



# Greener miles

Delivering on a net-zero vision for commuting

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# Introduction

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## To meet the UK's net-zero target, business and government must work together to reduce emissions from commuting

### **Commuting makes a notable contribution to carbon emissions**

Transport accounts for around a third of UK carbon emissions, with 15% of all trips and 20% of distance being travelled for commuting purposes pre-pandemic.<sup>1,2</sup> In total, UK commuter travel accounts for 18 billion kg of CO<sub>2</sub> emissions each year.<sup>3</sup>

If the UK is to meet its obligations to reach net-zero emissions by 2050, and its new target to slash emissions by 78% by 2035, decarbonising the commute will be vital.<sup>4</sup> To make this a reality not only requires delivery of significant public and private investments in infrastructure and technology, but also a shift in business and employee behaviours to match.

This should include distinct changes for different types of commuter including a combination of simply travelling less, more modal shift to lower emissions public transport, investment in infrastructure for electric vehicles, and greater uptake of active and shared travel options. With the common environmental and sustainability objectives of reducing carbon and improving air quality, collaboration between business and government can be a catalyst for achieving this.

The tools needed to achieve a decarbonised commute can also help the economy get back on its feet and 'level up' opportunity and productivity across the country. The government has recognised this with the publication of the Ten Point Plan for a Green Industrial Revolution including ambitious commitments to end the sale of new petrol and diesel cars and vans from 2030, (as well as hybrid vehicles from 2035), and to provide a new wave of funding for decarbonising public transport networks.<sup>5</sup> The challenge now will be to bring commuters on this journey and make the transition accessible and affordable for all.

### **Businesses expect fewer commutes beyond the pandemic**

Future patterns of commuting are uncertain, however it is clear that many businesses have recast their expectations for the way they work. Whilst certain sectors such as manufacturing and retail will see less change given their need for on-site working, it is evident that for a significant proportion of the economy, any new normal will see transport used more flexibly to match newly developed working routines.

CBI analysis has showed that 76% of businesses expect flexible working to become more common in their organisation post pandemic, and 47% expect most of their workforce to adopt hybrid working beyond 2021.<sup>6</sup> The challenge will be, as the economy gradually reopens, to embed new travel practices that can drive down emissions from commuting in both the immediate and longer term.

### **Net-zero strategies can be the catalyst for change**

The government has committed to developing a nationwide electric vehicle (EV) charging infrastructure network, investing in more flexible and greener public transport networks and creating a framework for improved active and shared travel. How most of this will be funded, implemented, adopted, and managed has yet to be determined.

Proposals made at a national level will also need to be translated into meaningful changes at a regional, local and, ultimately, personal level.

Alongside this, there is an important role for business to play - now is an opportune moment for employers to assess how they can contribute to a greener recovery. Building on extensive staff engagement throughout the pandemic regarding working patterns and travel preferences, employers can support employees to make lower emissions choices about commuting.

With many firms in the process of setting their own net-zero targets, this would also be in step with broader business efforts to reduce emissions.<sup>7</sup>

Employee commuting is already captured under all other indirect emissions that occur in a business value chain, also known as Scope 3 emissions.<sup>8</sup> Increasingly, where these make a material contribution to total emissions and where data is available to measure them, there is a move for company net-zero strategies to also begin incorporating them. This includes the UN's Race to Zero campaign, building momentum around the shift to a decarbonised economy ahead of COP26.<sup>9</sup>

As more of the UK's economy is covered by these reporting requirements, including by 2025 mandatory reporting aligned to the Task Force on Climate-related Financial Disclosures (TCFD), systematic collection and reporting of emissions data will become the business norm.<sup>10</sup> With that in mind the CBI believes that:

**Employers should now take greater responsibility for the emissions created by their employees' commutes. This should involve factoring these emissions into their net-zero strategies and setting out tangible steps to help their employees make greener journeys to and from work.**

To support this, this paper sets out several steps for both businesses and government in England, laying out the complementary roles they can play in reducing commuter emissions both in the short-term as the economy reopens and in the decade to come.

# Taking a tailored approach to decarbonising commutes

## Why one size won't fit all - the need for tailored approaches to decarbonise different journeys

Businesses and government at all levels must consider the diverse range of journeys to work across the country. For all workforces, staff will be commuting for different lengths of time, using a wide range of modes of travel that reflect the options available to them; where they live, what they can afford, and the facilities available at their workplace. Each different journey has a unique set of challenges if it is to be decarbonised.

The table below lays out some of this variation, showing significant differences across mode of travel to work and distance travelled.

	Share of commuter journeys	Share of distance travelled
<b>Rail</b>	7%	18%
<b>Active travel</b>	16%	2%
<b>Bus</b>	9%	5%
<b>Car/Van</b>	61%	67%
<b>London Underground</b>	5%	5%
<b>Other Modes</b>	2%	3%

**Source:** Transport Statistics Great Britain, TSGB0108: Usual method of travel to work by region of residence, Department for Transport, 17th December 2020

This means that a wide menu of policy solutions and incentives, reflecting the diversity of commuters' requirements, must be used to drive system-wide change.

To begin to address this, this paper maps a number of example commutes which highlight the range of issues presented for decarbonising journeys to work.

These nine commutes, developed in consultation with the business community, identify a number of challenges which have informed the themes and recommendations explored in the rest of the paper. The solutions proposed are not exhaustive, but taken together these steps could help drive significant modal shift, encourage more journeys to be electrified and ultimately have a genuine impact on emissions from commutes up and down the country.

# Mapping everyday commutes



**Stella**

Partner, Accountancy Firm

Woolton to Central Liverpool (6 miles – 50 mins)

 and 

**Unreliable bus services**

Stella's journey on a diesel bus is unreliable due to heavy traffic.

