



# RACE TO ZERO: POWERING UP BRITAIN'S EV SUPPLY CHAIN

March 2023



Britain has a unique automotive offering – one of the world’s most diverse and varied vehicle production sectors, with a stable of illustrious brands, an outstanding record in R&D, and a supply chain that combines innovation with quality and flexibility.

To date, that success has been built primarily on the internal combustion engine. Over the next decade or so, that expertise will reduce in importance. The UK will end the sale of new pure petrol and diesel cars and vans in 2030. The EU, our largest export market, will do the same by 2035. New HGVs will be zero emission by 2040. Other markets will follow. The transformation of our industry will be wholesale, rapid – and highly competitive.

The UK is already a significant producer of battery electric and electrified vehicles, manufacturing zero emission cars, vans, buses and trucks. Underpinning vehicle production across the UK is an equally diverse supply chain, one which must also make the switch.

But that transition needs investment and for that we must be competitive, build on our strengths and match the best the world has to offer.

We cannot ignore the fact that other countries and blocs are powering up their political and economic backing for their own automotive sectors. The US has announced a \$2 trillion package of measures in pursuit of clean technology, including its flagship \$370 billion Inflation Reduction Act. The EU is proposing a Green Deal Industrial Plan, easing restrictions on State Aid for these essential investments. Other countries, especially those in Asia-Pacific, for instance, already have a head start in battery production.

We cannot let the UK fall behind. Britain has a foundational EV supply chain, one which has been mapped for the first time in SMMT’s new EV Supply Chain Directory, also published today. This shows that we already produce almost every component required to manufacture zero emission vehicles in some capacity: batteries, power electronics, hydrogen fuel cells, everything from anodes to graphene to silicon carbide wafers, are already made here. So we have the base elements of a successful EV transition, as well as embedded strengths such as significant renewable energy provision, a flexible and skilled workforce and world-leading R&D. These key advantages provide an opportunity to match ambitions for the market with ambitions for production.

But we must build on this early capability. We must scale up and do so rapidly. This means creating the conditions to retain and attract investment, capture earlier and greater UK-based value in battery production, drive the rapid growth of the electrified supply chain and secure the trade agreements that guarantee the supply of minerals and the openness of markets. This requires a government-led strategy and action delivered at pace.

This document explores the great achievements and potential within our zero emission supply chain and sets out a blueprint for a Green Automotive Transition (GreAT) strategy to anchor future vehicle production in the UK.

Britain is a global leader in the decarbonisation of the vehicle market. But our aspiration must be broader. We must also be a leader in zero emission vehicle production, supported by a world class supply chain that acts as a workshop for new technologies delivered by a UK industry to a global market.

**Mike Hawes, Chief Executive**  
The Society of Motor Manufacturers and Traders (SMMT)

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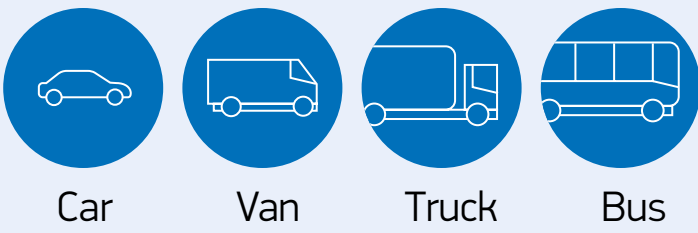
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# WORKSHOP FOR THE WORLD

## THE UK EV SUPPLY CHAIN

Every part of the UK contributes to electrified vehicle production, either through finished vehicle manufacturing or supply of key components.

KEY: ELECTRIFIED VEHICLE PRODUCTION

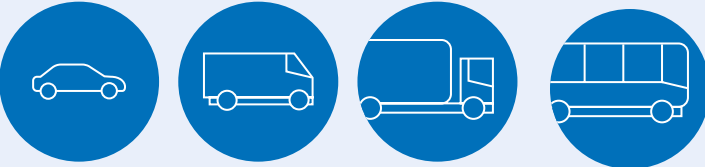


### SCOTLAND



- Battery systems**
  - Cell components
  - Cells
  - Raw materials
  - Refurb, re-use and recycling
- Power electronics**
  - Semiconductors

### NORTH WEST



- Battery systems**
  - Battery components
  - Battery development
  - Battery pack assembly
  - Cells
  - Raw materials
  - Refurb, re-use and recycling
- Electrified powertrain**
  - Electric drive unit
  - Powertrain design and development
- Power electronics**
  - Inverters
- Hydrogen**
  - Fuel cell components

### NORTHERN IRELAND



### NORTH EAST



- Battery systems**
  - Battery components
  - Battery development
  - Battery pack assembly
  - Cells
  - Raw materials
- Electrified powertrain**
  - Electric drive unit
  - Powertrain design and development
- Power electronics**
  - Power electronics
  - Semiconductors

### YORKSHIRE AND THE HUMBER



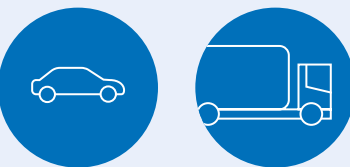
- Battery systems**
  - Battery components
  - Cells
  - Raw materials
  - Refurb, re-use and recycling
- Electrified powertrain**
  - Electric drive unit
  - Hybrid transmissions

### WALES



- Battery systems**
  - Battery components
  - Battery testing
  - Cells
  - Refurb, re-use and recycling
- Electrified powertrain**
  - Electric drive unit

### WEST MIDLANDS



- Battery systems**
  - Battery components
  - Battery development
  - Battery pack assembly
  - Battery testing
  - Cell components
  - Cells
  - Raw materials
  - Refurb, re-use and recycling
- Electrified powertrain**
  - Electric drive unit
  - Full powertrain
  - Powertrain design and development
- Power electronics**
  - Component design
  - Power electronics assembly
  - Wiring harnesses
- Hydrogen**
  - Fuel cells

### SOUTH WEST

- Battery systems**
  - Battery components
  - Raw materials
- Electrified powertrain**
  - Full powertrain
- Hydrogen**
  - Fuel cell

### EAST MIDLANDS

- Battery systems**
  - Battery testing
  - Cell components
  - Raw materials
  - Refurb, re-use and recycling
- Electrified powertrain**
  - Electric drive unit
  - Full powertrain
  - Powertrain design and development
- Power electronics**
  - Semiconductors
- Hydrogen**
  - Hydrogen storage

### LONDON AND THE SOUTH EAST



- Battery systems**
  - Battery components
  - Battery development
  - Battery pack assembly
  - Battery testing
  - Cell components
  - Cells
  - Raw materials
- Electrified powertrain**
  - Electric drive unit
  - E-motor components
  - Full powertrain
  - Powertrain design and development
- Hydrogen**
  - Inverters
  - Control electronic and software
  - Power electronics assembly
- Power electronics**
  - Fuel cells

### EAST OF ENGLAND



- Battery systems**
  - Battery testing
  - Cell components
  - Raw materials
  - Refurb, re-use and recycling
- Electrified powertrain**
  - Electric drive unit
  - Full powertrain
  - Powertrain design and development
- Power electronics**
  - Semiconductors
- Hydrogen**
  - Hydrogen storage

Britain has a truly unique automotive offering – one of the world's most diverse and varied vehicle production sectors, an outstanding record in R&D and a supply chain that provides parts and components used to manufacture new vehicles

# 01 GREAT STRENGTHS A FIRM FOUNDATION

→ The UK already has an established global reputation as an automotive production powerhouse.

