INDUSTRY OVERVIEW

The Automotive Industry in Germany

ISSUE 2018/2019
The automotive sector is the backbone industry in Germany, and the German automotive industry is a global leader. Germany is also one of the strongest countries in the world when it comes to high-tech automotive products, including autonomous driving technology.

Hui Zhang
Managing Director, NIO Germany GmbH

Germany is recognized the world over for its outstanding automotive industry and excellence in engineering. From Asia to the Americas, German cars embody highly cherished values of innovation, reliability, safety, and design.

Germany is by some distance Europe’s leading production and sales market. The country’s world-class R&D infrastructure, complete industry value chain integration, and highly qualified workforce create an internationally peerless automotive environment. It enables companies to develop cutting-edge technologies which perfectly address tomorrow’s mobility needs.
Germany’s Automotive Industry in Numbers

Germany’s industry numbers speak for themselves and for a secure and successful investment in the country.

Europe’s Biggest Automotive Market
Germany is Europe’s number one automotive market in production and sales terms; accounting for around 30 percent of all passenger cars manufactured and almost 20 percent of all new registrations. Germany also boasts the largest concentration of OEM plants in Europe. There are currently 40 OEM sites located in Germany. German OEM market share in western Europe was more than 52 percent in 2017.

Manufacturing Leader Germany
German automobile manufacturers produced over 16.4 million vehicles in 2017. Sixteen of the world’s 100 top automotive suppliers are German companies. Germany is the European car production leader: some 5.65 million passenger cars – and 315,750 commercial vehicles – were manufactured in German plants in 2017.

Export Success
German passenger car and light commercial vehicle OEM generated foreign market revenue of almost EUR 272 billion in 2017 – a six percent increase over 2016. Automotive exports account for more than 16 percent of all German exports in 2017 – the product group with the largest export share. Domestic market revenue is EUR 151 billion – a two percent increase compared to 2016.

R&D Leadership
German OEMs are responsible R&D investments amounting to almost EUR 22 billion in 2017. Germany’s automotive sector is the country’s most innovative industry sector, accounting for 35 percent of total German industry R&D expenditure of around EUR 57 billion in 2017. Research and development personnel within the German automobile industry reached a level of 114,000.

Passenger car production in Europe 2017
in million units

<table>
<thead>
<tr>
<th>Country</th>
<th>Units</th>
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<tbody>
<tr>
<td>Germany</td>
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<td>Spain</td>
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<td>UK</td>
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<tr>
<td>France</td>
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</tr>
<tr>
<td>Czechia</td>
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<td>Slovakia</td>
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<td>Italy</td>
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Sources: ACEA (2018), OICA (2018)

Passenger car registrations in Europe 2017
in million units

<table>
<thead>
<tr>
<th>Country</th>
<th>Units</th>
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<td>Spain</td>
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<td>Belgium</td>
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<tr>
<td>Poland</td>
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Sources: ACEA (2018), OICA (2018)
Global Market Perspective

Premium Market Hub
Germany is the world’s premium car production hub. Of all premium branded vehicles produced globally, more than 70 percent are German OEM-manufactured. Of all vehicles produced globally, almost two thirds of vehicles were produced in Europe (38 percent were made in Germany). Within Europe, more than 80 percent are German OEM-badged vehicles – almost 70 percent of these vehicles are made in Germany. The western European light vehicle production sector is predominantly premium sector focused. As a result, the scale and range of production is expanding significantly. Production of premium segment cars will continue to grow (currently 38 percent share of western European light vehicle production).

Growing Premium Market
Globally, the premium market segment will grow at a much faster rate than the total passenger car segment in the next decades. Growth can be mainly attributed to growing international demand for high-value, premium small- and compact-sized cars as well as premium SUVs. The German automotive industry is the leading producer of premium cars worldwide. Almost all German and Germany-based manufacturers have already launched or intend to launch new products meeting premium segment demand. The know-how based on the country’s automotive manufacturing tradition will further strengthen Germany as a leading international automotive manufacturing location.

