



Innovation update: The latest EVs from Chinese OEMs

May 2022



What's next?
leaseplan.com



An entire new generation of Chinese original equipment manufacturers (OEMs) – including both start-ups and incumbents – are entering the European market, helping to further electrify what is already the most exciting segment of the automotive sector: the battery electric vehicle (BEV) market. This paper highlights some notable trends across these OEMs and the challenges they face.

Models to look out for in 2022

In 2022, seven OEMs (represented through eight brands) are expected to launch 16 vehicles in various markets, as shown in the table.

OEM	Brand	Car model	Car segment	Notable specs
 Shanghai Automotive Industry Corporation (SAIC)	MG	MG5	C2	First BEV station wagon
		Marvel R	SUV-D2	NCAP rating: 4 stars
 Build Your Dreams (BYD)	Build Your Dreams	Dolphin	B1	A new battery technology: Blade Battery
		Yuan Plus/ Atto 3	SUV-C2	A new battery technology: Blade Battery
		Tang	SUV-D1	A new battery technology: Blade Battery
		Han	D2	A new battery technology: Blade Battery
 FAW Group	Hongqi	E-HS9	SUV-E2	Hi-tech with e.g., augmented reality
 Great Wall Motors (GWM)	Ora	Ora Cat	B1	Battery guarantee: 8 years / 160,000 km
	Wey	Coffee 01	SUV-E2	Plug-in hybrid EV with large battery (40 kWh)
 NIO	Nio	ES8	SUV-D2	NCAP rating: 5 stars. Leased battery (lifetime guarantee)
		ET7	D2	Leased battery (lifetime guarantee)
 Xpeng	Xpeng	G3	SUV-C2	Battery guarantee: 8 years / 160,000 km
		P5	C2	Battery guarantee: 8 years / 160,000 km
		P7	D2	Battery guarantee: 8 years / 160,000 km
 Aiways	Aiways	U5	SUV-D2	NCAP rating: 3 stars
		U6	SUV-E2	Hi-tech with e.g., LiDAR technology to enhance autonomous driving



While many of these vehicles have unique selling points, there are also some interesting overall trends to note, as explored below.

Exciting ambitions

Many of the new Chinese OEM entrants into Europe aim to compete with the established, premium vehicle brands, and have therefore hired designers, directors, and engineers with experience at these brands. Targeting the premium segment is logical for Chinese OEMs, whose strengths lie in producing cars at a lower cost than others, especially when it comes to BEVs.

While there are many reasons for this, one important factor is that many Chinese OEMs develop their own batteries in house (China has historically been the home of most of the world's battery technology). In the premium car market, the resulting difference in cost will be even more significant, meaning Chinese vehicles will appeal to a larger customer base that includes those for whom premium segment vehicles were previously out of reach. However, aiming to compete with the likes of Mercedes (voted the world's 8th most valuable brand) is a tall order. It will take a long-term approach to convince customers.

A phased approach

While some of these OEMs are already well-established names in their home market and beyond, most are taking it slow when entering European markets. This is clear from:

- The small number of launching markets for new models
- The limited number of models
- The relatively small number of vehicles supplied

While the attractiveness of the Chinese home market no doubt plays a role in this caution, these signs indicate that incoming OEMs are aware of the difficulty of capturing European market share, and therefore prefer to take a careful approach.

Investing in innovation

A low-cost strategy is far from the only strategic advantage of the car models announced for 2022. This year, Chinese OEMs hope to win over European consumers with innovation.

Some notable examples are:

- NIO's battery-swap option, allowing for different-sized batteries based on the required distance of travel. The end goal is to build up a dense network of battery-swap stations so drivers can easily swap an empty battery with a full one at their nearest station. Plus, with a leased battery, the purchasing price is significantly reduced. So far, NIO has launched in Norway with three battery-swap stations.
- BYD's innovation for all its new models can also be found in its battery: a so-called Blade Battery. The company claims that the Blade battery is significantly more reliable, takes up 50% less space, is much more impact resistant than others, and is designed to withstand temperatures of +500°C; in fact, Tesla is also looking to move to this type of battery technology. It is no surprise that BYD started out as a battery company.
- WEY, owned by GWM, will bring the Coffee 01 to Europe, a plug-in hybrid (PHEV) with 150 km of WLTP range. To put this into context, most PHEVs today have batteries with capacity for a range of only around 70 km. The Coffee 01 therefore makes a significantly higher number of trips possible on battery power alone, instead of having to use fuel.



The challenges ahead

With all these innovations, there is much to like about these upcoming car models – but new OEM entrants to the European market also face some challenges.

Establishing brand recognition

While these car models will certainly have the technological features to compete with European counterparts, the specs alone might not be enough to convince car dealers, fleet managers and individual customers to buy them.

Purchasing a new vehicle is often done with the residual or trade-in value in mind (taking into consideration the years on the road, mileage and level of maintenance). For established brands and their models, these figures are already known. But it is harder to assess the residual value of cars from new OEMs with relatively new EV technologies. Residual values will therefore be set conservatively – meaning higher depreciation.

One way for Chinese OEMs to overcome this is by offering market-competitive warranties on cars and/or batteries. However, even with these warranties, it could still prove difficult to convince European consumers to take the plunge.

Building a network

Besides having trust in the vehicle itself, buyers will need to be confident of a reliable network to take care of the car during its lifetime. This includes (online) incident/maintenance processing, spare part logistics, garage availability and a replacement vehicle process. Building such a network takes time, and (MG aside) the OEMs on this list do not yet have this in place. Some are looking to partner with providers of existing networks, but putting in place the required technical know-how and supply chains will still take considerable time and effort.





Waiting for ratings

Conforming to European standards has proven difficult for new entrants. Take the European New Car Assessment Programme (NCAP), one of the more well-known safety standards: although it is not mandatory, it is regarded as the leading standard for crash-testing vehicles to assess their safety, and sets higher performance requirements for car models than is legally required by the EU. With ratings ranging from 0 (low) to 5 (high) stars, the NCAP is an important factor for many European customers when buying a car.

Most of the above-mentioned car models have either not been tested against this standard or are still awaiting their results. However, there are promising signs: of the vehicles that have been tested under NCAP, MG's Marvel R received a 4 star rating and NIO's ES8 even a 5 star rating.

Rolling out

Every vehicle is a collection of thousands of individual parts procured through an immense logistics network of suppliers. Getting all components ready in time for assembly is no small feat, particularly given the shortage of high-end semiconductors – so it is no surprise that ramping up production of new car models takes time, especially if an OEM has no significant experience with earlier car models. Accordingly, it is taking many of these Chinese OEMs some time to get a significant number of vehicles produced and on the road.

Supply aside, another reason for this relatively slow progress lies with demand – or the lack of it, with regard to unfamiliar brand names. While the premium European OEMs have a century of marketing underpinning their brands (did we mention Mercedes?), the new Chinese OEMs need to build their reputation from scratch, even if they already have a well-established reputation in their local market. With the growing market and lower costs in China, some brands have chosen to prioritise their home market for the time being.



Conclusion

The trust of European consumers is not easily won, and securing it will require investment, know-how, and the right certifications. While previous attempts by Chinese OEMs to enter the European market may not have gone to plan, there is no doubt that, thanks to their vehicles' cutting-edge features and competitive prices, they have a stronger chance of success this time around.

LeasePlan Corporation N.V.

Gustav Mahlerlaan 360
1082 ME Amsterdam
The Netherlands
info@leaseplancorp.com
leaseplan.com



What's next?