

# The Future of Fleet

Fleet Solutions

In partnership with: **CARDIFF**  
UNIVERSITY







# Contents

	<b>Introduction / BP Forward</b>
<b>5</b>	<b>The Future of Fleet</b>

---

	<b>Chapter 1</b>
<b>6-9</b>	<b>The Electric Dream</b>

---

- Current barriers to switching to EV.
- Green ambition & barriers to electrification.
- The growth of green values.

	<b>Chapter 2</b>
<b>10-15</b>	<b>Ev-olving Landscape</b>

---

- Evolution of EVs.
- Infrastructure & charging.
- Policy priorities.

	<b>Chapter 3</b>
<b>16-17</b>	<b>Leading The Charge</b>

---

bp supporting your first steps towards a fully electric future.

<b>18</b>	<b>Executive Summary</b>
-----------	--------------------------

---

<b>20</b>	<b>Sources / Consulted</b>
-----------	----------------------------

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# The Future of Fleet

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**Adrian Brabazon, UK Fleet Sales Manager, BP Fleet Solutions**

The impact of the global pandemic continues to demand flexibility and adaptability from all of us, unlike anything we have seen in our lifetimes. With the seismic changes that have come about in the last year has come resilience, reappraisal, and a renewed sense of direction.

Innovation, technology and connectivity have made leaps and bounds over an unthinkable short period, and whilst pivoting and evolving to survive the short term has been a priority for most, it has also left us looking to a reshaped future and considering what responsibilities and opportunities lie ahead.

We recognise that there are many changes afoot in our industry and with the collective target of reaching a net zero economy by 2050 or sooner, there is still much progress to be made and steps to be taken.

However, following the global pandemic we know that behaviours change, consumers adapt and businesses evolve faster

than we had ever anticipated, and now is the time to embrace change for the better – specifically with a switch to electric vehicles (EVs).

With electric vehicles moving further and further up the agenda, fleet managers will need to make vital decisions on how, why, and when to make the switch - sooner rather than later.

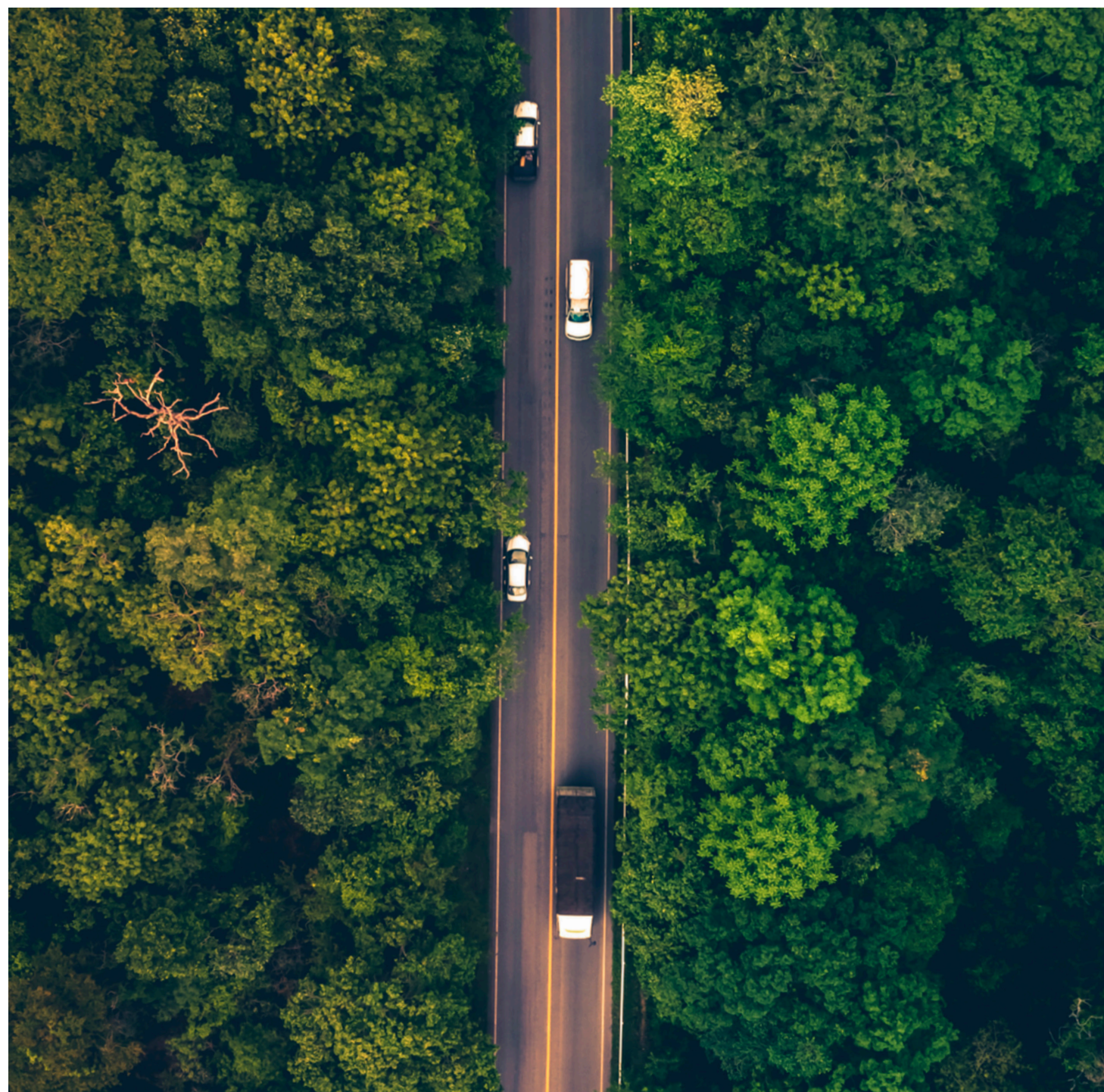
With petrol and diesel cars now set to be banned in 2030<sup>1</sup>, the move to EV or even to a plug-in hybrid vehicle is ahead, but we know there are many things to consider when switching an entire fleet to being electric. The needs of each driver and vehicle will be different, so while some fleets might be ready now, others need time and support to enable an effective transition.