More than 70 vehicle models are built in Britain by more than 25 manufacturing brands and electrified vehicles comprise almost a third of all car production. The UK is also home to electrified van, bus and truck production, by long established brands and new challengers.

The electric vehicle supply chain is an important contributor to the UK economy. Every part of the UK is involved in electric vehicle or component manufacturing, with the EV supply chain growing by more than 25% in the past five years.

As a result, EV production and its associated supply chain are essentially national critical assets. Finished vehicles are among Britain's most valuable exports, delivering revenue of £24 billion in 2022, of which £10 billion was for electrified vehicles.<sup>1</sup>

A full manufacturing transition will need the UK to increase its gigafactory capacity, which is limited at present to one facility with an output of 2GWh. However, this is expected to increase to 11GWh by 2025 and further projects have been outlined that would add another 60GWh if the right conditions are met. While the UK has lost one potential gigafactory project, this does not

derail ambition. Furthermore, while much focus has (importantly) been placed on finished vehicle and battery production, there is a wealth of further opportunity for supply of other essential EV components such as powertrains, fuel cells and power electronics.

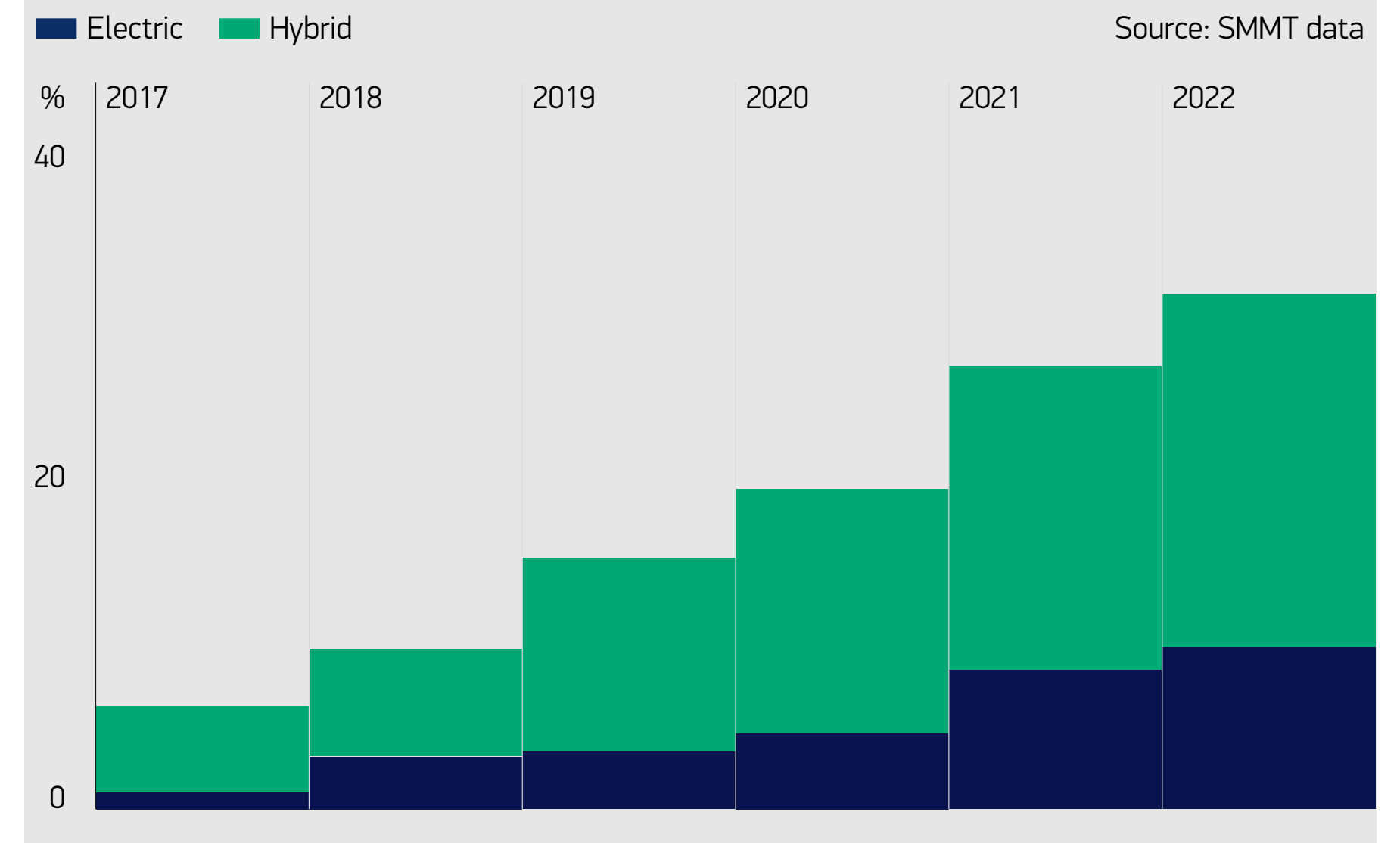
The UK automotive supply chain currently employs around 123,500 people, with more than 2,500 automotive-specific companies and a total turnover of £21.2 billion.<sup>2</sup> This underpins the UK's current vehicle and engine production, demonstrating the vast economic opportunity available beyond headline automotive manufacturing. The fledgling sector is growing rapidly, it is broad, diverse and capable, with huge potential – and the UK benefits from specific advantages in helping it to grow.

First, Britain already has an established and growing EV supply chain, which has been mapped for the first time in SMMT's *EV Supply Chain Directory*. More than 180 companies are involved in producing components for electric vehicles – a small, but important and growing proportion of the total automotive supply chain. As a result, the UK already produces most major components and assemblies required to manufacture an electric vehicle's powertrain – battery packs, e-machines and power electronics – as well as fuel cells for hydrogen vehicles. These companies

**The UK already produces most major components and assemblies required to manufacture an electric vehicle's powertrain**



UK electrified car production as proportion of overall UK production, 2017-2022



are distributed throughout Britain, meaning electric vehicle production and its supply chain is already creating jobs across the country, with huge opportunity for growth. Estimates from the Advanced Propulsion Centre (APC) suggest there is a £24 billion opportunity for the EV supply chain, which can be delivered with the right industrial strategy.

Second, Britain is among the world's leading automotive manufacturing countries for productivity, with high labour flexibility. Furthermore, while other nations have accelerated their production transition, the UK is home to Europe's first mass produced electric car, and by 2025 at least 20 models of battery electric (BEV) or plug-in hybrid (PHEV) cars and vans are expected to be in production – in addition to buses and trucks.

Third, the UK can benefit from new export opportunities. The EU-UK Trade and Cooperation Agreement (TCA) enables tariff-free, quota-free trade with the EU while also providing the UK scope to negotiate new trade deals with other nations. However, we must ensure these deals are appropriate for the technologies of today and tomorrow. The TCA, for example, includes provisions that will tighten rules of origin for electric vehicles in 2024 and 2027. Investing in UK suppliers, therefore, will be vital to ensure that British-built EVs can continue to meet the required thresholds to export tariff-free to our largest single trade partner and the rest of the world.