Strong R&D Investment
German automotive company investment in research and development remains strong as manufacturers seek to maintain the competitiveness of vehicles “Made in Germany.” In 2017, German automotive companies spent almost EUR 22 billion on internal R&D projects; more than any other domestic manufacturing sector. More than one third of Germany’s total manufacturing industry R&D expenditure is spent by automotive manufacturers and suppliers, with R&D budgets expected to rise. Germany’s automotive companies employ the largest number of research personnel in the manufacturing sector. With 114,000 researchers (full-time equivalent), automotive companies employ more than one quarter of the total R&D workforce in Germany’s private economy.

Innovative Production Location
German cars continue to enjoy a globally positive image and are in high demand across the world. A recent Ernst & Young study of 300 companies active in the European automotive sector (15 percent OEMs and 85 percent suppliers) find Germany to be the most innovative automotive hub in international comparison. Eighty-one percent of those companies surveyed consider Germany to be the most competitive hub in terms of innovative power – ahead of Japan and South Korea who polled 65 percent and 61 percent respectively.

Premium Car Production by Country 2017

<table>
<thead>
<tr>
<th>Country</th>
<th>Production in percent</th>
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<tbody>
<tr>
<td>Germany</td>
<td>38</td>
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<tr>
<td>USA</td>
<td>19</td>
</tr>
<tr>
<td>UK</td>
<td>7</td>
</tr>
<tr>
<td>Japan</td>
<td>6</td>
</tr>
<tr>
<td>China</td>
<td>17</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>12</td>
</tr>
</tbody>
</table>

Source: GTAI 2018 (analysis based on data derived from MarkLines database)

Light Vehicle Production Trend

<table>
<thead>
<tr>
<th>Year</th>
<th>Germany</th>
<th>Other Europe</th>
<th>Asia</th>
<th>USA (incl. Opel)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>20</td>
<td>28</td>
<td>7</td>
<td>13</td>
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<tr>
<td>2012</td>
<td>20</td>
<td>47</td>
<td>5</td>
<td>15</td>
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<tr>
<td>2019</td>
<td>20</td>
<td>45</td>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Statista 2018
Technological Trends

Sustainable Mobility
Automotive engineers in Germany are hard at work improving internal combustion engine energy efficiency, developing alternative drive technologies (including electric, hybrid, and fuel cell cars), and adapting lightweight materials and electronics. Carbon emission reduction targets, smart traffic management, and the government's electric mobility initiative are major drivers for future mobility growth. According to McKinsey, the overall market value for new vehicles with optimized combustion engines is set to reach between EUR 280 billion and EUR 330 billion by 2020. Impressive developments have already been made in developing smaller, highly charged-up "homogeneous combustion" engines and dual clutch transmissions (DCTs). Overall market potential for efficient drive systems is valued at between EUR 325 billion and EUR 500 billion through to 2020.

E-Mobility
Domestic and international market potential for energy-efficient passenger cars is huge. The global market is expected to grow by almost 30 percent annually by 2020. Supported by the country's ambitious e-mobility plans, the automotive sector has set itself the goal of becoming a lead provider and market of electromobility solutions by 2020. The country also has ambitious e-mobility plans outside Germany, with German OEMs keen to meet rising export demand for vehicles in the USA and emerging economies. Economic growth, the changing mobility requirements of a young and aspirational population, and the relatively low density of passenger cars are driving demand in the emerging economies. This will allow manufacturers located in Germany to successfully follow their proven strategy of increased imports and on-site production.

Car Connectivity
The demand for connected cars is set to increase significantly, nowhere more so than in the premium segment. Facilitating a raft of innovative safety, comfort and information services, smart technologies are revolutionizing the driving experience. According to a trend study conducted by McKinsey, the number of smart cars will increase by 30 percent annually over the next years. By 2020, one in five cars will be connected to the internet – 50 percent of these vehicles will belong to the premium segment. Germany’s industry strength in electronic technologies and software solutions is crucial for technological advancement in this sector.

