



The race to zero



getting you there

What's inside

Discover what 2030 means for your fleet, how to plan for a switch to EVs and why the Total Cost of Ownership (TCO) is so important.

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The race to zero has begun

Athlon has always been a true forerunner when it comes to EVs. We were one of the first fleet providers to make electric vehicles available to our lease customers back in 2008. Since then we have been carefully introducing electric vehicles into fleets of all sizes, working hard to balance the relationship between Profit, People and Planet (the three Ps).

We don't pretend to have all the answers even experts don't stop learning every day. However, as the race towards an emissions free future gains pace, we feel perfectly placed to help guide and support UK businesses of all sizes towards hitting their mobility targets and reducing their CO₂ footprint.

How would you rate your fleet's green credentials currently? Are you leading the charge with your hybrid fleet or are you yet to get started with EV and wondering where to begin? This guide will provide a broad range of informative tips and advice, which we hope will help fleet managers and drivers at every stage of their race to NET zero.



The need for change

The scale of the challenge

The sad fact is climate change is not slowing down, it's racing ahead! 2019 was the second warmest year on record and came at the end of the warmest decade ever recorded.

Since 1990 many industry sectors have been working hard to dramatically reduce emissions with total domestic emissions in the UK dropping by 43%, but transport has fallen only 3%. Transport remains the UK's largest greenhouse gas (GHG) emitter. In June 2019 the UK legislated for "NET zero" GHG emissions across the economy by 2050 and then went a step further by banning the sale of new cars and vans powered wholly by petrol and diesel from 2030. Which puts all businesses in a race to hit "NET Zero" by the end of the government deadlines.

Alongside these big changes in regulation and legislation it is also clear there have been significant shifts in public attitude towards sustainable transport and cleaner driving recently. As communities right across Britain experienced the benefits of low emissions in cities and towns during the national lockdowns, new thinking on mobility has set in and taken root. While there are still some hurdles to overcome, advances in technology, wider electric vehicle availability, better charging networks and new emissions related incentives are all

driving the transition from traditional ICE (internal combustion engines) to electric, meaning it has never been a better time to make a change.

The six priorities driving the UK Governments strategy:

The Transport Decarbonisation Plan sets out the following themes as critical for tackling transport emissions in the UK.

- Accelerating modal shift to public and active transport.
- Decarbonisation of road vehicles.
- Decarbonising how we get our goods.
- Place-based solutions.
- UK as a hub for green transport technology and innovation.
- Reducing carbon in a global economy.

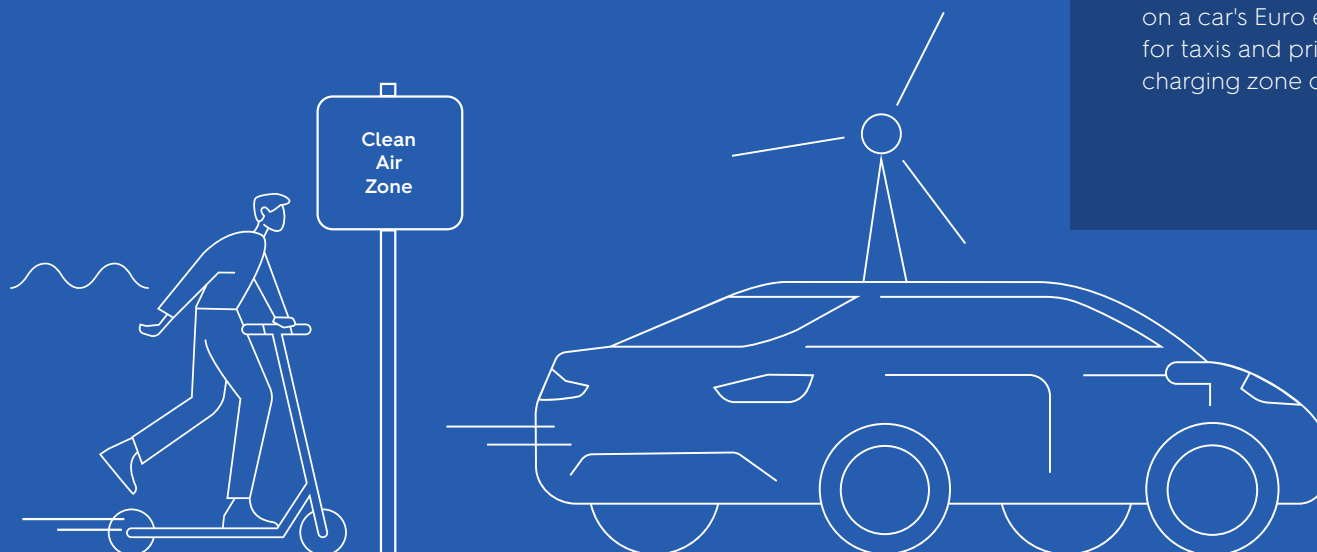
Ready,
set,
GO!

Clean Air Zones (CAZs)

Don't let Clean Air Zones hold your business back

Clean Air Zones have been quietly popping up all over the UK since first being introduced in London. They form a central pillar to the Government's strategy on the environment and broader targets set out in the Government's Air Quality Plan. The development of the zones aims to directly tackle problem cities where air pollution breaches legal limits and improve air quality across the country by discouraging the use of older, more polluting vehicles.

Outside of London most are still free for petrol and diesel vehicles that meet the latest Euro emissions standards, but there are signs that this is changing. With charges planned for new destinations and existing zones readying for expansion, CAZs and ULEZs (Ultra Low Emissions Zones) will soon start to impact the bottom line of many more organisations. So it makes a lot of sense to start planning ahead and considering what problems ineligible vehicles might cause you.



Which vehicles are affected?

There are 4 types of Clean Air Zones, Class A to D.

Class	Vehicle Type
A	Buses, coaches, taxis, private hire vehicles
B	Buses, coaches, taxis, private hire vehicles, heavy goods vehicles
C	Buses, coaches, taxis, private hire vehicles, heavy goods vehicles, vans, minibuses
D	Buses, coaches, taxis, private hire vehicles, heavy goods vehicles, vans, minibuses, cars, the local authority has the option to include motorcycles

How are Clean Air Zones administered?

