Germany

Germany's 'carland' braces for electric shock

Saarland symbolises economy's vulnerability to changing technology

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Guy Chazan and **Patrick McGee** in Saarbrücken JUNE 12 2019

The ZF factory in Saarbrücken is a monument to Germany's carmaking success. Every day it produces more than 10,000 eight-speed automatic transmissions and ships them to 21 countries. Last year it made €4.7bn in sales, up from €1.9bn in 2010.

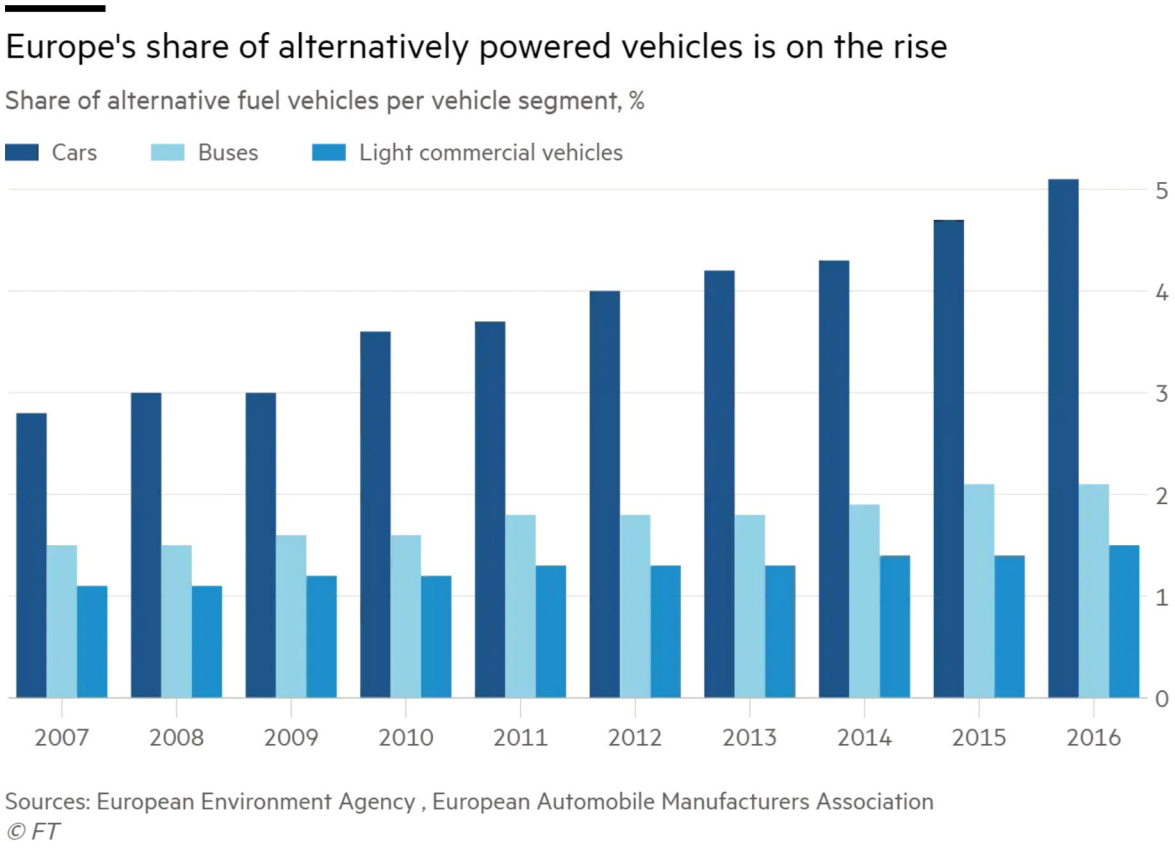
"This plant has developed technology you cannot find anywhere else in the world," said Haluk Mehmet, director of car power train technology. "Our workforce is not only educated, but experienced over decades."