**Ali**

Senior Manager, Chemicals Company

Knutsford to Stockport (40 miles – 40 mins (by train) 35 mins (by car))

 or 

**Cost and lack of flexible ticketing options on public transport**

Ali no longer travels into the office 5 days a week, so current rail season ticket offerings do not make financial sense.

**Angela**

Lettings Manager, Estate Agent

Newark-on-Trent to Nottingham (21 miles – 38 mins)



**Inability to commute in company EV**

Whilst Angela has access to a company electric vehicle, she can only use it for work purposes meaning she relies on her old car to commute.

**Pawel**

Factory Floor Worker, Yoghurt Factory

Weston-super-Mare to Highbridge (10 miles -25 mins)



**Lack of accessible EV charging infrastructure**

The patchy coverage of electric charging infrastructure and the lack of charging at his workplace has made Pawel hesitant to make the switch to electric.

**Gordon**

Border Force Agent, Heathrow Airport

High Wycombe to Heathrow Terminal 5 (25 miles – 31 mins)



**Range anxiety**

Gordon is concerned that he might not have the right charging options available for his commute.

**Tina**

Nurse, Hospital

Seaton Carew to Hartlepool (4 miles – 12 minutes)



**Insufficient information about shared mobility options**

Tina is keen to cycle to work but doesn't want to buy a bike and is finding it hard to find out about shared bike options in her area – she drives to work as a default.

**Jaynesh**

Brand Strategist, Branding Agency

Castleford to Armley, Leeds (15 miles – 50 mins (by train and car) 30 mins (by car))

 and  or  and 

**Integration of public transport modes**

Jaynesh's train to Leeds is poorly integrated with local buses – making it much more reliable to drive in.

**Daniel**

Check-out Assistant, Supermarket

Clover Hill to Central Norwich (5 miles -31 mins (on bus) 20 mins (by car))

 or  or 

**Practicalities of active travel**

Daniel currently gets to work by car as its easy, but would like to cycle in. However the local roads are busy and he doesn't have facilities available at work to get changed, or shower.

**Sonya**

Plumber, Self-Employed

Hornchurch to locations across Central London (Varying)



**Lack of on-street charging facilities**

Sonya lives in a flat with no off-street parking and has limited access to on-street charging facilities. Sticking to her hybrid van in the interim is reliable and convenient for work.

# Transforming public transport

## Investing in change on bus and rail networks can play a key role in reducing emissions

Greater use of public transport not only reduces congestion, but also commuting emissions. Public transport networks accounted for just over a fifth of journeys to work in the UK prior to the pandemic.<sup>11</sup>

A full double decker bus has the potential to remove up to 75 single occupancy private vehicles from the road, while at pre-crisis levels of occupancy, the average passenger on a train journey emitted just over a quarter of the emissions per km travelled than they would have in an average diesel car.<sup>12</sup> Further modal shift away from single occupancy vehicles to public transport therefore offers a significant opportunity to decarbonise more journeys.

However, if these networks are to fulfil their potential, they must not only return to a financially sustainable position after the pandemic - through higher ridership levels and running services that better meet demand - but they must also seek to use lower-emission assets.

There are therefore two challenges - to increase modal shift from private vehicles to public transport networks, whilst simultaneously financing a new generation of zero emissions vehicles and infrastructure.

### Public transport - the challenge in context

Ali no longer takes the train for his commute from Knutsford to Stockport. While it made financial sense to purchase a season ticket for a five-day working week, his employer has told him that he should expect to work less than three days a week on-site in future. At present, there is not the range of ticketing products available that makes rail a cost-effective option.

Jaynesh is also rethinking his plans for when his office returns to on-site work. This is because he found the interchange between his inter-city train journey from Castleford to Leeds and his bus service from the station to his office in Armley difficult and unreliable.

To tackle the issues described in these journeys, transformational changes will need to be made to these networks. These should focus on:

- **Ensuring more efficient and integrated transport networks.** This should include close alignment between bus and rail timetables.
- **Modernising fare and ticketing offerings,** such as by making payment for travel and journey planning for commuters seamless and aligned with wider retail trends like increased contactless card payment.
- **Investing in the vehicles and infrastructure needed for faster, more reliable and lower emissions services.** This should include the transition to greener fleets and, in the longer term, electrification of rail in line with Network Rail's Traction Decarbonisation Network Strategy.<sup>13</sup> Track electrification may need to follow other changes aimed at more quickly rebuilding demand for public transport networks and introducing low emissions vehicles onto bus routes.

Whilst this chapter does not seek to address these challenges in full, it looks at three key opportunities for government to improve the public transport offering to consumers. It also lays out a number of actions for employers to take to support increased modal shift in the years to come.

### **To increase modal shift, government and operators need to drive forward reform on the railways**

The rail industry awaits the publication of the Williams Rail Review.<sup>14</sup> As such, operators and the wider business community still do not have clarity about how the government will support better use of capacity and incentivise modal shift by taking forward industry proposals for wholesale fares reform.

In the period since the Williams Review was first launched, the urgency for reform to attract new passengers and win back old users has significantly increased due to the collapse in demand seen during the pandemic. With demand from commuters particularly uncertain going forward, reforms need to coordinate a network that can deliver better for a wider range of people travelling to work, leisure passengers and freight customers.

The government must therefore press ahead with publication of the Williams Review and quickly move on to adopting the wholesale reforms to fares and ticketing systems proposed by the Rail Delivery Group (RDG).<sup>15</sup> These proposals will involve an initial cost, but will improve the offering for customers by better matching the range of available tickets with the needs of current and future users. This should include as a priority looking to ensure that digital ticketing is enabled across the entire rail network, as well as account based ticketing in urban areas and flexible season ticket offerings.