Non-charging Clean Air Zones: Focus on improving air quality, without administering charges for vehicles entering the zone. Measures can include retrofitting certain vehicles; traffic flow management and rerouting of traffic to lower emissions in key positions.

Charging Clean Air Zones: Drivers will be charged a fee to enter the area if their vehicle fails to meet the required environmental standards - this is most often based on a car's Euro emissions standard. Local authorities may set a different standard for taxis and private hire vehicles so you should always check before entering a charging zone or contact the local authority for more information.

Race to zero TIPS

Stay up-to-date on the latest plans by visiting the **DEFRA** website or [gov.uk/guidance/driving-in-a-clean-air-zone](https://www.gov.uk/guidance/driving-in-a-clean-air-zone)

To get a better understanding of which UK cities have Clean Air Zones and which ones intend to introduce them, consult the BVRLA's Interactive UK CAZ Map [bvrla.co.uk/resource/CAZmap.html](https://www.bvrla.co.uk/resource/CAZmap.html)

1. What to consider first

The race to
zero 

Is an EV right for your business?

Or should that be...Is it right, right now?

Momentum is growing all the time and increasing the pressure on businesses to support the move towards a NET zero economy. As the previous pages outline, organisations across the UK need to determine when and how, rather than if, EVs should be implemented.

However, it's important not to panic. The right time to start switching the makeup of your fleet will be different for each business. You may decide to stick to your standard replacement cycles and start replacing vehicles one by one or, you could be considering a small trial first. Whatever approach you decide to take, make sure you start by doing a bit of preparation first.

🕒 A simple checklist to help you get started

Carrying out some research and planning at the start can save you a lot of wasted effort and time further down the line so it pays to get started early.

1. Have you looked in detail at the regulatory landscape?

Do you know enough about existing and upcoming laws and regulations that may affect your business?

2. Is there existing pressure within your business to decarbonise or become more sustainable?

Do leaders within the business already recognise a change is needed? Any changes will need supporters in key roles, so it makes sense to start talking early.

3. Do you have a good understanding of your existing fleet, replacement cycles, associated costs and supplier base?

Getting an accurate understanding of your current situation will enable you to properly assess the pros and cons of a switch to EVs.

4. Do you understand the habits and behaviours of your drivers?

Talk to your drivers or study the telematics data to better understand driver habits and how an EV might fit with their existing behaviours.

5. Have you already identified employees who are keen to make the switch?

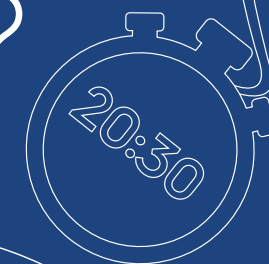
Identify potential early adopters within your business. They may even become future EV ambassadors within the organisation.

6. Have you checked what impacts a switch to EVs might have on other parts of the business?

You will likely need the cooperation of other stakeholders and departments across the business so it is best to start discussing and understanding their perspectives early in the consideration process.

7. Are there any other upgrades or development plans happening around the business which could align with an electrification strategy?

Getting workplaces ready for EVs can often require changes to infrastructure so it can be beneficial to understand what other projects may be happening.



There can be some hurdles to overcome in the race to zero

It's important to understand that there can be complexities involved in switching to EVs for some businesses. Remember there are several factors outside of vehicle choice that will play a part when starting your EV fleet project.

Charging

Assessing how many chargers, where they should be placed and what type of charger they should be can be difficult to judge accurately at the outset, so you may need to seek some support. You should also consider what your approach to home charging and charging on the go will be for employees. Assessing existing fleet telematics data and dwell times can be a good way to better understand charging needs.

Power supply

For some businesses power supply at the business location will play a critical role in the day-to-day running of an electric fleet. Downtime or interruption will have a direct impact on business continuity. The costs and business impact of a power outage need to be fully assessed and appropriate measures taken to ensure there is a contingency plan in place from the beginning. Start working with your local energy suppliers early to properly assess the need for location upgrades and consider installing on-site power generation and storage solutions to reduce dependency on the grid whilst also reducing overall energy costs. If your business is leasing premises you should also approach landlords as early as possible since getting buy-in will be crucial in moving the project forward.

Company culture

Existing habits and mindsets around the business may be a barrier to EV adoption. Assess the individual needs of employees and recognise the role communication and training will play in shaping the transition to a greener more sustainable fleet.

The business benefits of making the switch

If you decide now is the right time to start transitioning your fleet towards electric vehicles, improving your environmental credentials won't be the only boost! You can unlock significant financial, reputational and operational benefits as well. Read more about these below:

→ **Become a more sustainable business**

By adapting your fleet to utilise more electric power you will simultaneously help your business prepare itself to meet new legislation, whilst also demonstrating to employees, investors, suppliers and partners that you are playing your part in reducing harmful greenhouse gases, improving air quality and reducing noise pollution.

→ **Reduce your costs**

There are a number of reasons why switching to EVs could make financial sense for your business. You can benefit immediately from many government incentives and tax benefits. There is the dual opportunity to benefit from reduced fuelling costs and low-cost energy solutions. You can avoid the additional charges associated with Clean Air Zones (CAZs). Plus the lack of as many moving parts in EVs tends to result in lower maintenance costs when compared to traditional ICE vehicles. (See [section 2](#) for more on this)

→ **Enhance your reputation**

By being proactive in demonstrating green leadership, your business can avoid falling foul of the increasing compliance and regulations. Not doing enough could lead to reputational damage in the future.

→ **Stay competitive**

Not being seen to do enough is a risky approach when businesses around you are actively making changes already. People are increasingly looking to align themselves with businesses that are committed to sustainable ideals - so going green is great from a customer loyalty perspective.

→ **Increase employee satisfaction and improve talent attraction**

It's not just customers who care though as employees and future job candidates are increasingly won over by businesses that show they care about the environment and our future.

→ **Generate new revenue streams**

Energy optimisation schemes and charging the public for use of your on-site charging facilities could even start bringing money into your business.



Finding the right EV

It's important to put the hard yards in when considering which electric vehicles will benefit your business the most. Making sure you have scrutinised the details and considered all the impacts is the key to success.

