

**Policy Challenge Paper: TRANSPORT DECARBONISATION PLAN**  
September 2021

## 1. Overview

The Department for Transport's (DfT) Transport Decarbonisation Plan (TDP) was published on 14 July 2021. Titled *Decarbonising transport: a better, greener Britain*, the document sets out how the government intends to work with local authorities and other key stakeholders to reduce transport emissions. The plan covers all domestic forms of transport including road, rail, shipping and aviation. However, international shipping and aviation are not included.

The purpose of the TDP is to align the transport sector with the UK's legally binding carbon budgets which state, in law, that the UK's emissions must be net zero by 2050<sup>1</sup>. The plan follows on from DfT's *Decarbonising Transport: setting the challenge* document published in March 2020 (now withdrawn), which describes the challenge in meeting carbon budgets and net zero by 2050.

The TDP is split into two parts. The first part sets out the government's path to net zero transport by identifying their six strategic priorities. The second part provides further detail on the government's commitments, actions and timings. This is centred around decarbonising all forms of transport and multi-modal decarbonisation and key enablers.

The remainder of this paper provides a high-level summary of the key messages contained with the TDP, identifies gaps and weaknesses, and identifies areas where local authorities have more questions, require clarification and can offer help and support.

## 2. Key Messages

### a. Local Transport Plans (LTPs)

- i. **The TDP sets out a step change in how climate action is accounted for in LTPs.** The TDP states that LTPs will need to set out how local areas will deliver ambitious quantifiable carbon reductions in transport, taking into account the differing transport requirements of different areas. Future funding for the LTPs will be contingent on these commitments.

### b. Supporting local authorities

- i. **The government will publish a new Local Authority Toolkit to guide the delivery of sustainable transport measures.** A new toolkit will help turn local authorities' declarations of climate emergencies into action plans, and help local authorities develop new business cases to secure additional funding.
- ii. **DfT will continue to work with MHCLG to identify how they can best support local authorities.** DfT and MHCLG will work together to develop innovative sustainable transport policies as part of the planning process, how this can be used to better assess planning applications, and better monitor local transport outcomes to deliver on our ambitions for sustainable transport use.

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<sup>1</sup> The Climate Change Act 2008, as amended 2019

- iii. **The Office for Zero Emission Vehicles (OZEV) will continue to support local authorities.** OZEV will provide a platform for discussion with local authorities and industry to encourage the sharing of information and learning.
- c. *Strategic Transport Bodies*
  - i. **Strategic Transport Bodies (STBs) will have a key role in delivering de-carbonisation.** The TDP highlights the role of STBs in delivering de-carbonisation and joining up local plans across a wider geography – economies of scale and to ensure coherence across boundaries. The government has tasked each STB with developing a transport strategy for their region.
- d. *Walking and cycling*
  - i. **The TDP does not provide any new funding commitments for walking and cycling.** The plan reaffirms the government’s commitment to spend £2bn on walking and cycling over the next 5 years. Whilst the plan does not include any additional funding commitments for walking and cycling, it notes that further announcements will be made later in Summer 2021.
- e. *Buses*
  - i. **The government is consulting on phasing out the sale of new petrol and diesel buses and coaches.**
  - ii. **The TDP does not provide any new funding commitments for bus services.** The TDP reaffirms the government’s commitment to spend £3bn on buses in England outside London and deliver 4,000 zero emission buses. However, the plan does not include any additional funding commitments for bus services.
  - iii. **The adoption of zero emission buses is more advanced than HGVs.**
- f. *HGVs*
  - i. **The sale of new diesel and petrol HGVs will be phased out by 2040.** The government will launch a consultation on the ban of the sale of vehicles weighing between 3.5 tonnes and 26 tonnes from 2035 and vehicles weighing more than 26 tonnes from 2040. The government recognises that zero-emission HGV technology is not yet commercially available. To address this, the government state in their consultation on zero-emission HGVs - released alongside the strategy - that this will be addressed through future plans and legislation. It will also be supported through projects like the zero-emission road freight trials.
- g. *First mile / last mile deliveries*
  - i. **Compulsory consolidation centres will be explored.** The DfT will research the legal and practical issues around compulsory consolidation centres setting the groundwork for future pilots.
  - ii. **The franchising of certain delivery and waste management services will be explored.** The DfT will run a pilot allowing some local authorities to franchise certain delivery and waste management services. This will help them to better co-ordinate the number of deliveries and waste collections in certain areas, enabling competition and choice, while reducing the number of operators and vehicle movements.
- h. *Car sharing*
  - i. **The TDP will seek to improve commuter car occupancy levels through the Commute Zero programme.** The government will work with businesses to reduce emissions from their employee travel journeys. This will be achieved through improvements to the average commuter car occupancy.
- i. *Zero-emission vehicles*
  - i. **A new green paper will provide car manufacturers with clarity on the future of Zero Emission Vehicles (ZEV).** The government has committed to publishing a green paper that sets out a regulatory framework for electric vehicle manufacturers. This will consider both