The launch of our innovative BP Fuel and Charge card and app offers a seamless solution for fleet vehicles of all engine types, which delivers maximum flexibility, so fleets can make the decisions that are right for them. With a focus on end to end integration, mixed

fleets have one card solution for all charging and fuelling needs. BP Pulse is also aiming to develop the largest UK charging network, already operating over 500 rapid chargers nationwide. Charging infrastructure is also not only becoming more prevalent, but much more accessible, helping all fleets to begin the transition to EV smoothly, working towards the Government's 2030 ban.

To support the launch of our Fuel and Charge offer and in recognition of the impending decisions fleet managers face regarding the future of their fleets, we have partnered with the Electric Vehicle Centre of Excellence at Cardiff University to publish this report looking into The Future of Fleets.

Supported by proprietary research, which polled fleet decision makers across the UK, our report looks at the role of fleets on the road to net zero, some of the challenges currently being faced with the adoption of EVs, and advances being made to help fleets evolve and embrace the changes that come with a net zero ambition.



<sup>1</sup> BBC News Report - <https://www.bbc.co.uk/news/science-environment-54981425>



# The Electric Dream

## Green ambition & barriers to electrification.

The widespread adoption of EVs for private use, combined with the electrification of commercial vehicles and fleets will go some way to help achieve our collective ambition for a net zero economy by 2050, and positive progress is being made.

Our survey of fleet decision makers revealed that over half already have electric vehicles in their fleet (52%), and of those who don't, 54% of decision makers said they will start switching to EVs in the next five years.<sup>2</sup>

This is a positive trajectory, standing the industry in good stead for the road to net zero. However, it is clear there are still some barriers to adopting EVs, which the industry needs to overcome if we are to meet the target by 2050 or sooner.

## The growth of green values.

Our research has found that 71% of fleet managers who have switched to EVs did so because they wanted to 'be greener' whilst 39% switched to 'improve the reputation and CSR of their fleet'.

Given the tax incentives that now come with green action, and the changing legislation on emissions, many would assume there is also a financial motivation to make the switch. However, just over 35% of fleet managers with EVs in their fleet said that they switched for the financial benefits, proving a positive desire within the

industry to do what is best for the environment as well as business.

Additionally, in a COVID - conscious world, the adoption of sustainable, cleaner, greener transport and the promotion of clean air has never been higher on the agenda. Clean Air Zones (CAZs), Ultra Low Emission Zones and equivalent schemes are increasingly popular, and their implementation is widely encouraged across the UK, while consumers purchasing vehicles for private use are increasingly more open to electric and hybrid options.

