existing, or potential future, transport related social exclusion, and those living in our rural areas and dispersed communities.

4.1 TfN's Approach and Trajectory – Support and Concerns

Approximately 65% of respondents either strongly agreed or agreed with TfN's approach to the development of its Strategy and Decarbonisation Trajectory, with just under 20% either disagreeing or strongly disagreeing.

- 4.2 Common sentiments included support for the quality and depth of the Strategy, the potential for levelling up, the importance and urgency of meeting net-zero targets and a call for immediate implementation.
- 4.3 Some respondents also raised concerns around the ability of TfN to implement the policies and activities described within the Strategy, the risk of duplication in some areas, concerns regarding the costs of decarbonisation and the wider environmental impacts of decarbonisation.

4.4 Respondent Priorities for Urgent Action up to 2025 and the Role of TfN

Chapter 9 of the Draft Decarbonisation Strategy proposed 30 potential activities that TfN could lead or support in near-term up to 2025. Recognising that it will not be possible for TfN to undertake all these activities, we asked respondents to identify the three activities that they considered to be top priority for urgent action.

- 4.5 The four proposed activities most commonly selected by respondents for urgent prioritisation were:
- SD1: Developing a regional route map for transport decarbonisation (by place typology, including rural areas as a priority).
 - PGA4: Supporting Government and Network Rail, utilising the NPR project, in identifying appropriate routes for electrification and associated implementation.
 - PGA8: Develop schemes and infrastructure to improve the regional public transport network, e.g. Northern Powerhouse Rail.

- CGA1: Develop a regional EV charging infrastructure framework.

It should be noted that support for these activities was 'stand-out' with all four activities receiving about twice the level of support than the remaining proposed activities. For all these activities, there was strong support for TfN taking a leading role.

4.9 ***Respondents Views on the Importance of Different National and Local Policy Recommendations***

In terms of **national policy prioritisation**, respondents expressed strongest support for: (1) 'the provision of a substantial and consistent funding stream to Local Authorities to improve public transport and active travel networks', and for national government to (2) 'identify and fund a core network for rail electrification'.

4.11 In terms of **local policy prioritisation**, respondents expressed strongest support for: (1) 'the need to develop models for delivery and maintenance of local EV charging infrastructure, covering rapid hubs, on-street charging, public parking spaces and council fleets', and for local authorities (2) 'to invest in bus and light rail networks (subject to Government funding) to offer improved journey quality, accessibility and cheaper fares to passengers'.

4.13 ***Key Themes Emerging from Open Question Responses***

Several key themes have been identified from the open format responses received through the consultation and the engagement events hosted by TfN. The general sentiments expressed in relation to these themes have raised our awareness to a number of key future challenges and also allowed us insights into the perceptions and preferences of respondents.

4.14 **Modal shift policies** stood out as the most popular mechanism for achieving vehicle reduction targets, with public bodies and environmental groups more likely to favour these types of measures whilst business group in general expressed a preference for technology focused measures. Many responses inferred fiscal measures such as road pricing would be more palatable if suitable alternatives were already in place.

4.15 Some respondents expressed concerns around the adequacy of **electric vehicle charging infrastructure** in the North, and whether it would meet demand and therefore restrict uptake.

4.16 Freight was brought up by many respondents, some expressed support for a **shift of road freight to rail**, particularly as this would also reduce congestion on roads. Further to this, some business group representatives expressed general support for **improving road freight efficiency** and the role this could have in decarbonising emissions from HGVs.

4.17 Generally, respondents **supported the clean growth opportunities** set out by TfN. Respondents, largely public body representatives and members of the public expressed **concerns relating to hydrogen**, such as the high costs, inefficiencies, production issues and suitability.

4.18 Emissions from aviation was raised as a theme of concern, with many respondents supportive of **aviation and shipping** being included in TfN's emissions baselines. Notably, there was less support for TfN to take a lead role in this area with some respondents questioning the extent to which TfN could influence aviation emissions reductions.

4.19 Respondents were concerned about the **potential for decarbonisation to marginalise certain socio-economic groups and rural communities.**

4.20 TfN will consider these key themes and the main sentiments expressed around them, when prioritising, and embarking on the more detailed scoping of its activities going forward.

5. Update of TfN's Decarbonisation Strategy

5.1 *Increased emphasis on the importance of reducing vehicle mileage*

At several points in the document we have made changes or added supplementary text to increase the emphasis on the need to reduce private vehicle usage and the essential part that modal shift will play in decarbonising transport in the North, particularly in order to satisfy our carbon budgets pre-2030.

5.2 *Further clarity on our approach to aviation and shipping*

We have included some initial findings and insights in relation to the North's emissions from aviation and shipping. We also set out in more detail than previously, how we intend to work with Partners and an independent expert advisory group to (1) agree TfN's role in relation to aviation and airports, (2) investigate the approach that could be taken as a region to reduce emissions from aviation (alongside what has been proposed by Government within its Jet Zero Strategy consultation¹) and capture the economic benefits that net zero aviation could bring to the North.

