GREEN GROWTH

THE UK IS FALLING BEHIND

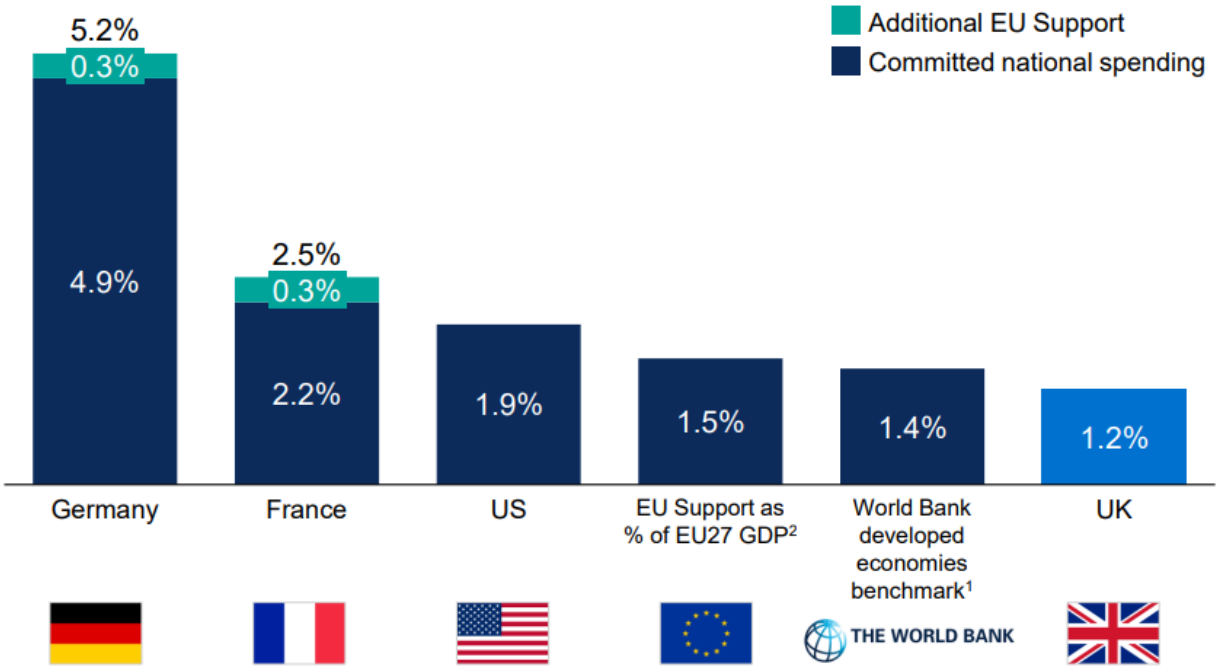
JANUARY 2023

Global competitors have changed the game…

With its natural resources, innovation and skills strengths, the UK should be winning the race in green technology. The UK was the first major economy to commit net zero targets into law, has an excellent track record of cutting emissions from its power supply and thousands of net zero-committed businesses up and down the country. More firms aligned to the UN's Race to Zero are headquartered in the UK than any other nation, almost 70% of the FTSE 100.[1] But the UK is losing its first mover advantage as global competitor's double down on stimulus for their green economies.

The UK now has one of the lowest proportions of spending to address climate change of many comparable global economies, with France having committed over twice and Germany over four times as much spend.

Government spending committed by selected countries to climate change, % of GDP



1. Calculated as total climate spending committed by the European Commission divided by the combined GDP of the EU member states; in practice EU funding is not equally distributed by GDP.
2. Spending on climate expressed as % of GDP recommended in World Bank's Climate and Development: an Agenda for Change report (2021).

Source: World Bank, UK's Ten Point Plan, Germany Climate and Transformation Fund, France 2030, Bruegel, US Bureau of Economic Analysis, Press search, CBI Analysis

In European markets, REPowerEU, passed in May 2022, has been designed to diversify energy supplies and accelerate the clean energy transition. The €300 billion total package is combined with the roll-out of solar, wind and hydrogen accelerator projects, dedicated funding for industrial decarbonisation and faster renewables permitting and hydrogen deployment. It also sets series of new EU-wide targets, such as energy efficiency to increase from 9% to 13% by 2030.

In the US, the Inflation Reduction Act, passed in August 2022, represents unprecedented economic stimulus and commits its largest share to energy and climate funding – $370 billion over the next 10 years. Most is in the form of tax credits for a broad range of green technologies which corporations can claim in full and receive as direct payment even if the credit is higher than their tax liability. It has been designed to catalyse domestic energy production and manufacturing through on-shoring conditions, and reduce the US' carbon emissions by approximately 40% by 2030.