Supply Chain Transformation
The automotive industry is conspicuously changing in terms of its structure. The classic OEM business model – with its dependence on turnover generated from new vehicle sales – is undergoing a major paradigm shift as a response to falling value creation returns. This has seen OEMs become caught up in a “crowding-out” cycle where ever more and better technological features are required to stay ahead of a congested international market. The role of suppliers is noticeably increasing. According to McKinsey, OEMs will also have to deal with rising production volumes as a result of further alternative drives developments. Suppliers will accordingly become even more important in terms of how much value they add to the product. Seventy-one percent of automotive industry CEOs questioned in the PWC 16th Annual Global CEO Survey stress the importance of strengthening their supply chain partnerships as a top priority behind customers and clients (99 percent of respondents).
MARKET OPPORTUNITIES

Value Added in the Value Chain

Automotive Industry Structure
The auto industry in Germany thrives as a result of the diversity of companies active in the sector: large and medium-sized auto manufacturers alike are to be found there, as are system and module suppliers – not to mention numerous small and medium-sized tier 2 and 3 suppliers. Around 85 percent of auto industry suppliers are medium-sized companies. All of these suppliers provide up to 70 percent of value added within the domestic auto sector – ensuring that the German auto industry remains ahead of the competition. Value added is moving to the supplier side, and increasingly also to non-auto industry sectors (e.g. the chemical industry in the field of electric mobility). Not unsurprisingly, international suppliers are increasingly attracted to Germany as a business location. To date, the world’s ten largest non-German auto industry suppliers have successfully established operations in Germany.

Global OEM Supplier Leader
Germany boasts 16 of the world’s top 100 automotive OEM suppliers. Automotive suppliers generated almost EUR 80 billion of total German automotive industry turnover in 2017 – surpassing previous records. The German automotive industry recorded total revenue volume of EUR 422.8

German Automotive OEM and Supplier Density
No other country in Europe can boast a comparable concentration of auto-related R&D, design, supply, manufacturing and assembly facilities. Accordingly, no other country in Europe provides the same market opportunities as those offered by the German auto industry.
billion in 2017 – equivalent to a four percent increase on 2016 revenue. The domestic market accounted for over EUR 151 billion of this sum, with more than EUR 271 billion turnover generated in foreign markets (equivalent to a six percent increase on 2016 revenue). Looking further afield, OEM exports account for almost two thirds of generated turnover. Research and development is a crucial factor in maintaining this leading position, as German-based companies strive to stay on top of the trends and developments of a market in transformation. This explains German OEM R&D spending of almost EUR 22 billion in 2017 (more than one third of total global automotive R&D expenditure). Central to the successes enjoyed by German OEMs to date are the skilled teams of workers who support ongoing development and production. The German automotive supplying industry employed a workforce of around 300,200 people in 2017. They also serve Europe’s largest automotive market, where more than 5.6 million passenger cars and 315,750 light commercial vehicles were produced in the same year.

### OEMs

1. Audi  
2. BMW  
3. Ford  
4. Iveco  
5. MAN  
6. Mercedes  
7. Neoplan  
8. Opel  
9. Porsche  
10. Volkswagen

### Suppliers (only German headquarters)

1. Bosch  
2. Continental  
3. ZF Friedrichshafen  
4. Thyssen Krupp  
5. BASF SE  
6. Mahle  
7. Schaeffler  
8. Bentheler Automobiltechnik  
9. Hella KGaA  
10. Brose Fahrzeugtechnik  
11. Draexlmaier  
12. Eberspaecher Holding  
13. Getrag  
14. Leoni  
15. KSPG  
16. Freudenberg  
17. Webasto SE  
18. Infineon  
19. Leopold Kostal  
20. Trelleborg Vibracoustic  
21. Kautex Textron
R&D Infrastructure

Leading Auto R&D Nation
No other industry invests as much in R&D – more than almost EUR 22 billion in 2017 alone. As such, the auto industry in Germany accounts for more than one third of the country’s total R&D expenditure. Germany has the highest concentration of all European automotive OEM and tier supplier R&D centers. This makes the country the most important automotive development activity location in Europe. Suppliers and service providers located in Germany profit from close client interaction starting from the pre-development stage. They can take advantage of joint research activities with some of the world’s leading automotive technology research institutes and universities.

