

Powering up

Boosting the Access to Electric Vehicles



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By EVA England



The Electric Vehicle Association (EVA) England was established in June 2020 to offer a voice, services and representation to current and prospective electric vehicle drivers in England. EVA England is a non-profit community interest company founded by passionate EV drivers inspired by the benefits of electric driving and concerned by the health and climate impacts of the use of petrol and diesel cars and vans.

EVA England is an independent group and represent our members and the wider EV driver community.

Community Interest Company in England, number 12649115.



Public First 99

EVA England thanks Public First for their contribution to this report. Public First is a policy, research, public opinion and strategy consultancy which works with organisations around the world to tackle major public policy and strategic challenges.

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© Executive Summary

The UK has set itself ambitious climate targets. Large scale changes in the way we live our lives and run our economy are going to be needed to meet these targets. This is especially true when it comes to the way we get from A to B. From air travel through to road transport, the UK transport system is going to have to decarbonise, and rapidly.

Whilst public transport improvements, more active lifestyles and initiatives like car clubs can reduce some of the cars on the roads, the reality for the vast majority of households is that cars for personal use are always going to be necessary. Cars are here to stay, but we need a change in the kind of cars we drive.

The Climate Change Committee has said that all new vehicles should be electrically propelled by 2035 and the government has committed to the Zero Emission Vehicle Mandate that will see all new cars and vans being 100% zero emission at the tailpipe by 2035.¹

This transition is already underway in the UK. The government has incentivised the adoption of electric vehicles through a mix of subsidies and tax benefits, as well as investing in charging infrastructure and encouraging the automotive industry to diversify production. As a result, the number of new electric vehicle registrations has been rapidly increasing year on year.

However, the total number of clean cars on the road remains very low, at only 2% of all cars and ownership is concentrated in higher income groups. The price of new electric vehicles remains higher than traditional cars, and the second hand market for electric vehicles – where most people buy their cars – is still extremely limited.

^{1.} Committee on Climate Change, Net Zero: The UK's contribution to stopping global warming, May 2019; gov.uk, Government takes historic step towards net-zero with end of sale of new petrol and diesel cars by 2030, November 2020



And while the price of EVs continues to go down, and the second hand market is growing as more cars filter through, many drivers won't have access to the lower running costs and wider benefits of EVs for many years, which presents a fairness and access issue that could cause resentment and a feeling of 'them and us'.

Despite this, the government has rolled back all direct subsidies such as the Plug In Car Grant for the purchase of electric vehicles, and is relying on greater regulation, more charging infrastructure and beneficial tax treatment to encourage adoption. This is not enough. We know the high upfront costs of clean cars are a key barrier to their adoption, and the Uxbridge and South Ruislip by-election, demonstrated the feelings of the electorate when regulations are imposed but support to meet the imposed requirements isn't perceived to be given.

More recently, the Prime Minister gave a speech on rolling back green initiatives, and whilst the rhetoric was more robust than the policy announcements, it is clear that the cost of transition will be a top issue for the coming general election, and appealing to the 'average' voter on green policies is more crucial than ever.

We need to ensure that the transition to clean cars increases pace to meet our climate targets, coupled with the need to not be driven solely by wealthier households, the UK needs policy action to make electric vehicles more accessible to the average consumer.

The government must widen access to electric vehicles and this paper makes three recommendations for policymakers to achieve this goal:

1. Medium and large companies to offer EV salary sacrifice schemes to their employees

Salary sacrifice schemes for electric vehicles can save employees 30-60% of the cost of personally leasing the same car.² The government should mandate that all medium

^{2.} LoveElectric, Electric Car Salary Sacrifice: A Guide to Tax Bracket Savings, 10th February 2023

and large companies (over 50 employees) must offer an EV salary sacrifice scheme for their employees. This would be available to all employees subject to existing limitations on salary sacrifice. Implementing this policy would have the dual advantage of boosting the number of people driving clean cars and feeding the second hand car market over time.

2. EV social leasing programme for lower income households

The Government should target subsidies for electric vehicles by introducing a subsidised EV leasing programme for lower income households. Modelled on France's new social leasing scheme, the government should contract with UK based manufacturers to produce a certain number of 'no frills' electric cars per year which will be guaranteed for purchase by the state-backed scheme. Households below a certain income would then be eligible for a discounted lease, up to a certain number of cars per year. This measure could be geographically targeted to areas impacted by clean air zones.

