

IN THE DRIVER'S SEAT: CHINA'S ELECTRIC VEHICLE MAKERS TARGET EUROPE

Key developments and challenges to European governments and companies

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MAIN FINDINGS AND RECOMMENDATIONS

- **China will become a major automotive export hub.** Fueled by technological change, huge production capacity and government support China has the necessary requirements to export vehicles on a large scale.
- **Europe is the main market for Chinese electric vehicle (EV) exporters.** Europe has the second highest demand for EVs after China. Buyers benefit from high subsidies and a comparatively well-developed charging network. China's automakers have government support to master European safety ratings.
- **China's government directs and pressures Chinese and China-based foreign car-makers to export.** The government has relegated its ambition to primarily promote national champions in favor of absorbing global value chains. The government is also setting targets and providing information about overseas regulations to help Chinese EV makers overseas advance.
- **Chinese manufacturers are moving up the value chain.** Chinese car makers have leapfrogged established carmakers and can now produce desirable, safe and technologically advanced EVs. A few Chinese brands have a shot to rank among the world's most successful carmakers.
- **Chinese companies' overseas investments and partnerships make them global competitors.** Automotive competition is going to increase globally, and consequently Chinese battery manufacturers and carmakers are expanding their global footprint. Exports are only the tip of the iceberg as companies pursue different strategies to leverage international brands and access overseas markets.
- **Government subsidies for China-based manufacturers could distort global markets.** That China has become the leading EV market is the result of substantial government support. But Chinese exports are also directly supported by central and local governments sponsorship of new production plants, R&D centers and overseas acquisitions.



A two-way street: Europe and China's car industries are increasingly intertwined

China plans to acquire a greater share of the global automotive value chain



EUROPE IS AT THE CENTER OF CHINA'S ELECTRIC VEHICLE EXPORT PUSH

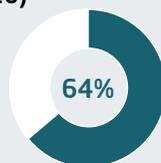
Chinese battery producers' investments in Europe - a model for Chinese EV makers

Company	Country	Year (announced)	Investment (in EUR bn)	GWh
CATL	Germany	2018	1.8	24
Farasis	Germany	2019	0.6	16
Svolt	Germany	2020	2	24
Envision AESC	France	2021	2	9*
Envision AESC	UK	2021	0.52	9*

*During initial stage, later 24 GWh

Electric vehicle exports focus on Europe (2020)

While still low in absolute numbers, China's EV exports are increasingly focused on European countries. China-based carmakers have announced plans to enter European markets like Norway and Germany in 2021 and 2022.



Chinese companies seek European know-how



Since 2015 Chinese carmakers have established at least 18 R&D and design centers in Europe to access the market, fuel innovation and learn about local regulations. This comes in addition to the acquisition of European carmakers by Chinese firms such as Geely's acquisition of Lotus.

Source: MERICS



CHINA'S EV EXPORT AMBITIONS CREATE OPPORTUNITIES FOR LOCAL EUROPEAN FIRMS

Localized supply chains



of Tesla's components in China are sourced locally, which means that China-based suppliers profit even if foreign carmakers export vehicles.

Opportunities for foreign suppliers



of NIO's components come from international suppliers like Bosch, Continental and Qualcomm.

European carmakers and suppliers scale up China-based production



Volkswagen and its local joint ventures want to spend EUR 15 billion on e-mobility in China by 2025. BASF has invested in a EUR 10 billion Verbund site to serve EV demand.

From "Made in China" to "Created in China": European carmakers develop global products in China

Smart cars, BMW iX3s and other electric vehicles are developed and produced in China to supply global markets.



1. ELECTRIC VEHICLES OFFER A WINDOW OF OPPORTUNITY FOR CHINA'S AUTO EXPORTS

China overtook the US to become the biggest automotive market and producer in 2009. One third of all vehicles are now produced in China.¹ However, this success story has not yet translated into automotive exports (see exhibit 1). That is about to change as Chinese manufacturers have set their eyes on global markets; it is a strategy in which European markets and actors play a key role.

Exhibit 1

China's low export ratio implies strong potential for expansion



COUNTRY	VEHICLE EXPORTS - TOTAL PRODUCTION RATIO (%)	DOMESTIC AUTOMOTIVE PRODUCTION (MILLION UNITS)	AUTOMOTIVE EXPORTS (MILLION UNITS)
China	4.0	25.7	1.0
Germany	74.8	4.7	3.5
Japan	49.8	9.7	4.8
South Korea	58.6	4.0	2.3
USA	17.7	10.9	1.9