Increasing R&D Investments
Around 114,000 people were engaged in R&D activity in 2017. As well as making provision for significant internal R&D expenditure, the German automotive sector spends about EUR 10 billion on external R&D – this is equivalent to almost half of the country’s external R&D investments. Despite record R&D expenditure levels, German companies intend to boost their R&D activities further still. According to the Ernst & Young European Automotive Survey, more than 40 percent of German automotive companies want to increase their R&D investments in the future, while 58 percent will maintain current R&D spending levels.

World Innovation Leader
Auto manufacturers and suppliers located in Germany are among the world’s leading patent applicants. Nine out of the country’s top ten patent filing companies are predominately active in the automotive industry – proof positive of the country’s importance within the world’s automotive market and its enormous innovation power. Germany’s automotive industry remains the country’s leading industry innovator with a significant share of turnover being generated from new product innovations. Almost 70 percent of companies active in the sector introduced new products or processes in 2014. Overall investment in innovation, including internal and external R&D expenditures, is constantly increasing. Complete industry value chain presence ensures that new and innovative products are made to the highest possible technological standards. The biggest German automotive supplier alone files around 19 patents per working day on average.

R&D Incentives – Germany’s High-Tech Strategy
With R&D considered to be among the most important areas for the development of the German economy, industry and the public sector have made a commitment to spend around three percent of national GDP per year on R&D activities. This amounts to approximately EUR 80 billion R&D spending each year. In addition, an unprecedented campaign to foster the advancement of new technologies has been launched by the German government. The High-Tech Strategy represents the first national concept to bring key innovation and technology stakeholders together in a common purpose of advancing new technologies. The initiative combines the resources of all government ministries, setting billions of euros aside annually for the development of cutting-edge technologies (R&D projects can also count on generous financial support in the form of R&D grants).

MARKET OPPORTUNITIES

Innovation Expenditure Share of Industry Turnover
in percent

<table>
<thead>
<tr>
<th>Industry</th>
<th>Innovation Expenditure Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Industry</td>
<td>10.0</td>
</tr>
<tr>
<td>Electronics Industry</td>
<td>9.9</td>
</tr>
<tr>
<td>Information &amp; Telecommunication Industry</td>
<td>7.7</td>
</tr>
<tr>
<td>Chemical Industry</td>
<td>6.6</td>
</tr>
<tr>
<td>Mechanical Engineering Industry</td>
<td>5.6</td>
</tr>
</tbody>
</table>

Source: ZEW 2016
Automotive Industry Clusters
The decentralized nature of the automotive industry has spurred the development of strong R&D business networks. Non-university research institutes, universities and companies work together in numerous federal and regional industry and research clusters to improve or invent new products, solutions, services, and processes. By connecting individual competencies, major R&D clusters in the automotive industry can be identified. These clusters have gained international recognition by integrating industry, science and education in automotive-related areas including mechatronics, microelectronics, mechanical engineering, manufacturing processes, and material sciences. This has helped the industry to secure an internationally leading position in a number of technology fields and secured its status as the international benchmark.

International Research Partners
Industrial R&D activities in Germany benefit from a broad innovation landscape which is home to a diverse array of potential research cooperation partners. Germany also offers research cooperation opportunities with the more than 250 institutes of the four large research organizations: Fraunhofer-Gesellschaft, Max Planck Society, Helmholtz Association, and Leibniz Association. Their more than 70,000 researchers are globally acknowledged experts in applied and basic sciences and economically successful. The Fraunhofer Institute for Communication Systems ESK, in particular, is developing state-of-the-art vehicle information and communication technologies (ICT). Main competencies lie in the fields of automotive networks, infotainment and driver assistance, and model-driven software.