<sup>1</sup> Based on HMRC data

<sup>2</sup> SMMT, [Full Charge to Full Throttle](#)

EV production and its associated supply chain are essentially national critical assets



# A FUTURE FACING NATION



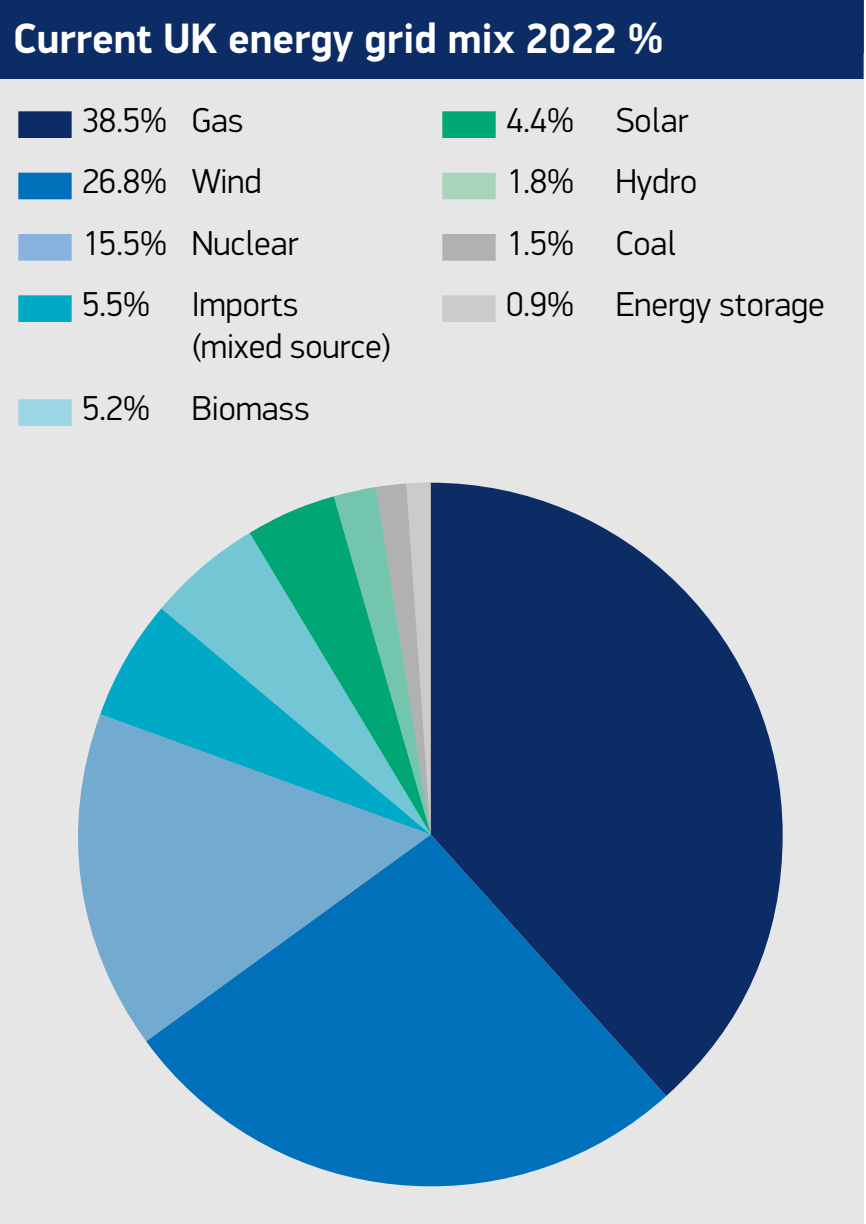
On top of the UK’s existing foundations for EV production and supply chain are strong commitments to future innovation and an energy landscape designed to help deliver a net zero future.

**GREEN ENERGY FOR A GREEN SUPPLY CHAIN**  
For the zero emission transition to truly deliver for the economy and the environment, it is vital that it is fuelled by low- or zero-carbon energy. Otherwise, the switch to electric and hydrogen vehicles would simply move emissions, rather than eliminate them.

The UK’s energy mix provides an opportunity to be a low-carbon hub for EV production and the EV supply chain. As of 2022, Britain’s second largest source of energy was wind power and, overall, almost a third of all electricity used in the UK came from renewables.<sup>3</sup> By 2026, more than half of all UK electricity is forecast to be renewably generated, while government has set a target that 100% of all electricity be zero emission sourced by 2035.

Of the world’s top 20 automotive producing countries, the UK currently ranks as seventh best for low carbon energy generation, with 269g of CO<sub>2</sub> emitted per kilowatt hour generated.<sup>4</sup> As of 2021, the UK’s energy generation emissions were -17% lower than the EU average. While some major markets have lower energy emissions (notably France and Slovakia), other major EV manufacturing nations have far more carbon-intensive electricity – Germany’s emissions are 31.3% higher than the UK’s, while the US’ are 40.7% higher, South Korea’s are 69.8% higher and China’s 101.8% higher.

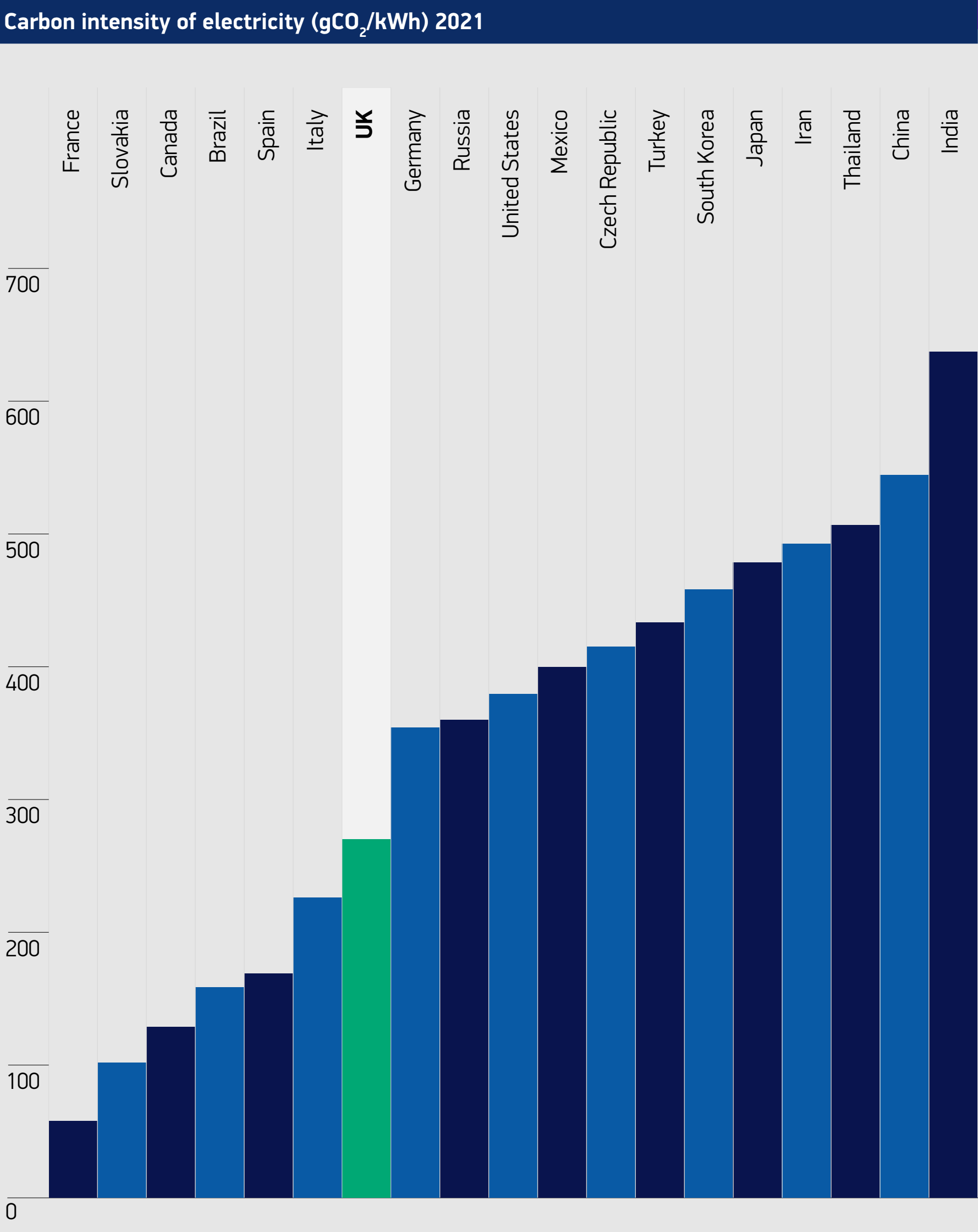
As a result, the UK has major potential for low carbon manufacturing of EVs and key EV-specific components, either via complete production domestically or through supply of British-built batteries and e-motors for manufacturing overseas.