3. Zero-interest EV Loans

Scotland and France have set a precedent for state provision of interest free loans for the purchase of electric vehicles. The government should make a limited number of zero interest loans available to average income and below households who live in or near clean air zones. Loans would be available to purchase new or used electric cars, and would be paid back without interest over a 5 year period. This can be delivered either solely by the government through an agency to administer the loans, or in partnership with private finance providers.



The case for action

It is now widely accepted that reducing global emissions is necessary to ensure the survival of our planet as we know it, and its inhabitants. Countries across the world have set bold targets and made significant commitments to reach those goals.

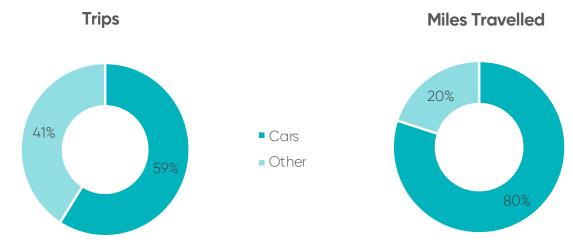
As part of that global effort, the UK has committed to net-zero carbon emissions by 2050. This is a significant commitment, and one that is going to take wholesale changes in the way we run our economy and live our lives. From the way we travel to methods of producing food, this is a moment that requires mass change in the way we do things.

One area that will need to decarbonise drastically is the way in which we all move around. Transport is the largest emitting sector of the UK economy, responsible for 25% of total UK greenhouse gas emissions in 2021 and over half of UK transport emissions come from cars. For decades, internal combustion engine (ICE) vehicles have been a cornerstone of transportation, offering convenience and accessibility for the vast majority of households. In 2020, households in England outside of London had an average of 1.33 cars.³ However, this convenience comes at a substantial environmental cost. The tailpipe emissions from ICE cars release a plethora of harmful pollutants, including carbon dioxide, nitrogen oxides, particulate matter, and volatile organic compounds. These emissions have dire consequences for air quality, public health, and contribute significantly to the UK's greenhouse gas emissions. Reducing emissions from the cars we drive will be absolutely necessary if the UK is to achieve its net zero goals.

Whilst some reductions can be achieved by encouraging greater use of public transport, car clubs or more active lifestyles which incorporate more cycling or walking, the reality for the vast majority of UK households is that cars for personal use will always be

^{3.} NimbleFins, Number of Cars in the UK, 2023

necessary for the day-to-day running of their lives. This is especially true outside of Central and Greater London, where public transport infrastructure is simply never going to deliver the convenience of personal car use. In 2021, car trips were the most popular mode of travel with 59% of all trips taken by car and 80% of all miles travelled.⁴



Source: Department for Transport, National Travel Survey 2021

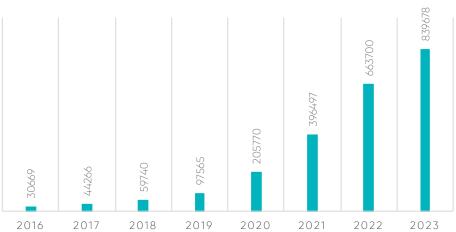
A wholesale change in the cars we drive is therefore going to be necessary if we are to maintain the convenience we are used to whilst reducing harmful emissions. Electric vehicles (EVs) offer a solution to this problem. EVs produce zero tailpipe emissions, meaning they do not emit CO2 or other harmful pollutants during operation. By shifting away from ICE cars to EVs, the UK can significantly reduce its carbon footprint and improve air quality. The Committee on Climate Change has said that all new vehicles should be electrically propelled by 2035, if not sooner, if the UK is to achieve its net zero target. In response, the government has mandated that there will be no new sales of petrol and diesel only cars and vans after 2030, and that all new cars and vans are to be 100% zero emission at the tailpipe by 2035.

These targets are a good step, and the EV market is growing in response to clear government direction both in the UK and across Europe. The transition from ICE vehicles to EVs is underway. Over the past few years, there has been a sizeable increase in the number of electric vehicles on British roads:⁵

^{4.} Department for Transport, *National Travel Survey 2021*, 31st August 2022 5. ZapMap, *EV market stats 2023*, 8th August 2023







In 2022, 16% of new car registrations in the UK were battery electric vehicles (BEVs), an increase of 40% on 2021. Whilst new petrol and diesel registrations were down 10% and 34% respectively. Amazingly, the number of new BEV registrations has increased by nearly 2000% since 2017.6

New Car Registrations in the UK

5-year Percentage Change in 2022 (compared to 2017)

Petrol Diesel HEV PHEV BEV -40% -88% +359% +207% +1808%

Source: Department for Transport, Vehicle licensing statistics: 2022

But despite these encouraging trends, BEVs still only account for 2% of vehicles on the road.⁷ There is a significant way to go to get to a place where driving an electric vehicle is the norm. And this is where we need to get to if we are to reduce our emissions to the levels needed by 2050.