Successful delivery of rail reform at pace will also depend on the government developing a greater appetite for the risks associated with these changes. Having intervened on the railways to an unprecedented level since privatisation, the government has already assumed the fare-box risk from operating services. It is therefore in its interest to push ahead with making the initial investments needed for reforms which can help restore the railways as a more attractive proposition to returning commuters.

### **Building a greener bus network will require further government investment**

The government has recently published its National Bus Strategy (NBS) and recommitted to delivering 4,000 Zero Emissions Buses (ZEBs) in England by the end of the Parliament in 2024.<sup>16</sup> Whilst this is a welcome intention, it is clear that there remain significant barriers to delivery.

At present, the up-front cost of a brand new ZEB is close to double that of a diesel vehicle, batteries or fuel cells will need to be replaced mid-life, while fleet transition also requires the roll-out of potentially expensive charging infrastructure.<sup>17</sup> Even before the pandemic, operators struggled to meet these costs, while now their reliance on Coronavirus Bus Services Support Grant (CBSSG) and uncertainty about the speed, timing and scale of returning demand means the environment for investment is challenging. Most of all, operators struggle to make the financial case for transition as the lifetime costs of a ZEB are higher. Information provided by operators in CBI membership suggests that mid-life replacement of batteries can cost £120-150k for a double decker bus.

The government's initial plan for the first £120m of capital support for Zero Emissions Bus Regional Areas (ZEBRAs) does not provide the levels of funding needed to incentivise many operators, including a large number of SMEs, to make the switch at volume.<sup>18</sup> The government needs to provide better incentives for operators to transition their fleets while ZEB technology is in its infancy and prices remain high. This could include future funding rounds covering closer to 100% of the extra capital costs, as well as support that will cover the comparatively higher mid-life costs of battery and fuel cell replacement.

Similarly, the planned consultation on Bus Service Operators Grant (BSOG) presents a further opportunity to provide incentives for operators to invest in ZEBs. At present, BSOG is predominantly a subsidy for fuel consumed and, as a result, even with additional support of 6p per km for Ultra Low Emissions Buses (ULEBs), operators have limited incentive to invest in low or zero emissions vehicles.<sup>19</sup> In Scotland, reforms to BSOG have meant that operators of ULEB receive revenue support at a rate of 20p per km more than diesel for the first five years of operation in addition to initial support with capital costs. A similar BSOG structure in England would help build the business case for operators to accelerate the transition to ultra-low emissions and ZEB fleets.<sup>20</sup>



At the same time, the accelerated roll-out of ZEBs in England will also rely on the fast development at scale of a private leasing market for these vehicles. Current uncertainty about the second-hand value of a ZEB, and the whole-life cost expectations of these vehicles is acting as a brake on investment. Business sees an opportunity for the newly created National Infrastructure Bank to help kickstart this market and crowd in private finance in the longer-term. This could be achieved by building on the current role of the Infrastructure Projects Authority (IPA) and providing guarantees that will underwrite the risks involved with investing in ZEBs in the short-term whilst the market for them develops.

### **Building capacity and expertise in local government will be essential to the success of the National Bus Strategy**

Alongside plans for a greener fleet, the National Bus Strategy sets out a clear way forward for increasing ridership with the delivery of Local Bus Service Improvement Plans through either the development of Enhanced Partnerships between local transport authorities and operators, or franchising models.

Making this a success, however, will not only rely on capital investment being deployed for bus priority, but local authorities working more collaboratively with operators and having the resources, capacity and expertise to deliver on a set of ambitious reforms. The opportunity to align local bus schedules, as well as national rail services, and to push ahead with offering more integrated, cross-operator and modal ticketing options will require a significant level of commercial expertise. In this context, whilst the government's initial funding for a Bus Centre of Excellence is welcomed, this may need to be extended to deliver lasting improvements.

The size of the prize is, however, also significant. Delivered effectively, these steps will not only drive increases in patronage, but simultaneously improve operators' capacity to pay for zero emissions buses and reduce overall emissions per commuter journey.

## Employers should incentivise more public transport uptake post-pandemic

More than just a question of action from operators and government, businesses also must play a role in promoting modal shift towards public transport networks.

This should start by looking to further develop survey work employers have run throughout the pandemic to explore how employees travelled to work pre-crisis and how this might change in light of new working practices.

Gradually, employers eager to reduce their Scope 3 emissions from commuting should look to deploy a mixture of carrot and stick interventions aimed at encouraging more uptake of public transport and discouraging private car use.

This could include rewards for employees using public transport in the short-term and employers thinking strategically about links to networks as they plan for the future as laid out below.

### Recommendations

#### On public transport

##### Government should:

1. Publish the Williams Rail Review as soon as possible, setting a clear plan for reforms that can restore ridership levels and drive modal shift. As a priority, the government should work with the rail industry to modernise ticketing and simplify fares to encourage greater use of public transport.
2. Ensure that an appropriate proportion of the £3bn already committed to bus improvements is used to meet the ambitious target of 4,000 new Zero Emissions Buses (ZEBs) by the end of the parliament. This could include:
  - Increasing levels of capital support for purchasing ZEBs and related infrastructure in future rounds of government funding.
  - Providing capital support to cover the excess costs of mid-life battery and fuel cell replacement.
  - Reforming BSOG in a way that incentivises private operators to transition to ZEBs.
  - Supporting the development of a private leasing market for ZEBs at pace and scale through the National Infrastructure Bank underwriting some of the early risks in this market with a view to crowding in private finance in the longer term.