The following pages provide you with some practical advice, helping you to better understand the range of electric vehicles currently available and where their strengths lie. **And remember**, if you still have questions about vehicle choice the team at Athlon are always ready to simplify the complexities.



Take the strain out of tax by focusing on 2 key areas :

→ **BEV - Battery Electric Vehicle or 'Pure' EV.**

A vehicle powered only by electricity. The vehicle is charged by an external power source and incorporates regenerative braking which helps to extend the available range.

Typical examples: Nissan Leaf, Peugeot e-208, Tesla Model 3.

→ **PHEV - Plug-in hybrid electric vehicle**

A vehicle which combines a battery, electric drive motor and an internal combustion engine (ICE) and the ability to charge the battery from an external power source. The vehicle can be driven by the ICE, by the electric drive motor, or both together. **Typical examples:** BMW 330e, Škoda Superb iV.

→ **E-REV - Extended range electric vehicle**

A vehicle which combines a battery, electric drive motor and an ICE. The electric motor always drives the wheels with the ICE acting as a generator when the battery is depleted. **Typical examples:** LEVC VN5 van, Ford Transit Custom PHEV.

→ **Hybrid or Parallel hybrid**

A vehicle that incorporates a small electric motor which is mainly charged when braking. Traditional engines aren't very efficient at low speeds, so the electric motor powers the vehicle upto 15mph and then the ICE takes over. **Typical examples:** Toyota Prius, Kia e-Niro.

→ **Mild hybrid**

A vehicle that has both an ICE and an electric motor, but use a battery much smaller than that found in a hybrid. The battery stores energy generated by braking, but the electric motor cannot power the car on its own: it is used to support the engine during acceleration or cruising. **Typical examples:** Ford Puma, Kia Sportage.

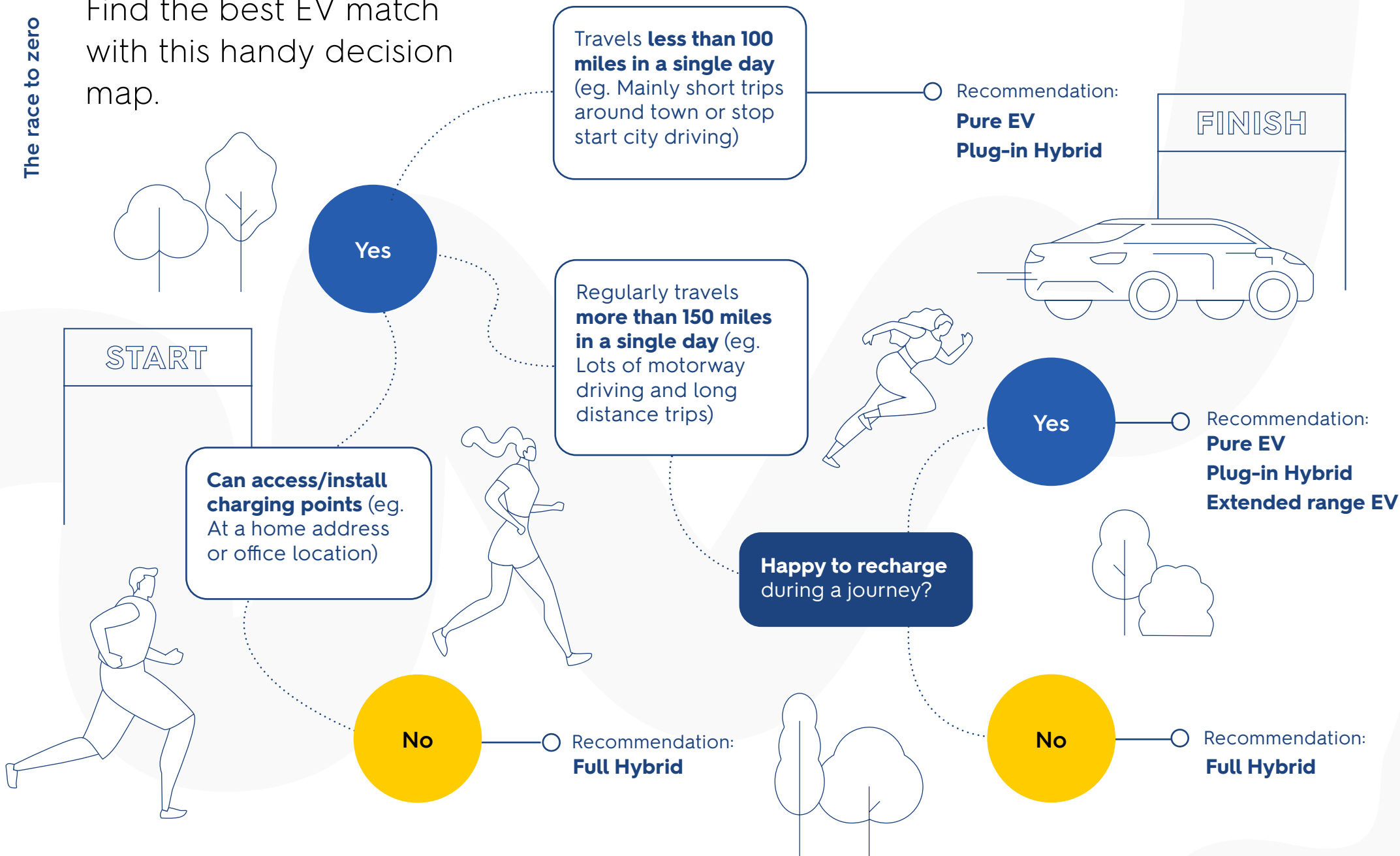
→ **FCEV - Fuel cell electric vehicle**

A vehicle which runs on pressurised hydrogen reacting with oxygen to produce electricity. These vehicles produce zero CO₂ and air pollutant tailpipe emissions as water is the only waste product. FCEVs also take a fraction of the time to refill: it takes around five minutes to fill an FCEV with enough hydrogen for around 300 miles. **Typical examples:** Toyota Mirai, Hyundai Nexo.

Is Hydrogen still just hype?