We need to drastically increase the number of EVs, and this means addressing some of the key barriers for consumers purchasing and

^{6.} Department for Transport, Vehicle licensing statistics: 2022, 15th June 2023

^{7.} RAC, The road to electric - in charts and data

driving clean vehicles.

One of the most significant challenges is the cost associated with purchasing an electric car. Electric vehicles tend to have higher upfront costs compared to traditional ICE vehicles. This cost discrepancy is primarily due to the expensive battery technology used in EVs. Batteries represent a substantial portion of an EV's total cost, and advancements in battery technology are necessary to reduce manufacturing costs and, consequently, the retail price of EVs. For now, new EVs suffer from a significant price premium.

Further compounding the problem is the fact most people buy their cars on the second hand market. In 2022 there were nearly 7 million used car sales, compared to just over 1.5 million new car sales.⁸ But for EVs the second hand market is extremely small. In 2022 sales of used BEVs represented only 4% of the used car sales market.⁹ Even though BEVs share of the used car market is growing at pace, there will need to be a large increase in the purchase of new EVs to enable a thriving second hand market where clean vehicles are readily available, as well as increases in the life of batteries.

As a result, driving an electric vehicle is very much concentrated in higher income groups at the moment. A recent survey found that 21 percent of UK electric vehicle (BEV and PHEV) drivers had an annual household salary before tax over £83,000; the income group with the largest share of EV drivers. This compares to participants with an annual household income at or below £21,000 British pounds which constituted only 7% of EV drivers surveyed.¹⁰

We need to make the purchase of EVs more accessible for average income groups.

We know the public perceive cost to be the major barrier to buying EVs, despite cheaper running costs over the lifetime of the vehicle. To increase uptake we therefore need to bring down the upfront

^{8.} HeyCar, Car sales statistics 2023 - UK & worldwide, 4th May 2023

^{9.} SMMT, Used car market down but EVs buck trend, 10th February 2023

^{10.} Statista, EV drivers by annual household income range before tax in the UK 2021, 20th July 2023



cost associated with EVs or enable greater choice in financing their purchase or renting.

This is even more urgent in the face of incoming bans on new petrol and diesel vehicles. Failing to increase access to clean cars risks a situation where wealthy people can afford to buy a clean vehicle, taking advantage of the incentives for doing so, whilst people on lower incomes are stuck with dirty polluting vehicles on their driveway, which cost more money to run in the long-term and impact local air quality. We need to ensure a just transition as we seek to meet our net zero targets.

This is politically important. Both political parties are committed to net zero targets, and are signed up to phasing out of ICE vehicles. But the Uxbridge and South Ruislip by-election result – where the expansion of central London's Ultra Low Emission Zone policy is widely considered to have decided the result –has shown parties what can happen when the electorate feels unsupported to meet the requirements being set for them by government. Politically, parties need to show the electorate how they will support them to meet targets which will have an impact on the vast majority of people's lives such as phasing out of ICE vehicles. This is especially true in areas where drivers are being penalised for driving particular vehicles such as clean air and low emission zones.

Bringing the average person with us is going to be absolutely vital to ensure the huge shift needed in the kind of vehicles we drive. Notwithstanding the 2030 phase out of new ICE only vehicles, there is going to need to be a wholesale change in the makeup of the cars on the road and this is going to have to happen quickly in order to meet out climate goals. Simply waiting for the EV market to grow from 2.1% of cars on the road to 100% is not going to be enough unless government intervenes to help ordinary consumers make the shift, and risks people being left behind.

On current uptake rates of electric vehicles, by 2035 we can expect around 82% of new vehicle registrations to be BEVs.¹¹ Given the

^{11.} Public First modelling using data from ZapMap, EV market stats 2023, 8th August 2023

government's target is for all new cars and vans be fully zero emission at the tailpipe from 2035, simply leaving the market to its own devices is not going to deliver the speed of change needed.

Finally, we know that air quality, especially in urban areas is significantly impacted by the number of polluting cars on the streets. In London especially it is estimated that 4000 premature deaths a year are caused by dirty air and this is a big driver of the introduction of the ULEZ policy.¹² To realise these air quality and health benefits at a mass scale means supporting average households to drive electric vehicles.

