

GERMANY



POPULATION 2016
82 667 680



URBAN POPULATION %
76 %



NUMBER OF PASSENGER CARS IN USE
46 474 594



NUMBER OF VEHICLE PER HEAD
(DATA IN 2015) PER 1000 HABITANT
593



TOTAL PASSENGER TRAVEL
DISTANCE 2016
1 027 629



ROAD INFRASTRUCTURE
INVESTMENT 2017 €
11 690 000 000



% OF ELECTRIC VEHICLES IN 2017
IN NEW CAR SALES
LESS THAN 5%

Source of data: World Bank; OECD; Eurostat; OICA; IEA; UN-DE-SA/Population Division; Statistics from Departments of Transport



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Can arriving late to the sustainable mobility party work to Germany's advantage?

Björn Franke, partner at Mazars in Berlin looks at how a more measured approach to sustainable mobility solutions may be of benefit to Germany's automotive sector in the long term.

Compared with some of its European cousins such as Norway and The Netherlands, Germany has not embraced alternative drive vehicles as quickly as others. This is not entirely surprising with car manufacturing giants such as BMW and Volkswagen earning their reputations on the expertise and knowledge of combustion engine technology and manufacturing excellence built up over the past 80 to 100 years. But with the political and regulatory landscape moving firmly in the direction of car electrification, the industry is having to seriously examine its future.

Accounting for 20% of total German industry revenue and employing approximately 808,500 people, the political will to meddle with an industry that is an integral part of Germany's social fabric is not yet at full throttle. However, a Federal Administrative Court ruling in February 2018 giving cities the right to ban diesel cars, together with a fall in diesel car sales and the lingering emissions scandal, are creating the perfect storm for the automotive industry to explore alternatives. So how can being a late adopter of sustainable mobility solutions work to Germany's advantage?

MONETIZING CURRENT EXPERTISE

Synonymous with reliability, safety and manufacturing excellence, the 'Made in Germany' brand still holds prestige. A large part of this reputation is based on the high priority placed on Research & Develop (R&D) that underpins the industry's technological capabilities and international competitiveness. The automotive industry is by far the biggest investor and employer in the R&D arena employing over 110,000 people.

According to German's automotive industry association, VDA, the industry accounts for more than one third of total global R&D spending in the automotive sector, putting it at the top of the league ahead of Japanese and American companies. It's a sector of the industry that is highly prized internationally, particularly in the field of optimizing production processes where non-auto players are weak. The ability to transfer such expertise and knowledge to the sustainable mobility sector is not to be underestimated. Certainly, adapting traditional knowledge and expertise already in place can help propel Germany forward and leapfrog countries that are still developing relevant skills.

EXPLOIT BATTERY INNOVATION

Battery-cell production for electrified powertrains is currently the biggest battleground in terms of getting alternative drive vehicles to be fully accepted by consumers. Elon Musk's Tesla has spent millions of dollar developing and testing EV batteries. But while investing money into new technology can shine a light on opportunities, it doesn't always equate to a mass-market ready product as quickly and effectively as anticipated. We are still on a learning curve if we take the impact of factors such as climate, chemical composition on battery performance and cost into account. Learning from pioneers such as Tesla and honing budgets to manufacture or identify partners to achieve a better and more revenue-certain product is certainly one late-mover advantage that Volkswagen and Daimler are currently exploiting in the EV sector.

INFRASTRUCTURE ADVANTAGE

Again, charging station infrastructure to accommodate EVs is key to gaining consumer traction. The complexity of changing established infrastructure to propel EV popularity is slower than expected resulting in bottle necks as governments struggle to accommodate consumer charging needs. However, Germany's recent move to convert 12,000 distribution boxes into charging stations is a great example of how to leverage existing infrastructure to create more EV charging points without infrastructure displacement. Certainly stepping in at a timeframe when EV growth is more quantifiable opens the door to how best to develop, install or adapt infrastructure.

On a practical level, there's no denying that a move to a more sustainable mobility solution is well and truly in motion, and that German CEOs, CFOs and marketers alike are acutely aware that developing finance, investment and marketing strategies to cope with changes that are driven by disruption is not simplistic and at risk to market pressure. However, German auto manufacturers seem to be intent on finding their own way.

Despite the fact that Volkswagen has recently pledged 34 billion euros towards the development of battery-powered and autonomous vehicle technology, and has also partnered-up with Silicon Valley start-up, Aurora, headed by ex-Google innovator Chris Urmson to bring self-driving taxis, cars and trucks to the roads, Volkswagen and other German OEMs are still working to improve traditional engine powertrain development, which is indicative that a more measured approach to the challenges ahead is favoured by Germany's automotive industry.

It's an approach that has its advantages in terms of formulating strategies and budgets in the sustainable mobility arena, particularly in terms of identifying the right partners, adapting business models, as well as assessing the impact on the country's social and economic make-up. Indeed, it is a strategy that is paying dividends with Germany now overtaking France for EV sales and second only to Norway, according to the European Automobile Manufacturers Association (AECEA). It certainly highlights the fact that when knowledge and expertise are at the very heart of an industry, being a late mover need not always be a disadvantage.

