



**SMMT** DRIVING THE MOTOR INDUSTRY

# **VISION 2035:** READY TO GROW

June 2024







This July, the UK will return to the polling booth, and the nation What's changed is the scope of our vision. New analysis shows will make a choice as to who will steer our progress and growth the scale of the prize on offer – and the benefits the country can reap over the next decade. From the new car market alone, £800 billion over the next five years. in revenue from now to 2035. From new car and van production, a Real, lasting progress and change is only possible with a long-term cumulative £290 billion in factory gate prices over the next decade. vision – and that is exactly what the UK automotive industry The automotive sector just needs the framework to turn today's has to offer. potential into tomorrow's trillion pound trophy.

That growth will make a massive contribution to society and the environment. The right support now will mean that by 2035, almost half of all cars on the road will be zero emission – with more than 17 million people enjoying the benefits of a fairer, faster transition. A reformed energy market with easier grid connections can unlock our admirable potential in renewable electricity generation. And investment in our most valuable asset of all - our people - will give all corners of our country a workforce that's ready for the net zero world ahead, sustaining jobs and prosperity.

Last year, we unveiled our Manifesto 2030 – a series of five pledges that we urged all parties to adopt, in anticipation of a forthcoming election, and to be delivered across the next Parliament. With that election now imminent, that long-term vision has never been more important. The pledges the sector needs remain the same. Net zero mobility for all. Britain as global power in vehicle production. An upskilled

workforce ready for the next generation of automotive technology. Clean, cost-effective energy. And an industrial transformation strategy that provides a holistic, joined up approach that ensures every stakeholder contributes to delivering on the UK's economic growth potential.



Our Vision 2035 is clear. Provide the framework and the growth will follow.

#### Mike Hawes, Chief Executive

The Society of Motor Manufacturers and Traders (SMMT)

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## **VISION 2035: READY TO GROW**

PLEDGE 1

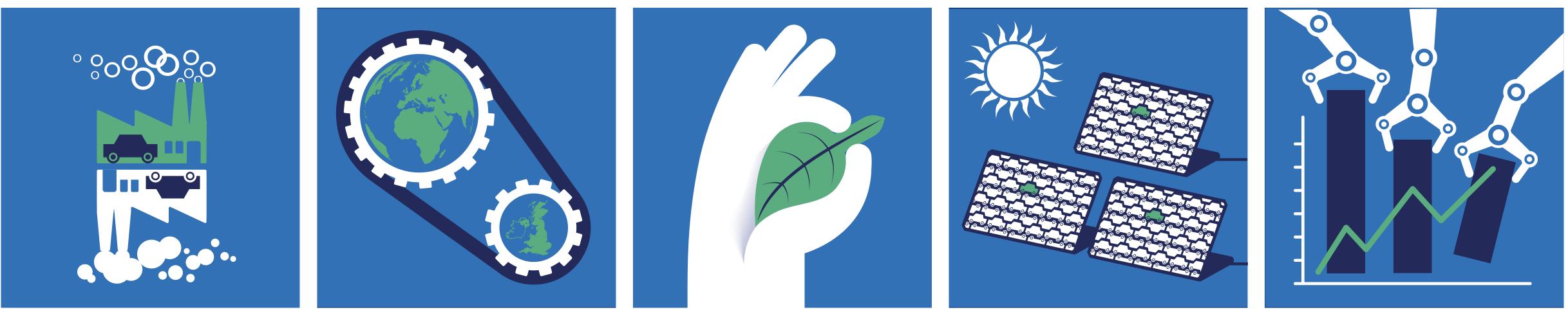
## **NET ZERO MOBILITY** FOR ALL

PLEDGE 2

PLEDGE 3

### MADE IN BRITAIN - MADE FOR THE WORLD A GREENER FUTURE





THE SOCIETY OF MOTOR MANUFACTURERS AND TRADERS

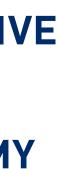


## **POWERING THE UK CLEAN TECH** REVOLUTION

PLEDGE 4

PLEDGE 5

### **A GREEN AUTOMOTIVE** TRANSFORMATION **STRATEGY FOR A STRONGER ECONOMY**



## PLEDGE 01 Net Zero mobility for all



The UK's progress towards net zero mobility has been delivered by the market at pace, driven by massive investment by manufacturers in delivering choice across every vehicle type.

The transition is also well underway in the van, heavy goods vehicle (HGV) and bus and coach sectors. In 2023 the UK was Europe's largest zero emission bus market, with 45.1% of all new single and double-decker buses last year powered by

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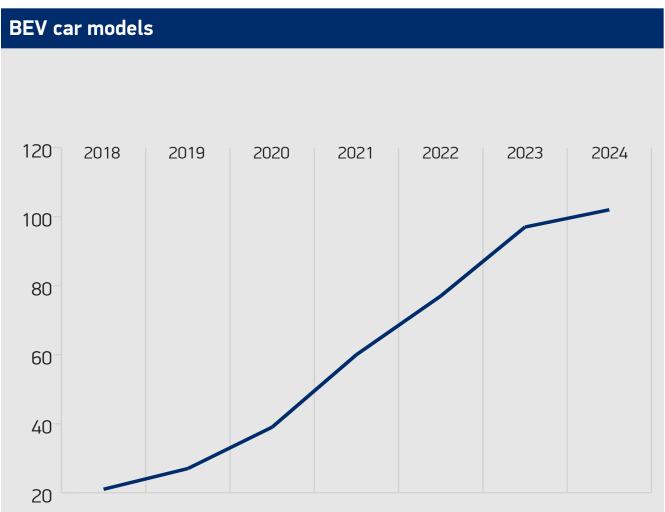
### **THE PRESENT**