But the factory is also a symbol of Germany's vulnerability. If the future of the car industry lies in all-electric vehicles — which do not need multi-speed transmissions — the innovations that ZF has pioneered in Saarbrücken will cease to matter.

The issue worries not just Germany's car industry executives but also its political leaders, both in Berlin and in places like Saarland, the region of which Saarbrücken is the capital.

In an interview Tobias Hans, Saarland's prime minister, said its reliance on the car industry leaves it uniquely exposed. "We basically build parts for cars with combustion engines," he said. "[But] we know that by 2030, more than a third of all cars will be electric or hybrid. And that will obviously have an impact on us."

Germany's business model is predicated on the success of its car industry. It sustains 800,000 jobs domestically and contributed 4.7 per cent to German gross domestic product in 2016. Export champions such as BMW, Audi and Mercedes-Benz account for 80 per cent of the global luxury car market.



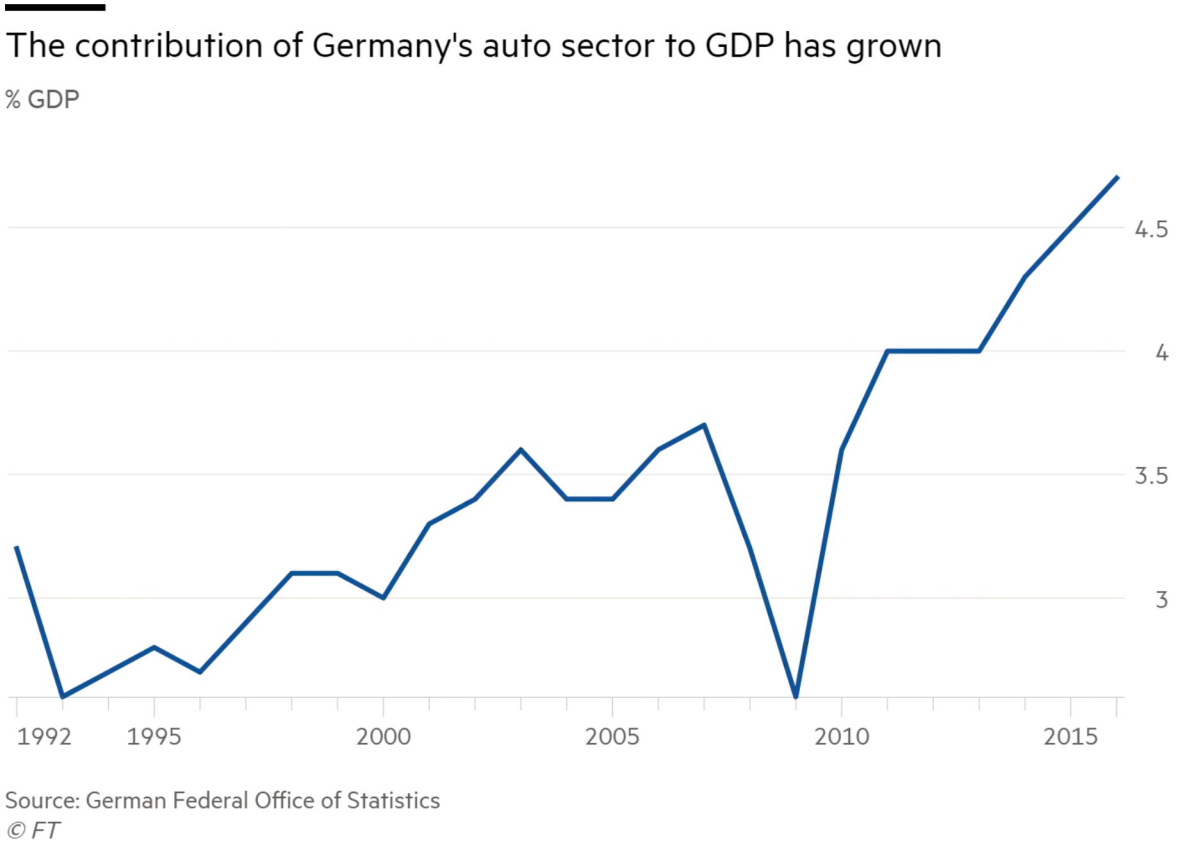
Yet the outlook for the combustion engine, the cornerstone of the sector, is darkening as emission standards tighten and diesel bans are implemented. Chancellor Angela Merkel admitted in March that if Germany was to meet its target of reducing CO_2 emissions in transport by 42 per cent by 2030, electric vehicles were the only answer. "We cannot achieve that with the old motor technologies," she said.