There is a unique opportunity at this moment in time for fleets to embrace this growth in green values as a means not to just help hit net zero targets, but to positively influence public opinion when it comes to EVs and lead the charge with the adoption of low carbon vehicles.

Further to this, there is a public desire for suppliers to increase their sustainability and be more eco-friendly. This gives fleets a unique opportunity to win both the hearts and minds of consumers, if they're quick to adapt and engage with the demographic who prioritise sustainability in the suppliers they use.

<sup>2</sup> Research by bp via OnePoll, October 2020.



## Current barriers to switching to EV.

Our research clearly indicates that fleet managers are keen to transition their fleets but it also reveals that they are currently held back by a lack of confidence in the suitability of current EV models, the upfront investment required to make the switch and limited information around electric vehicles, and accessible charging infrastructure.

Of those who do not yet have electric vehicles in their fleet, more than a quarter say this is because they would not be able to afford the up-front cost of switching all vehicles to an EV (27%).

A further 25% stated it was because their fleets drive long haul and believe current EV models do not

do as many miles in one charge as current diesel options, with 24% stating they don't have the time to wait for EVs to charge whilst on the road.

Other barriers included lack of driver access to home charging (24%), lack of confidence driving EV vehicles (10%) and a reluctance to change (10%).

"Environmental issues must be the biggest factor, but we do need improvements in the technology".

"Manufacturers should provide vehicles with enhanced range to cut down on charging points. We use multi-drop vehicles in our business and this is especially pertinent with those. However, the servicing of these vehicles will require a different approach and costing, so that will be a new challenge".

"The removal of diesel-powered vehicles. Diesel has always been the fuel of choice for fleet managers, so adapting to this change will require entirely new systems, financing, training etc".

The Government Office for Science (GOS) 2019 paper, Decision Making in the UK Transport System, proposes that while technophiles and those with green values are willing to adopt EVs, many individuals perceive the current generation of EVs as a 'work in progress' and too costly, despite being cleaner than conventional vehicles. GOS also outlines a perception of limited rapid-charging infrastructure, leading to 'range anxiety', presenting another significant barrier, something which we've also seen in our own research.

So how can fleets tackle these barriers, what support and services are currently in place, and what advances and innovations are on the horizon that will help decision makers confidently make the transition to an electric future?



27%

"I wouldn't be able to afford the up-front cost of switching all my vehicles to electric"



25%

"We drive long haul and I do not trust electric vehicles doing those longer journeys"



24%

"We don't have time to wait for them to charge"



17%

"We have big vehicles"



14%

"I'm not sure how to switch any of our fleet to electric"



11%

"I've thought about it but some of the vehicles in my fleet aren't suitable for EV"



10%

"I don't think our drivers would be confident driving an electric vehicle"



10%

"Most of our drivers are used to what they usually drive and wouldn't accept change that well"



24%

"Many of my drivers do not have homes suitable for the installation of home charging points"





# Ev-olving Landscape

Advances and innovations to help facilitate a zero-carbon future.



Electric and alternative fuel vehicles have already been playing a successful part in the fleet industry; in particular for sectors such as city centre delivery, where the trips are short, noise pollution is a problem and zero emissions give an obvious advantage over combustion engine vehicles.

As electrification takes a stronger hold and we are becoming increasingly concerned about the welfare of our planet, fleets are having to adapt fast to a rapidly evolving industry.

With the constant development of technology, transport getting quicker and smarter, and government policies being implemented to encourage an electric future, fleets have an opportunity to accelerate electrification on a large scale in the transport industry.



## Policy priorities.

The UK Government recently placed EVs at the heart of their industrial strategy, the government’s “Road to Zero,” has clearly set the parameters. EVs are seen as a key part of future smart and flexible energy systems.

The Government’s ambition is to ban all new petrol and

diesel cars by 2030, and hybrids by 2035. This has made the transition to EV much more pressing, and businesses will need to start preparing now.

This commitment is maintained in the “Decarbonising Transport, Setting the Challenge”

document published by the Department for Transport in March 2020. This identifies six strategic priorities to support the UK Government’s transport decarbonisation plan (TDP), outlined in October 2019.