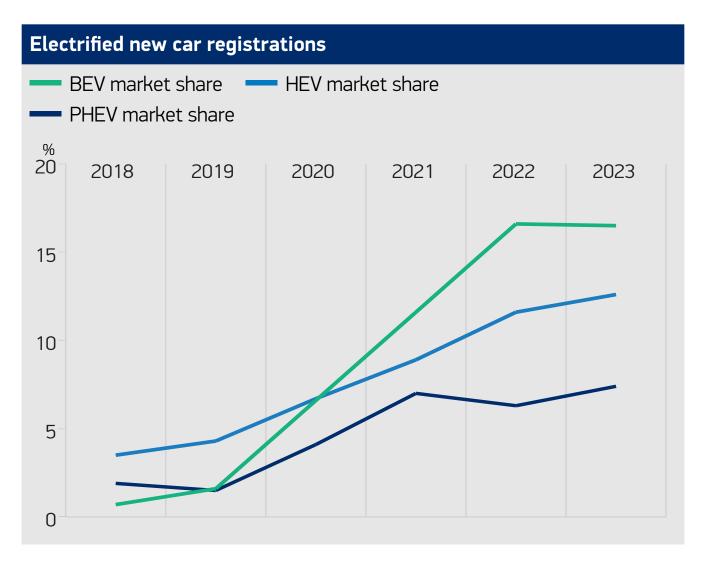
Within a decade, choice has gone from just 16 battery electric car models, to more than 100, covering every vehicle segment. Uptake has gone from fewer than two new BEV registrations per hour, to almost 37 per hour<sup>1</sup> reaching a market share of around 16%. It means the UK is Europe's second biggest zero emission car market<sup>2</sup>. While this growth has been impressive, market share has plateaued since consumer incentives ended in 2022, when under the Vehicle Emissions Trading Scheme (VETS) it needs to accelerate. VETS has also introduced new challenges in planning and product allocation.

electric or hydrogen.<sup>3</sup> Around one in 20 new vans are battery electric, and the nascent HGV market has seen 0.5% of new trucks go zero emission. As a result, more than a million zero emission vehicles are on the road already, along with more than 1.8 million plug-in hybrids and hybrids – all of them playing a crucial role in the transition towards net zero mobility.

Bus buyers face investment challenges, with no roadmap in place to focus investment on ZEV infrastructure and slow processing of Zero Emission Bus Regional Area (ZEBRA) funding applications. HGVs, meanwhile, rely on a grant system now almost a decade old which hasn't kept pace with technology. Just 10 models are approved for funding – less than half of those now available.<sup>4</sup> And vans, like cars, face VETS guotas and a dearth of van-specific public charging infrastructure. Solving these challenges over the next decade is critical – and the barriers to progress can be overcome through simple policies that will deliver significant benefits.









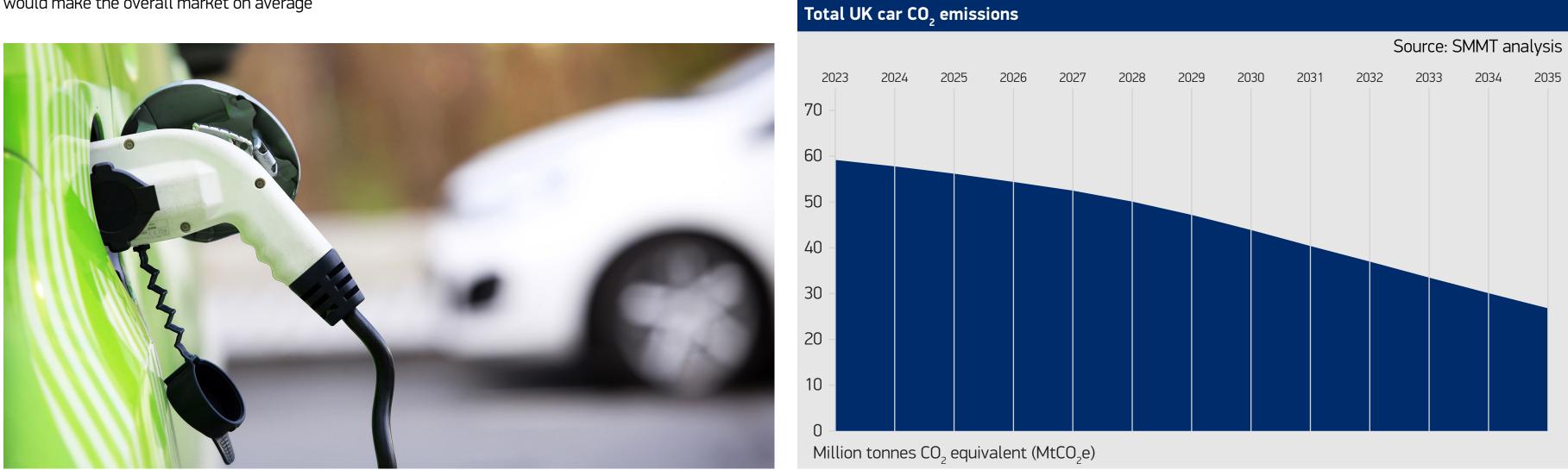
### THE PLAN

- $\rightarrow$  Support retail consumers buying new EVs by temporarily halving VAT and amending the Vehicle Excise Duty expensive car supplement, to avoid an EV tax hike in 2025 hitting new and used car buyers.
- $\rightarrow$  Maintain existing grants for commercial vehicles and revitalise the Plug-in Truck Grant to more accurately reflect the wider choice now on offer.
- $\rightarrow$  Commit to an infrastructure strategy which enables the rollout and funding of commercial and heavy duty vehicle networks to support the movement of goods and people across the country.
- $\rightarrow$  Ensure everyone has a 'right to charge' by mandating delivery of public charging and refuelling infrastructure across the UK with binding targets, leading to a significant uplift and reliability of all types of public chargers across the whole UK.
- Cut VAT on public charging to 5% in line with home charging.
- $\rightarrow$  A regulatory framework to 2035/40 that enables an equitable consumer and business transition to zero emission vehicles providing investment certainty, delivering consumer choices and rewarding innovation.