New Product Turnover Share by Industry 2013 in percent

New Lightweight Materials for the Automotive Industry
Lightweight construction is a key enabling technology for manufacturing the cars of tomorrow and addressing the challenges of digital transformation, electric mobility and energy and resource efficiency. McKinsey reports that vehicle manufacturers will need to increase lightweight component levels from 30 percent to 70 percent by 2030 in order to compensate for electric drive weight increases, more efficient engine technology and CO2 reduction goals. Germany boasts a lightweight construction cluster network that covers the complete industry value chain. Two exemplary initiatives are the ARENA2036 platform and the Open Hybrid LabFactory. Arena2036 is the largest and leading research platform for mobility in Germany. The entire value chain of tomorrow’s fully digitized vehicles is being rethought and implemented as part of the initiative. Since the project launch in 2013, the research campus has focused its activities in core projects in four research areas including functional integrated lightweight design. Partner competences are anchored in a variety of disciplines that range from simulation and lightweight construction to production technology and ergonomics. The Open Hybrid LabFactory carries out research into new materials and production techniques to help make serial production of cars more environmentally friendly. Production and production technologies suitable for mass production will be developed for the economically and ecologically sustainable production of hybrid lightweight components using metals, plastics and textile structures.
Europe’s Most Attractive Automotive Location

Growth Markets
The German automotive industry will perform best in the developing world in the years ahead. At home, the sector will consolidate its leading market position, largely as a result of development and growth in the premium market segment. The European share of value added in the premium vehicle segment will be more pronounced than in other regions, where the segment is comparatively small or irrelevant. China will remain a strong performer in the volume segment, with India also recording a significant increase in demand in the small vehicle segment. The US vehicle market is in upturn mode and one of the most important sales markets for German OEMs. In global comparison, Europe is the most promising automotive investment location in value-added terms.

Competitive and Stable Hub
The PWC 18th Annual Global CEO Survey finds that automotive CEOs are comparatively confident of generating higher revenues in the short and longer term. Seventy-five percent expect to do so in the next 12 months, and 92 percent in the next three years. Main country sources of expected growth are China, the US and Germany. A recent Ernst & Young study concludes that German-based automotive hubs record the highest product quality levels – 88 percent of those surveyed consider Germany to be the most competitive hub with the best quality worldwide. Seventy-four percent of respondents also identified Germany as the world’s most product automotive hub.

Manufacturing Location
German companies represent 10 percent of European manufacturing companies and generate 27 percent of total EU turnover in this sector. In fact, the manufacturing sector represents more than one fifth of Germany’s “value added” – one of the highest shares in Europe. Increasingly more international companies are placing their faith in Germany as a vital production site location, and are benefiting from superior productivity rates and the country’s excellent business framework of stable labor costs, excellent production standards, and a highly skilled workforce.

Automotive FDI Magnet
According to Ernst & Young’s European Attractiveness Survey 2017, Germany continues to be seen as the most attractive FDI destination in Europe. Ernst & Young’s Standort Deutschland (“Location Germany”) report illustrates that the number of investments made in Germany increased in comparison to the previous years. Germany has been able to further exploit its strong industrial base and highly skilled labor force to attract FDI projects; nowhere more so than in the automotive sector where it ranked as the number one destination in Europe. Companies within Germany also assess the current business situation in Germany more positively than in the rest of Europe.

FDI Projects in the Automotive Sector 2013-2017*

<table>
<thead>
<tr>
<th>by country of origin</th>
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<tbody>
<tr>
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<td>Japan</td>
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<td>China</td>
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<table>
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<th>by destination country</th>
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<td>Turkey</td>
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</tr>
<tr>
<td>Hungary</td>
<td>73</td>
</tr>
</tbody>
</table>

*Only greenfield investment projects and expansion projects included.
Source: fDi Markets 2018
Financing & Incentives in Germany

Incentives programs in Germany are available through different public funding instruments and for different funding purposes. The individual funding requirements may, for example, result from investment projects, research and development activities, personnel recruitment, working capital needs or other specific purposes. The different incentives instruments including grants, loans and guarantees are generally available for all funding purposes and can ordinarily be combined; thus matching the different business activity needs at different development stages of the company.