The Faraday Institution estimates that by 2025 a UK-produced battery would 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.<sup>5</sup>

This then produces a potential competitive advantage, where the UK can be positioned as a place where green energy is used to produce green batteries and powertrains, which then power green vehicles.

<sup>3</sup> National Grid ESO: [Britain's Electricity Explained: 2022 Review](#)  
<sup>4</sup> [Our World In Data: global energy mix](#)  
<sup>5</sup> Faraday Institution: [The UK: A Low Carbon Location to Manufacture, Drive and Recycle Electric Vehicles](#)



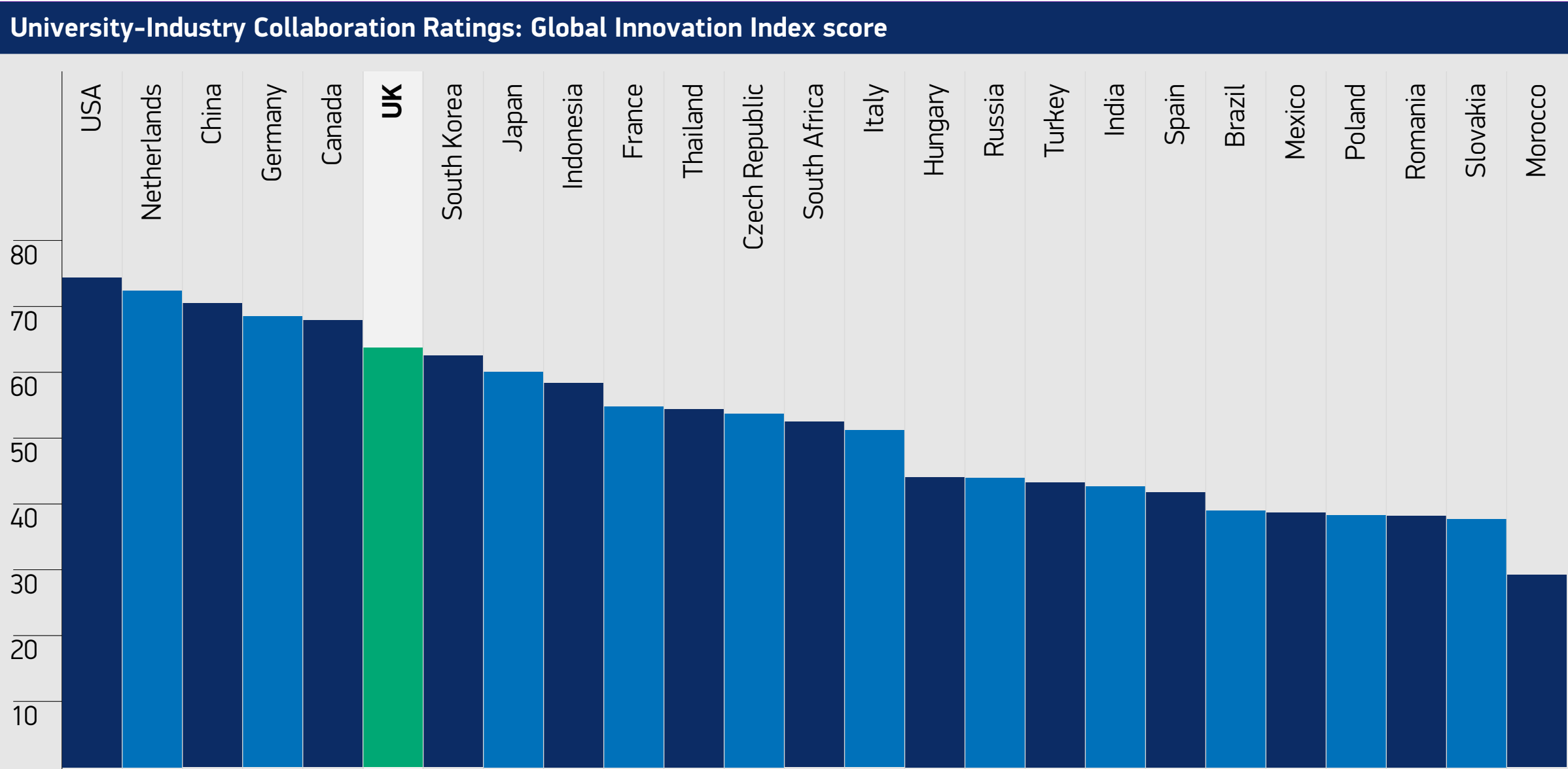
FOCUSED ON RESEARCH AND DEVELOPMENT

The UK is highly focused on research and development of new technology, with the automotive sector having a particularly strong track record in this field. Around 11% of UK business research and development is made by the automotive sector, which boasts 22 dedicated R&D centres across the country.<sup>6</sup> This is testament to the strength of relationships between academia and industry in Britain. 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. This is complemented by the UK’s unique motorsport pedigree, which drives competitive and ‘challenge-led’ engineering, helping to spur innovation across the entire sector.

The industry itself invests around £3 billion a year in R&D, and benefits from the Automotive Transformation Fund (ATF), administered by the APC. So far, the ATF is expected to deliver £1 billion in investment in zero emission automotive production and supply chain development, creating or safeguarding approximately 50,000 jobs.