Hydrogen fuel cells have been talked about as legitimate rivals to BEV technology for years now but hydrogen continues to struggle getting any kind of significant foothold in the small to medium EV market. One of the main issues is the lack of efficiency in the transition process of energy to hydrogen and then back into electricity (known as the energy vector transition). Out of an original 100 watts of energy, after the transition process only around 38 watts will be left to power the vehicle. (Read more about Hydrogen fuel cells on [page 12](#))

Find the best EV match with this handy decision map.



Powering towards a more sustainable future

For many businesses and fleet managers now is a perfect time to start the move towards electric vehicles. There is no doubt they are the shape of the future for both personal and business drivers. However the switch won't be a clear cut decision for everyone and historically EV advancements have lagged behind in the commercial sector. Lately that situation has changed dramatically with improved ranges and better onboard options more businesses will be able to seriously consider the switch to an electric van.

It has to be said there are still some fairly sizeable gaps in the UK EV market. **Offroad 4x4s** are still a very unsupported class with little viable choice for commercial operators, like those in the utilities, scientific, and emergency sectors. Signs overseas could point to that situation changing soon with the arrival of products from manufacturers like Tesla, Rivian and Bollinger.

The **Heavy goods transport** industry also has very few viable fully electric options on the market, a number of manufacturers are working to address this issue and despite hydrogen fuel cells struggling to break through in the passenger cars market, hydrogen makes particular sense for commercial vehicles for two main reasons: The tanks can be topped up quickly to ensure vehicles are off the road for shorter periods and hydrogen gas tanks are much lighter than lithium-ion battery units, which means more weight can be loaded in the trailer. Currently in the UK there are very few hydrogen refuelling locations so a nationwide network of stations would be needed to make the plans viable on a mass scale.

So what if you're unable to find exactly what you are looking for in an EV?

Don't give up. The market is changing rapidly. Consider what is going to be available in the next year or so. Based on this information, you might consider taking shorter agreements on an ICE vehicle or temporarily extending contracts to give yourself flexibility. Keep in mind that with so many EVs in production, the market will also soon be competitive enough to drive prices down even further. A short extension to an existing contract may be the best option in the short term.

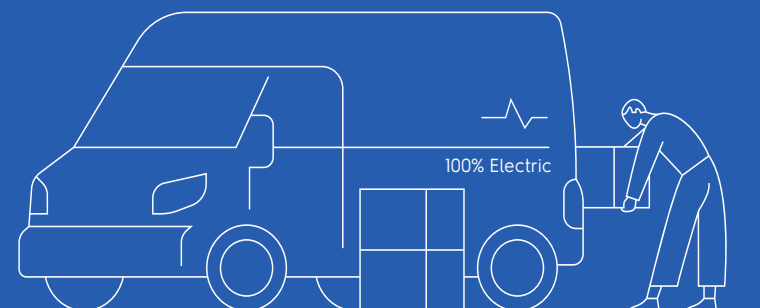
Race to Zero TIPS

There is no substitute for doing some thorough research. A great place to start is the Government's **Go Ultra Low website** which has a heap of useful advice, guidance and tools. You can also begin your exploration of the latest EV models here: www.goultralow.com

Picking a new eLCV for your commercial fleet

We've compiled a short list of some key considerations for anyone thinking about adding a new electric light commercial vehicle (eLCV) to their fleet.

- **Weather conditions** Electric vans work perfectly well in cold weather but it is important to understand that it can affect the battery performance and therefore the mileage. So try and account for seasonal variations when you are calculating expected ranges.
- **Load carrying** It's important to recognise the role payload will play in affecting the range of EVs. This tends not to be a big problem for short range commercial vehicles such as those carrying out 'Last Mile' activities. But for vehicles that have heavy onboard equipment or fit outs and cover variable distances, it is important to consider the impacts extra weight may have on battery performance and maximum range.
- **Onboard power** Do you need access to onboard power whilst using the vehicle? A number of the newer electric vans have been starting to incorporate onboard power sockets (2.3 kW / 23-volt) which reduces the need for separate generators and makes it easier to power your tools no matter where you may find yourself working.
- **Quiet performance** Does your fleet often work during unsociable hours or in situations where noise pollution is a consideration such as late night or early morning deliveries. Electric vehicles enjoy the added benefit of quiet vehicle function so you can confidently work anywhere at any time.



Boost your battery knowledge

Battery technology plays a pivotal role in the performance and reliability of Electric Vehicles so it pays to learn a little about them.

Many of the EVs on sale currently use battery units made up of hundreds of individual battery cells which are assembled together and then housed along the chassis of the vehicle, this type of configuration is often known as a skateboard platform.

Battery Life: Battery life is often cited as one of the biggest concerns of potential buyers. Many people assume that an electric car battery operates in a similar way to those found in mobile phones or laptops and worry that the deterioration will be the same. The underlying chemistry is similar (Lithium ion) but car batteries actually use a different technology, and built-in battery management systems are also present to monitor and protect battery life.

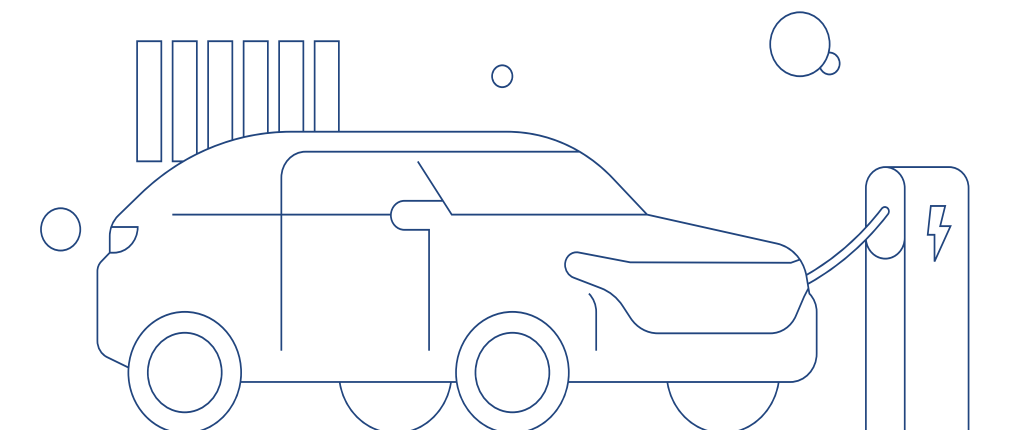
The job of a car battery is multi-layered and the demands put on them are complex. They need to store a lot of energy, whilst also being able to recharge quickly and retain their energy density over thousands of charging cycles. They also need to be packaged together into a unit which is conditioned to remain ultra safe and able to operate in an optimal fashion regardless of outside conditions and temperatures.