### These six strategic priorities are:

- 1 Accelerating model shift to public and active transport
- 2 Decarbonisation of road vehicles
- 3 Decarbonisation of how we get our goods
- 4 Place-based solutions
- 5 UK as a hub for green transport technology and innovation
- 6 Reducing carbon in a global economy

bp has committed to actively advocating for policies that support net zero, including carbon pricing; stopping corporate reputation advertising and redirecting resources to promote net zero policies, ideas, actions, collaborations and its own net zero ambition.



## Policy priorities.

Professor Liana Cipcigan from the Electric Vehicle Centre of Excellence (EVCE) at Cardiff University comments; "Supporting government policies, subsidies, grants and tax rebates are important factors for the adoption of electric vehicles."

The Plug-in Car Van Grant is an example of an important incentive put in place by the Government. Another incentive to encourage businesses with predominantly diesel van fleets to make the switch to electric is the scheme launched by Highways England to allow businesses to try an EV

for two months before committing to ownership.

Green number plates, which were rolled out on the 1st of September 2020, will also allow drivers to benefit from local incentives, for example cheaper parking or cost-free entry into zero-emission zones."

## Infrastructure & charging.

a cause for concern amongst many fleet managers, as we outlined in chapter one. However, the development of a widespread, accessible charging infrastructure will provide much needed reassurance, reducing range anxiety. A significant growth in the charging infrastructure market is expected over the next few years to support the Government's plan to ban all NEW petrol and diesel cars by 2030. Public charging infrastructure in the UK has dramatically expanded in recent years. As recently as five years ago, there was relatively little in the way of rapid charging infrastructure to enable longer journeys across the country. They were possible, but a lot of effort had to be made in planning before setting off.

Today, there are thousands of rapid chargers nationwide, of which bp Pulse operates over 500, as well as hundreds of the latest ultra-fast chargers, with bp Pulse aiming to develop the largest UK network, targeting 700 units by 2025 and 1,400 by 2030.

Infrastructure is not only becoming more prevalent, but also much more usable. The first-generation public charging networks were government funded and had to be free to use for an initial period, with schemes set up where users could activate the charging with an RFID card, which created lots of separate regional networks. Today, almost all new rapid and ultra-fast chargers have contactless payment as standard, making it

easier for drivers who only need public charging occasionally. Most networks also offer live availability data, meaning drivers can easily check if a charge point is free to use at any given time.

Unlike refuelling petrol and diesel cars, which is done in a fairly homogenous way, with virtually all drivers doing this on a forecourt, electric cars are – and always will be – charged in a variety of places, and at a variety of speeds, to suit each driver's needs. For example, many drivers will do most if not all their charging at home. Some will always charge at work. And others will rely on public charging points, which is already the case for many EV drivers today.

When thinking about transitioning drivers to electric vehicles, it is important to consider how each driver will need to charge, and what support can be put in place to enable them to charge as efficiently as possible.

## Chapter 2 - Ev-olving Landscape.

For example, many companies are already funding the cost of a home charging point for employees with business vehicles, with the driver then claiming back the cost of electricity used to charge it. Others are providing access to public charging points without the employee having to pay at the point of use, avoiding unnecessary expense processing.

It is already entirely possible to drive electric vehicles long distances in the UK, thanks to both the long ranges on offer from the latest models, and the abundance of charging infrastructure across the country. There is undoubtedly still work to be done in expanding the number of charging points in certain local areas, but at a national level, there is enough public charging infrastructure to support today's EV market – and the numbers (of both charging points and EVs) are growing every day.

The decarbonisation of transport through electrification is also being transformed by the rapid decrease in the battery cost and increase in the battery energy density. This is important progress for the acceleration of electrification.

As battery capacities increase, charging times reduce, and charging infrastructure grows further, these functional barriers to adopting EVs are taken away. Professor Liana Cipcigan from the EVCE at Cardiff University comments, "batteries are critical components for the decarbonisation of transport through electrification. However, there is lots of progress to be made on costs, energy density and cycle life."

"We want to ensure that our fleet customers are able to transition to net zero emissions, which means having the confidence to drive wherever they need to, whenever they need to. So in addition to our expansive rapid charging network, we are developing the UK's largest nationwide network of ultra-fast chargers, with an aim of installing 700 by 2025 and 1,400 by 2030."

**Tom Callow,**  
Head of External Affairs, bp Pulse

## Evolution of EVs.

Historically, EV models have been somewhat limited in their breadth of offer, especially in relation to the commercial needs of fleets. However, fleet managers now have an impressive range of models available in the 2020 European manufacturing market.