Meanwhile, the high-end engineering skills that Germans excel in will decline in relevance as the role of software and imported batteries grows. A pillar of Germany's economic strength could start to wobble.

That could have big ramifications for a small region like Saarland. A territory of just 1m people bordering France and Luxembourg, Saarland is carland. Once a centre for steel and coal, it reinvented itself in the 1970s and 1980s as a hub for big

carmakers such as Ford, which builds Focuses in Saarlouis, and ZF, a supplier for the likes of Audi and Jaguar Land Rover.

ZF's Saarbrücken plant is the largest of its 230 factories and is Saarland's biggest employer. Elsewhere, Eberspächer builds car emissions systems in the town of Neunkirchen while Gusswerke Saarbrücken makes engine blocks and driveshafts. Bosch, the world's biggest car parts supplier, produces diesel injection systems in Homburg.



Yet Germany has failed to carve out a big role producing the essential building blocks for electric cars. Ms Merkel has repeatedly warned that Europe's future as a centre of car production is at grave risk unless, for example, it can figure out a way to produce batteries on the scale that countries like China have.

"If we want to stay competitive in the long term, we cannot just leave it to other continents to take on large parts of the value creation of the car of the future," she told global business leaders in Davos in January.

ZF itself is more sanguine about the future. Stephan von Schuckmann, head of its car power train technology division, said the Saarbrücken plant would be busy for years building transmissions for hybrid cars. Today these make up just 3 per cent of ZF's sales. In 2025, that share will climb to more than 50 per cent.

"That is not a hypothetical projection," he said. "The vehicles are currently being