In addition, up to 2025, government will fund £211 million worth of battery research and innovation, which is expected to deliver 100,000 jobs in the supply chain by 2040. Indeed, the UK has a robust global reputation for supporting R&D by smaller companies, ranked sixth best for government incentives for research out of the 21 nations evaluated.<sup>7</sup>

6 SMMT: [Full Throttle to Full Charge](#)  
7 Automotive Council UK: [UK Automotive International Competitiveness – Third Edition](#)



Around 11% of UK business research and development is made by the automotive sector

R&D LOCATIONS

- SOUTH EAST AND LONDON

  - AVL Powertrain UK
  - Digital Engineering & Test Centre (DETC)
  - Ford Dunton Technical Centre
  - Shoreham Technical Centre
  - University Of Brighton (APC ICE Thermal Efficiency Spoke)
- WEST MIDLANDS

  - Changan UK R&D Centre
  - Lotus Tech Creative Centre
  - The Manufacturing Technology Centre (MTC)
  - HORIBA MIRA
  - The National Automotive Innovation Centre (NAIC)
  - REE Engineering Centre
  - SAIC Motor UK Technical Centre
  - Tata Motors European Technical Centre
  - WMG Warwick (APC Electrical Energy Storage Spoke)
- EAST OF ENGLAND

  - Cranfield University
  - Hethel Engineering Centre
  - Millbrook Proving Ground
  - Nissan Technical Centre Europe
- NORTH EAST

  - Newcastle University (APC Electric Machines Spoke)
- SOUTH WEST

  - University of Bath (APC ICE Systems Efficiency Spoke)
- EAST MIDLANDS

  - University of Nottingham (EPSRC Centre Power Electronics; APC Power Electronics Spoke)
  - Vestatec Automotive Engineering

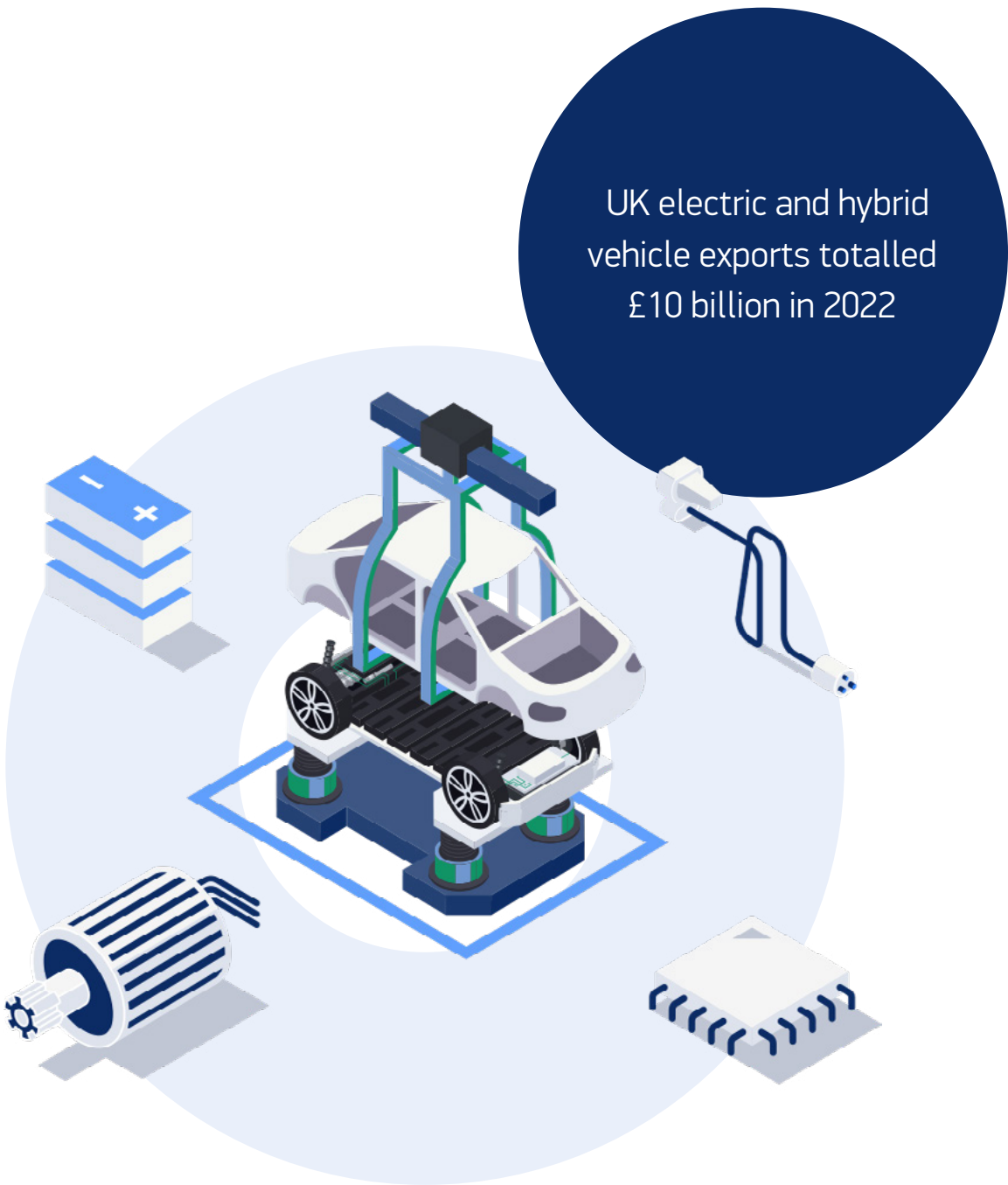
# 02 A GREEN AUTOMOTIVE TRANSFORMATION (GREAT) STRATEGY

→ The UK automotive industry has significant capabilities in driving the mission to decarbonise road transport. With almost a third of all UK-manufactured cars last year either fully electric or hybrid with an export value of £10 billion, its strong fundamentals are clear. Our foundations in advanced manufacturing, engineering and R&D are solid, buoyed by decades of inward investment. Our ingenuity and drive to continuously innovate are underpinned by a skilled, flexible and highly productive workforce.

We need a national industrial vision for green growth and, specifically for the automotive industry, a dedicated and comprehensive transformation strategy to actively and visibly position and deliver the UK as one of the world's most competitive locations for advanced automotive manufacturing.

The strategy should be ambitious and pragmatic, focusing on strategic government orchestration with active delivery at pace. It is not a return to the dark days of protectionism, but looking to a brighter, greener future through the lens of realism. As such, the strategy must have a relentless and razor-sharp focus on enhancing competitiveness and stimulating growth, which are critical factors in attracting investment and levelling the playing field for UK Automotive.

Almost a third of all UK-manufactured cars last year were fully electric or hybrid



## A GREEN AUTOMOTIVE TRANSFORMATION STRATEGY

### DE-RISK PRIVATE CAPITAL

- More generous incentives and subsidies
- Competitive energy costs
- Support renewable energy projects
- Support clean-tech start-ups and scale-ups
- Green tech co-investment
- Upskill the workforce

### REGULATORY REFORM

- Update outdated regulation and planning requirements to be appropriate for the electric vehicle age
- Reduce red tape and fast-track approvals for battery production and renewable energy projects
- Speed up green technology project funding
- Decouple electricity prices and renewables from gas

### GLOBAL DIPLOMACY

- Expand and enhance free trade agreements
- Partner with mineral-rich nations
- Promote British investment in critical material mining
- Provide best possible trade conditions for remanufacturing