3. Ensure the successful delivery of Local Bus Service Improvement Plans by also using a reasonable proportion of the £3bn to invest in bus priority infrastructure and building commercial expertise within local authorities.

**Business should look to:**

1. As restrictions ease, where feasible enable more staff to work more flexible hours, making it easier for these employees to use more affordable off-peak services.
2. Support pre-existing salary sacrifice schemes to pay for public transport season tickets, including new flexi season tickets when they come to market.
3. Reduce incentives to drive to work such as free carparking space.
4. Provide vouchers or coupons to staff who make the switch from car to bus or train (for example to be used in a staff canteen or local coffee shop).
5. Choose office, or worksite spaces that are in walkable distance from public transport options.

*\*Full breakdown of CBI analysis of anticipated costs for bus priority and additional support for ZEB transition available on request.*



# Going electric

## Ensuring electric vehicles play a critical role in delivering on the country's ambitions to decarbonise the commute

Driven by convenience, for many commuters, cars and vans are their chosen mode of travel in England. In 2019, 61% of commuter journeys were made by car or van, accounting for 67% of distance travelled.<sup>21</sup>

Looking beyond the pandemic, there is a risk that measures such as social distancing and limits on vehicle sharing may in fact encourage a rise in single household car use, leading to increased pollution and congestion.

If the country is to cut emissions from the commute, a key solution will be to ensure that every mile driven is low or zero emissions. The government's target to end the sale of all diesel and petrol cars and vans by 2030 (and hybrids by 2035), coupled with the implementation of clean air zones is a signal of this intent. Whilst overall new car sales saw the most dramatic decline since 1992 resulting from pandemic lockdowns, it was 2020 that delivered a record year for the sale of Electric Vehicles (EVs).<sup>22</sup> The challenge now will be to maintain and accelerate this upward trajectory by knocking down the barriers to transition.

### Electric vehicles - the challenge in context

For Gordon, shifts at the airport begin early in the morning but finish mid-afternoon when there is greater congestion on the road. The ability to top up charge at work or quickly on the M40 back home is therefore particularly important.

For Sonya the challenge of on-the-job movement throughout the day and living in a flat with no off-street parking means having access to charging facilities when needed will be critical to not getting caught without charge.

To tackle the issues described in these journeys, accessible, reliable, and affordable charging infrastructure and vehicles will be key. To achieve this will require:

- Investing in charging infrastructure where commuters need it the most; on-streets, at homes and at workplaces.
- Adapting current tax policy to support the transition to zero emission vehicles.
- Providing the right support mechanisms so that businesses can invest in EVs and the supporting energy infrastructure required to charge vehicles.

## **The lack of a delivery plan for charging infrastructure and targeted tax incentives for purchasing EVs risks stalling progress towards net zero**

The availability and reliability of charging infrastructure and the compatibility of chargepoints combined with pricing and payment challenges, remain common themes causing consumer hesitancy about making the transition to EVs.<sup>23</sup> As a result, for many commuters the low cost, reliability and convenience of a traditional petrol or diesel car or van means they are currently not driven to go electric.

To date, the government has made significant investments to double the availability of rapid charging by 2030, announcing plans for there to be around 2,500 high-powered chargepoints across England's motorways and major A roads.<sup>24</sup> However, the scale of delivering this challenge should not be underestimated, with the Committee on Climate Change (CCC) finding that by 2032, 325,000 public charging points will be needed in the UK compared to the approximately 8,400 petrol stations currently in existence.<sup>25, 26</sup>

Home charging is one part of the puzzle, with progress already underway for wider rollout and grants of £350 available to cover the cost of a chargepoint.<sup>27</sup> Looking ahead, to help accelerate roll-out, England is set to be the first country in the world to introduce mandatory charge points in new homes.<sup>28</sup> But for those without access to a driveway, there are two additional priorities; access to on-street charging (at the same cost as those with home charging) and investment in workplace charging.

The need for on-street charging has been widely recognised by government, with a dedicated scheme providing 75% of funding for on-street chargepoint installations aimed at tackling the high upfront cost.<sup>29</sup> But despite this funding, research from Centrica has shown that councils across the UK are planning on average to install just 35 on-street electric vehicle chargers in the next few years. Additionally, there is a notable levelling up challenge, with southern councils planning to install 2.5 times more chargers than their counterparts.<sup>30</sup> Further targeted policy action, particularly at a local level, is required to ensure those without a driveway across the country are not left behind in this transition.

Finally, there are still hurdles to overcome on the cost of vehicles. Despite the overall lifetime cost of EVs becoming lower over time and availability of models ever expanding, upfront cost remains a key determinant in purchasing and leasing decisions. With increasing signs from government that financial incentives will continue to fall as the market develops; it will be important that other tax levers are utilised to prevent the growth in EV sales from stalling.<sup>31</sup>

### **Government should set a clear delivery plan for EV charging and enable employers to support an accessible and affordable EV market**

The development of electric charging infrastructure should be treated as a national infrastructure priority. To create a future-ready network that gives consumers the confidence to switch, the government should not only have a clearer strategy to deliver the right mix of charging across homes, streets, and commercial premises, but also to deliver the infrastructure in rural and remote areas which the market would not otherwise support. Creating such a blueprint would also give local and regional authorities a framework against which to consider how to develop charging infrastructure across a geographical spread, to ensure equitable access.

The newly created National Infrastructure Bank should have an important role here (given its dual objectives of levelling-up and net zero), by helping local and mayoral authorities to invest in charging infrastructure today where the high ancillary infrastructure costs are prohibitive, or at locations where the market will not deliver.