5.3 *Further clarity on our approach to the appraisal of our Investment Programme (IP)*

We have added text to explain in more detail how we intend to use our analytical framework to model operational carbon emissions. We have also removed text related to the project level appraisal of carbon on schemes within the IP (where **not led** by TfN), recognising that TfN is best placed to influence at the strategic level and will only be involved as a stakeholder when schemes come forward for delivery.

5.4 We have, however, retained the commitment to work with individual scheme sponsors to embed the consideration of the TfN's Decarbonisation Trajectory within the business case development processes for those projects.

5.5 *Introduced the need to understand the full costs of our travel choices and acknowledged the relationship between increased highways capacity and increased car use*

We've introduced text with the aim of initiating further discussion on how a fairer pricing system for public transport relative to car travel could be achieved. We have also acknowledged the need for appropriate scrutiny of schemes that increase or release highways capacity, cross referring to the Climate Change Committees' recommendation that investment in roads needs to be accompanied by proportionate investment in EV charging infrastructure, active travel and public transport.

5.6 *Support for the role of HS2 and NPR in achieving mode shift, and for shifting freight from road to rail*

Reflecting sentiments picked up during the consultation, we've added text to acknowledge the role that rail must play in shifting long distance car trips and also

¹ <https://www.gov.uk/government/consultations/achieving-net-zero-aviation-by-2050>

the need to shift more road freight onto rail (cross-referring to TfN's upcoming Freight and Logistics Strategy in that respect).

5.7 ***Updated future baseline emissions trajectories***

We have updated our future baseline trajectories to take into account the policy ambitions as set out in the Government's transport decarbonisation plan. The most notable impact of this is that the residual emissions have dropped to close to zero under all our future baseline scenarios, by 2050. This is primarily due to the proposal of ambitious non-zero HGV sales phase out dates by the Government. Even with these new ambitious dates, the cumulative emissions accrued under all our baseline scenarios still exceed the maximum budget allowed by our trajectory by 2030 or shortly after.

5.8 ***Commitment to a strategic embodied carbon footprint study of schemes within IP up to 2033***

We have included this as an additional TfN activity (**SD13**), with the aim of allowing us to benchmark the potential maximum and minimum embodied carbon footprints against our trajectory.

5.9 ***Addition of new activity to work with LEPs to support SME's in their green transitions***

Responding to the outcomes of the consultation, we have included an additional stakeholder defined activity (**SD14**) to work with LEPs to consider how we can more directly support SMEs to both adopt and take advantage of the opportunities from, the transition to clean green transport. How this would be implemented is still to be defined.

5.10 ***Signposting of stakeholder priorities from consultation***

We have signposted both policy recommendations (national and local) and potential TfN activities that were identified by respondents through the consultation as the highest priority and most urgent.

5.11 ***No-Carb modelling updates***

We are in the process of making a number of updates to TfN's carbon modelling tool (No-Carb), as a result of both general sentiments and specific comments received through the consultation on TfN's Draft Strategy and also the publication of DfT's transport decarbonisation plan.

5.12 ***The Challenge of Rural Decarbonisation***

Acknowledging the unique and challenging context of transport decarbonisation in rural areas, we have included wording to show the need for explicit application of a number of activities to the rural context as a priority, for example our Clean Mobility Vision workstream and when developing a regional routemap for decarbonisation.

5.13 Changes include:

- NoCarb now factors in biofuel proportions in petrol and diesel.
- Other greenhouse gases other than carbon dioxide are now included in the analysis, such as methane and nitrous oxide, and emissions are reflected as CO₂ equivalent, rather than just CO₂.
- We have improved the accuracy of our van and HGV analysis.
- We have updated some of the input values used in our modelling, particularly around the phase out dates for sales of non-zero HGVs.

Preliminary analysis on aviation and shipping emissions has been incorporated.

6. Next Steps

6.1 Whilst the intention is to publish the final Strategy in late November or early December, it is imperative that we rapidly turn from strategizing to action. TfN has already commenced a number of high value activities detailed within the Strategy, including:

- **Developing Clean Mobility Visions for the North:** we've started the evidence gathering associated with this activity, which will underpin the development of a number of policy packages for different typologies in the North, aimed at achieving **reduced private vehicle usage** and **increased public transport and active travel**; illustrating the emissions reductions and wider environmental and societal benefits of doing so. Local Transport Authorities will be able to use this robust evidence in the development of their Local Transport Plans, which will need to achieve quantified emissions reduction targets.
- **Regional Electric Vehicle Charging Framework:** TfN is approaching the end of phase 1 of this project, which brings together TfN's transport and land use data with the Distribution Network Operators to optimise locations for EV charging on the North's major road network. The next phase will include provision of local data for use by our Partners and also the consideration of wider social and environmental implications.
- **Strategic Hydrogen Refuelling Infrastructure Analysis:** TfN is facilitating a study, led by Durham and Herriot Watt Universities to establish refuelling demands for HGVs along strategic corridors in the North, and then to establish the optimised number and locations of hydrogen refuelling stations. The project is due to conclude in January 2022, and TfN is currently seeking funding, alongside project partners, to expand the study to become multimodal and include generation, hydrogen transport and storage considerations.