- overall fleet efficiency and the path to delivering the move to 100 per cent ZEV sales for cars and vans, and consider options, including zero emissions vehicle mandates.
- ii. **The sale of new petrol and diesel cars and vans will be banned from 2030.** The TDP reaffirmed the government's announcement in November 2020 to end the sale of petrol and diesel cars and vans by 2030, with all new cars and vans being ZEV by 2035.
- j. *Electric vehicle charging*
- i. **Additional funding to support the roll out of Electric Vehicle (EV) chargepoints.** A new £90m Local Electric Vehicle Infrastructure Fund is being established to support the rollout of larger on-street charging schemes and rapid charging hubs across England. The TDP also commits to £950m rapid charging fund to upgrade grid capacity along motorways and A roads. This is expected to be 6,000 ultra-rapid chargepoints across the strategic road network by 2035. The Electric Vehicle Home Charge Scheme will also shift towards a focus on flats and leaseholders in April 2020 with dedicated off-street parking space.
  - ii. **Additional guidance to support local authorities delivering EV infrastructure will be made available.** The TDP recognises the crucial role that local authorities will have in the delivery of EV infrastructure. To support local authorities, an EV Infrastructure Guide will be published later in the year.
  - iii. **New regulations on EV chargepoints will be introduced.** The government will regulate that all new-build and non-residential buildings with an associated parking space will have an EV chargepoint. In addition to this, they will regulate that all private chargepoints have smart capabilities. This should increase the longevity of EV chargepoint infrastructure. The government also plan to regulate measures to improve the experience of public charging. This will open up data, improve reliability, streamline payment methods and increase pricing transparency.
  - iv. **A separate EV Infrastructure Strategy will be produced.** The government will publish a full EV Infrastructure Strategy later in the year.
- k. *Rail and freight*
- i. **All diesel only trains removed from network by 2040.** The TDP includes a commitment to remove diesel only trains from the network by 2040 and for the rail network to be net-zero by 2050. The plan focuses on electrification as the best way to decarbonise the rail network. On less well used lines, the introduction of battery and hydrogen fuelled trains are identified as a potentially more cost effective alternative.
- l. *Aviation*
- i. **Consultation launched on the Jet Zero Strategy.** The government has launched a consultation on a Jet Zero Strategy, which sets out steps to reach net zero aviation emissions by 2050. This includes getting domestic aviation in the UK to net zero by 2040. This will be achieved using new clean technologies and sustainable aviation fuels.
- m. *Maritime and shipping*
- i. **Indicative targets established for maritime and shipping.** The TDP establishes indicative targets from 2030 and as early as is feasible. The government will undertake further consultation on these targets in 2022, following the conclusion of the current Clean Maritime Demonstration Competition and the Course to Zero consultation. The TDP does state that the government will look to phase out the sale of new, non-zero emission domestic vessels, but there is no set date or policy commitment.
- n. *Transport infrastructure*
- i. **Separate programmes and strategy documents will be implemented and published to manage whole life carbon in transport infrastructure.** To better manage whole life carbon in transport infrastructure, the DfT has initiated a Carbon Management Programme. This will

embed an integrated system for managing whole life carbon of infrastructure at the portfolio level. The government is also seeking to reduce the embodied emissions associated with the construction and manufacture of vehicles (to be detailed in their upcoming Industrial Decarbonisation Strategy and Defra's End of Life Vehicles Regulations).