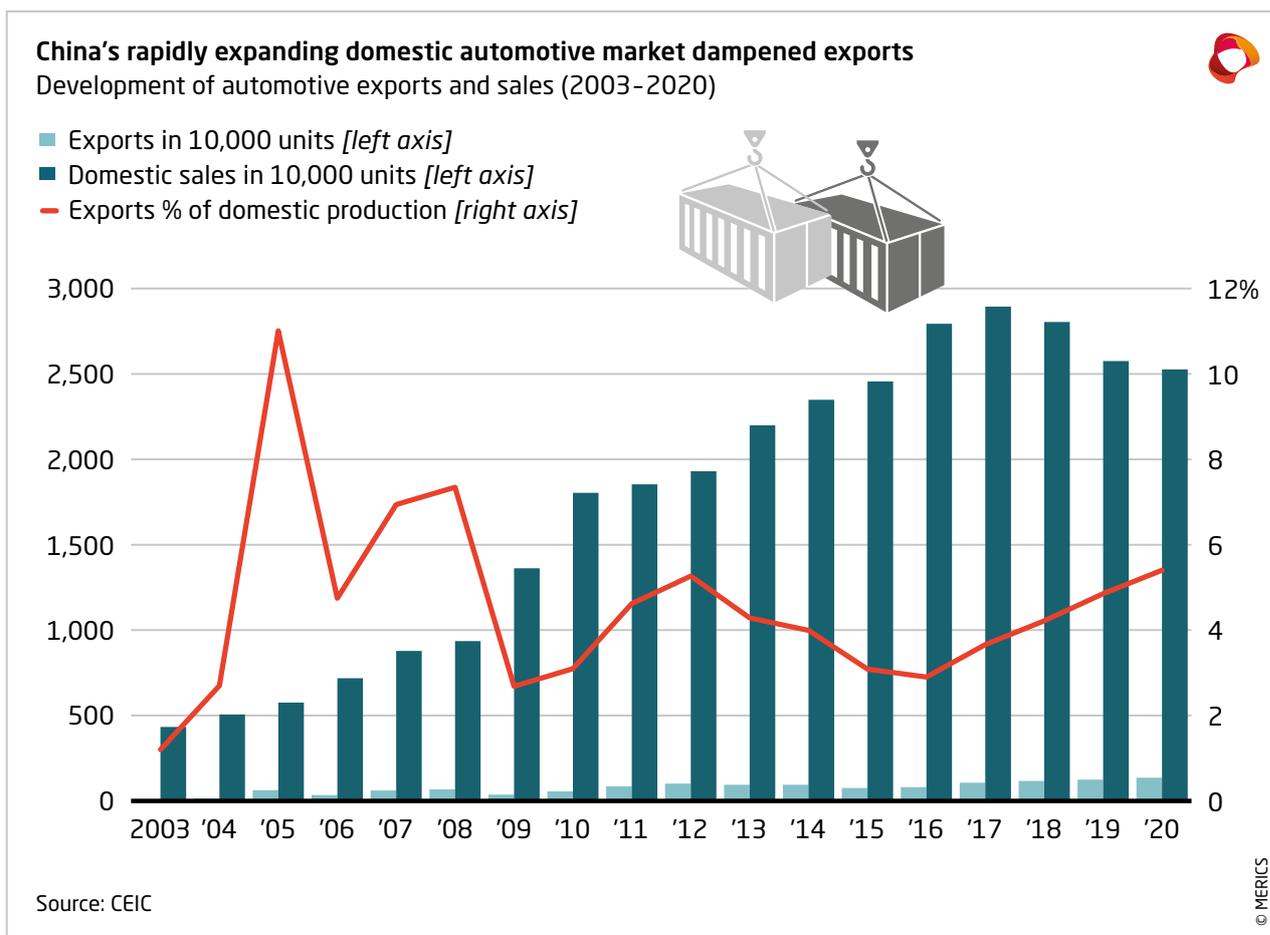
Sources: OICA; Statista (2019)

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Until recently, China-based carmakers had little economic incentive to push into overseas markets as surging domestic sales buoyed them up, tripling in eight years between 2008 and 2016 (see exhibit 2). Some Chinese SOEs started exporting on a bigger scale in the mid-2000s, largely in response to government pressure to signal that Chinese cars were globally competitive. Unfortunately, the export push by SOEs such as Brilliance and JMC had the opposite effect. JMC's Landwind received record-low safety ratings from Euro NCAP, a testing organization, which has stained the reputation of Chinese cars.

Next came an export push from foreign carmakers manufacturing in China (from 2015 to 2019) that saw GM export China-made Buicks to the United States. It fizzled quickly when the Trump administration placed tariffs on China-made cars. Overall, Chinese automotive exports have remained small, in both relative and absolute terms. With the notable exception of the United States, most Chinese auto exports are to emerging markets.

However, the pattern could be about to change. A mixture of technological advances and structural changes in the global automotive industry has created a window of opportunity for global expansion by China-based carmakers. Several major disruptive technology-driven trends, including electrification and autonomous driving, have the potential to fundamentally alter driving and automotive manufacturing. The automotive industry remains in flux, and established hierarchies are being called into question. Chinese policymakers recognize that it is an opportune time to jumpstart exports once more.