6.2 The outcomes from the public consultation on the Strategy and extensive pre-consultation engagement with Partners and other stakeholders have also helped us define a number of other priority activities which we are now planning for the remainder of this business year and into 2022-2023:

- **Programmatic Appraisal of Carbon in TfN's Investment Programme:** to include consideration of both operational and embodied carbon and benchmarking this against our agreed Decarbonisation Trajectory.
- **Aviation and Shipping Emissions:** incorporation of the North's emissions from aviation and shipping in our future emission baselines and consideration of TfN and Partners potential role in shaping emissions from these sources in the future.

6.3 Responses from the consultation suggest that along with a rapid transition to practical actions, **ensuring buy-in from the wider socio-economic spectrum** that exists within our communities is fundamental in terms of next steps. In relation to this, TfN will:

- Ensure the findings of TfN's two major Transport Related Social Exclusion (TRSE) research projects are explicitly considered in all our decarbonisation activities.
- Focus, first and foremost, on decarbonisation measures that help to reduce car dependence and increase viable public transport choices.

- Focus future engagement on those socio-economic and demographic groups that will be most affected by transport decarbonisation measures in the North and those who will be most vulnerable to the effects of climate change itself.
- Consider how TfN's TRSE work might be extended to include consideration of the wider benefits and impacts of specific transport decarbonisation measures in different population contexts, and provide this evidence for use by our Partners in their local transport plan development.
- Develop specific activities to understand and support the societal readiness within our communities for the changes that are needed.

7. Corporate Considerations:

Financial and Resource Implications

7.1 There are no direct finance and resource implications as a result of this report.

Legal Implications

7.2 There are no apparent legal implications as a result of this report.

Risk Management and Key Issues

7.3 A risk assessment is not required for this stage, however, TfN's risks relating to decarbonisation can be found in TfN's Corporate Risk Register.

Environmental Implications

7.4 This report does not constitute or influence a plan or programme which sets the framework for future development consents of projects listed in the EIA Directive and therefore does not stimulate the need for SEA or EIA. The Decarbonisation Strategy fulfils an undertaking made within the existing Strategic Transport Plan (2019), to develop a pathway to net zero for surface transport in the North by 2050 and as such is supplementary document to that STP which was subject to a full Integrated Sustainability Appraisal.

7.5 The Decarbonisation Strategy, the data that underpins it and certain activities that stem from it, will also form an important part of the evidence base for the upcoming Strategic Transport Plan update in 2024. As such, it will be a consideration within the Integrated Sustainability Appraisal which will accompany that plan making process.

7.6 The consultation responses reported within this paper support the aims and objectives of TfN's Draft Decarbonisation Strategy.

Equality and Diversity

7.7 Transport decarbonisation policy measures have the potential to lead to uneven distributional impacts. As part of the activities flowing from TfN's Decarbonisation Strategy - the results of the current Transport Related Social Exclusion workstream being undertaken by TfN will be built upon to include consideration of how decarbonisation measures might reduce existing social exclusion (and certainly not exacerbate).

7.8 The Decarbonisation Strategy, the data that underpins it and certain activities that stem from it, will also form an important part of the evidence base for the upcoming Strategic Transport Plan update in 2024. As such, it will be a consideration within the Equality Impact Assessment process which will accompany that plan making process.

Consultations

- 7.9 The consultation responses reported within this paper support the aims and objectives of TfN's Draft Decarbonisation Strategy.

8. Background Papers

- 8.1 No background paper.

9. Appendices

- 9.1 Appendix 1a – Updated TfN Decarbonisation Strategy.
Appendix 1b – Updated TfN Decarbonisation Strategy Annex A
Appendix 1c – Updated TfN Decarbonisation Strategy Annex B. Please note that this annex still requires minor updates following a detailed proof reading exercise.
Appendix 2 – Draft Consultation Analysis Report

Glossary of terms, abbreviations and acronyms used (*if applicable*)

a) ZEV	Zero Emission Vehicle
b) ICE	Internal Combustion Engine
c) EV	Electric Vehicle
d) CCC	Climate Change Committee
e) HGV	Heavy Goods Vehicle
f) TDP	Transport Decarbonisation Plan
g) SME	Small to Medium-sized Enterprise
h) SEA	Strategic Environmental Assessment
i) EIA	Environmental Impact Assessment
j) TRSE	Transport Related Social Exclusion