Conclusion

The transition from ICE cars to electric vehicles in the UK is a critical step towards reducing emissions, improving air quality, and achieving climate goals. While the progress made in EV adoption is commendable, challenges such as affordability must be addressed to accelerate the transition. Governments, industries, and consumers must collectively work towards making EVs more affordable through a combination of incentives, infrastructure development, technological advancements, and strategic partnerships. By doing so, the UK can pave the way for a greener and more sustainable transportation future, ultimately benefiting both the environment and society as a whole.

This has to have a focus on making clean cars more accessible to the average consumer. The rest of this paper sets out 3 policy calls to action to democratise clean cars so that they are more affordable to the average consumer – addressing the primary barrier to the take up of EVs amongst ordinary people.

^{12.} The Times, Ulez saboteurs topple cameras on Sadiq Khan's expansion day, 29th August 2023



O Democratising electric vehicles

As outlined in the preceding chapter, if we are to reach our net zero targets in a just way we need to significantly increase the rate at which electric vehicles are adopted, and by a broader demographic of consumer.

The government set out the measures it is taking to facilitate this transition in its 2021 Transitioning to zero emission cars and vans: 2035 delivery plan. The government primarily expects the private sector to drive the transition:

Government will not deliver this transition alone. We will set direction, remove barriers and support the early market, but it is the private sector that will lead the charge towards mass ownership of zero emission vehicles.

However, there are some measures directly aimed at reducing costs in order to facilitate the transition:

- Until April 2023, the plug-in car grant provided up to £1,500 (more generous in preceding years) towards the purchase of a zero emission car priced under £35,000. This grant is no longer available for cars, but remains available for other forms of vehicle; taxis, motorcycles, vans and trucks and wheelchair accessible vehicles.
- Zero emission cars are exempt from vehicle excise duty (VED) until at least March 2025.
- Company Car Tax (CCT) rates are lower for zero and ultralow emission cars. The company car tax on electric cars was 0% for the 2020/21 financial year (reduced from 16%). Since then, CCT rates for EVs have increased but is still just 2% in 2022-23,

with the rate frozen until at least 2025. After that, the tax will rise to 5% by 2027/28.

• Companies are eligible for enhanced capital allowances when buying a new zero emission car for business use which means 100% of the cost of the car can be written off against the taxable income of the period in which it was bought. The government is committed to this policy until March 2025.

Other government measures are focused on increasing charging infrastructure, increasing supply and bolstering supply chains (for example, incentivising investment in gigafactories), research and development and transitioning fleets. Noticeably, many of the support pathways for the transition to zero emissions cars and vans shifts from financial support through grants and the tax system, to greater regulation from the mid-2020s.



HM Opposition

At the time of writing, The Labour Party is polling far ahead of the Conservatives, with a change of government currently looking likely at the next general election in 2024.

Green investment is a major component of Labour's plans for government. Their Green Prosperity Pledge commits to £28 billion of capital investment in green industries per year by the end of their first Parliament.

So what would a Labour government do to boost adoption of electric cars?

The party has committed to an electric vehicle plan which would:

- Invest £2 billion to part-finance the creation of eight new, additional gigafactories in the West Midlands, the North East, the North West, and the South West. The party estimates this would generation £30 billion in economic growth, and power 1.8 million cars.
- Accelerate the roll-out of public charging points to make it easier to own an electric car wherever you live, with binding targets which hold central government accountable for progress and ensuring local authorities and sub-regional authorities are able to deliver charge points.
- Negotiate a long-term agreement with the European Union to make Brexit work for the automotive industry.
- Make the UK a clean-energy superpower by 2030 with net-zero carbon electricity, lowering UK electricity costs and addressing a barrier to the UK automotive sector's competitiveness.

Source: Bloomberg, UK Labour Party Pledges £2 Billion for Eight Battery Plants, 9th March 2023

Given the rate of change needed, there is a risk that this shift away from direct support to greater regulation will undermine the increasing demand for electric vehicles. As outlined above, we know that upfront cost is the major barrier to purchasing an EV for the ordinary consumer.

This paper is therefore focused on the specific issue of affordability of EVs for the average consumer. It is not seeking to examine all of the barriers to purchasing and running EVs for consumers such as charging infrastructure, nor is it examining the supply side problems and opportunities for EV production or seeking to look at what you could do to increase commercial use of EVs in private and public sector fleets. These issues are important to the rollout of EVs and over time progress in these areas will encourage the mass take up of clean vehicles and lower costs as the market matures. However, as outlined above we need this to happen at pace and in a just way. This report is therefore focused specifically on what demand-side action government could take to make EVs more affordable and accessible for the average consumer in the short term.