A delivery plan should include setting out a framework for how EV chargepoint rollout will be achieved for home and on-street charging, as well as commercial premises, whilst also accounting for wider systemic changes like smart flexible charging systems and shared infrastructure. Furthermore, it should set out key delivery milestones against which progress and regulatory development can be scrutinized.

### **Government should continue to support the growth of EVs through changes to VAT**

VAT applies to the price of vehicles, their fuels and electricity. Therefore, adjusting its rate can be another tool to help reduce the perceived cost of transitioning. The government should conduct a review of the applicable VAT rates in respect to zero emission vehicle-related transactions with a view to bringing more consistency and simplification.<sup>32</sup> For instance, currently the VAT treatment of electricity charging at home is 5% vs public charging which is 20%.<sup>33</sup> Bringing the public charging VAT rates down to 5% to match domestic charging would additionally support those without access to domestic charging.

As purchasers and managers of fleets of electric cars and vans, changes to VAT will also have an impact on businesses. Increasingly zero emission vehicles are leased or acquired by Personal Contract Hire (PCH), which has VAT on monthly payments. Reviewing this can provide an opportunity to encourage the uptake of zero emission vehicles.

In addition, company fleets can play a significant role in supporting staff to transition to zero emission vehicles and contribute to the growth of an affordable second-hand market. Allowing VAT recovery on company cars that are purely Battery Electric Vehicles (BEVs) when they are in private use could encourage more zero emission miles to be driven.<sup>34</sup>



### **Removing tax barriers could encourage more shared commutes using company EVs**

Company vehicles already have a powerful role to play in the transition to electric, but can also be a compelling way to encourage people to share journeys, especially when individuals know each other from work or share similar shift patterns. However, tax rules currently work to disincentivise the use of company vehicles for commuting both as an individual or on shared trips.

Even if a business has invested in a pool of electric vehicles, these can only be shared for business purposes excluding the commute.<sup>35</sup> This is due to rules limiting the amount of mileage businesses can claim tax relief on. However, the unintended consequence is a fleet of company car vehicles stood idle outside working hours, taking up parking space, and the loss of potential zero emission miles.

Employers can play a proactive role in promoting shared travel through examining employees' journeys to work and providing a matching service where similar commutes occur. However, in turn the government should evaluate how tax rules can be reformed to encourage more shared zero emission journeys.

One step should be to reduce any benefit in kind tax on private journeys to 0%, including commuting, that are zero emission. This would not only help to incentivise greater uptake of zero emission vehicles as part of company car packages but could enable more employers to offer shared vehicles for commuting purposes.

## **Businesses should play an active role in the provision of workplace charging infrastructure**

Government policy alone cannot make the transition happen. Workplaces will have a big role to play, and can have a notable impact in supporting employees to make the jump to electric, with the added benefit of also reducing overall company emissions. Additionally, they could have an increasingly important role in the charging infrastructure ecosystem, sharing chargepoints with local communities and wider users outside of working hours.

Different employers will require different charging solutions dependent on the nature of their business. For instance, a logistics depot will need commercial electric vehicle charging at scale to enable a fleet of company owned vehicles to charge, whereas an office complex in a town will need solutions for a handful of individuals who drive to work. Understanding the demand for and type of EV charging on workplace premises is a critical first step and, in light of recent events, this should include considerations about the adoption of new travel patterns.

However, currently there are financial barriers when deciding to install multiple high-capacity chargepoints. Everything from the chargepoints themselves to the expense of electricity capacity upgrades and planning complexities, act as an upfront disincentive to invest. Whilst some government support exists, including tax allowances and a Workplace Charging Scheme, there is little support or transparency on associated infrastructure upgrade costs. Further still, there is inconsistency across the country, resulting in a postcode lottery of grid upgrade costs.

If business is to play its part, government assistance is required to encourage greater transparency and help offset high infrastructure costs. One way to achieve this could be through the energy regulator Ofgem, which has already committed to developing a regulatory strategy to support plans for transport electrification.<sup>36</sup> As part of this, a review, with published findings, should be undertaken on connection costs across different locations and workplace sites.

Greater transparency could subsequently identify where costs are prohibitive and where government support can be targeted. Business welcomed the government's announcement in Budget 2021 that a 130% super-deduction for capital allowances for two years will be introduced, with the inclusion of electric vehicle chargepoints and vans within this.<sup>37</sup> However, not only is this time limited, but it does not extend to supporting wider investments associated with emissions reduction. An alternative wider 'green' investment-focused capital allowance for making any green capital investment is one tool that should be maximised and applied towards the deployment of electric vehicles.

## Recommendations

### To accelerate uptake of electric vehicles

#### Government should:

1. Commit to the publication of a national EV infrastructure delivery plan by the end of 2021.

The plan should:

- Set out a framework for how EV chargepoint rollout will be achieved for home and on-street charging, as well as for commercial premises.
  - Provide a timeline of key delivery milestones against which progress, and regulatory development can be scrutinized.
2. Prioritise reform on VAT to incentivise the uptake of zero emission vehicles including:
    - Bringing the public charging VAT rates down to 5% to match domestic charging.
    - Reviewing the VAT rate on Personal Contract Hire (PCH) for zero emission vehicles.
    - Allowing VAT recovery on company cars that are battery electric when they are in private use.
  3. Reduce Benefit in Kind (BiK) tax to 0% for private journeys that are zero emissions.
  4. As part of its regulatory strategy to support transport electrification Ofgem should also look to review and publish the connection costs associated with charging infrastructure investment.
  5. Provide a more targeted 'green' investment focused capital allowance. This should be set at 120% of the investment's value for businesses purchasing zero emission vehicles, or indeed making any 'green' capital investment.