#### THE PRIZE

New SMMT research suggests that if market and tax enablers remain as they currently are, there will be almost 6.4 million electric cars reaching the road between now and the end of 2030 – rising to 16.3 million by the end of 2035. This assumes no disruption to supply or economic shocks, chargepoint rollout keeping pace with uptake and consumer demand for ZEVs being sufficient for manufacturers to easily meet the VETS requirements.

However, halving VAT for three years, building fairness into the tax system that rewards rather than penalises drivers for going zero emission, and developing an infrastructure network ahead of need, would accelerate uptake and decarbonise road transport. Under this scenario around 6.9 million ZEVs could be added to the road by 2030. By the end of 2035, this would rise to more than 17 million new EV cars on the road – half of all cars in use, and ensuring a fair, just transition. Cumulatively, the EV market value over the next decade would be approximately £800 million, and would make the overall market on average

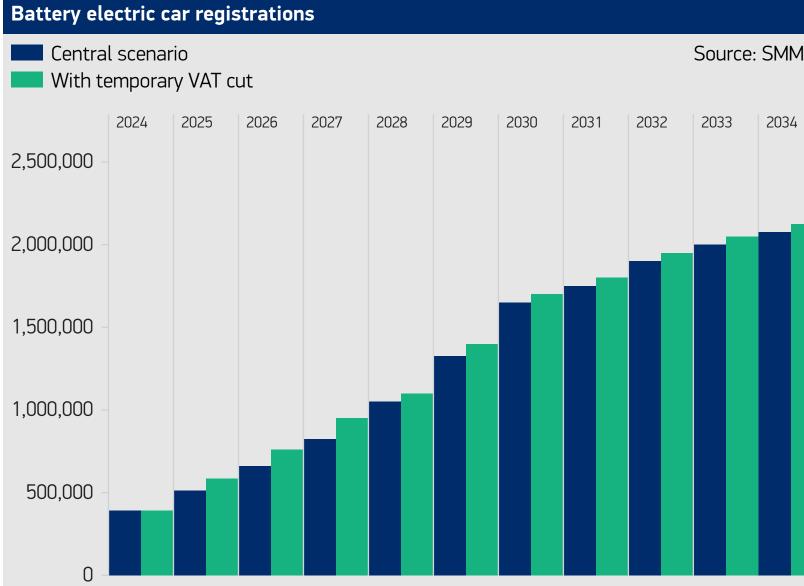




10% larger than today. The opportunity would also be massive for commercial vehicle uptake as our culture shifts towards an expectation that road transport should be zero emission.

The emissions decline across all vehicle types would be profound. By the end of 2035, total UK car CO<sub>2</sub> emissions would be 55% lower than today. Over the next decade, this would cut total  $CO_2$ emissions by some 175Mt.

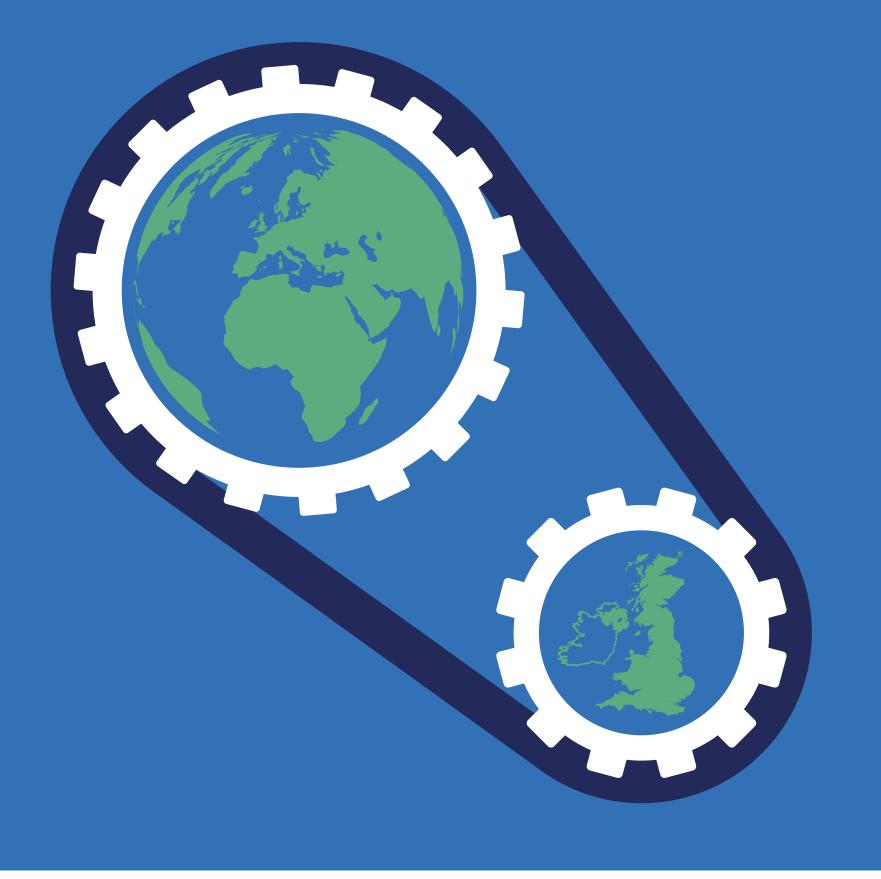
The impact on air quality in urban areas would also be significant, particularly as commercial vehicles and public transport follow suit. Indeed, with the right policies, the new bus market could be entirely zero emission by 2030, providing a monumental opportunity for everyone – whether they can drive, or not – to access zero emission mobility.