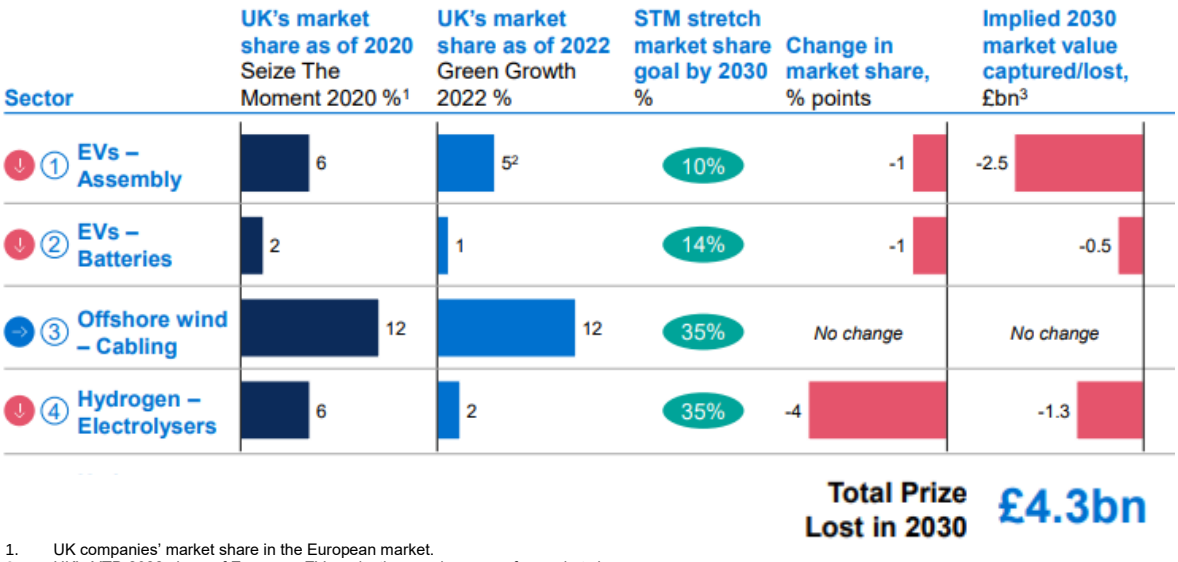
[1] UNFCCC, United Nations Race to Net Zero Campaign, 2022

…and the UK's market share of green tech is eroding

In 2020, the CBI set out its Seize the Moment (STM) vision to transform the UK economy – the economic prizes on offer, and the role of business and government to achieve them. Looking at European export opportunities specifically, it identified that decarbonisation sectors with the highest potential included up to £18bn in electric vehicles (EVs) and batteries, £8bn in hydrogen electrolysers and £3bn in offshore wind goods and services by 2030.[2]

To assess the UK's performance in these sectors and how to maximise their export potential, our work set aspirational targets for market shares achievable in 2030 (column three) compared to the share the UK had already captured of the European market in 2020 (column one). This year, the CBI updated its analysis to assess what market share improvement, if any, had been achieved in these sectors (column two). It found that in all but offshore wind, the UK's market share has declined (column four), equivalent to £4.3bn in total projected lost value by 2030.

Between 2020 and 2022, the UK's share of the European markets in both EV assembly and battery production fell by 1 percentage point. If there is no change in UK production shares before 2030, the UK will have lost £3bn in projected value in total across both areas. The UK's share of the European market in hydrogen electrolysers also fell by 4 percentage points in the last two years, equivalent to a loss of £1.3bn in value by 2030 if current shares remain consistent.



1. UK companies' market share in the European market.
2. UK's YTD 2022 share of European EV production used as proxy for market share.
3. Size of prize capture or lost assuming the UK maintains the 2022 market share by 2030. Prize sizing is based on STM estimates.

Source: McKinsey Battery Support Tracker, Bloomberg New Energy Finance, McKinsey EV volumes 2022

The UK needs to keep pace in the global competitiveness race in these markets. This requires political commitment to policy frameworks that increase UK production. The global value of hydrogen electrolysers is forecast to be £22.4bn by 2030[3]. In practice the UK should be well placed to capture a significant proportion of this economic opportunity given its specialist knowledge and innovation capabilities. Demand for EVs in passenger cars is increasing year on year in all major economies, including the UK. There is also expected to be a cumulative imbalance in the supply and demand of batteries for the European market (excluding the UK) creating an undersupply of 567GWh[4] between 2023 and 2030 indicating that increasing UK production capabilities is a significant export opportunity.

[2] CBI, Seize the Moment: how can business transform the UK economy?, 2020, pg. 16
[3] McKinsey Hydrogen Insights Value Pool Model, 2022
[4] McKinsey Battery Insights – Battery Demand & Supply Model 2022

How can the UK realise green growth opportunities?

The UK has a growth problem. Accelerating the transition to net zero isn't just a global moral imperative, it presents huge opportunities for those economies that maximise the competitiveness and export opportunities of green tech. The UK were global leaders – political action is needed now to ensure that further market share isn't lost in sectors where geological, innovation and skills strengths mean the UK has a natural right to win.

UK business see green as the biggest growth opportunity. It wants to work with policymakers to unlock the right combination of investment incentives and smarter regulation that will realise these opportunities for the UK economy by 2030.

The CBI is engaging with its UK-wide membership, representing almost a quarter of the private sector, to develop the policy strategy that will deliver the highest growth route to UK decarbonisation as the basis of a major *Green Growth* business campaign in 2023. McKinsey & Co are providing the underlying research and analytical support as our knowledge partner on green growth.