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Post-Brexit UK Automotive Industry (Part 2)

Transformation & Component Business Opportunities

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(Editor's note: Following the detailed analysis of the post-Brexit UK automotive industry and sales in Fastener World Bimonthly Edition Jan. 2025 Issue, this article will further explore the transformation of the UK's automotive industry after Brexit and the related component business opportunities.)

Transformation and Challenges of the EV Industry

Despite a significant increase in EV sales in the UK driven by the commercial and operational vehicle fleets, consumers in the private sector are still hesitant to purchase EVs due to a lack of policy support, with many already delaying their purchase until 2026.

Unlike other countries, the UK has phased out most subsidies for individual EV buyers, including the £5,000 EV subsidy. In addition, in 2023 the government has delayed the ban on the sale of new petrol and diesel cars until 2035, further slowing down sales of EVs and causing the UK to lag behind the rest of the EU. The Society of Motor Manufacturers and Traders (SMMT) believes that these policy changes and uncertainty are making consumers hesitant to buy EVs. In order to cope with the future development of the EV market, the UK government needs to coordinate closely with the EU to increase EV exports and cope with the post-Brexit tariff policy changes. According to the British Chambers of Commerce (BCC), the introduction of tariffs between the UK and the EU will increase the burden on consumers and reduce the competitiveness of EVs in both the UK and the EU; these issues suggest that while the EV market is meeting the needs of early adopters, it will be more challenging to reach the mass market.

The UK Government's "2020 Energy White Paper" sets out a two-phase approach to phasing out diesel vehicles, promoting the UK's transition towards zero emissions, and investing in innovative technology and developing the supply chain and subsidizing EV purchases and charging stations plans, further encouraging the UK's traditional automotive industry to develop EVs and increasing consumer demand. The UK is Europe's third-largest market for ultra-low emission vehicles, and a global leader in development and manufacturing. After Brexit, the UK's EV industry is facing increased transaction costs for export documentation and transportation time, as well as a shortage of domestic charging facilities and battery factories, and relies on imports for raw materials such as cobalt, lithium and graphite. The Financial Times emphasized that traditional car engine factories must be gradually replaced by battery factories, and that attracting battery manufacturers to invest in the industry is a top priority; SMMT also pointed out that investment in charging infrastructure and "battery mega-factories" will be crucial to revitalizing the UK automotive industry and meeting the challenges of the post-Brexit market.

EV industry transformation is facing some problems: (a) Brexit led to an increase in transaction costs. As the UK and EU automotive industries are highly connected, about 2/3 sales of battery powered EVs in the UK are produced in the European factories, and more than half of the UK-made cars are exported to the EU, such a close integration makes UK's EV industry vulnerable to changes in the relationship between the UK and the EU. According to Autocar (a UK automotive magazine), if the UK were to exit from the EU without a deal, according to the WTO, the UK would incur a tariff of 10% on automotive trade with the EU, and a tariff of 2-4% on other components, costing British consumers an extra £2,800 to buy an EV made in the EU. However, in the current agreement, the UK only imposes tariffs on products that do not comply with the Rule of Origin and there are no restrictions on

the value of the goods, so trade between the UK and the EU can be maintained at a stable level. The Financial Times thinks that UK manufacturers after Brexit face a cost of around 2%, including changes to the supply chain, application for new export certificates and increased time for imported components. Although the rate of increase is much lower than the 10% tariff, these changes will reduce the competitiveness of UK manufacturers.

(b) Insufficient charging facilities and battery factories, and relving on imported raw materials. According to Frost & Sullivan's analysis, at least 1.7 million public charging stations will be needed by 2030, and at least 2.8 million by 2035, to create a complete zero-carbon emission market for new cars in the UK. However, there are currently only around 19,314 charging stations in the UK, meaning that 507 on-street charging stations would need to be installed every day until 2035, costing £16.7 billion. According to SMMT, investment in charging infrastructure and "battery mega-factories" is

essential to revitalize the UK automotive industry and meet the challenges of a post-Brexit market. Autocar, the UK automotive magazine, said that most cobalt and key raw materials for EVs need to be imported, and that possible raw material shortages will also pose a risk to the development of UK's EV industry.

Automotive Component Industry and Supply Chain

Automotive and components manufacturing are very important industries in the UK. The local automotive manufacturers are among the world's top brands, with the domestic supply chain, including parts manufacturers, technology suppliers, design and engineering consultancy firms, and other related industries up to international standards. According to the 2023 report of SMMT, over 800,000 of the 33.56 million people employed in the UK are in the automotive industry (including vehicle manufacturing, parts and components, and aftermarket service).