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## PLEDGE 02 Made in Britain



The UK is already an automotive production powerhouse with one of the most diverse product bases in the world – including everything from mass market cars, to vans, trucks, buses, specialist and luxury vehicles, exported globally. And as we move towards next generation zero emission production, two in five cars built in the UK are electrified already.

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(SMMT)

#### **THE PRESENT**

Manufacturing facilities are found in every region of the country, producing almost every single component needed for EVs, along with electric and hydrogen cars, vans, buses and trucks. Almost 200,000 people are employed directly in automotive manufacturing, while finished vehicles are the UK's single most valuable trade commodity, now generating more than £47 billion a year in revenue<sup>5</sup>. This in turn supports a far wider ecosystem of 813,000 jobs in total – with millions more dependent on the essential mobility that vehicles provide.

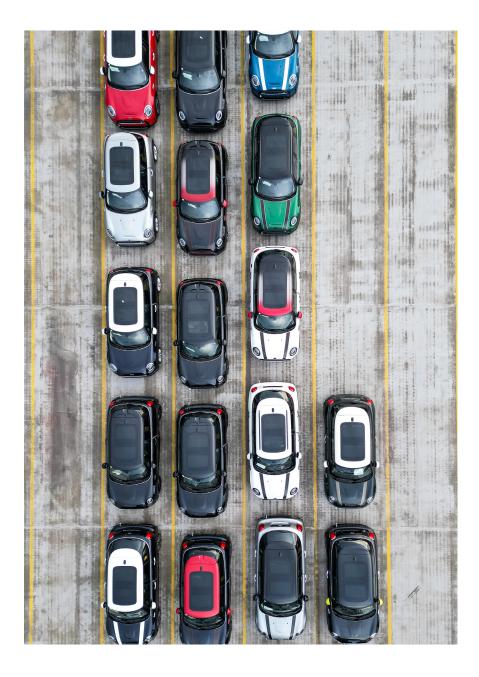
Manufacturers are also investing in the UK. Last year, more than £20 billion was committed to zero emission vehicle production, giving Britain the opportunity to move forward. However, that investment needs to be realised at pace and converted into new facilities, value chains and jobs. Plus, global competition, particularly in the EV space, is fierce and the UK needs clear plans that will support production growth in the face of global challenges and looming trade barriers.

The largest destination market for British-built vehicles remains the EU – receiving 60.3% of UK car exports and 94.2% of CV exports last year.

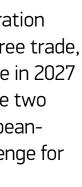
But, while the EU-UK Trade and Co-operation Agreement currently provides for tariff-free trade, new rules of origin due to come into force in 2027 will require all EVs traded between these two markets to have either a British or Europeanbuilt battery, a major foundational challenge for competitiveness.

The UK also lacks sufficient quantities of domestic critical raw materials needed for sustaining and expanding EV production. Strategic trade partnerships, supply chain development, investment in battery remanufacturing, and recycling existing materials currently in use, will all be essential - ensuring capacity, access and economic resilience for British manufacturers.

ar n	r manufacturing by powertrain					
EV, HEV, PHEV iesel etrol						
20	18.8%	25.8%	55.4%			
1	26.1%	15.9%	58.0%			
2	30.2%	7.4%	62.4%			
23	38.3%		7.2% 54.6%			
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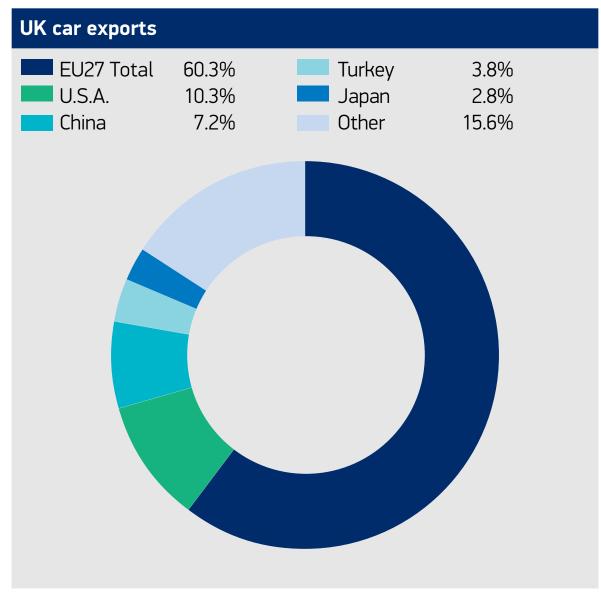






### THE PLAN

- $\rightarrow$  Ensure Free Trade Agreements support the UK's industrial capability and changing technologies through appropriate Rules of Origin and market access rules.
- Establish and maintain new and innovative partnerships with minerals-rich countries such as Australia, Canada and Indonesia to secure supplies of critical raw materials and other inputs.
- $\rightarrow$  Create the best possible conditions for remanufacturing and the circular economy to source tariff-free from anywhere, to process and/or recycle them in the UK for re-use at home and abroad without tariffs.
- Deliver a modern border and customs framework that facilitates smooth, costeffective trade, supported by trade promotion and export services and funding.