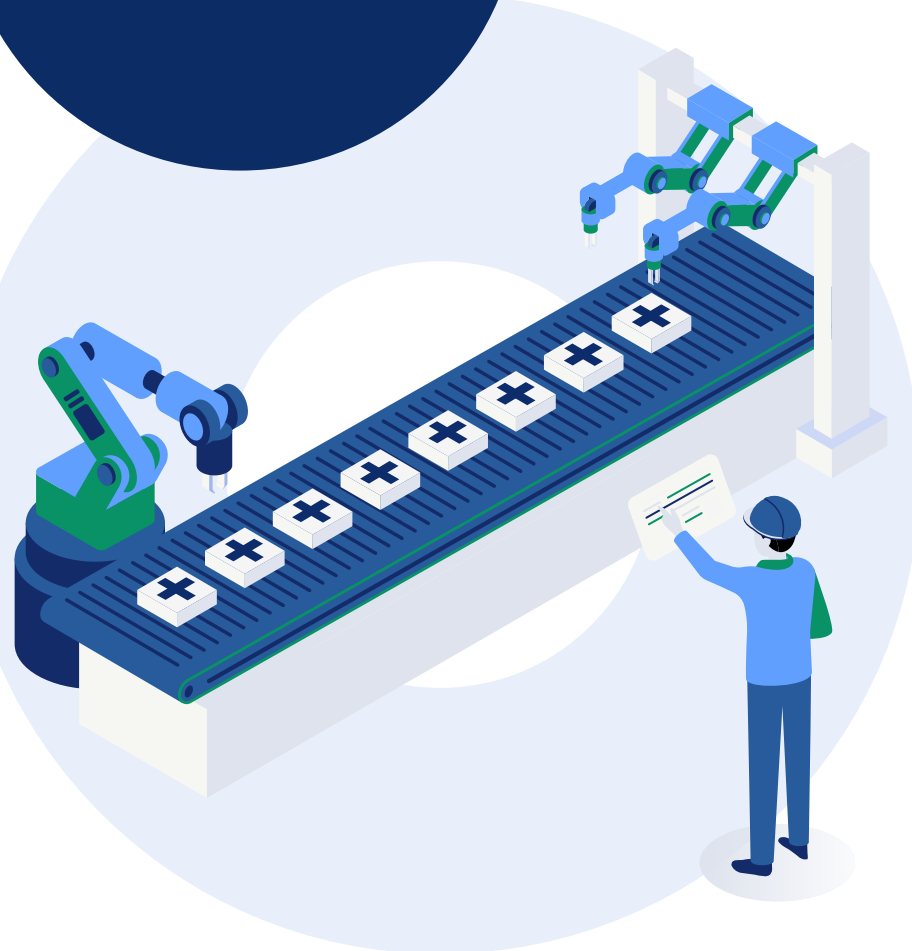
# DE-RISK PRIVATE CAPITAL

↳ The Race to Zero is global, and the UK must be equipped with the right business framework, incentives and subsidies to promote investment in zero emission technology research, development and production. The UK currently has structural disadvantages when competing with major European countries, which offer cash incentives, tax breaks and investment in land and infrastructure. Mission Zero – Rt Hon Chris Skidmore's independent Net Zero review – outlines several potential recommendations, including backing businesses by reviewing incentives for investment in green technologies.

Given stringent local content requirements under free trade agreements, significant investment in domestic minerals refining, cathode and anode active materials, battery component and cell manufacturing, and electric drive units is crucial to ensure we can benefit from and maximise tariff-free trade, including with the EU, which will continue to be the UK's most significant automotive trading partner.

Calculated risk-taking is fundamental to the growth of enterprise and economies. Global investors are cognisant of the strengths and capabilities of UK Automotive but must have confidence to select the UK over alternative locations. This calls for a bold, internationally competitive pro-growth package of incentives and subsidies, smartly delivered to de-risk international capital and position the UK as the location of choice for green technology investment. This domestic strategy must be aligned to a complementary international trade strategy that ensures trade rules for EVs and batteries are fit for purpose so that the UK is a global manufacturing destination of choice.

Global investors are cognisant of the strengths and capabilities of UK Automotive



## A PLAN FOR DE-RISKING INVESTMENT



**More generous near-to-medium term incentives and subsidies more accessible to business and deployed at pace**, including grants and tax breaks to encourage the localisation and scaling of a battery value chain and promote a circular economy. Funding should be prioritised for high-value or strategic activities such as minerals processing, cell manufacturing, battery reuse and remanufacturing, materials recovery and recycling, electric drive unit manufacturing and fuel cell production.



Significant support in the near-term to **ensure our energy costs are competitive**. Automotive, widely recognised as export-led and trade intensive, should be afforded equivalent benefits as an energy-intensive industry (EII) allowed to claim from the EII Exemption Scheme, or be a beneficiary of the British Industry Supercharger scheme. Given UK electricity prices are currently more than double the average paid at EU vehicle plants, the availability of low cost, low carbon energy could be a huge influencer in investment decisions, especially for more electricity-intensive electric vehicles and their associated supply chains.



**Greater incentivisation of renewable energy projects** to ensure medium-to-longer term energy security. While the UK is still a world leader in offshore wind, the increase in overall renewable energy capacity has been sluggish, with only 6.9% of new capacity added in the 12 months to September 2022. This calls for a doubling down of incentives and subsidies to drive the rapid scaling of renewable energy generation and storage required.



**Better access to innovation grants and subsidies to support clean-tech start-ups** with innovative solutions. The path to creating the next British unicorns begins with nurturing and supporting less mature, experimental technologies, especially those in battery chemistries, renewable energy generation and storage, and carbon capture and storage. Government should at least match the EU's intention to fund up to 45% of the total project costs of these initiatives, and develop a clear pathway to scale up successful R&D that keeps prosperity and opportunity in the UK.



**Creation of a special purpose vehicle (SPV) to enable government to co-invest in green technologies** in the medium-to-longer term. Similar to the European Sovereignty Fund and Singaporean government investment vehicles, an special purpose vehicle that takes a minority stake in carefully identified ventures will allow high-potential businesses with proven technologies to rapidly scale. Once they become more attractive to private investors, government can exit for a profit that is then reinvested, hence creating a virtuous circle of growth.



Continue to **champion the delivery of the 2023 Automotive Upskilling Pilot Project** in the major automotive regions and support to transition the Pilot Project into a long-term National Skills Platform, with centralised governance structures and trusted, government-backed branding established. Short-course qualifications should be quality assured and Occupational Maps established to provide employees and their employer with a training roadmap, equivalent to what is available for apprentices.

# REGULATORY REFORMS

→ An industrial transformation strategy must be ambitiously funded and delivered at speed. The UK needs a regulatory framework that is suited for simplified and fast-track green technology project permissions and funding approvals. The current process for securing permits and funds to, for example, build a battery production or refining facility is onerously protracted, while currently it could take longer to permit a windfarm than to build it. Reform will enable industry and consumers to benefit from the lower costs and increased availability of renewables.