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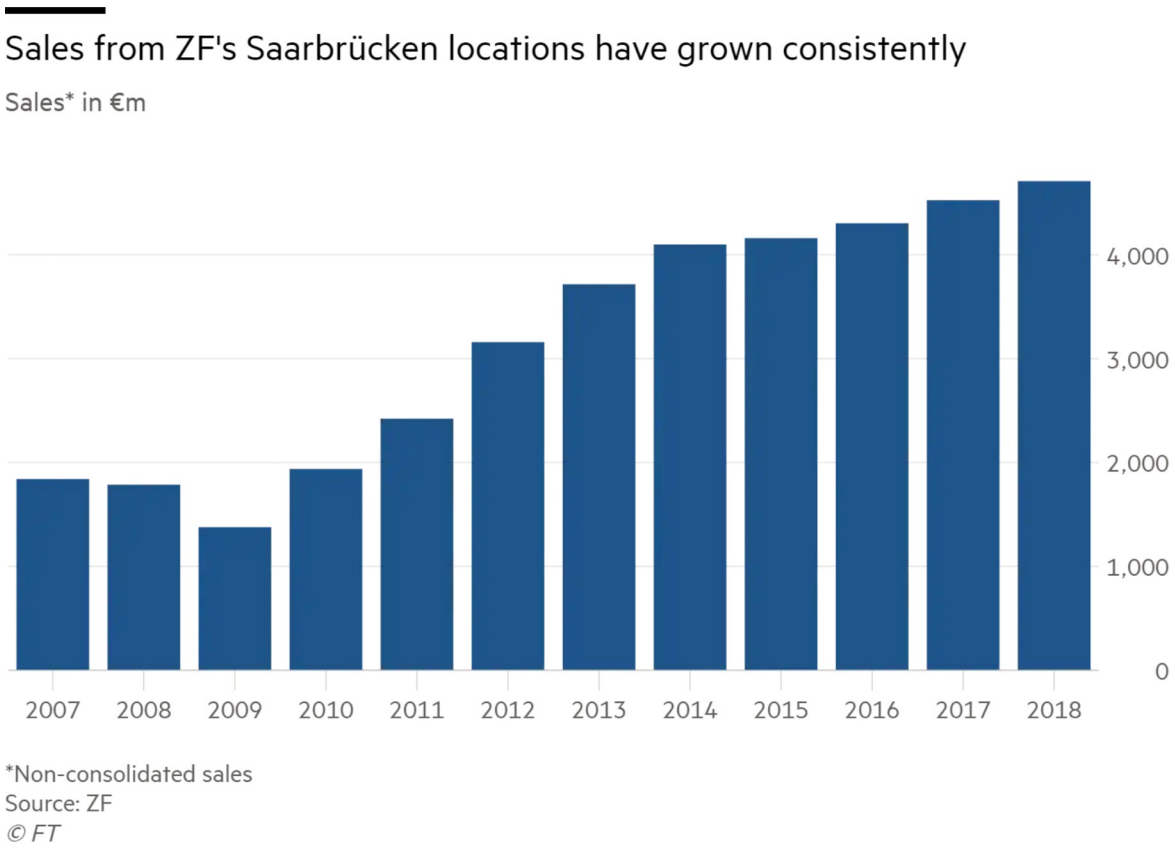
worked on and will be launched in 2022, 2023."

In April, ZF received the biggest order in its history — a multiyear deal worth around €20bn to supply BMW with 8-speed automatic transmissions which integrate an electric drive for hybrids. Production begins in 2022, at Saarbrücken.

Mr von Schuckmann acknowledged that "if everything switched to [battery electric vehicles] that would be difficult for us". But he is confident that plug-in hybrids with an electric range of 80-100km could represent the best of both worlds and are not just a stopgap en route to an all-electric future.

Others are much less optimistic. "We're experiencing a revolution . . . and the region that has the biggest problem is Saarland," said Oliver Luksic, a Bundestag MP for the liberal FDP party, who comes from Saarland.



It has more jobs in the car industry per inhabitant than Baden-Württemberg, home to Daimler, Porsche and Bosch, he noted. Yet, unlike Baden-Württemberg, it has no big company headquarters and few corporate research centres. "It is just

production facilities, and that is why it will soon face a massive restructuring," said Mr Luksic.

Already, the region's car industry is showing signs of stress. In March, Ford announced it was cutting 1,600 of 6,300 jobs in Saarlouis as it ends production of the C-Max minivan. Bosch is slashing 400 jobs in Homburg, reflecting declining demand for diesel engines.

Saarland is trying to adapt its economy. It has become home to some of Germany's most cutting-edge scientific institutes, such as the Helmholtz Center for Information Security (CISPA) and the German Research Center for Artificial Intelligence, a public-private partnership whose shareholders include Google, Intel, Microsoft and Airbus. The Saarland Informatics Campus hosts 800 computer science researchers and 1,900 students from 81 countries.

"I want the big companies that have operations here to bring their R&D centres to Saarland," said Mr Hans. "That's the way we turn this region from a manufacturing base to a centre for research and innovation."

Already there are signs this is happening. In March, ZF announced it was setting up a technology centre for AI and cybersecurity in Saarbrücken. It plans to hire 100 researchers to work on areas such as "automated mobility".

Yet the doomsayers doubt such steps will be enough. "A big part of the 44,000 jobs in the car industry in Saarland will disappear over the next 10 years," said Mr Luksic. "Coal and steel is nothing compared to what lies in store for Saarland."