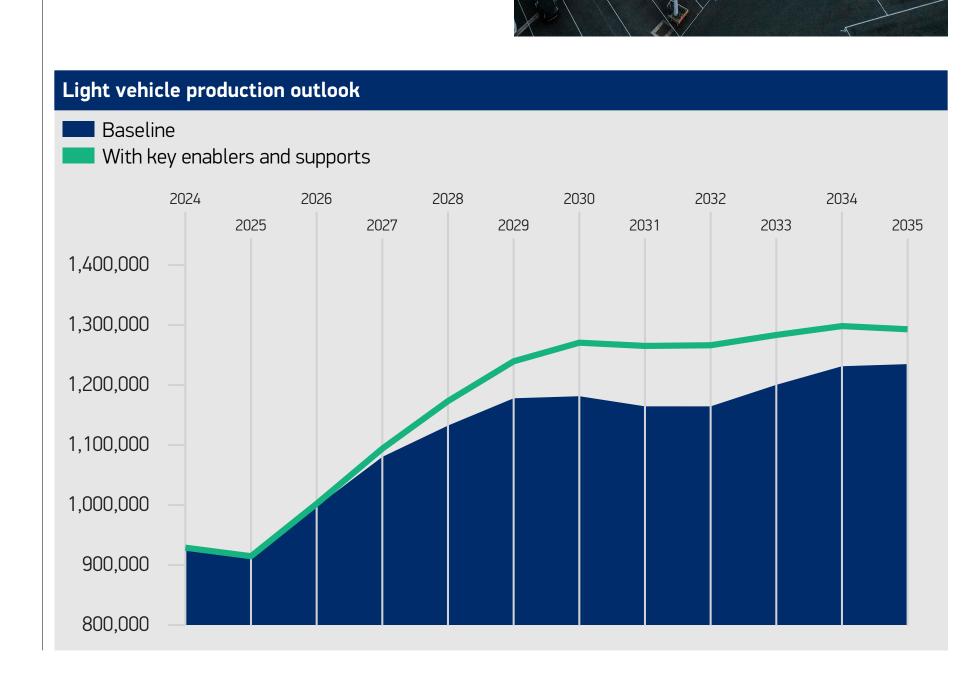


#### **THE PRIZE**

Current factory repurposing for electric vehicle production means that output will dip until the end of 2025, but the right policies would then turbocharge towards 2030 and beyond.

While more than half of all British car and van production is expected to be zero emission by 2028, more advantageous trade conditions would enable greater total output and attract more inward investment to the UK as a place to do business.

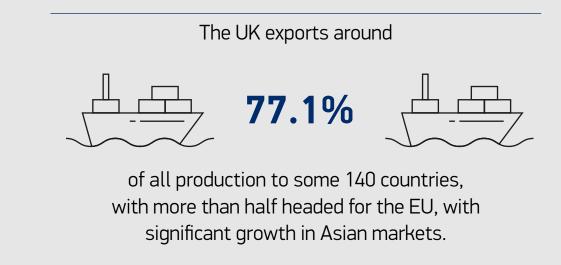
With the right support, by the end of 2035, the UK would cumulatively have produced more than nine million zero emission light vehicles – an extra 600,000 than anticipated under current outlooks and worth over £290 billion at factory gate prices.

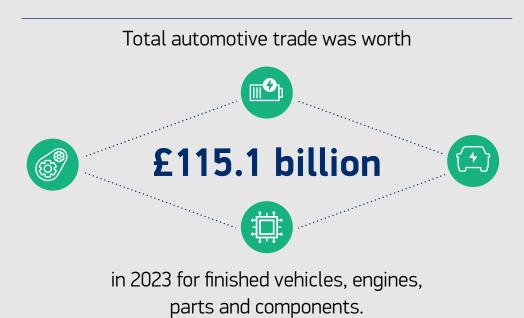


#### THE SOCIETY OF MOTOR MANUFACTURERS AND TRADERS

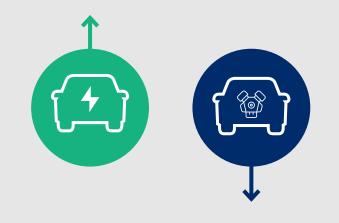


**KEY DATA** 





Exports of UK-built battery electric, plug-in and hybrid passenger cars to the EU were worth £8.7bn in 2023.



exceeding the £3.3bn value in exports of internal combustion engine cars.







## PLEDGE 03 **Green skills**



Almost 200,000 people already work directly in automotive manufacturing – and with production shifting dramatically towards electric vehicles over the next decade Britain needs a new generation of engineers, designers, fabricators and many other skills to deliver the transition to electrification. decarbonisation and digitalisation. A laser sharp focus on attracting new talent and up- and reskilling the existing workforce is key.

the road.<sup>6</sup>

Britain enjoys huge advantages when it comes to the academic skills needed to drive the transition. Around 8% of UK business research and development investment is made by the automotive sector, which boasts 22 dedicated R&D centres across the country. The Automotive Council's UK International Competitiveness (UKIC) survey in 2022 found that of all the factors that influence investment decisions, university-industry collaboration was rated as the UK's biggest strength. Britain is also rated more highly than the majority of EU nations on university – industry R&D, and above average globally.

Maintaining the advantage currently enjoyed and setting out a pathway to ensure we can fill the talent gaps ahead will be crucial.