#### Business should look to:

1. Engage with chargepoint providers and landlords to identify barriers to implementing workplace charging infrastructure and make use of existing government schemes.
2. Establish roadmaps for transitioning company car fleets to electric, setting clear targets working towards the government's 2030 phase out date.
3. Explore opportunities for making car parking spaces and charging facilities in office car parks available for wider use during off-peak and non-working hours.

# From transport to mobility

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## **The role of active and shared travel in encouraging low carbon commuting**

Pre-crisis, there was an uptick in the number of mobility options available to commuters, such as: regional bike sharing platforms and car clubs. Each of these separately serve to reduce an individual's emissions from commuting, either by promoting active travel for the first or last mile of journeys as well as for complete journeys, or by enabling access to low emission vehicles without the associated costs of ownership.

However, the pandemic has seen an acute and yet polarised focus placed on the roles of active and shared travel.<sup>38</sup> To make it easier for individuals to choose alternatives such as cycling and walking, the government announced the Emergency Active Travel Fund, whilst at the same time advising limited use of car sharing outside households and support bubbles due to social distancing concerns.<sup>39</sup> As we restart after the pandemic, to make these options viable for the commute there will be distinct challenges for these two types of mobility.

### **For active travel:**

- How to encourage more strategic investment in active travel infrastructure to make it a safer option for commuters, whilst also consulting with other road users to ensure these new routes do not create congestion, or slow down other parts of the economy such as the delivery of freight or consumer goods.
- How to better link active travel routes with public transport networks to ensure commuters with longer journeys see this as a viable option as part of their commute.
- How to convert the overall growth of commuter interest in cycling and walking that occurred in summer 2020 into long-term behaviour change.

### **For shared mobility:**

- How to ensure that shared travel is perceived as an attractive mobility option.
- How to improve the availability and quality of data on shared mobility provision and uptake.
- How to ensure employers leverage their insights into employee working and travel patterns to provide more shared travel options.

### **Active travel and shared mobility - the challenge in context**

Daniel kept telling himself that he wanted to get fit and cycle into his work in the town centre more often. After trying it a few times, he didn't feel safe as he rode along high-speed roads with no separation from road traffic. When he arrived at work he was sweaty, and couldn't use work facilities to freshen up. Daniel has now gone back to driving in.

Tina would like to cycle to her shifts at the hospital, but doesn't want to invest in a bike. Without up-to-date and reliable information about the alternative travel options available to her, she still depends on her car.

### **Consultation with transport operators and businesses must be at the heart of delivering on the ambition of the Active Travel Strategy**

The government set out an ambitious strategy for active travel in July 2020, alongside promised investment of £2bn in cycling and walking infrastructure over the next five years.<sup>40</sup> Now, the challenge will be to ensure that this investment translates into permanent, well-used, and well-consulted on changes to road space that deliver good value for money.

Whilst there is much to welcome within the Active Travel Strategy, questions remain about how it will be integrated with other transport policies and plans, and how the needs of other road users - for both business and commuting will be considered. The pandemic response is an important lesson in why this is so important because moves to act quickly to put in place new cycling and walking infrastructure outpaced wider consultation, and in many places, these were quickly reversed.<sup>41</sup> This included, for example, cycle lanes being removed due to increases in congestion.

Good consultation should involve engagement with the public, businesses and transport operators to ensure investments are not disconnected and temporary. This should be driven by local authorities as they draw up Local Cycling and Walking Infrastructure Plans (LCWIPs).<sup>42</sup>

These plans should also consider how active travel routes can be better integrated with public transport networks, to make active travel options a more viable option as part of longer or more complex commutes. As key transport interchanges, there is a role here too for rail and bus stations, for example by providing better cycle storage facilities on trains and at stations, or clearer maps telling passengers how far destinations are by foot.

As part of its oversight role, Active Travel England should seek to ensure coordination with other transport investments, local infrastructure, and the needs of the wider road user community. This should include sharing best practice on what good consultation looks like and highlighting examples where local authorities have successfully integrated cycling and walking routes with local bus and train networks.

## **Improving the availability and quality of transport data is key to increasing uptake of shared mobility**

Greater use of shared mobility can play a key role in not only reducing emissions, but also tackling congestion and parking shortages, particularly within urban centres. This can be due to increasing accessibility to bikes, commuters choosing to use their own car less often, or in some cases individuals even deciding not to own a private vehicle at all. And more recently, the emergence of app-based hiring and booking models, as well as travel planning apps, have promoted the use of shared journeys.

However, unlike the policy frameworks for public transport, electric vehicles and active travel, comparatively less attention and investment has been given to shared mobility options. This is despite these having been available for some time, with shared cars and bikes being two of the most effective examples of shared journeys. This paper therefore seeks to focus on one key area – improved data sharing – which business believes is key to bringing existing and emerging models of shared mobility together. Like the preceding sections, it also identifies key steps employers can take to support this shift.

For commuters, there are clear reasons to make the switch to shared travel, as evidenced in public attitude trackers.<sup>43</sup> Shared mobility is not only affordable, but can provide a more flexible option to public transport – particularly for those employees who work shifts – as well as the ability for those with limited space for bike storage to cycle to their place of work.

However, whilst there has been a clear increase in the use of shared mobility for leisure, less growth has been seen when it comes to the commute. There is therefore a significant opportunity to see shared mobility play a bigger role in reducing commuter emissions in the years to come.

Feedback from business suggests that one of the challenges to greater use of shared mobility options is the quality and availability of transport data. Too often this means it is not easy or convenient for commuters to find shared mobility options, and more generally awareness of existing provision is low. This lack of data also impedes local and regional policy makers from understanding how shared mobility options interact with other local transport infrastructure and prevents Mobility as a Service (MaaS) providers from knowing where to invest. Without open access to more transport data for all parties, the benefits offered by shared mobility are unlikely to be fully realised.