Investment Project Financing by Private Equity
Technologically innovative start-ups in particular have to rely solely on financing through equity such as venture capital (VC). In Germany, appropriate VC partners can be found through the Bundesverband Deutscher Kapitalbeteiligungsge- sellschaften e.V. (BVK – “German Private Equity and Venture Capital Association”). Special conferences and events like the Deutsches Eigenkapitalforum (“German Equity Forum”) provide another opportunity for young enterprises to come into direct contact with potential VC partners. Public institutions such as development banks (publicly owned and organized banks which exist at the national and state level) and public VC companies may also offer partnership programs at this development stage.

Investment Project Financing by Bank Loans
Debt financing is a central financing resource and the classic supplement to equity financing in Germany. It is available to companies with a continuous cash flow. Loans can be provided to finance long-term investments, working capital and operational costs (R&D, personnel) and for bridging temporary financial gaps. Besides offers from commercial banks, investors can access publicly subsidized loan programs in Germany. These programs usually offer loans at attractive interest rates in combination with repayment-free start-up years, particularly for small and medium-sized companies. These loans are provided by the federal development bank KfW and also by regional development banks.

Investment and R&D Incentives
When it comes to setting up production and service facilities, investors can count on a number of different public funding programs. These programs complement investment project financing. Most important are cash incentives provided in the form of non-repayable grants applicable to co-finance investment-related expenditures such as new buildings, equipment and machinery. R&D project funding is made available through a number of different incentives programs targeted at reducing the operating costs of R&D projects. Programs operate at the regional, national, and European level and are wholly independent from investment incentives. At the national level, all R&D project funding has been concentrated in the High-Tech-Strategy to push the development of cutting-edge technologies. Substantial annual funding budgets are available for diverse R&D projects.

Labor-related Incentives
After the location-based investment has been initiated or realized, companies can receive further subsidies for building up a workforce or the implementation of R&D projects. Labor-related incentives play a significant role in reducing the operational costs incurred by new businesses. The range of programs offered can be classified into three main groups: programs focusing on recruitment support, training support, and wage subsidies respectively. Labor-related incentives play a significant role in reducing the operational costs incurred by new businesses.

Incentives in Germany

<table>
<thead>
<tr>
<th>Funding purposes</th>
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<tbody>
<tr>
<td>Investments</td>
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<tr>
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<tr>
<td>Research &amp; Development</td>
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<tr>
<td>Specific Purposes</td>
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<tr>
<td>Personnel</td>
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Financing supported by any of the following public funding instruments (combinations of instruments usually possible)

<table>
<thead>
<tr>
<th>Public funding instruments</th>
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<tbody>
<tr>
<td>Grants</td>
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<td>Loans</td>
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<tr>
<td>Guarantees</td>
</tr>
<tr>
<td>Equity Capital</td>
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<tr>
<td>Mezzanine Capital</td>
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</table>
SUCCESS STORY

Best Practice Example: NIO GmbH

Chinese electric vehicle start-up NIO Group established its global design center in Munich in 2015. It is here in Bavaria that the premium vehicle provider designs its autonomous and electric vehicles including its EP9 model – currently the fastest e-sports car in the world according to the company. The group has invested EUR 80 million in its NIO GmbH German subsidiary operation to date.

“For research and development, particularly in the automotive industry, Germany is the best location in the world. The country offers top talent and excellent infrastructure. Hardware, industrial infrastructure, the right suppliers: They are all here.”