Battery Power: EV battery energy is usually measured in kilowatt-hours (kWh) which refers to the battery's energy storage capability over a specific time. So a vehicle with a 100kWh battery for example will be able to deliver 100 kilowatts of power for one hour straight. In typical conditions, drivers will require considerably less energy than the stated full power, so the battery could potentially last for several hours before needing a recharge.

Battery Size: Cars and vans are heavy, so propelling one up a hill is going to require access to plenty of power and this is why EV batteries tend to be on the large side. When you are considering an EV, it's important to pick a vehicle with a capacity big enough to suit the driver's needs. So if you only ever need the vehicle to carry out modest distances a smaller battery could be sufficient. As the number and range of EV vehicles on the market continues to increase we are seeing a move by OEMs to include a variety of battery sizes, with some battery sizes reaching as low as 30kWh. The price of larger batteries can be significant so installing smaller battery sizes can help manufacturers keep the initial price tag lower.

The general rule is that the bigger the battery pack, the more range you will get. If you use your vehicle for long journeys or regular charging could be a problem, then go for a larger capacity battery pack.

Battery Warranty: Car manufacturers understand that battery life has been a longstanding concern for customers so almost all models now come with a generous battery guarantee/warranty of around 100,000 miles: for the average driver, that could equate to well over 10 years of use. These manufacturer warranties combined with the rare metals involved in battery production is also helping to boost the residual values of EVs and the second hand market is showing good signs for almost all models.



2. Making your money go further

The race to
zero 

Total Cost of Ownership

You can save money whilst you're saving the planet.



It's easy to look at the higher price tag of an electric vehicle and assume it is going to cost more than traditional petrol or diesel powered vehicles but this isn't always the case. It is true that EVs aren't quite at a point of cost parity with traditional cars and vans yet. Rebates, tax subsidies and incentives currently play a big part in keeping electric vehicles competitive, but as key costs continue to come down cost parity is getting closer. It's also important to recognise that in most cases the EV you are getting is a superior, more technologically advanced product than the ICE equivalent.

Understanding the true cost of an EV relies on understanding a number of different factors. Calculating the Total Cost of Ownership is the best way.

The initial investment

The disparity in the price tag between a traditional ICE vehicle and an electric vehicle has always been seen as a barrier to adoption. However this gap has decreased dramatically over recent years and as more cost effective electric models reach the market this difference is becoming less of an issue. There are a number of ways to approach financing the purchase of an EV and depending on your business needs, leasing could be an option that gives you the affordability and flexibility you need. (refer to **section 3** for more information)

The cost of maintenance & repairs

This is a win for EVs. As they have electric motors, EVs have fewer components and moving parts. This means less friction, less wear and tear and most importantly, fewer things that could go wrong. Your maintenance costs are therefore lower, as is your downtime.

Tyre costs

EVs need different types of tyres than traditional vehicles. They're more expensive and larger; they carry the increased load of the heavy batteries. Plus, EVs transfer torque to the wheels immediately instead of building it up the way you do when you accelerate in a traditional vehicle. This does result in a more enjoyable driving experience. But it's at the cost of your tyres. You'll have to replace your tyres more frequently on an EV than on a traditional car. This is a cost you need to take into account.

Residual value

Although they have become popular, EVs and particularly BEVs are relatively new to the market, and especially the used-car market. This means it is quite difficult to establish the residual value of EVs. However, the market is maturing quite quickly, so insight into the residual value of these vehicles will improve. Take the residual value into account to the best extent possible when determining the TCO.

Energy and fuel costs

Properly establishing the TCO also requires working out the costs of charging a PHEV or a BEV. And these costs will depend on where and when the vehicle is charged. Typically, there are three different places that they are likely to be charged. At the workplace or Depot, at home or through public chargers. These all have a different impact on the TCO. It is good to establish a realistic pattern of likely charging behaviour. If a driver is office based for long periods of time then they will most likely be able to take advantage of onsite chargers but if a driver is often on the road for long periods then they may be relying on public chargers which are less cost effective currently. It is also wise to understand what kind of opportunities employees have to install home chargers at their property. There is also the added benefit of automatic overnight charging, when electricity tariffs are generally lower.

Taxes, subsidies and incentives

Taxes, subsidies and other incentives are vitally important and typically have a sizeable impact on TCO. And not just for your EVs. It is also important to recognise that CO₂ emissions of traditional vehicles are increasingly becoming susceptible to taxes and penalties (Such as Clean Air Zone charges) so you'll need to take them into account when establishing the TCO of a traditional vehicle, just as you take subsidies, rebates and incentives into account in calculating the TCO of an EV.

A closer look at Benefit-in-kind tax bands for Electric vehicles

When it comes to offering staff company cars, the common drawback is that it usually creates more personal tax liability than it saves on a company's corporation tax bill, with employees being liable to pay 'Benefit in Kind' (BiK) most choose to opt out of having one altogether.

The new BiK tax exemptions on electric and low emission vehicles which have been in place since 2020 are having a positive effect on the popularity of electric company cars again.

CO2 (g/km)	Electric Range (Miles)	2021-22 (%)	2022-23 (%)
0	N/A	1	2
1-50	>130	1	2
1-50	70-129	4	5
1-50	40-69	7	8
1-50	30-39	11	12
1-50	<30	13	14

Cars registered from 6 April 2020

Understanding the additional tax benefits associated with EV ownership

→ Fuel Duty

fuel duty is applied to combustible fuels, but not electricity. Plug-in electric vehicles (and hydrogen fuel cell vehicles) do not incur fuel duty for the electricity they use.

→ Vehicle Excise Duty (VED)

Zero emission vehicles valued less than £40k are currently exempt from vehicle excise duty.

→ Value added tax

electricity used to recharge a plug-in vehicle at home attracts only a 5% level of VAT, much lower than road fuels (20%).