Whilst it is right that approaches to shared mobility are developed locally, in line with the needs of nearby communities and compliant with data protection requirements, business believes there is an important role for central government to play in setting out a clear framework and standards for gathering and sharing data on the provision and uptake of shared mobility options. The government's Future of Transport Regulatory Review and subsequent intention to develop a Transport Data Strategy is therefore hugely welcomed. Once developed, the challenge will then be how to translate high-level policy into meaningful everyday impact for commuters.<sup>44</sup>



This should include building on data gathered at both a local and national level throughout the pandemic on commuting routes, travel and work preferences - all of which can provide the foundations for more shared mobility options to be embedded within Local Transport Plans.

### **Sharing best practice amongst employers can enable more staff to choose active and shared mobility**

These changes must be matched by businesses and employees making the most of opportunities for active and shared travel uptake.

One clear way that employers can do this is to promote information sharing amongst staff about parallel journeys to work that could be made more efficient through lift sharing, or active travel. In a similar way to public transport, this may include incentives such as vouchers or coupons for those who leave their cars in favour of more active options, or raising awareness of existing schemes such as Cycle to Work.

Employers also have a key role in making sure the right facilities are available for their employees. This can be achieved by directly providing them, such as bike storage or showering facilities, or engaging with local authorities on urban planning to ensure local transport infrastructure is well connected and maintained.



Below are some key steps employers could take to reduce scope 3 emissions from commuting by facilitating shifts in behaviour amongst employees.

### **Recommendations**

#### **To promote more active and shared travel**

##### **Government should:**

- 1.** Work with local authorities and Active Travel England to ensure Local Cycling and Walking Infrastructure Plans (LCWIPs) are aligned with wider strategies for transport investment, and take into account the needs of other road users. Active Travel England should also take the lead on sharing best practice regarding consultation with business and operators to ensure investments in active travel deliver good long-term value for money.
- 2.** Lay out a clear framework for sharing and gathering more consistent data on shared mobility provision and uptake as part of its Transport Data Strategy.

##### **Business should look to:**

- 1.** Engage with local government to help shape wider spatial plans as well as the future of new infrastructure for active travel that will be used by staff.
- 2.** Promote active travel by staff, including through schemes such as Cycle to Work and providing vouchers or coupons to reward employees taking low carbon options.
- 3.** Enable as many staff as possible to use active travel to get to work by providing sufficient onsite facilities such as bike storage and shower rooms, and explore options for helping employees with bike repairs and servicing.
- 4.** Explore the provision of tools or apps to enable employees to find more opportunities for shared travel with colleagues.
- 5.** Explore opportunities for smaller 'hub offices' in regional or local locations to open up further opportunities for active travel.



# Conclusion

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## **A cleaner future for commuting – together employers, employees, and government can turn the corner towards net-zero travel to work**

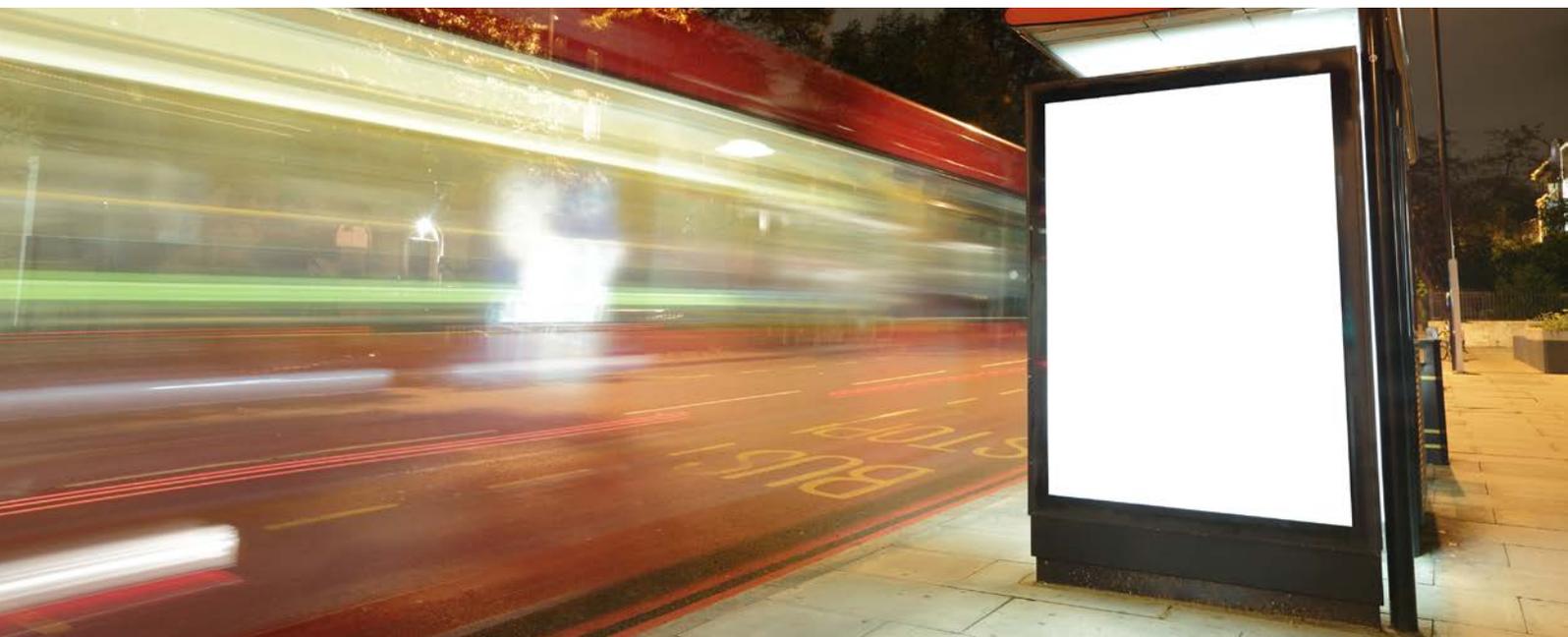
As this report has shown, employers and government have the tools necessary to materially reduce the overall impact of journeys to work on the environment, bringing the UK one step closer to reaching its obligation to achieve net zero by 2050.