### 3. Areas where ADEPT feels that there are gaps or weaknesses

- ***The TDP places too much reliance on innovation and new technology, particularly in sectors where alternative fuel technologies are not currently commercially available.*** For example, the success of Jet Zero and ban of diesel HGVs is solely reliant upon technological innovation. The TDP does not include a 'Plan B' or consider alternative future scenarios in which technological innovation has not delivered new, cleaner forms of transport as fast as expected.
- ***The TDP does not address behavioural change, and demand management does not include any targets for a reduction in vehicle mileage.*** The TDP does acknowledge the need for car use to fall but is less clear on the actions needed to deliver this change. There is a risk that without demand management and a clear strategy on how behaviour change can be achieved, the amount people travel could increase. In the short term, this could have a negative impact on decarbonisation efforts. The TDP also does not discuss any measures, such as the reallocation of carriageways, that would limit or restrict car usage.
- ***The TDP does not provide any additional funding for active travel and public transport to encourage mode shift.*** The TDP does not provide any new funding for measures that would help support a reduction in vehicle mileage. Existing funding commitments for commitments to active travel are likely to only scratch the surface. Local authorities require multi-year revenue funding to support behavioural change programmes.
- ***The TDP does not include a strategy to address embodied carbon emissions associated with new transport infrastructure.*** Rather, the TDP suggests that this will be addressed through upcoming programmes and strategies. It is important that these programmes and documents contain a clear strategy for identifying and reducing embodied carbon in transport infrastructure.
- ***The TDP risks looking at the decarbonisation of transport in isolation.*** The decarbonisation of transport must be considered in the context of other industries and sectors. For instance, there must be the infrastructure / capacity within the National Grid to support the widespread roll-out of EV chargepoints. Furthermore, for EVs to be truly zero emission, they must be powered by renewable energy. As such, a separate plan to achieve this must sit alongside the TDP.
- ***The TDP should not fixate on residential EV chargepoints and should explore other charging models, particularly in areas where off-street EV chargepoints are not feasible.*** Alternatives to residential EV chargepoints include EV Charge Stations (e.g. the GRIDSERVE Electric Forecourt in Braintree, Essex) or deployment of EV chargepoints at the users' end destination (e.g. workplace car park or retail car park). The TDP must also consider the challenges and complexities associated with the delivery of EV chargepoints in rural areas.
- ***The TDP has underestimated the scale of the challenge to switch to EVs.*** The TDP assumes that technological innovation will drive adoption of EVs. There is a risk that this approach underestimates the challenges associated with delivering EV infrastructure and the willingness of consumers to change their behaviour. Both aspects are not considered in detail within the TDP.

- ***The TDP's overreliance on EVs to decarbonise transport could incentivise the use of the car over sustainable modes of transport.*** In many areas, the local and strategic highway network is already at or above capacity at peak times. EVs could increase demand for car travel and place increased pressure on the highway network (e.g. more congestion). In turn this could result in increased demand for new large-scale highway infrastructure which has a significant carbon footprint (embodied carbon emissions).
- ***The TDP places a presumption on private car ownership and potentially overlooks medium to long term future mobility trends.*** The TDP assumes that in the future, most people will still seek private car ownership. In the medium to long term, Mobility as a Service (MaaS) and autonomous vehicles may remove private car ownership entirely by replacing car ownership with an on-demand subscription service. This could, in turn, reduce embodied carbon (through reduced car ownership) and help encourage the use of zero emission vehicles.
- ***The TDP presents a potential policy gap between central and local government.*** A number of local authorities have already established timescales for achieving net zero emission (often significantly earlier than 2050). For instance, Bristol City Council has adopted the goal of achieving a carbon neutral city by 2030. The pace of change proposed in the TDP and target for net zero by 2050 may result in a climb down by local authorities or a failure to meet their original targets.
- ***The plan places very little responsibility on National Highways (formally Highways England) and does not address the government's £27bn road building plan.*** Instead, the TDP places much of the responsibility for delivering a reduction in tailpipe emissions on local authorities through lower traffic in urban environments, improvements to walking and cycling infrastructure, public transport improvements and installation of electric vehicle chargepoints. The TDP does commit to a review of National Networks' National Policy Statement which may in future result in future changes to the government's road building plan. It is important that National Highways' Road Investment Strategy (RIS3) reflects the aspirations of the TDP.
- ***The TDP does not recognise the challenges and complexities in reducing carbon emissions across different geographies. The government must consider this when making funding decisions.***
  - Government strategy and guidance is often urban centric. Documents such as *Gear Change* for instance, are not suitable for rural areas.
  - It is likely to be significantly easier for local authorities in urban areas to deliver a reduction in carbon emissions than rural areas, where there is greater reliance upon private cars. This could place local authorities in rural areas at a funding disadvantage if scheme funding is tied to carbon reduction targets.
  - In rural areas, low emission vehicles are not considered a priority. For example, in rural areas bus operators typically inherit / purchase buses from urban areas. As such, without significant additional investment, it is unlikely that low carbon buses will be adopted in rural areas until the current generation of zero emission buses are replaced.
  - First mile / last mile modes are already being delivered in urban areas. However, in rural areas the delivery of these modes will be more challenging.
- ***The TDP does not address systemic issues associated with the planning system that help to create new car dependent developments.***