#### THE PRESENT

While the UK is expected to produce just over 30.000 BEV cars and vans in 2024, this could increase by 30-fold by the start of the next decade. As well as manufacturing vehicles, the UK also needs skills to maintain the ever-growing number of EVs in use. By the end of 2023, the UK had around 45,300 technicians qualified to work on EVs - around 20% of the total vehicle technician pool. However, research by the Institute of the Motor Industry suggests that around 107,000 technicians will be needed by 2030 as millions more EVs reach

#### THE PLAN

- → Enable a Net Zero automotive workforce that develops future domestic talent, retains and upskills the existing workforce, and continues to attract global talent and expertise.
- Champion the delivery of a long-term, online National Upskilling Platform to allow automotive businesses of all sizes to join the upskilling drive.
- Reform the Apprenticeship Levy to support upskilling of existing workers in priority training areas such as electrification, decarbonisation and digitalisation.
- Elevate STEM in further education and promote automotive and manufacturing as life-long career opportunities, contributing positively to green growth.
- Regularly review skilled visa routes and shortage occupation lists to reflect business needs as technology evolves at pace to attract international talent to the overall benefit UK industry.

#### THE PRIZE

Success will give the UK the skills it needs to continue compete internationally and keep at the forefront of the EV transition.

Reforming the Apprenticeship Levy to encourage non-apprentice training and championing the long-term future of the Automotive Upskilling and Reskilling Platform would encourage employers to invest in training the estimated 80% of existing workers involved in powertrain roles which need to be upskilled.

Investment in the creation of modular, short-course training content for advanced manufacturing will create productivity gains for the sector, as the industry can better take advantage of innovative new technologies for manufacturing processes - with research showing that businesses that upskill increase turnover by 3%, providing a vital contribution to the economy.<sup>7</sup>

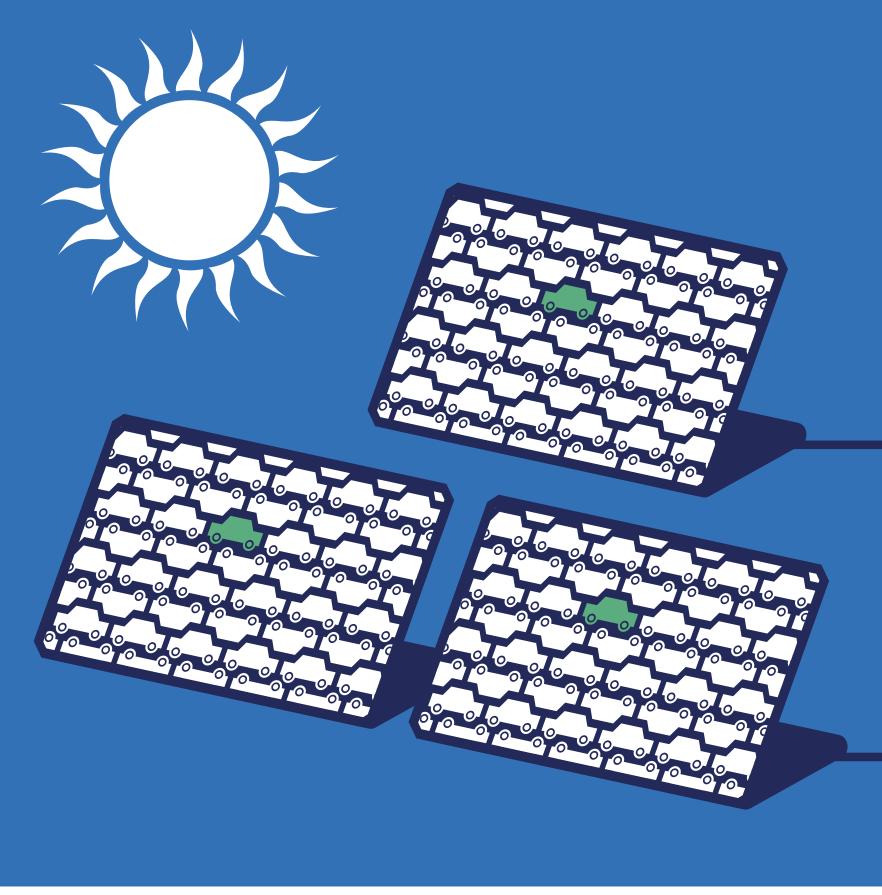
Elevating STEM teaching at an earlier age in schools would support a talent pipeline into the sector. At present, the industry has 7% labour shortages in supply chain production roles. Establishing a better understanding of the automotive industry and its contribution to green growth would improve the sector's attractiveness, via schools, at a young age and ultimately help diversify the industry's prospective talent pool. And ultimately, success will deliver a highly skilled workforce, empowered to contribute to economic growth in all parts of the country.







## PLEDGE 04 **Clean tech**



### **THE PRESENT**

The UK already benefits from some significant advantages that make it well placed to deliver net zero automotive production – and capitalising on these can unlock further investment and make Britain a ZEV manufacturing powerhouse with massively reduced lifecycle carbon emissions.