Hui Zhang
Managing Director, NIO Germany GmbH

Company Information
Founded in Shanghai in 2014, NIO is a global start-up that produces high-performance premium electric and autonomous vehicles. NIO investors include Baidu, Lenovo, Tencent, and Sequoia Capital. Demand for battery electric vehicles (BEVs) is growing in China, with Chinese consumers purchasing more than 200,000 BEVs in the first two quarters of 2018. This is best reflected in the increased competition in the premium BEV segment. NIO plans to make deliveries of its ES6 sport-utility vehicle in 2019, with plans afoot to launch a sedan by 2020.

NIO also currently operates seven “NIO Houses” – including charge points, workspaces, lecture theatres, and childcare services – with plans afoot to open five more this year in China. The company also foresees the opening of NIO Houses in a number of major world cities, thereby providing customers with international access to services provided.

In August 2018 the company filed to go public on the New York Stock Exchange as part of its plans to scale up its activities in order consolidate its position in the competitive Chinese market.

Project Information
NIO established its first international operations outside China in Munich in 2015 – just six months after parent group formation. The Munich site serves the dual function of being both the Group’s global design center and its vehicle design center. NIO’s positioning as a pioneer in the delivery of premium in-car services to create a “mobile living space” is central to the company’s ambitious plans to increase its footprint in China’s competitive BEV market. Additional services include mobile charging, battery swap, and 24-hour pick-up and drop-off options that make up the USD 2.6 billion in-car services market forecast by NIO for connected and autonomous vehicles. Around EUR 80 million has been invested in the group’s global design center in Munich to date.

Location Factors
Germany’s longstanding reputation as global auto industry leader and home of the best automotive R&D location in the world was pivotal to NIO’s decision to locate its global design center in Munich. This, and access to Bavaria’s thriving automotive industry and attendant infrastructure – as well as a highly qualified pool of international labor – proved the decisive factors in the decision to locate to Germany. Innovation in the field of autonomous technology is key to the company’s long-term plans to differentiate itself from other BEV manufacturers, with the company boasting more than 700 registered patents with almost 2,000 pending in Hong Kong, China, USA, and Europe. NIO’s Chinese name (“Weilai”), means “Blue Sky Coming” and represents the group’s commitment to establishing BEVs as the natural vehicle lifestyle choice for a more sustainable future – one being driven by innovation forged in Germany.
Germany Trade & Invest Helps You

Germany Trade & Invest’s teams of industry experts will assist you in setting up your operations in Germany. We support your project management activities from the earliest stages of your expansion strategy.

We provide you with all of the industry information you need – covering everything from key markets and related supply and application sectors to the R&D landscape. Foreign companies profit from our rich experience in identifying the business locations which best meet their specific investment criteria. We help turn your requirements into concrete investment site proposals; providing consulting services to ensure you make the right location decision. We coordinate site visits, meetings with potential partners, universities, and other institutes active in the industry. Our team of consultants is at hand to provide you with the relevant background information on Germany’s tax and legal system, industry regulations, and the domestic labor market. Germany Trade & Invest’s experts help you create the appropriate financial package for your investment and put you in contact with suitable financial partners. Our incentives specialists provide you with detailed information about available incentives, support you with the application process, and arrange contacts with local economic development corporations.

All of our investor-related services are treated with the utmost confidentiality and provided free of charge.

Our support services for your investment project

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Evaluation</th>
<th>Decision &amp; Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business opportunity analysis and market research</td>
<td>Market entry strategy support</td>
<td>Project partner identification and contact</td>
</tr>
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<td>Project management assistance</td>
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<td>Contact to financial partners</td>
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Germany Trade & Invest’s teams of industry experts will assist you in setting up your operations in Germany. We support your project management activities from the earliest stages of your expansion strategy.