- The current planning system places a presumption in favour of sustainable development. However, this still results in car dependent developments that offer no notable improvement to an area's public and active travel offering. Travel Plans that are often delivered alongside new developments to encourage mode shift, are often poorly funded with few measures to have any meaningful impact.
- The planning system must be reformed to help to create developments where public transport, active travel and shared mobility is at the heart of development design. Public transport and shared mobility must be well funded and supported through appropriate conditions or legally binding planning obligations. In addition to reducing tailpipe emissions, these reforms could help reduce embodied carbon in transport (e.g. by reducing the need for car ownership).
- ***The TDP must consider the full carbon emissions of the aviation sector.***
  - An airport's impacts go far wider than its boundary fence. It is therefore important that the TDP and 'Jet Zero' consider carbon emissions associated with all aspects of the aviation sector, including surface access to / from the airport.
  - The government must also address the aviation sector's emissions on an international platform, to help coordinate international decarbonisation approaches and ensure that the UK avoids competitive distortion and carbon leakage.
  - Local authorities need genuine powers and influence to manage and mitigate impacts relating from surface access to airports, such as air quality and congestion, while also promoting the creation and integration of appropriate transport systems and initiatives that enable airports and affected communities to develop concurrently.
- ***The TDP does not identify any need for mode shift to more sustainable modes of transport. This is unlikely to be feasible and instead focus should be placed on developing competitive low carbon alternatives.***
  - A roadmap published by the Sustainable Aviation Industry coalition suggests that the sector believes it can accommodate a 70% increase in passengers by 2050 and achieve net zero emissions. The Climate Change Committee (CCC) in turn suggests this is "highly unlikely to be feasible by 2050".
  - The government should continue to develop alternative, lower carbon transport modes that provide an equivalent journey / convenience experience and consider a mechanism to discourage air travel. Levying a fuel tax, such as implemented by USA, Canada and Japan, for example, could be a phased alternative to Air Passenger Duty and subsequently could be ringfenced for research investment into greener technologies, creating alternatives to aviation travel.
- ***The TDP does not address challenges associated with the political acceptability of schemes.*** Active travel and public transport schemes are often politically unpopular, particularly where they result in a reduction in carriageway space for car drivers.
- ***The TDP does not establish clear short, medium- and long-term targets for decarbonising transport.*** The TDP should establish clear aims and objectives for the TDP (5 to 10-year intervals). Without clear accountable targets, there is a risk that the TDP could remain a vision. The lack of targets or evidence within the TDP to set targets will be a significant issue for local authorities if they are required to set their own in the refreshed LTPs.

#### 4. Areas where ADEPT has further questions

- **What is the government's long-term strategy to address a funding blackhole created by an uptake in the use of EVs and reduction in tax revenue from fuel duty and road tax?** This was not addressed in the Treasury's Net Zero Review (December 2020).
- **What is the government's long-term strategy to address high bus and train fares?** In real terms, the cost of travelling by public transport has risen considerably faster than the cost of travelling by car. The cost of travelling by public transport must be competitive to that of travelling by car for public transport to offer a realistic option for medium and long-distance journeys.
- **What additional funding and resources will be made available to local authorities to help them deliver the measures and actions set out within the TDP?** The measures and actions contained within the TDP (such as the update of LTPs) will place increased pressure on local authority resources at a time when they are already preparing a number of funding bids / strategy documents (e.g. Bus Service Improvement Plans, Levelling Up Fund etc.).
- **What is the governments long term strategy to address the Science, Technology, Engineering and Maths (STEM) skills shortage?** The measures and actions contained within the TDP (particularly where it is reliant upon technological innovation) will increase demand for a workforce with STEM skills.
- **What are the government's plans for monitoring the success and producing future revisions of the TDP?** The TDP notes that the final transition to fully zero emission surface transport may require additional measures beyond those identified in the plan.
- **What is the government's strategy for improving car sharing for non-commuting journey purposes?** The TDP introduced Commuter Zero, a programme designed to increase the occupancy of commuter journeys by car. However these only account for one in five car journeys.
- **How will the ability of transport schemes to deliver carbon emission reductions be quantified?** Any methodology used to establish targets must be consistently applied across all local authorities, especially if the ability to meet these targets is linked to funding. It is suggested that the toolkit sets out a methodology to quantify targets.
- **How does the government intend to deal with residual emissions still left on the network in 2050?** It is still likely that there will be many petrol and diesel cars, vans and HGVs on the network by 2050.
- **What funding will be linked to each Highway Authority LTP and what will happen to existing funding sources?** The TDP notes that future funding will be linked to local authorities' updated LTPs and their ability to deliver quantifiable reductions in carbon. However, bus funding is currently being routed through Bus Service Improvement Plans and walking and cycling being routed through LCWIPs and active travel funds.
- **Will the linking of funding to the LTP result in longer term funding settlements for local authorities, replacing the shorter term 1-2-year funding pots?** The short-term competitive bidding process significantly restricts local authorities transport delivery capacity.
- **How will TDP be monitored and reviewed to ensure that the commitments and actions align with the new post-COVID-19 'normal'.** The long-lasting impacts of COVID-19 present significant uncertainty, particularly with regards to what the new 'normal' will look like.
- **The freight industry is becoming ever more dependent on aviation. How can we balance this economic dependence with environmental impact?**

