NEW REPORT FINDS DECISIVE POLICY ACTION COULD BRING UK BIG OPPORTUNITIES FROM ZERO-EMISSION AND AUTONOMOUS VEHICLES

Zero-emission and autonomous vehicles present significant growth potential for the UK, and diverse employment opportunities, according to a new report published today (13 February 2020).

The report finds that UK-based manufacturing of selected zero-emission and autonomous vehicle components could be worth £16.8 billion per year by 2030 and could sustain up to 80,000 jobs, but only with the right set of flexible policy measures, incentives and regulation.

The report is the first in a series by the Grantham Research Institute on Climate Change and the Environment, and the Centre for Economic Performance (CEP) both at the London School of Economics and Political Science (LSE). The series will present the institutional and policy frameworks required to stimulate investments in innovation, infrastructure, skills and cities needed to return the UK to long-term and inclusive growth.

Lord Stern, chair of Grantham Research Institute and I.G. Patel Professor of Economics and Government at LSE, said: “The zero-carbon transition is the growth story of the 21st century, and the race is now on between economies to become cleaner, smarter and more efficient. The UK’s recent commitment to achieve net-zero annual emissions of greenhouse gases by 2050 presents an opportunity to drive sustainable growth, while demonstrating international leadership on climate change.

“In many parts of the country, employment in automotive manufacturing and related sectors is interwoven with local communities and their sense of identity. Well-planned policies for sustainable investment can strengthen local cohesion, generate economic opportunities and improve labour market resilience, ensuring that the benefits of the zero-carbon transition are spread across the UK.”

The report finds that despite the UK losing competitiveness in comparison with market leaders such as China and Germany, it could still have a manufacturing opportunity if it steps up incentives to support production in regions across the UK, spurs demand for zero-emission vehicles and secures close alignment with the European Single Market and EU emissions regulations.

“The supply chains of the future could look quite different from today and the government has to take measures now to ensure global competitiveness in zero-emission and autonomous vehicle technologies. Within these supply chains the UK could secure 80,000 jobs in 2030 in the production of selected electric vehicle powertrain components, charge points, fuel cell powertrain components and autonomous vehicle hardware and software under a high market-share scenario,” Sam Unsworth, a co-author of the report, said.

“Under such a scenario we would expect considerable further employment besides component production in diverse areas such as vehicle assembly, chemical inputs for batteries, testing of connected and autonomous vehicles and software platforms for mobility services.”
The report includes an analysis of innovation across the country which finds that the West Midlands and Eastern Scotland are proving to be hotbeds of innovation in zero-emission and autonomous vehicles. Overall the UK has a comparatively lower share of global innovation across clean and autonomous car technologies relative to other countries but does well in specific technology classes, including those related to connected and autonomous vehicles.

“The UK government’s recent commitment to move the ban on sales of new petrol and diesel vehicles forward from 2040 to 2035 – and to include hybrids – creates stronger market incentives to accelerate the shift from vehicles powered by internal combustion engines towards a number of cleaner and smarter technologies and innovations,” Dr Anna Valero, a co-author of the report, said.

“By being at the forefront of the development of zero-carbon products and services, the UK can leverage its innovative strengths to seize economic opportunities from the worldwide transition that is already underway, and the markets that are growing around the world.”

The report recommends that the UK adopt a portfolio approach to incentive design, targeting a wide range of goods and services that can contribute to zero-emission, connected and autonomous road transport. It is likely that the UK will need to surpass its international competitors in the provision of incentives, given its mixed record of competitiveness and uncertainties over its future trading relationships. This will require implementing the recommendations in this report, including:

- More ambitious and holistic demand-side policies to spur domestic vehicle sales.
- Systematic integration of zero-carbon into incentive structures such as R&D tax credits and export finance.
- Greater focus on skills, including a future skills marketplace.
- Addressing Brexit-related uncertainty where possible in the auto sector.
- Using a reinvigorated policy environment to attract major players to site a battery gigafactory in the UK.

Click to read: “Seizing sustainable growth opportunities from zero-carbon passenger vehicles in the UK”.

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Notes for editors

About The Grantham Research Institute on Climate Change and the Environment

Established in 2008 at the London School of Economics and Political Science, the Institute brings together international expertise on economics, as well as finance, geography, the environment, international development and political economy to establish a world-leading centre for policy-relevant research, teaching and training in climate change and the environment. It is funded by the Grantham Foundation for the Protection of the Environment. www.lse.ac.uk/grantham/

About the Centre for Economic Performance

Established at LSE in 1990 CEP is one of Europe’s leading economic research centres. Comprising some 90 faculty, research staff and doctoral students, CEP studies economic performance at the level of the company, the nation and the global economy by focusing on the major links between globalisation, technology, the educational system and the labour market and their impact on productivity, inequality, employment, stability and wellbeing. http://cep.lse.ac.uk/_new/about/default.asp