In order to do this, we set out three policy options that policymakers should consider:

- Expanding salary sacrifice
- 2. Introducing Social leasing
- 3. Providing 0% loans for EV purchases

1. Expand salary sacrifice

Salary sacrifice is an arrangement where an employee agrees to exchange part of their salary for a non-cash benefit, such as a company car, childcare vouchers or other employee benefits. The salary sacrificed is not subject to income tax or National Insurance contributions, which often leads to tax savings for the employee. The sacrificed amount is used to cover the cost of the benefit provided by the employer.



For example, if an employee earns £40,000 per year and decides to sacrifice £5,000 of their salary for a low-emission company car, their taxable income would be considered as £35,000 for income tax and National Insurance purposes.

Many companies have long offered salary sacrifice schemes for a company car. Typically, the schemes involve the company renting a brand new car from a leasing company on a business contract hire for between two and four years. The company pays the leasing provider a monthly fee which is then covered by the employee through salary sacrifice. There is no upfront cost for the employee and the schemes generally include essential extras like road tax, insurance, breakdown cover and servicing. At the end of the lease period, the employee returns the car and settles any extra charges. Sometime there is an option to buy the car at the end of the lease, otherwise the cars are often sold on the second-hand car market.

The car is then subject to company car tax (CCT) as a benefit-in-kind contribution. The level of CCT is based on the value of vehicle and the type of fuel it uses multiplied by the employee's rate of income tax. For example, a £40,000 car with emission levels which attract a 25% BiK banding will have a rateable figure of £10,000. The rateable figure is then multiplied by the level of income tax (20%, 40% or 45%) so the annual CCT would be either £2,500, £4,000 or £4500. The employee is liable for payment of CCT.

For traditional ICE vehicles, salary sacrifice has become less advantageous in recent years. In Autumn Statement 2016 new salary sacrifice schemes for company cars were removed from the list of areas that can benefit from tax and NICs reductions, unless they are ultra-low emissions cars. Similarly, changes to CCT mean there is little benefit to the employee of leasing an ICE car through a salary sacrifice scheme versus a personal leasing arrangement. However, the schemes remain much more advantageous for employees leasing electric vehicles.

This is because electrics cars are still able to benefit from reduced

^{13.} MoneySavingExpert, Autumn Statement 2016: Salary sacrifice perks cut back, November 2016

tax and NICs contributions through salary sacrifice and in April 2020 company car tax on electric cars was slashed from 16% to zero. Since then, CCT rates for EVs have remained very low (2% in 22/23) and will remain low for the foreseeable future; rising to only 5% by 27/28.. The overall effect of the tax regime for salary sacrifice schemes for electric vehicles is a 30-60% saving compared to leasing an EV privately.¹⁴

Although higher earning employees see a bigger advantage than average earning employees – due to the structure of the tax break – BVRLA data shows that 60% of salary sacrifice users are basic rate taxpayers. Salary sacrifice schemes for electric vehicles therefore represent an extremely effective way of reducing the costs associated with buying or leasing an electric vehicle for the average consumer.

There is limited data on the number of companies offering or the uptake of salary sacrifice schemes for electric vehicles. Estimates vary from a third to half of employers offering such a scheme. Increasing the number of employers offering these schemes is therefore a relatively easy way to improve accessibility of electric vehicles to the ordinary consumer.

Currently, companies can choose to offer salary sacrifice schemes for company cars, there is no requirement for them to do so.

Policy 1: The Government should mandate that all companies with over fifty employees must offer an electric vehicle salary sacrifice scheme.

Mandating that all medium and large companies must offer an electric vehicle salary sacrifice scheme would mean that over 14 million people – over half of all employees in the UK- in over 40,000 companies

^{14.} LoveElectric, Electric Car Salary Sacrifice: A Guide to Tax Bracket Savings, 10th February 2023

^{15.} BVRLA, #SeeTheBenefit campaign secures company car win for the sector, 22nd November 2022

^{16.} Fleet News, A third of fleets introduce salary sacrifice, 1st June 2023; Employee Benefits, 53% of employers offer an electric vehicle salary sacrifice scheme, 17th May 2022; Fleet Evolution, One-Fifth of Companies Offer Salary Sacrifice Schemes, July 2023.



would be able to benefit from lower-cost hassle-free electric vehicle leasing.¹⁷ Employers would be mandated to offer a scheme, but there would be no requirement on employees to take it up as personal financial circumstances dictate whether salary sacrifice is worthwhile for individual employees.