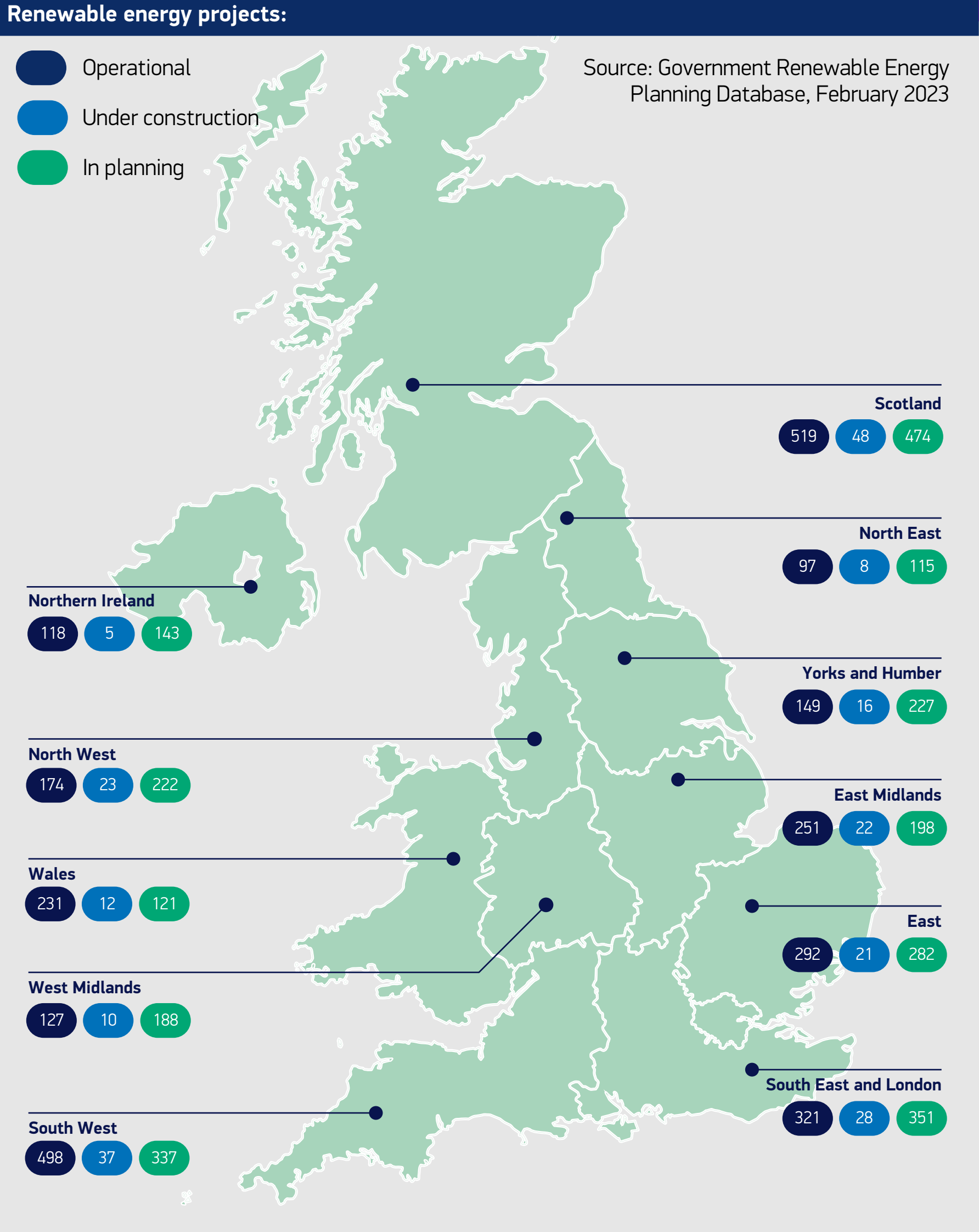
We must not let our world-leading ambitions on zero emission vehicles and renewable energy be derailed by cumbersome and outdated planning and permitting policies. We believe the following measures are necessary:

**Simplify red tape or fast-track where appropriate approval processes** for capital projects such as battery production or materials refining facilities, onshore and offshore windfarms, solar farms, energy storage, electrolyzers, and carbon capture and storage. Government should consider adapting the approach in Spain, where the government automatically grants permits to sub-150 MW solar photovoltaic projects and sub-75 MW windfarms that meet specific technical criteria if there are no objections to the application within two months. Such an approach could halve the development time for solar projects without compromising environmental and social considerations.

**Speed up and streamline access to funding for green technology projects.** Public funding is capable of unlocking significant amounts of private financing required for industry's green transformation. A faster response for drawing down funds will help maintain global investors' attention, build confidence in the UK's strategic direction and help prevent the UK from losing out to more agile competitors through smart delivery and by cultivating an internationally recognised track record for successful realisation of prospective investment.

**Reform the electricity market by decoupling the price of electricity and renewables** from gas. The current regime is anachronistic and out of sync with the transition to a future built upon clean power. The much-needed reforms will enhance our long-term energy security based on an exponential increase in renewables and could significantly lower the energy costs for industry.

The UK needs a regulatory framework that is suited for simplified and fast-track green technology project permissions and funding approvals



# GLOBAL DIPLOMACY



While the UK does have limited domestic quantities of lithium and graphite, these resources alone will not be sufficient to deliver on our ambition or potential – in common with many automotive hotbeds. Europe’s largest vehicle producers are Germany, Spain, Slovakia and the Czech Republic – none of which have self-sufficiency in critical raw materials. Lithium is mined largely in Australia and Chile, cobalt in Congo and Australia, and nickel in Indonesia and Russia. China dominates in minerals refining capacity, with up to 90% of the world’s critical minerals refined and processed there – with the inevitable result of high embedded carbon in the refined materials due to a fossil-heavy energy mix.

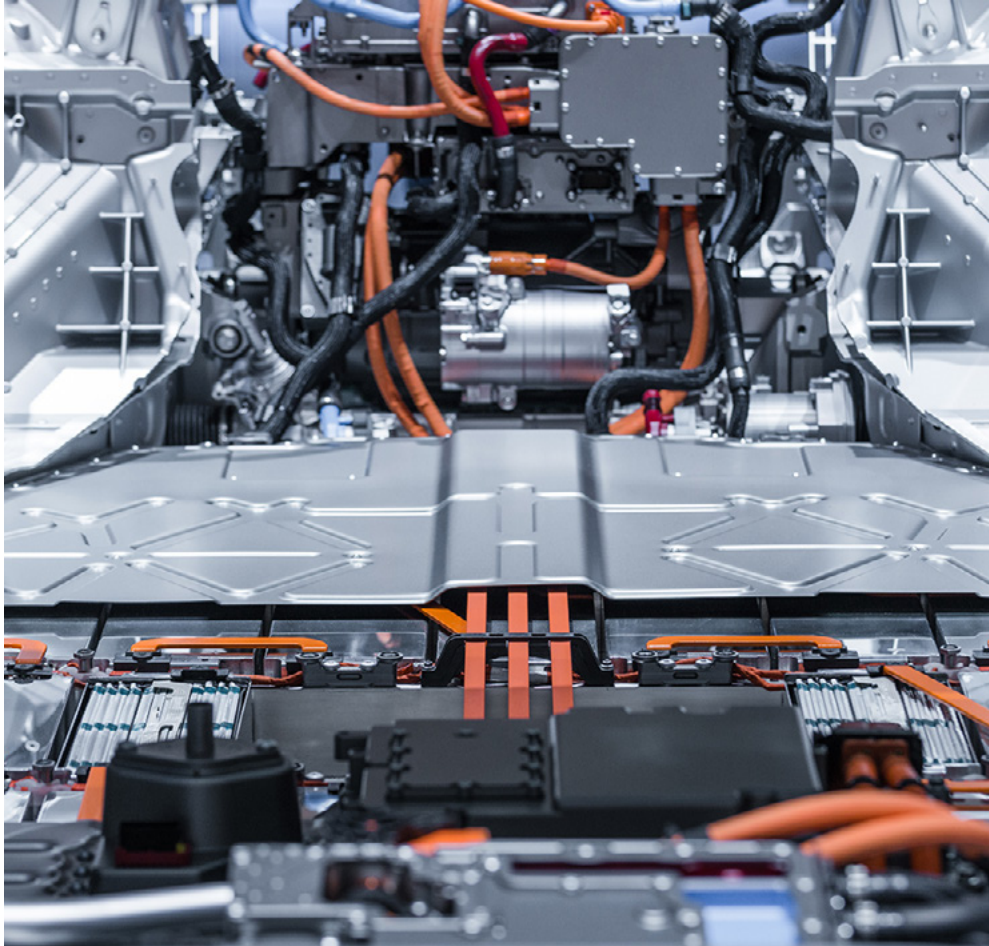
While there is still a window of opportunity for the UK to secure its own minerals processing capacity, government must continue to expand at pace the UK’s network of trade agreements and partnerships with resource-rich countries to support the industrial transformation. It is imperative to engage in global resource diplomacy to ensure UK businesses can source from a diverse, secure, resilient minerals supply chain that enhances global trade and export opportunities.