### **Life after the transition – the solution in action**

If all the recommendations outlined in this report are implemented in the next five years, as seen on the next page each of our commuters' journeys would be one step closer towards zero emissions. Although, of course, these recommendations are only part of the solution, successful delivery could mean that these commuters would emit significantly lower emissions on their journeys to work, contributing to their employers also reducing company Scope 3 emissions.

Businesses and government now need to rise to this challenge, accelerating plans to deliver new infrastructure and vehicles, alongside rethinking how commuters can use networks most efficiently. As more and more businesses nationwide begin to return to on-site work this summer, firms have an important opportunity to work with government to provide their staff with a menu of low emissions travel options.

This will be critical, not only for meeting the UK's net zero commitment, but for improvements to people's health, wellbeing and productivity.



# A vision for greener everyday commutes



**Stella**

*Partner, Accountancy firm*



**Brand new, ZEB with bus priority measures in place**

Stella now takes a new bus that recently arrived on her commuter route. It's lower emissions than her car and, thanks to new bus priority measures in place, much more reliable and quicker.

**Ali**

*Senior Manager, Chemicals Company*



**Flexible season ticketing**

Ali can now affordably take the train to work. He enjoys being able to relax on his way home without having to struggle through rush-hour traffic.

**Angela**

*Lettings Manager, Estate Agent*



**Employer run car club**

Reforms to taxation have encouraged Angela's employer to make use of their company car fleet as part of a car-pooling scheme for travel to work. This has encouraged Angela to share her journeys with colleagues who live close by and have similar shift patterns.

**Pawet**

*Factory Floor Worker, Yoghurt Factory*



**Investment in workplace charging infrastructure**

The factory has begun investing in workplace charging infrastructure as part of its net zero commitments. This has given Pawet greater confidence to purchase a second-hand EV, knowing he won't get stuck between shifts with no charge.

**Gordon**

*Border Force Agent, Heathrow Airport*



**Improvements to the national EV charging network**

Now that there are rapid charging points widely available, Gordon feels much more confident that he won't run out of charge on the go and has taken the plunge on an EV.

**Tina**

*Nurse, Hospital*



**Launch of e-bike hire app and open data sharing about bike locations**

A private sector e-bike hire app has recently launched in the Hartlepool area with live updates about where bikes are available. Tina is now able to use the scheme to commute to and from her hospital shifts.

**Jaynesh**

*Brand Strategist, Branding Agency*

 and 

**Improved interoperability of public transport modes**

Due to the effective delivery of the area's Local Bus Service Improvement Plan, Jaynesh's journey on public transport is quicker, more integrated and stress free. As a result, he now takes public transport more regularly.

**Daniel**

*Check-out Assistant, Supermarket*



**A consistently protected cycle path between his home and place of work**

Now that he is shielded from traffic, Daniel feels far more confident cycling in. His employer has also fitted a shower at work meaning that he can get washed and changed before starting his shift.

**Sonya**

*Plumber, Self-Employed*



**Investments in on-street and wider charging infrastructure network**

A widespread network of charging infrastructure means Sonya has more choice to charge either on the street two roads from her flat, in between jobs, or at the supermarket rapid charging forecourt 20 mins away. This has given her greater confidence to invest in an electric van.

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# About the CBI

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Founded by Royal Charter in 1965, the CBI is a non-profit business organisation that speaks on behalf of 190,000 UK businesses of all sizes and from across all sectors, employing nearly 7 million people between them. That's about one third of the private workforce. This number is made up of both direct members and our trade association members. We do this because we are a confederation and both classes of membership are equally important to us.

The CBI's mission is to promote the conditions in which businesses of all sizes and sectors in the UK can compete and prosper for the benefit of all. With offices around the UK (including in Scotland, Wales and Northern Ireland) and representation in Brussels, Washington, Beijing and Delhi, the CBI communicates the British business voice around the world.

## **Our mandate comes from our members who have a direct say in what we do and how we do it**

The CBI receives its formal mandate from 9 Regional Councils, 3 National Councils from Scotland, Wales and Northern Ireland plus 16 sector based Standing Committees. These bodies are made up of members in that region, nation or sector who serve a term of office. The chair of each Standing Committee and Regional and National Council sit on the CBI's Chairs' Committee which is ultimately responsible for setting and steering CBI policy positions.

Each quarter this formal engagement process across the CBI Council reaches over 1,000 senior business leaders across 700 of our members who have a direct say in what the CBI do and how they do it, from refreshing their workplan to discussing the key business issues of the day and re-calibrating its influence. Over 80% of the businesses represented on the CBI Council are outside of the FTSE350 as the CBI represents a wide range of sizes and sectors from the UK business community. This formal governance process is supported by a wide range of working groups, roundtables, member meeting and events that makes the CBI unparalleled at listening to and representing British business.

# CBI Council in numbers

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1000+

Committee and Council representatives



28+

Regional and National Council and sector based Standing Committees



50%

Representatives of the CBI Council at C-Suite level



80%

Of the CBI Council from non-FTSE 350 businesses

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