The mandate should be limited to medium and large companies to ensure a disproportionate regulatory burden is not placed on small companies of under fifty employees.

We estimate the cost to the Exchequer to be around £200 million per year in lost income tax and national insurance receipts. However, there would be some additional revenue coming in to the Exchequer in the form of increased CCT receipts, as well as the VAT receipts from the purchase of the new cars.

This would incentivise the take up of electric vehicles, especially amongst groups who might otherwise be put off by the costs associated with purchasing or leasing an EV. As outlined above, this would help the UK meet its climate goals, whilst ensuring a just transition across different income groups.

2. Introduce social leasing

Expanding salary sacrifice is one way of making electric vehicles more accessible for the average consumer, another way is for the state to directly subsidise the costs of leasing new electric vehicles for those on lower incomes.

Since 2011 the plug in car grant was the UK government's direct subsidy for the purchase of electric vehicles.¹⁹ It was either paid upfront when purchasing an electric car in full or when taking out a lease for a new

^{17.} Department for Business, *Energy and Industrial Strategy, Business population estimates for the UK and regions 2022:* statistical release, 6th October 2022

^{18.} Calculated assuming an uptake rate of 5%, and modelled on the average salary and approximate leasing charge for family sized car.

^{19.} NI Assembly Research and Information Service, *A comparison of electric vehicle (EV) markets and policies to promote adoption in Europe*, 8th September 2021

car the value of the grant was usually shared across the lifetime of the lease in the form of lower monthly payments. When it was first introduced the grant was worth up to £5000, it was reduced over time to £1500 for cars with a value of less than £35,000. The car grant has now been phased out with subsidies available for other vehicles like vans and taxis.

Although new registrations of electric vehicles are growing rapidly, they still only constitute a fraction of the market. Consumers, especially those on average and lower than average income, still need support to purchase and the market still needs to grow rapidly in order to facilitate the change needed in the UK's fleet, and support a thriving second hand car market where most people buy their cars.

There is a risk that removing subsidies now undermines consumer confidence to purchase electric vehicles, especially amongst groups who are not able to access electric vehicles without support. Comparable nations are continuing to have subsidies in place for a number of years even if they are being phased down, and many were much higher in the first instance.

Whilst the government cannot subsidise electric vehicle purchases in perpetuity, subsidies should be reformed in the short term to be better targeted rather removed entirely.

In France, for example, President Macron has pledged a social leasing scheme which will make 100% electric cars available to low income households for 100 euros per month. There has been little detail on who will be eligible, the mechanism for its delivery and the level of government subsidy. However, the scheme was confirmed in April 2023, and it is understood that eligible citizens will be able to reserve a car in Autumn 2023 to be delivered in 2024.²⁰ It has been reported that the intention is to lease 100,000 cars per year through the scheme.²¹

A recent report by Transport and Environment France and French

^{20.} L'automobile & L'entreprise, Social leasing: "The system will be launched in the fall," confirms Élisabeth Borne, 27th February 2023

^{21.} AutoInfos, Social leasing: financing of 10,000 electric vehicles planned for 2023, 27th September 2022; The Connexion, France's electric car for €100/month scheme: who is eligible?, 25th May 2022



think tank IDDRI sets out a proposal for how the scheme could work in practice. They propose the French government contracts with French and European manufacturers of electric vehicles to produce small, functional electric vehicles which the state will buy at a reduced price. They estimate that 'no-frills' models of clean cars could reduce the cost of purchase to the state by 20–30%. An operator – either public or private – would acquire the cars and would lease them to target populations for a number of years. The paper recommends that the first four income deciles are targeted alongside certain requirements for already owning a polluting car. Maintenance costs would be included in the lease.

The report estimates that electric vehicles could be leased in this way for between 70 and 200 euros a month depending on vehicle size, with up to 900,000 low income households benefiting between 2024 and 2030. The report projects the scheme would cost around 800 million euros a year and could be offset by reducing blanket subsidies for electric vehicles funded by government elsewhere.

The report offers a number of benefits to the scheme:

- With rising costs of traditional car fuels, low income households risk being most vulnerable to rising costs as they are forced to continue driving fossil fuel reliant polluting cars;
- As low emission zones are rolled out in cities across France, a government backed social leasing scheme ensures lower income people are as able to adapt to changing requirements as wealthier counterparts;
- It provides a guaranteed market for EV manufacturers, especially for lower cost 'everyday' cars which need to be developed and mass-produced in the next few years to meet phase out targets rather than expensive models which wealthier consumers tend to buy;

^{22.} Transport and Environment, *Leasing social, Propositions pour un mécanisme social et industriel innovant et écologique,* 12th May 2023

- It is a form of industrial policy which supports European manufacturers with a guaranteed market and;
- It will boost the development of a second hand car market where affordable everyday cars are more readily available.