**Government must continue to expand at pace the UK’s network of trade agreements and partnerships with resource-rich countries**

- The following measures should be prioritised:**
- Expand and enhance free trade agreements at pace to secure global markets for tariff-free export of British-made vehicles, batteries and battery parts that support the UK’s industrial capability through appropriate rules of origin thresholds and market access.
  - Establish partnerships with minerals-rich countries such as Australia, Canada and Indonesia, through bilateral and multilateral minerals supply agreements to secure supplies of critical raw materials for batteries.
  - Encourage British investors to develop new mines using sustainable practices and provide technical expertise in partner countries to achieve win-win outcomes for local communities and British industry.

The UK has eminent strengths in advanced manufacturing, including automotive, and we must build on those foundations. We are now at a crossroads with a once-in-a-generation opportunity to transform our world-leading automotive industry, ensuring it remains a key driver of Britain’s transition to net zero and a major contributor to the country’s economic prosperity. We must avoid inaction, which could lead to industrial malaise. Instead, with a national vision and a dedicated and comprehensive transformation strategy the UK can continue to be a world leader in producing the sustainable, smart vehicles on which our reputation has for so long been built.

UK trade negotiations	
IN PROGRESS	SIGNED
Canada	Australia
Mexico	New Zealand
Israel	European Union
India	
Gulf Cooperation Council (GCC)	
CPTPP	
South Korea	



Top 5 producers of		
LITHIUM	COBALT	NICKEL
 Australia	 DR Congo	 Indonesia
 Chile	 Indonesia	 Philippines
 China	 Russia	 Russia
 Argentina	 Australia	 New Caledonia
 Brazil	 Canada	 Australia

# CONCLUSION

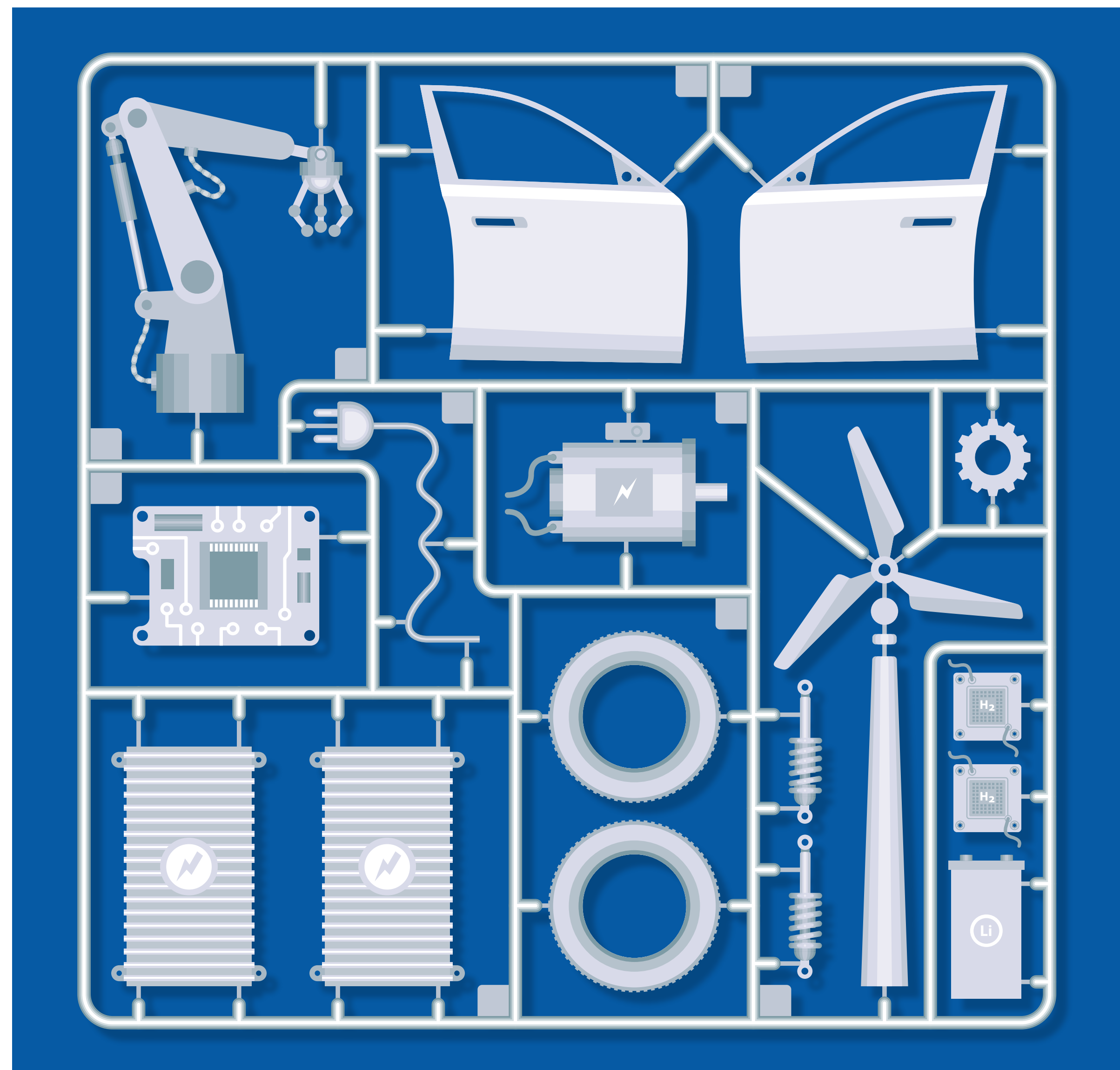
Britain's electric vehicle production future is in place for the short term, with at least 20 models expected to be in production by 2025. But against the backdrop of increasing global protectionism and major green technology incentives that are threatening to monopolise finite investment in clean technologies such as batteries, electric vehicle manufacturing and renewable energy generation, we must take action to ensure UK Automotive remains a global force and further entrench early adopter advantages.

The international funding landscape and approach to subsidy control is evolving rapidly to satisfy the huge political and social demand for green industry. The \$370 billion US Inflation Reduction Act and the European Union's response in the form of a Green Deal Industrial Plan will put the UK at a significant disadvantage if unanswered. This may mean the UK automotive industry losing ground and, ultimately, being left behind given the economically rational and borderless nature of net zero capital. While protectionist measures are undesirable and could result in a green capital arms race that in turn leads to unfair competition and market distortion, doing nothing is simply not an option.

Britain has several advantages that enhance our potential – an established and extensive, if proportionally small, electric supply chain, world-class R&D and a competitively low-carbon energy mix. Now we need a clear Green Automotive Transformation strategy that capitalises on these strengths and opens up new opportunities – by de-risking investment, accelerating approvals and securing new trade deals and partnerships that give us greater access to essential raw materials.

We must have the right strategy and smart delivery to ensure we continue to play a leading role in decarbonisation, job creation and economic prosperity.

The choice is clear. The opportunity is now. With the right strategy, our achievement can be great – for jobs, prosperity and the planet.



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