→ Capital Allowances

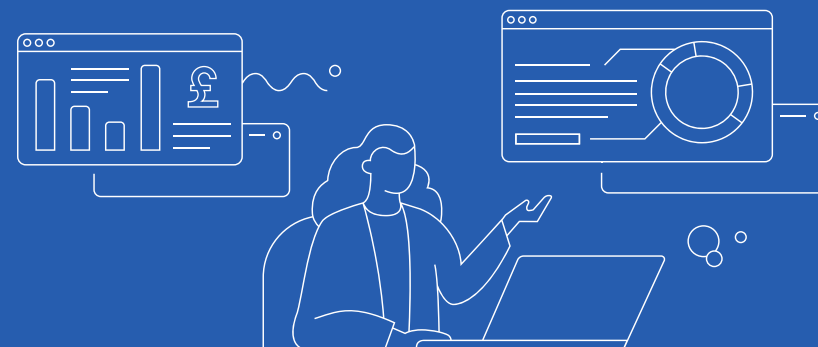
Buying an electric car with CO₂ emissions of less than 50g/km means you can write down 100% of the purchase price against corporation tax in year one. Potentially saving the business thousands of pounds in corporation tax.

→ ULEZ, CAZ and Congestion charges

Fully electric vehicles currently offer exemption from both ultra-low emission zones (ULEZ) and clean air zones (CAZ).

→ Fuel Benefit Charge for cars and vans

as electricity is not a fuel, there is currently no fuel benefit charge for electric vans.



Incentives can go a long way...

...in making a convincing argument for electric vehicles

When you combine the government tax breaks with the additional savings and incentives available to electric vehicle drivers, the picture painted in favour of EVs starts to look even more compelling. **Below we have highlighted a few of the additional incentives EV ownership entitles individuals and businesses to:**

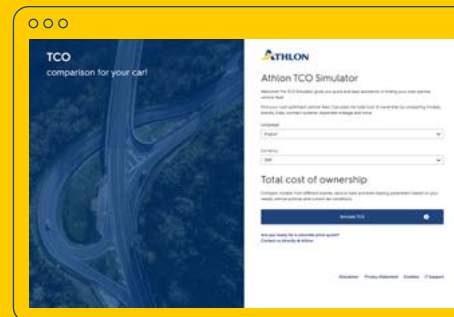
- The government is encouraging take-up with grants of up to **£1,500*** (or 35% of the overall purchase price, or whichever is lowest) **for cars** and up to **£2,500*** (or 35% of the overall purchase price, or whichever is lowest) **for small vans** and up to **£5,000*** (or 35% of the overall purchase price, or whichever is lowest) **for large vans.** (Find out more at gov.uk/plug-in-car-van-grants)
- Any business, charity or public authority can reduce the cost of installing workplace charge points upto the value of **£14,000** (40 sockets) saving **£350** per charging point installation. This also applies to the installation of home charging points for staff members.
- Ultra low emission zone (ULEZ) charges are already active in London and will likely be rolling out elsewhere in the country soon. Businesses can save **£12.50/per day** on cars or light commercial vehicles and **£100/per day** on heavier vehicles. If you are consistently entering these zones, the savings can be significant.
- Local incentives for EV vehicles such as **free parking** and **low emissions lanes** are already starting to arrive around the UK.



Race to zero TIP

Get some extra help from our **FREE Total Cost of Ownership (TCO) simulator**. Compare vehicles from all manufacturers and get an instant idea of the real world costs to your business.

To learn more visit tco.athlon.com



*Excludes cars costing more than £32,000. Vehicle categorisation: small vans < 2.5 tonnes gross vehicle weight (t GVW), large vans 2.5-3.5t GVW. All information stated correct at time of printing. December 2021.

The benefits of leasing an EV

There are many different ways to fund the purchase of electric vehicles and plug-in hybrids. During your planning phase it could be a good idea to do some modelling around the advantages and disadvantages of buying vs leasing electric vehicles specifically for your business, as every situation is different and the best funding option will be reliant on a range of factors. For many businesses, leasing presents a simple and effective way to start adding green credentials to their fleet. We have highlighted some of the key benefits to leasing EVs below:

→ **Lower your out-of-pocket costs**

Avoid large up-front costs and reduce capital expenditure for the business whilst maximising buying power.

→ **Affordable monthly rentals**

Leasing can make budgeting for new fleet vehicles easier and more predictable.

→ **Take advantage of new technology**

With OEMs limiting the development of ICE vehicles, all the latest technology is going in to their EV counterparts. Shorter leasing cycles let drivers experience the thrill of being a serial early adopter without having to worry about the hassle of reselling the car as that is the responsibility of the leasing company.

→ **No depreciation costs**

Reduce any concerns about residual values. The leasing company bears the risk of future EV model values.

→ **Expert maintenance and breakdown cover**

New technology demands new skills. Lease contracts can include service, maintenance and breakdown cover ensuring they are carried out by franchised dealers and qualified technicians with the latest EV equipment, knowledge and training.

→ **Electric and plug-in hybrid electric vehicles are not subject to the 85% lease rental restriction.**

Car lease rentals are normally an allowable expense for your business which can be deducted against your income or corporation tax charge. To incentivise the adoption of less polluting cars, bandings apply. So cars with a high CO₂ emissions value have a percentage restriction applied to the finance element, meaning companies can only deduct 85% of any rental payments against their taxable profits.

CO ₂ (g/km)	Allowed rentals	Disallowed rentals
50 g/km or below	100%	0%
Above 50 g/km	85%	15%



Race to Zero TIPS

Consider using our **FREE switch evaluation service**

Keen to fully explore the benefits of a switch to electric vehicles but feel you would benefit from some support? Our team of EV specialists can simplify things by guiding you through some of the key decisions and removing any guesswork.

3. It's a
marathon
not a sprint

The race to
zero 

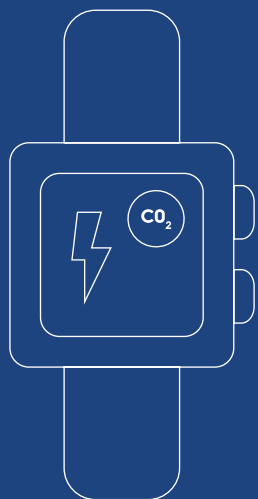
Pace yourself and begin slowly

So you've completed some hard yards analysing whether now is the right time to introduce electric vehicles to your fleet. The decision has been made to begin the switch. This is an important time to recognise that you are not going to be able to achieve everything overnight and it will take time to properly prepare and optimise the business for electrification.