The French social leasing model is innovative and answers many of the challenges we are grappling with in the UK.

Policy 2: The Government should target subsidies for electric vehicles by introducing a subsidised EV leasing programme for lower income households.

The UK government should replace the Plug-In Car Grant which has recently been phased out with a more targeted subsidy for lower income households through a social leasing programme.

This could take the form of a monthly subsidy paid to existing vehicle leasing companies which is passed on to the consumer when they lease electric vehicles to customers who fall below a specific income bracket or the government could establish an arms-length body or public corporation to deliver the scheme.

In this scenario the government would contract with UK based EV manufacturers to supply a certain number of basic electric cars per year which will be guaranteed for purchase by the state-backed scheme. Households below a certain income would then be eligible for a discounted lease - £200 a month for example - up to a certain number of cars per year. Leases would be provided for five years. At the end of the lease period the government agency would sell the cars into the second hand car market, boosting the second hand market which over time will make clean cars more accessible without government intervention.

We estimate the net cost to the Exchequer to be approximately £1 billion of capital spend to provide 100,000 cars through a social leasing



programme delivered through an arms-length government body.²³ However, the scheme would provide a source of revenue as lessees make their monthly payments. We estimate the revenue receipts over the lifetime of the lease to total over £10,000 per car. If the government was to lease 100,000 cars, it would create a revenue stream worth £1 billion to the Exchequer.

This policy would have a number of advantages; using public procurement to support UK production of electric vehicles, ensuring electric vehicles are more accessible to lower income households, creating a new revenue stream for the Exchequer and giving a large boost to the second hand EV market.

3. Provide zero-interest loans for EV purchases

Social leasing would provide a way for lower income households to make lower monthly payments to lease a clean car, incentivising take up and reducing their driving costs in the long term. Another method some governments have used to incentivise the upfront purchase of EVs is through the provision of low interest loans.

In 2011 the Scottish government introduced the Low Carbon Transport Loan. Drivers in Scotland could take out an interest free loan of up to £35,000 to cover the cost of purchasing an electric vehicle and £10,000 for a new electric motorbike or scooter. The loan had to be repaid over six years. Uptake of the loans increased steadily and in 2018/19 twelve percent of new ULEV sales in Scotland were supported by the scheme.²⁴

In 2020 loans for new EVs were phased out, and the Low Carbon Transport Loan is now available for the purchase of used electric vehicles up to the value of £30,000, to be repaid over a five year period.²⁵ The

^{23.} Costings assume government purchases 100,000 cars at £25,000 per car less a bulk purchase discount of 10%. At the end of the lease period, the government sells the cars onto the second hand car market at an estimated 40% of their original price. This gives a net capital cost of £1 billion.

^{24.} Energy Saving Trust 2019

^{25.} Energy Saving Trust, Energy Saving Trust Low Carbon Transport Loan (Used EV Domestic), 2023/24 Eligibility Criteria

scheme is funded by the Scottish government and delivered by the Energy Saving Trust.

In June 2022, the Scottish government said the Low Carbon Transport Loan had provided over £165 million of interest free loans and delivered 6000 electric vehicles over a decade.²⁶

The French government has likewise announced a trial of an interest-free loan scheme targeted at lower income households and small businesses in low emission zone areas. From January 2023 inhabitants with an income at or below $\leq 14,000$ and some small businesses living in or near low emissions zones will be able to apply for a loan of up to $\leq 30,000$, repayable over 7 years, for the purchase of electric and hybrid cars and vans up to a value of $\leq 45,000$ and $\leq 60,000$ respectively. Citizens will take out the loan with banks that have signed an agreement with the government.

The French government is financing this policy by granting tax reductions to the banks equivalent to the interest they would have received on normal market terms. The government is not underwriting or guaranteeing the loans.

As discussed in the preceding chapters, supporting ordinary consumers to transition away from polluting vehicles to clean cars is not just a social and climate imperative, but is politically important too.

The electorate does not react kindly to government imposing requirements on their everyday lives without being supported to meet those requirements. This is evidenced with the expansion of the ULEZ in London where there has been a lot of public resistance to the change, even having a tangible impact on the outcome of a by-election in outer London. Similarly in Manchester, the introduction of an clean air zone has been politically difficult for the Mayor.²⁸

London is not alone in introducing low emission or 'clean air' zones.