The UK's energy mix is 'carbon competitive'. More than a third of electricity generated last year came from renewable sources – wind, solar, and hydro – and when nuclear power is included, half of all UK electricity was zero carbon.<sup>8</sup>

The energy grid mix is the single most important factor in reducing vehicle emissions. Around 40% of carbon emissions from BEVs come from charging the vehicle, so stripping emissions out of the grid means that green vehicles can be recharged with green energy. EV and battery production is also energy intensive – accounting for around 57% of lifecycle emissions – and so a decarbonised grid has profound implications for delivering significant emission reduction.<sup>9</sup>

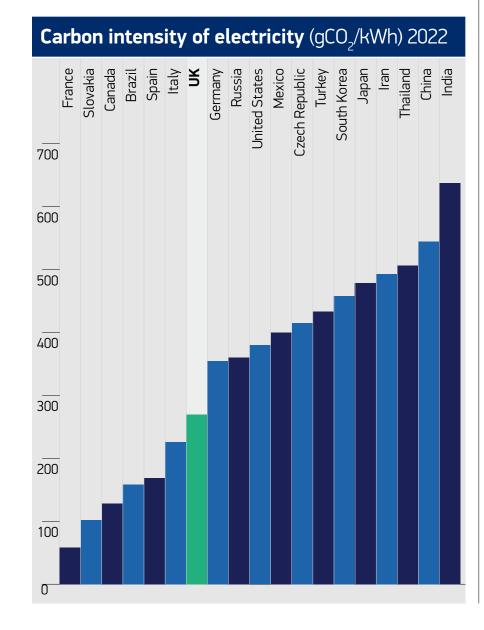
The Faraday Institution estimates that by 2025 a UK-produced battery will have 12% less embedded CO<sub>2</sub> from manufacturing than the European average, while there would also be reductions in embedded carbon for other key powertrain components produced in Britain, along with hydrogen generation and fuel cell production

This gives the UK a key advantage, but success depends on reducing something else the UK also has – the highest energy costs in Europe.

#### UK energy mix 2023 32.0% Solar 4.9% Gas 29.4% 1.8% Hydro Wind Nuclear 14.2% 1.0% Coal 10.7% Storage 1.0% Imports

5.0%

Biomass



### **THE PLAN**

- $\rightarrow$  Deliver an easily accessible abundant supply of low cost zero emission energy.
- Encourage investment in decarbonised and more efficient plants, eg by enhancing the Industrial Energy Transformation Fund.
- Ensuring Climate Change Agreements support competitiveness and are broadened to include new technologies, like battery manufacturing.
- Accelerate funding and permissions, and increase capability, to reduce waiting times for grid connections, and upgrades for production facilities and charging infrastructure.

#### THE PRIZE

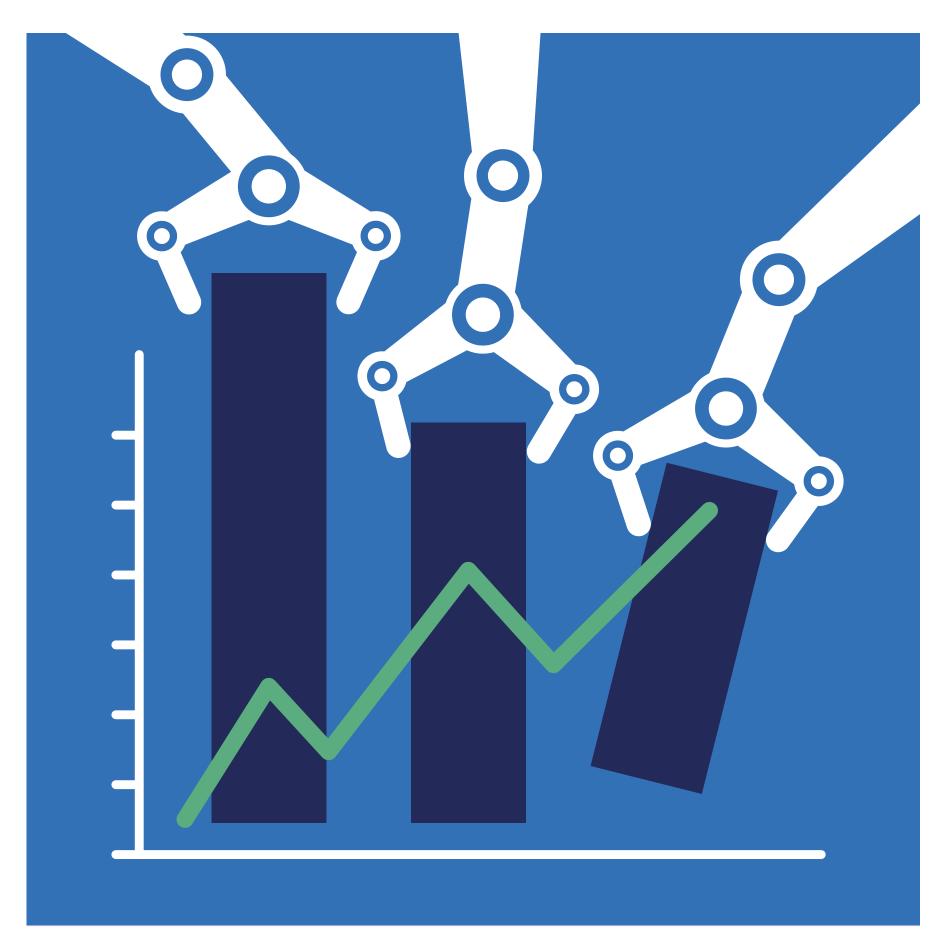
Cheaper energy could see the UK's electricity costs become more competitive with the rest of Europe. Aside from the impact this could have more widely on the economy such as unlocking greater consumer spending and reducing general business operating costs – all factors that can stimulate the automotive market – it would also increase the UK's value proposition as a destination for investment in production.