The automotive sector accounts for about 11.2% of the manufacturing in the UK, which is an important industry. In 2023, the automotive industry in the UK had a production value of about £93 billion, a workforce of 813,000 people, 22 automotive design and development centers, 7 international car manufacturers, 5 large bus factories, and 4 commercial vehicle assembly factories, and had sold 1,903,000 vehicles and exported 607,000 vehicles. Imports of complete vehicles (including passenger cars and commercial vehicles) and automotive parts outnumbered exports, as shown in UK Automotive at a Glance (*Figure 1*).

Fig 1. UK Automotive at a Glance



There are over 2,500 automotive component suppliers in the UK. Many wellknown car manufacturers, including Jaguar Land Rover, Bently, Aston Martin, Rolls-Royce, London EV Company, Vauxhall and Lotus, etc., are located in Midland. Other well-known foreign companies, such as Toyota, Nissan, Mercedes, Honda and BMW are also located in the UK. Other well-known foreign companies such as Toyota, Nissan, Mercedes, Honda and BMW have also set up factories in

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the UK. The UK is also home to a number of important automotive component manufacturers, including GKN, TI Automotive, Tomkins, Unipart Group and Robert Bosch, Calsonic Kansei Europe, Cummins, Delphi Automotive, Intier Automotive Interiors and TRW.

Import and Export of Automotive Components in Taiwan and the UK

The UK is the 4th largest export destination of automotive components of Taiwan. In 2023, Taiwan's top 5 exports of automotive components to the UK were wheels (HS8708709000, NT\$2,015 million), other motor vehicle parts (HS8708999090, NT\$1,123 million), car bodies (HS8708299000, NT\$483 million), and automotive lighting and parts (HS8512201910, NT\$351 million), and brake system components (HS8708309100, NT\$324 million). The top 5 major imported automotive components from the UK were diesel engines (HS8408209100, NT\$136 million), other motor vehicle parts (HS8708999090, NT\$135 million), heavy vehicle front ends (HS8707901000, NT\$133 million), car bodies (HS8708299000, NT\$61 million), and brake system parts (HS8708309100, NT\$49 million). Figure 2 shows the forecast of Taiwan's auto component exports to the UK and imports from the UK.

Opportunities for Taiwanese Manufacturers

(a) EV Components & Batteries

Taiwanese manufacturers can pay attention to the sourcing demand for components derived from the development of new EV models by British manufacturers such as Rolls Royce, Bentley and McLaren. The Financial Times emphasized that the UK should invest in battery production to ensure the future competitiveness of the automotive industry. Autocar, a British automotive magazine, thinks that the current battery production of the Sunderland plant in the UK is about 2GWh, and the planned Britishvolt plant will increase the capacity to 15GWh; however, if it is to supply the production of 1 million EVs in the UK in 2030, it will require a battery production of 60GWh, to which Taiwan's battery manufacturers may consider investing in the UK or cooperating with local partners to establish new factories.

(b) Body Sheet Metal and Fastening Components

The restructuring of the British automotive industry after Brexit has led to changes in the supply chain structure, with most of the basic technology manufacturing outsourced, coupled with rising wages, and most of the traditional automotive and EV body sheet metal and fastening components imported. Taiwanese manufacturers can utilize the advantages of "small quantity and diversified" manufacturing to tap into the supply chains of traditional automotive and EV industries.

(c) Charging Facilities

The UK charging infrastructure market shows growth potential, but while the demand for EVs is growing, more than 50% of consumers are still not



ready for the change, as they are concerned about the higher prices of EVs, the lack of charging stations, and the ability to ensure that there are enough charging stations for long-distance travel. Instead of trying to compete directly, Taiwanese companies could consider offering solutions to UK charging infrastructure players to help improve the charging environment for local manufacturers. In terms of EV infrastructure, SMMT is demanding the installation of public charging stations for all

Source: Statistics of Customs Administration of Ministry of Finance; ITRI IEK (2024/12)

users, including fast and ultra-fast charging, as well as integration with credit and finance cards and internet roaming services.

(d) Automotive Electronics

The difference between EVs and traditional fuel vehicles lies in the fact that the proportion of automotive electronics used in EVs will become higher and higher and dominate the pace of technological advancement in the EV industry. Taiwanese manufacturers can utilize their rich experience in the electronics field to become a reliable source of supply for the UK market.