^{26.} Transport Scotland, £30 million to support the shift to zero emission transport, 6th June 2022

^{27.} Service-Public.fr, Zero-interest loan for low-emission vehicle purchases in low-emission areas, 27th April 2022

^{28.} The Guardian, Vindication or cowardice? Andy Burnham's clean air gamble in Manchester, 1st August 2023



A large number of UK cities have or are in the process of introducing zones with varying degrees of vehicle restrictions.



Source: FleetPoint, Three more UK cities introduce clean air zones, January 2023

Policy 3: The Government should provide or support interest free loans for the purchase of new and used electric vehicles for average income and below households who live in or near low emission zones.

To support ordinary consumers to transition to clean cars the government should provide or support interest free loans for the purchase of electric vehicles. The loans should be available for both new and used cars to stimulate demand for used cars and also encourage greater supply over the long term. Modelled on the Scottish Low Carbon Transport Loan loans for new cars should be available up to £30,000 and £20,000 for used cars and be paid back over a five year period.

Similar to the French model, these loans should be targeted at the average driver and below – using median wage as a proxy for the average driver – who live in or within a reasonable radius of low emission zones.

The loans could be provided by government and administered through an arm's length government agency, like the Energy Saving Trust's role in Scotland. We estimate that providing 5000 interest free loans for new cars, and 5000 interest free loans for used cars in this way would cost the government approximately £35 million of capital spend.²⁹

However, there are some disadvantages to this approach. If the government funds the entirety of the loans, public funds need to be used to provide the upfront capital for the loans. The government is also liable for all the risks of any defaults at the expense of the taxpayer.

Another way of facilitating the loans would be for the government to provide a subsidy incentive for private lenders to offer attractive zero-interest loans, specifically for the purchase of EVs in and around clean air zones. The subsidy should cover the price differential between market interest rates and a zero-rating either through tax incentives for lenders to recover the difference or through a ring-fenced funding pot. Clear guidance should be published to set out the eligibility criteria and terms of the rates.

In this scenario, the capital is provided through private finance, not the government, and the risk is held by finance providers but they are incentivised to provide the loan product through the government interest subsidy.

^{29.} Calculated on cost of lost interest payment of and accounting for default assumptions



The way forward

The next general election will be held within eighteen months. Policymakers across all political parties must understand the scale and pace of change needed to meet the UK's net zero goals. Goals to which the main political parties are currently committed.

A significant part of reaching these ambitions is decarbonising the UK's vehicle fleet. Despite encouraging trends in electric vehicle adoption, there remains a long way to go. EV adoption is concentrated in higher income households, and whilst new registrations are rapidly increasing, they still only account for a tiny proportion of new and used vehicle sales.

Whilst improvements in areas like charging infrastructure, supply side innovation and investment and commercial fleets will facilitate greater adoption of clean cars and bring down their cost over the long term, policy intervention is needed to ensure the average consumer to be able to purchase and drive EVs.

Supporting ordinary people to transition away from polluting cars becomes even more urgent with the introduction of clean air zones, and the phasing out of new petrol and diesel cars in only a few years.

This paper recommends three policy actions government could take to widen access to electric vehicles amongst ordinary consumers:

1. Medium and large companies to offer EV salary sacrifice schemes to their employees

Salary sacrifice scheme for electric vehicles can save employees 30-60% of the cost of personally leasing the same car. The government should mandate that all medium and large companies (over 50 employees) must offer an EV salary

sacrifice scheme for their employees. This would be available to all employees subject to existing limitation on salary sacrifice. Implementing this policy would have the dual advantage of boosting the number of people driving clean cars and feeding the second hand car market over time.

2. EV social leasing programme for lower income households

The Government should target subsidies for electric vehicles by introducing a subsidised EV leasing programme for lower income households. Modelled on France's new social leasing scheme, the government should contract with UK based manufacturers to produce a certain number of 'no frills' electric cars per year which will be guaranteed for purchase by the state-backed scheme. Households below a certain income would then be eligible for a discounted lease, up to a certain number of cars per year. This measure could be geographically targeted to areas impacted by clean air zones.

3. Zero-interest EV Loans for households of average income and below in clean air zones

Scotland and France have set a precedent for state provision of interest free loans for the purchase of electric vehicles. The government should make a limited number of zero interest loans available to average income and below households who live in or near clean air zones. Loans would be available to purchase new or used electric cars, and would be paid back without interest over a 5 year period. This can be delivered either solely by government through an agency to administer the loans, or in partnership with private finance providers.