For example, the Mercedes eSprinter, the Citroen e-Dispatch, the Toyota Proace, and Tesla's newly launched Cybertruck provide electric solutions for most commercial needs.

This choice is expected to expand further, and the main manufacturing brands are making commitments to offer more options from light-duty to medium and heavy-duty trucks for commercial fleets.

New players, including Rivian, Bollinger, Lordstown Motors and Nikola, have also received significant funding to develop new products in the next few years.



- This year Amazon is looking to create a fleet of 100,000 electric delivery vans "with Alexa and routing software built-in"
- British Gas is planning to buy 1,000 all-electric Vivaro-e vans from Vauxhall with an ambition to decarbonise their entire fleet by 2030
- UPS announced the commitment to buy 10,000 tailor-made electric vans from UK start-up Arrival
- Tesla recently announced their strategy to decrease the cost of their battery by 50% in the next three years which could be a game changer for the automotive industry





# Leading The Charge

## bp supporting your first steps towards a fully electric future.

Taking the plunge to electric can seem daunting but there is little reason to be apprehensive. As ever, research is key, but bp's Fuel and Charge card can help eliminate some of the biggest concerns facing fleet managers responding to this industry change.

The offer helps facilitate a phased approach to electric fleets.

As it allows fuelling and charging on one card, with one consolidated report and invoice, not all vehicles need to be switched over to EV at the same time. This means that the upfront cost of transitioning to a fully electrified fleet is spread, given that the switch can be phased across several years to split the cost.

### Range

Range anxiety seems to be the biggest thing playing on drivers' minds when considering the switch to an electric vehicle<sup>13</sup>. While the charging network is growing and always being improved, particularly with infrastructure being put in place by bp Pulse, you should consider the effect charging time will have on your fleet, especially if your drivers will be required to make long journeys.

bp's Fuel and Charge card gives you access to the bp Pulse network - the UK's largest public charging network which consists of over 7,300 EV charging points, including over 400 rapid charging points which are growing year on year, with more EV hubs in development across the country. Drivers can easily plan ahead using the app to seek out convenient charging points on their route, and check availability.

### Charging

Many fleet managers will switch to EV to make fuel cost savings. However, you should be aware that cost savings are most effective when the majority of charging is carried out overnight at home, taking advantage of lower electricity rates. So, while new infrastructure offers convenience and peace of mind on the road, drivers' capability to charge at home is something important to consider within your fleet.

bp offers customers fully integrated support through the installation of home and office charging via bp Pulse. With access to the UK's largest public charging network - including work and home charging solutions - bp is committed to ensuring EV is a viable option for more and more fleet customers.

### Cost

Fleet managers need to consider the long-term gains when weighing up the cost of switching to electric and consider the upfront cost of the vehicle against savings on fuel, tax and maintenance.

BP's Fuel and Charge card can be used by fleet drivers to pay for petrol, diesel or electricity, offering flexibility for fleets who don't want the restraints or the cost of committing an entire contract to EV, giving you the time to make the right decision.

### Time

We know how demanding managing a fleet can be and the idea of processing all the admin that comes with changing to EV can seem overwhelming.

The easy-to-navigate bp Fuel and Charge card online reporting provides one simple solution and an overview of expenses for individual fuel types and EV charging in one place, allowing precious admin time to be cut to a minimum.

<sup>13</sup> Research by bp via OnePoll, October 2020.



# Executive Summary

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From our research, we know that decision makers within fleets have the intention to convert to electric, if they have not already. Green values are prevalent, and there is real desire to make positive change now, and not just in the industry. Changes in public attitude towards sustainable transport and clean driving, driven in part by the effects of the COVID-19 lockdown, are escalating. The experience of low emissions in cities during national lockdown

has triggered new thinking on e-mobility and this behavioural change will be fundamental in the continued development of sustainable transport and infrastructures as we count down towards a net zero future.

And while there are some hurdles still to be overcome, advances in fuel technology, a wider range of electric vehicles available, new emission legislation to support the transition from diesel to electric and a fast

growing charging network, all mean it has never been a better time to make this change. BP's Fuel and Charge card and app also give you the flexibility to bring your fleet into the future step by step. Combining fuelling and charging in one card means you can connect to charging networks and fuelling stations on your drivers' key routes with one simple card, helping you to keep adapting and advancing towards a fully electric future.





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