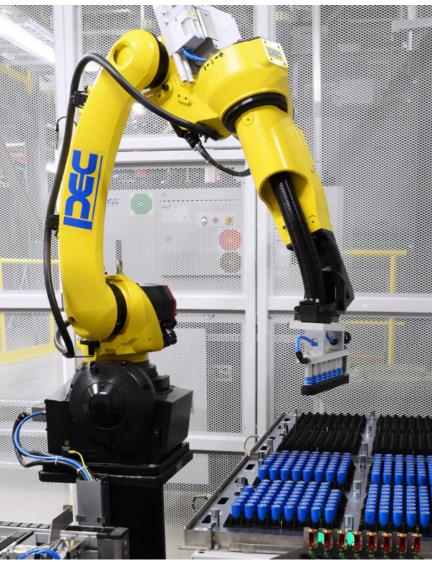
Energy would not just be cheaper, it would also be greener – a critical factor in reducing the lifecycle emissions of EVs. The UK will be a place where green energy produces batteries and powertrains and powers green vehicles. This could see Britain producing more than a million battery electric vehicles a year from 2031. Furthermore, it would also mean that EVs driven in the UK would have lower indirect emissions from EV charging. Such growth will enable the UK to drive more investment, create more jobs, and compete internationally on energy efficient, low carbon manufacturing, powered by more affordable clean energy from well to wheel.

#### PLEDGE 04

PLEDGE 05

## A Green Transformation Strategy









### **THE PRESENT**

The UK's automotive production capabilities are already attracting investment, drawn by an exceptional mix of varied vehicle manufacturing, a supply chain capable of building almost every EV component needed, a skilled and flexible workforce, green energy and a market on the move to net zero.

Since 2011, when the UK began production of the first mass-produced EV in Europe, more than £30 billion has been committed to, zero emission vehicle production. In addition to 26 vehicle and engine production plants, the UK is also home to more than 2,500 suppliers.

However, UK automotive production must keep pace with other advanced manufacturing economies in the midst of fierce competition. Transformation requires a dedicated, governmentled strategy where every stakeholder contributes.

## THE PLAN

A GREEN AUTOMOTIVE TRANSFORMATION STRATEGY					
DE-RISK	PRIVATE CAPITAL	REGULATORY REFORM		GLOBAL DIPLOMACY	
	More generous incentives and subsidies		Update outdated regulation and planning requirements to be		Expand and enhance free agreements
4	Competitive energy costs		appropriate for the electric vehicle age	69 129	Partner with r rich nations
	Support renewable and decarbonisation projects		Reduce red tape and fast-track approvals for battery production and renewable energy		Promote Briti investment in material minii
	Support clean-tech start-ups and		projects		Provide best trade conditio
<u>/ • • •</u>	scale-ups		Speed up green technology project		remanufactur
£	Green tech co-investment		funding		
	Upskill the workforce		Decouple electricity prices and renewables from gas		e to Zero, <u>smmt.co.ul</u> .oads/sites/2/SMMT-F pdf

### **THE PRIZE**

Successfully delivering all the elements UK Automotive needs to succeed in the zero emission world will transform the UK economy by the end of 2035.

- £800 billion in cumulative revenue from the zero emission new car market.
- £290 billion in cumulative revenue from zero emission car and van production.
- More than 17 million zero emission cars registered on the road.
- Half of all cars in use with zero emissions.

Delivering a cumulative 175Mt CO<sub>2</sub> savings and a 55% reduction in road transport emissions compared with today.

With the automotive sector proving Britain's most important export industry, transformation is about delivering growth - growth that delivers mobility for all, high quality jobs, more exports, more investment, competitive green energy, cleaner air and global leadership.







## CONCLUSION

The upcoming election will be a time when the UK chooses from the visions offered by the various parties competing across constituencies.

Whatever the outcome, the automotive sector has a single vision that should be shared by all parties - delivering a successful and sustainable transition to zero emission vehicles.

The automotive sector is one of Britain's most valuable exporters, while providing hundreds of thousands of jobs at home and keeping the nation on the move, supplying and supporting the more than 40 million cars, vans, trucks and buses that fuel our economy.

However, maintaining the status quo is not an option. Without an automotive strategy and delivery plan to transform UK industry for the new global zero emission economy heading towards us, we risk being outcompeted by other countries where governments are doing more to support their own automotive industries and stakeholders. And without real action to re-energise the market, we will miss out on the growth and transition the nation needs.

The success on offer is clear. With the automotive sector as a crucial driver of the economy, providing the optimal conditions for both manufacturing and the market would increase the sector's cumulative value over current outlooks by a further 5% by 2035 – an additional £50 billion over the next decade. Meanwhile, millions of fossil-fuel vehicles would be taken off the road and replaced by zero emission models. Hundreds of thousands of jobs would be kept safe and secure. The nation would enjoy a fairer, more just transition, with access for all to zero emission mobility and services - and cleaner air for all, wherever they live or work, or how they get around.

In July, the nation will choose. Whatever the choice, the next government can – and must – choose to seize the opportunity offered by UK Automotive.

A greener, cleaner, more prosperous future – built on the success already seen today. This is the automotive sector's Vision 2035.



#### **FOOTNOTES**

- BEV car registrations 2017: 13,632; BEV car registrations Jan-May 2024: 133,062
- ACEA new car registrations, May 2024
- Next stop, Net Zero: Britain boasts Europe's biggest new zero emission bus market, 16 Feb 2024
- Industry calls for 'next generation' incentive and infrastructure plan to decarbonise Britain's truck fleet, 23 April 2024
- ONS, UK trade in goods 2023
- Institute of the Motor Industry, EV Techsafe Technician Forecasts
- Ennis and Co, The Cost of Your Skills Gap
- National Grid, Britain's Electricity Explained: 2023 Review
- Faraday Institution, The UK: A Low Carbon Location to Manufacture, Drive and Recycle Electric Vehicles





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