Try not to over-commit in the beginning it could be a good idea to start small with a limited trial, then once the feasibility and business case have been proven, start to widen the adoption.

Here are some tips on setting up an EV trial:

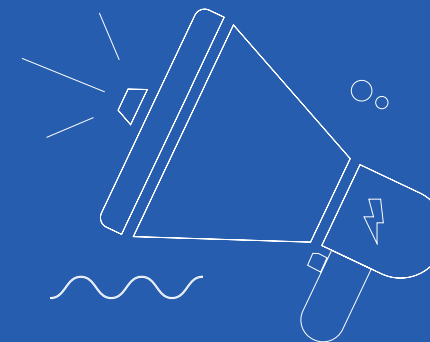
- If you are using pure EVs in your trial, **begin with a small number of vehicles** and test them in a range of real-world situations.
- Consider your charging needs. Do you need to install workplace chargers or can your trial get started with other forms of charging first? (eg. public or home-based solutions)
- **Pick the right candidates**, those that are likely to understand the benefits of a switch to EV and are keen to fully commit to the trial.
- Try to **involve someone high up in the business** leadership as this will set a good example to others and create a strong advocate when steering the wider business strategy.
- **Use any learnings** from the trial to support development of a full business case.
- **Communicate** progress and learnings with the wider company.



Make sure you start by measuring the results

Telematics info is a vital component in building a strong business case for the switch to lower emission vehicles. Here are some of the key reasons to build it into your trial or adoption plan.

- Provide you with data to calculate energy/fuel savings of EVs over ICEs
- Helps you work out the CO₂ savings of running EVs, which is vital for supporting the environmental arguments in favour of battery power
- Calculate battery range in realtime including monitoring weather, temperature, elevation and traffic congestion to give a true range
- Decide recharging priorities among operational fleet vehicles
- Help you calculate charging needs
- Record the road tolls and parking savings available to EVs
- Take advantage of predictive service and maintenance



Create a clear communication strategy

It's really important to communicate how the business is going to win its race to 2030. Detail how you are going to get there together and have some fun along the way. Electric cars are exciting!

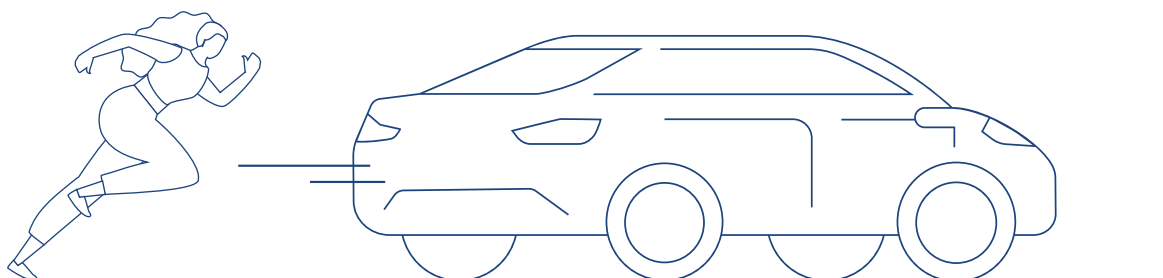
- Set-up good communication channels.
- Paint a positive picture and make sure you do some myth busting.
- Consider setting up a community for new EV drivers.
- Use the early adopters as strategy ambassadors.
- Get people in the cars.
- Make information as clear and succinct as you can.

4. Living with an EV

What to expect from an electric vehicle

Driving an electric vehicle can feel quite different from traditional ICE vehicles. They glide effortlessly, are whisper quiet and deliver instant power from a standing stop.

Despite their heavy batteries, they typically handle really well because the battery tends to be positioned low in the vehicle, plus they lack a heavy engine above the front axle. Evidence suggests that only a tiny proportion of people would consider switching back to traditional vehicles once they have made the switch. But that doesn't mean there isn't a lot to learn about EVs when starting out and there is often a period of adjustment when moving from a petrol or diesel-based vehicle. Fleet managers can help make this a comfortable transition for employees by laying some groundwork to help support new EV drivers in establishing realistic expectations.



Athlon International had a simple question: **Is it even feasible to take an electric car on holiday?** And if so, what's the best way to do it? So they decided to put the question to the test. Two teams were set up in order to examine which driving style is best when holidaying with an electric car.

The rules were simple:

- Two completely identical, fully electric Mercedes EQC vehicles were used.
- Both journeyed 942 kilometres from Almere (Netherlands) to Sölden (Austria).
- They left at the exact same moment and travelled the exact same route.

There was one variable - Speed. **Team 1** was restricted to 100 km/h. **Team 2 (High Speed)** was permitted to drive at the speed limit and up to 140 km/h on roads in Germany that have no speed limit.

The result: **Team 2 (High Speed)** arrived at the end destination three hours after **Team 1**. How did this happen? the winning team completed the journey in fifteen hours. This included the hour and a half they were stuck in traffic and the three charging stops they made. They were faster, despite their speed limit, because the other team had to stop and recharge on two extra occasions.

This simple test demonstrates the effect that driving style can have on range and battery performance. Other lessons learnt along the way: properly plan your route ahead of time, try to navigate from fast charger to fast charger and understand what car features can help reduce energy consumption along the way.