We provide you with all of the industry information you need – covering everything from key markets and related supply and application sectors to the R&D landscape. Foreign companies profit from our rich experience in identifying the business locations which best meet their specific investment criteria. We help turn your requirements into concrete investment site proposals; providing consulting services to ensure you make the right location decision. We coordinate site visits, meetings with potential partners, universities, and other institutes active in the industry. Our team of consultants is at hand to provide you with the relevant background information on Germany’s tax and legal system, industry regulations, and the domestic labor market. Germany Trade & Invest’s experts help you create the appropriate financial package for your investment and put you in contact with suitable financial partners. Our incentives specialists provide you with detailed information about available incentives, support you with the application process, and arrange contacts with local economic development corporations.

All of our investor-related services are treated with the utmost confidentiality and provided free of charge.

Our support services for your investment project

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Evaluation</th>
<th>Decision &amp; Investment</th>
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<tbody>
<tr>
<td>Business opportunity analysis and market research</td>
<td>Market entry strategy support</td>
<td>Project partner identification and contact</td>
</tr>
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Our Expertise Network

Germany Trade & Invest (GTAI) provides direct access to all of the relevant actors in the German economy. As the hub for a far-reaching network at both home and abroad, GTAI maintains close relations with a number of partners important to international investors setting up business in Germany. These include all federal government ministries and the leading associations of the German economy including the Federation of the German Industry (BDI) and the Association of the German Chambers of Industry and Commerce (DIHK).

As well as this, GTAI also maintains close ties to important trade and industry associations including the Verband der Automobilindustrie (VDA – “German Association of the Automotive Industry”). Our working partnership with the VDA allows prospective investors to benefit from the association’s detailed market analyses and industry structure insights. Together with Germany Trade & Invest’s business support services, companies who locate to Germany can do so knowing that the VDA is promoting the interests of the automotive industry both domestically and internationally.

The German Association of the Automotive Industry (VDA) nationally and internationally promotes the interests of the entire German automotive industry in all fields of the motor transport sector, for example in international trade and economic, transport and environmental policy, technical legislation, standardizing and quality assurance. To an equal extent, VDA promotes services in standardization, research and quality. It organizes the world’s largest trade fair for mobility, the IAA (International Motor Show), as well as other congresses and it regularly publishes on all automotive topics.

The members of the association are companies that operate a plant in the Federal Republic of Germany for the industrial production of motor vehicles and their engines, trailers, special bodies and containers as well as vehicle parts and accessories. The VDA consists of about 600 member companies, who have come together to research and produce clean and safe automobility for the future. In the country that is known for its successful invention of both automobiles and trucks, the VDA represents the automotive manufactures and supply companies to ensure the continued competitive utilization of their experience and skills. The cooperation between manufactures and suppliers in the VDA is unique in the world of motoring.

Since 1946, the VDA has lobbied nationally and internationally for the creation of the best possible automobility. Our goals are safety, quality and sustainability at the highest technical level. As the representative of the key industry in the German economy, the VDA is responsible for more than 750 thousand jobs in Germany and leads a lively dialogue with the industry, the public, politicians, and customers.

The IAA (International Motor Show) is held every year. In even-numbered years it is the turn of the IAA Commercial Vehicles Show. The IAA Passenger Cars Show is held in odd-numbered years.

The office of the association is situated in Berlin. The VDA also has an office in Brussels as well as a location of the VDA China (QMC) in Beijing.

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Stefan Di Bitonto is the senior manager for automotive technologies in Germany Trade & Invest’s Mechanical & Electronics Technologies team. An acknowledged industry expert, Stefan has successfully accompanied numerous investment projects from North America, Asia and Europe.

For questions on how to establish your business in Germany please contact Stefan Di Bitonto (stefan.dibitonto@gtai.com) or Markus Hempel (markus.hempel@gtai.com).

For more information about the automotive industry in Germany, please visit our website: www.gtai.com/automotive

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About Us
Germany Trade & Invest (GTAI) is the economic development agency of the Federal Republic of Germany. The company helps create and secure extra employment opportunities, strengthening Germany as a business location. With more than 50 offices in Germany and abroad and its network of partners throughout the world, GTAI supports German companies setting up in foreign markets, promotes Germany as a business location and assists foreign companies setting up in Germany. All investment services and related publications are free of charge.

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