## 5. Areas where ADEPT requires more clarification

- **More detail is needed on how the government will encourage a switch to EVs.** The TDP lacks substance on how the switch to EVs will occur.
- **Further detail on how a transition to zero emission HGVs is required.** Alternative fuel technology for HGVs does not currently exist and there is uncertainty about when this technology will be available, the cost of this technology and how any transition to alternative fuel HGVs will occur.
- **Further detail on the government's plan to roll out electric vehicle charging infrastructure, particularly at a local level, is required.** However, ADEPT welcomes the commitment to producing an EV Infrastructure Guide for local authorities and the commitment to producing a full EV Infrastructure Strategy.
- **Local highway authorities will require further detail and guidance to help inform the development of future LTPs.**
- **More detailed information on what will be contained within the Local Authority Toolkit is required.** For the toolkit to succeed it must be user friendly, practical, proportionate and not require significant resource from the local authority. It is important that this does not duplicate or conflict with existing guidance.
- **Local authorities require more detail on the information that they need to supply in order to secure future funding.** It is important that this information is disseminated to all local authorities and that they are clear on the requirements.
- **The government must make it clear what carbon is being measured,** both in terms of their own targets, but also what should be measured by local authorities in establishing their own targets, assessing the carbon impact of a scheme and assessing the potential of a scheme to reduce carbon emissions.
- **Local authorities need to understand the risks that they will carry as a result of the implementation of the TDP and what contingency support central government will provide.** For instance, a sudden shift in vehicle technology could result in a local authorities EV ChargePoint network becoming redundant. This could result in significant additional costs for local authorities to retrofit / replace existing infrastructure.
- **Local authorities need more information on how national, local and regional stakeholders will work together to achieve the aim and objectives of the TDP.** The TDP can only be achieved if all stakeholders work together. It is recommended that this aligns with the *Local Authorities and the Sixth Carbon Budget* recommendations, these are:
  - An agreed framework for delivery
  - Long term financing to support local authorities
  - Operational flexibility in how local areas address climate change and
  - Coherent policies and powers to facilitate delivery.
- **Local authorities require further guidance on how active travel solutions can help achieve carbon emission reductions in areas where new infrastructure cannot be delivered in accordance with national standards.** For example, in historic towns where there is not the carriageway space to deliver solutions that conform to LTN 1/20 Cycle Infrastructure Design. Local authorities have faced difficulty in securing funding in instances where they offer an improvement, but do not conform to new standards.
- **Further detail on the graphs and projections presented in the TDP are required.** This will enable third parties to peer-review assumptions and estimates.

## **6. Areas where ADEPT can offer help and support**

- ADEPT can provide advice on current issues associated with the delivery of EV infrastructure.
- ADEPT can help the DfT shape what is included within the Local Authority Toolkit.
- ADEPT can help identify areas where local authorities are likely to require additional resources to deliver the measures and actions set out within the TDP.
- ADEPT already has close working partnerships with DfT, MHCLG, Defra and a number of government bodies such as OZEV. ADEPT will continue to work with and support DfT and OZEV.
- ADEPT will continue to share the findings and results of the SMART Places Live Labs Programme. This is a two-year, £22.9m project funded by DfT that runs until November 2021. The programme examines the opportunities and challenges facing the adoption of digital technology across the local highway network. The findings of this work could provide an evidence base to help support the wider roll out of zero emission technologies and support a reduction in carbon emissions.