The EV Market in China

China is by far the largest car market in the world. One-third of the cars produced worldwide are sold in China, almost twice as many vehicles as in Europe. Of the foreign brands, the German brands sell by far the best in China.[1] But the swing to EVs (EV = electric vehicle) offers China a unique opportunity to rise from outsider to global market leader in the EV sector. Who are these Chinese pioneers and what does the Chinese EV market look like?

a. What does the swing to EVs change the starting position for China?

Engines, transmissions and chassis are three key components for vehicles with internal combustion engines and are highly complex components at that. However, the first two components are not important for electric vehicles. EVs are basically a new technology coming onto the market. When a Chinese carmaker enters this new segment, it is not seriously behind. It is, therefore, possible for it to now compete on an equal footing with the established manufacturers.[2]

The crucial new component of EVs is batteries. They account for nearly half of the cost of an electric car. China has been the global leader in battery production since 2015. By 2019, China will account for nearly one-third of global battery shipments.[3] In addition to this key advantage, the Chinese government is heavily promoting the purchase of EVs through purchase subsidies that have been extended until 2022.

b. What segments of EVs are there in China?

It may sound unbelievable, but there are currently around 450 registered EV manufacturers in China. Of these, more than 100 still seem to be active. The experts' estimates for the volume of the EV market are accordingly gigantic: for passenger cars, 25 million vehicles are estimated to be produced per year. Adding the van segment, the estimates for the total market of EVs approach 30 million vehicles per year.[4]

Accordingly, it is not surprising that everything from the premium segment to the cheapest microcar is available. So far, the highest volumes have been achieved by two representatives of the subcompact category. On the one hand, the manufacturer SGMW with a model for the equivalent of 6,000 USD, which already reached the half-million mark in sales in 2021. The other high-volume segment is represented by BYD

with the BYD Qin, a vehicle costing around 20,000 USD.[5] At the top end, the manufacturers NIO and Xpeng join in with models costing around 50-60,000 USD. The premium segment is still clearly marked by Tesla, which already produces locally with a Gigafactory in Shanghai.

c. Who are the important players in the Chinese EV market?

The Chinese EV market is still relatively young and will develop even clearer structures in terms of brands and price segments. In addition to established manufacturers that grew up with the combustion engine, new manufacturers with a completely different background are entering the market.

The low-cost segment, the micro and mini cars are currently dominated by the above-mentioned companies SGMW and BYD. The car manufacturer SGMW (SAIC GM Wuling 上汽通用五菱), located in Liuzhou in the Guangxi Autonomous Region, is a joint venture between SAIC Motor, General Motors and Wuling. BYD Auto (比亚迪汽车), headquartered in Shenzhen, is part of the BYD conglomerate, the world's largest manufacturer of rechargeable batteries. NIO (NIO 蔚来汽车) is a Shanghai EV manufacturer and tech company that competes directly with Tesla's Autopilot with its NIO Drive driving assistance system. Like NIO, XPeng (XPeng Motors 小鹏汽车) is also one of the new and emerging Smart EV manufacturers. At last year's Shanghai Auto Show, the Guangzhou-based company unveiled the new P5 model, a family sedan designed for the global market that will also be sold in Europe.

d. What are the possible implications for Europe?

Until now, Chinese vehicles have hardly been available in Europe, but this is changing fundamentally with the new Smart EVs. Both NIO and XPeng have their sights clearly set on the global market, including the European market in particular. NIO started deliveries of the ES8 model, an almost five-metre-long SUV, in September 2021. The special features are the design, which was created in Munich, as well as so-called exchangeable batteries that can be rented, which are supposed to reduce "recharging" to five minutes. Other European countries, including Germany, are planning for the market launch in autumn this year.[6]

XPeng has also started its European expansion in Norway, which is generally considered the most EV-friendly country in Europe. Reservations for the new P5 model are available in Norway, Denmark, Sweden and the Netherlands.[7]

How the Chinese Smart EVs will establish themselves in Europe remains to be seen. However, it is clear that China is approaching the top of the global value creation pyramid, as in other segments. Chinese EVs, therefore, want to challenge the European premium brands.

e. How will China's EV market develop?

Dynamic and probably even very dynamic, as one has come to expect from China. In addition to the aforementioned backing and support from the Chinese government, the decisive advantage of global market leadership in the field of batteries, entrepreneurial characteristics are also clearly recognisable.

NIO's CEO William Li (李斌) founded the company in 2000 with the support of technology leaders, the most important of whom is the CEO of JD.com (京东). Other investors include Chinese tech giants such as Tencent (腾讯) and Baidu (百度).[8] The founder of XPeng, He Xiaopeng (何小鹏), comes from Alibaba and the senior executive team consists of former employees of Guangzhou Auto, Ford, BMW and Tesla. In addition to the 14% stake Alibaba holds in XPeng, a large number of employees have been poached from tech giants such as Tencent, Xiaomi (小米), Huawei (华为) and Samsung, whose expertise has helped XPeng compete in record-time in the field of smart car technologies. For example, XPeng plans to manufacture its own semiconductor chips in the future.[9]

(This post was written by Wolfgang Kohl.)

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