

Brexit, batteries and the fate of the British car industry

*While the British automobile industry was spared from costly tariffs in the Trade and Cooperation agreement (the Brexit deal), **Bob Hancké** and **Laurenz Mathei** argue that strict Rules of Origin requirements could spell its demise in the near future if the UK doesn't boost its efforts to establish a large-scale battery supply chain.*

If you listened carefully, you could hear a sigh of relief going through the UK automobile industry on Christmas Eve 2020. The final Trade and Cooperation Agreement (TCA) between the EU and the UK was [good news](#) for the manufacturing sector in the UK, as goods (including cars) will be more or less freely traded between the UK and the EU without many of the obstacles a hard Brexit would have imposed. Ignore for a moment that many UK businesses are still trying to come to terms with the new arrangements, which seem to impose rather significant transaction costs: paperwork, red tape, unclear, unknown and undeclared restrictions.

However, it turned out to be only a short-lived period of ease. Carlos Tavares – the CEO of Stellantis, the new gigacarmaker created by a merger between Fiat Chrysler Automobiles and Peugeot SA – has already [issued a warning](#) about the potential closure of the UK Vauxhall plant. His remarks came in response to the UK government's decision to ban the sale of new petrol and diesel cars from 2030 and fit in with industry-wide concerns about the UK's viability as a production location in the era of electric vehicles.

It's about where the batteries come from, stupid

Let's start from the beginning. While the British automobile industry was spared from costly tariffs, the devil is in the detail. The Rules of Origin (RoO) requirements seem to throw up important new barriers to trade. Before 1 January 2021, any product legally made in the UK could be sold anywhere in the UK and the EU. From this month on, though, UK carmakers will have to prove that at least 40% of the value of parts in a finished car that is exported to the EU – be they internal combustion engine vehicles (ICEVs), battery-powered electric vehicles (EVs) or plug-in hybrid electric vehicles (PHEVs) – were produced in the UK or the EU. The threshold for so-called originating content will climb to 45% from 2023 until the end of 2026, and to 55% from 2027. This is particularly challenging for EV production because the batteries alone, which are currently mainly imported from Asia or the US, often make up 50% of the total value of a car.

The good old battery bottleneck

[We pointed out](#) in December 2020 that the transition towards EVs is not as simple as producing them on an existing assembly line. Not only will original equipment manufacturers (OEMs) need to restructure their plants, they also require access to a functioning EV supply chain – most importantly battery production facilities. The new RoO requirements further increase the need for domestic British battery production, which will likely shape the cost-benefit analysis for carmakers with plants in the UK.

The underlying logic is the following: if OEMs can source batteries in the UK, they will invest in EV plants and the British automobile industry has a future. Note that this is a one-directional condition – the costs of setting up EV assembly facilities in the UK are prohibitively high without a sufficiently developed battery supply chain. Or, as Ralf Speth, the CEO of Jaguar Land Rover is quoted in [AM Online](#) (an automotive industry magazine): "If batteries go out of the UK, then automotive production will go out of the UK."



Nissan's plant in Sunderland, Credit: Nissan

[Nissan's recent announcement](#) that it will increase production in their Sunderland plant, including EV assembly, is an illustrative example. While, over the last few years, they were planning to reduce their capacities in the UK, Nissan's exclusive deal with the battery producer Envision has shifted the company's cost-benefit analysis drastically. Envision's plant, which is conveniently located right next to Nissan in Sunderland, was previously owned by the Japanese manufacturer and currently produces batteries with a capacity of 40kWh. Expanding Envision's portfolio, including the production of 62kWh batteries – which Nissan needs for the Leaf, one of its flagship EVs produced in the UK – enables the carmaker to avoid problems related to the new RoO requirements and, hence, invest in the future of its British operations.

However, one OEM's exclusive collaboration with a (relatively small) battery producer by no means guarantees the emergence of a British battery supply chain at large, making the cost-benefit analysis of carmakers without existing ties to battery producers in the UK still look relatively dire. While there are numerous large-scale battery plant projects in the pipeline all over Europe, the UK is lagging behind significantly and there is currently only one concrete plan for a so-called battery gigafactory in Britain, though it [won't be operative before the end of 2023](#). Even if the price of imported batteries dropped sufficiently in the coming years to avoid creating RoO issues – as some commentators speculate – the uncertainty will disincentivise OEMs from investing in EV plants in the UK. Of course, UK assemblers could simply import the batteries from the EU. That, however, ignores the fact that the transition to EV production is linked with a shortening of supply chains and a trend towards co-location of battery and vehicle assembly.

The UK as Europe's last stronghold of ICEV production?

On the other hand, there is a rumour doing the rounds in the industry that continental factories will be converted into plants for EVs and that UK plants will remain producers of vehicles propelled by internal combustion engines. While that would almost certainly herald the demise of the automobile industry in Britain in the medium run – precisely because the transition is not very simple – it might at least safeguard the sector's short-term future.

However, the UK is not the only country in Europe's automobile periphery. Many OEMs have invested heavily in Central and Eastern Europe in the last decades – including investment in training and supply chain networks – and they might face a trade-off between the two production locations. As a consequence, the UK will have to enter into largely cost-oriented competition with traditional low-wage countries like Hungary, Slovakia, or the Czech Republic. This will prove difficult for Britain, not least because the TCA stops the country from significantly deregulating its labour market – thus reducing wages and other costs. If traditional engines will be prohibited for sale in the EU (and the UK) within a decade as planned, and OEMs have to decide how to reap the last benefits of the ICEV era, they'll likely prefer the more cost-efficient solution.

Automobile manufacturers may still be facing tough choices about their past investments in the UK – the sunk costs of their investment in UK plants bear heavily on their minds – but they seem to have accepted that the costs of remaining in the UK and producing at full capacity are too high, and have decided to slowly write off the losses. Honda has already announced capacity reductions, and BMW is likely to do the same for the Mini factory near Oxford. In addition, without a significant push towards a large-scale British battery supply chain, it is unlikely that newcomers would choose the UK, now outside the EU, as a production site: why exactly Elon Musk selected Brandenburg for the new (European) TESLA factory may be unclear, but Brexit surely mattered in the calculations of the company.

Covid was cyclical, Brexit is a structural problem

Covid-19 has likely accelerated this dynamic. The pandemic made companies hedge their bets, as Honda's recent announcement of a partial closure of the Swindon plants demonstrates. That could be overcome as a cyclical problem, but Brexit will seal the fate of both old and new investment in the automotive industry if the UK doesn't ramp up its efforts to establish a functioning battery supply chain. Companies often located in the UK because of the English language, the deregulated labour market, and the permissive business environment. Important as these advantages may be, Brexit trumps them all. When the UK is no longer an easy entry port into the EU's Single Market, the main competitive advantage in the race for FDI disappears. And with that the hope for a prosperous post-Brexit era of car manufacturing in the UK.

Note: This article gives the views of the authors, not the position of EUROPP – European Politics and Policy or the London School of Economics. Featured image credit: [Nissan](#)