A checklist for integrating EVs into your fleet

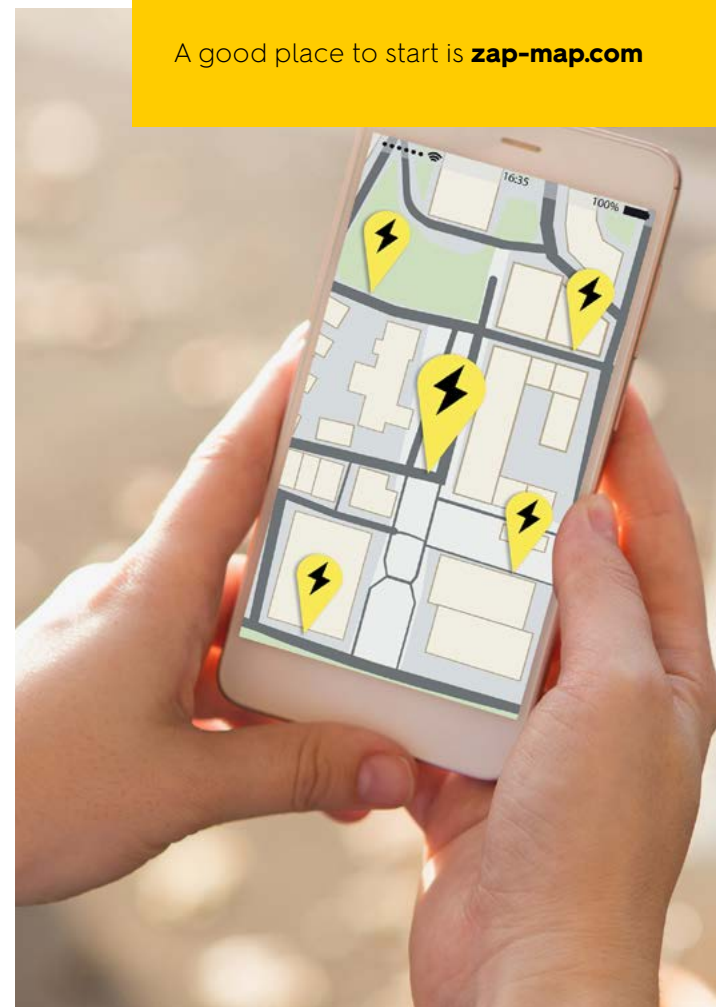
- Help drivers get to know their vehicles**
Make sure there is enough vehicle information available to drivers and try to ensure it matches the make they are using as there can be considerable differences.
- Help set the expectations of EVs**
For new drivers understanding the limitations of an EV can be tricky. Play a role in highlighting what to realistically expect from living with an EV.
- Develop a culture of route planning**
Good route planning is crucial to stress free EV driving. Ensure drivers know how to properly plan routes and signpost charging opportunities.
- Have guidance on charging etiquette**
The way people use chargers is especially important when they are being shared. Set guidelines to ensure users remain considerate to other EV drivers.
- Educate drivers on efficient driving**
The way drivers behave behind the wheel can have a dramatic effect on vehicle range. Help them to understand where the biggest impacts are with training and guidance.
- Update mobility and HR policies to account for EV drivers and NET zero initiatives**
You don't need to completely rewrite your policies but adding new information as and when it becomes important to employees is a good approach.
- Iron out the business approach to home charging and driver energy reimbursement**
Adding clear guidance on this subject to your mobility policy will be helpful for employees as businesses choose to approach this area in a multitude of ways.
- Educate business leaders and stakeholders on impact of EVs within the business**
Demonstrate how much of a positive impact EVs are having on drivers and the business.
- Use telematics and data to measure results**
Understanding your data can help you manage driver behaviour, spot problems and course correct before they become too costly.
- Have an emergency charge procedure**
Ensuring drivers know what to do if they run out of charge can help to further reduce any range anxiety they may have.
- Increase charge points based on demand and usage**
It can be easy to assume you need lots of chargers but what does the data tell you?

Race to Zero TIPS

Equip your drivers with the right apps

Setting people up for success is a big part in any EV rollout. A good way to make sure they feel supported when first engaging with a new electric vehicle, is to equip them with helpful apps which will help them with everything from finding the nearest rapid charger through to costing a journey.

A good place to start is zap-map.com



Getting to know your EV

Despite often looking identical to their ICE based counterparts, electric vehicles tend to have a number of key differences. The following section highlights some of the biggest ones to look out for.

Luggage areas

The reduced need for a large heavy engine often results in some additional room or luggage space in the EV. But remember to try not to leave unnecessary items in the car when not needed as any extra weight can impact range.

Specialised tyres

Because of the instant power transfer to the wheels EVs need different types of tyres than traditional vehicles. They're bigger and more expensive and due to the demands on them need replacing more often.



Heating and cooling

Using air conditioning and heating to manage cabin conditions uses electricity so drains the battery quicker. So, use it sparingly when on the go. One way round this is to use the charging app to automatically pre-condition the vehicle while it is still attached to the charger. This can work particularly well on a cold winter's morning.

Driving modes

EVs use 'Driving Modes' to manage vehicle performance or make the vehicle more economical. Enhancements to these drive modes can be made by the manufacturer and shared with vehicle owners at any time through downloads and system updates.

Regenerative Brakes

In simple terms regenerative braking turns your car's kinetic energy into electricity which helps to charge its battery and boost efficiency. Different manufacturers deploy slightly differing systems.

Charging behaviour

Many newcomers to electric vehicles may not realise that you can part charge an EV battery which makes it easy to keep it topped up with short bouts of regular charging.

Race to Zero TIPS

Consider supporting your drivers with extra training and suitable vehicle onboarding which includes some familiarisation prior to them receiving their chosen vehicle. You should consider either working with your fleet supplier to introduce an internal programme or consider using an existing training programme such as those provided by the BVRLA:

BVRLA - [bvrla.co.uk/learning-development/courses.html](https://www.bvrla.co.uk/learning-development/courses.html)

5. Ready to join the race?

The race to
zero 

It's easier to win when you're working together

The Government has ambitious plans to completely transform motoring in less than a generation. Fleets of the future will need to be more sustainable and less damaging to the environment.

Fleet professionals have always been a force for change within the transport industry and will continue to be pivotal in this transition as people begin to move from older technology to newer.

The 2030 deadline for the end of ICE production is looming large on the horizon but rest assured you are not alone in your race towards NET zero.

Join us in the race to zero. Athlon will get you there



We hope this guide has been helpful

If you would like to discuss any of the topics covered in this guide in more detail or need further support on any EV related question, our team of experts are standing by ready to help.

Contact the team

T 0345 600 3425

E contact_uk@athlon.com



Athlon Mobility Services UK

PO Box 6444

Milton Keynes

MK10 1ND

T 0345 600 3425

E contact_uk@athlon.com

W athlon.co.uk