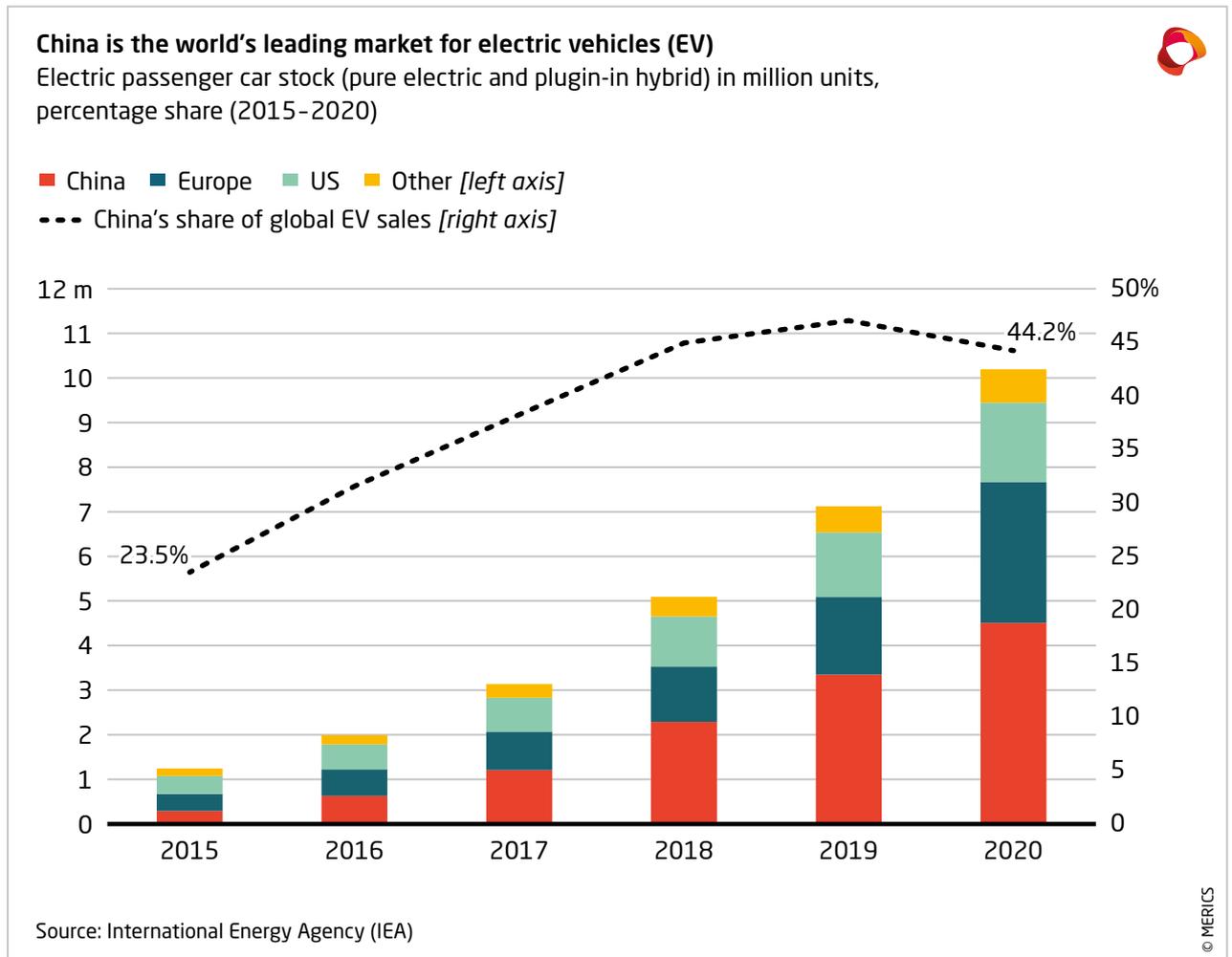


China's new export push is likely to focus on EVs² and several factors indicate it may be more successful than before:

- **China is the leading EV market:** Aided by substantial state support, China has become the biggest EV market (see exhibit 3). Chinese EV makers have leapfrogged entrenched carmakers to become frontrunners with internationally competitive products, including in luxury segments. Internationally successful Chinese battery makers like CATL serve as a role model for Chinese EV makers.
- **Slowing domestic growth:** China's economic growth has stalled in recent years, which has slackened the dramatic growth rates in its domestic automotive market too. Between 2009-2016, China's carmakers had little incentive to export as domestic growth offered ample returns. However, as demand for EVs is increasing rapidly in other economies, China-based carmakers have an economic incentive to expand globally.
- **Domestic overcapacity:** China's automotive and EV sectors already suffer from serious overcapacity, yet newcomers continue to enter the field, including tech companies like Baidu and conglomerates like Evergrande. The result is fragmentation and increasing overcapacity. In 2020, 89 Chinese EV-producers averaged sales of only 15,000 units³, while China's vehicle capacity utilization rate has been falling – to 48.5 percent in 2020 – which puts pressure on EV makers to export to achieve economies of scale.
- **National champion status:** Chinese carmakers are eager to export to become the next national champion. In the rail sector, where China also wants to compete globally, the government has forced major SOEs to merge to give CRRC a competitive edge due to sheer size. A similar consolidation will occur in the EV sector once government subsidies end, so successful exports could give Chinese EV makers a chance to stand out.

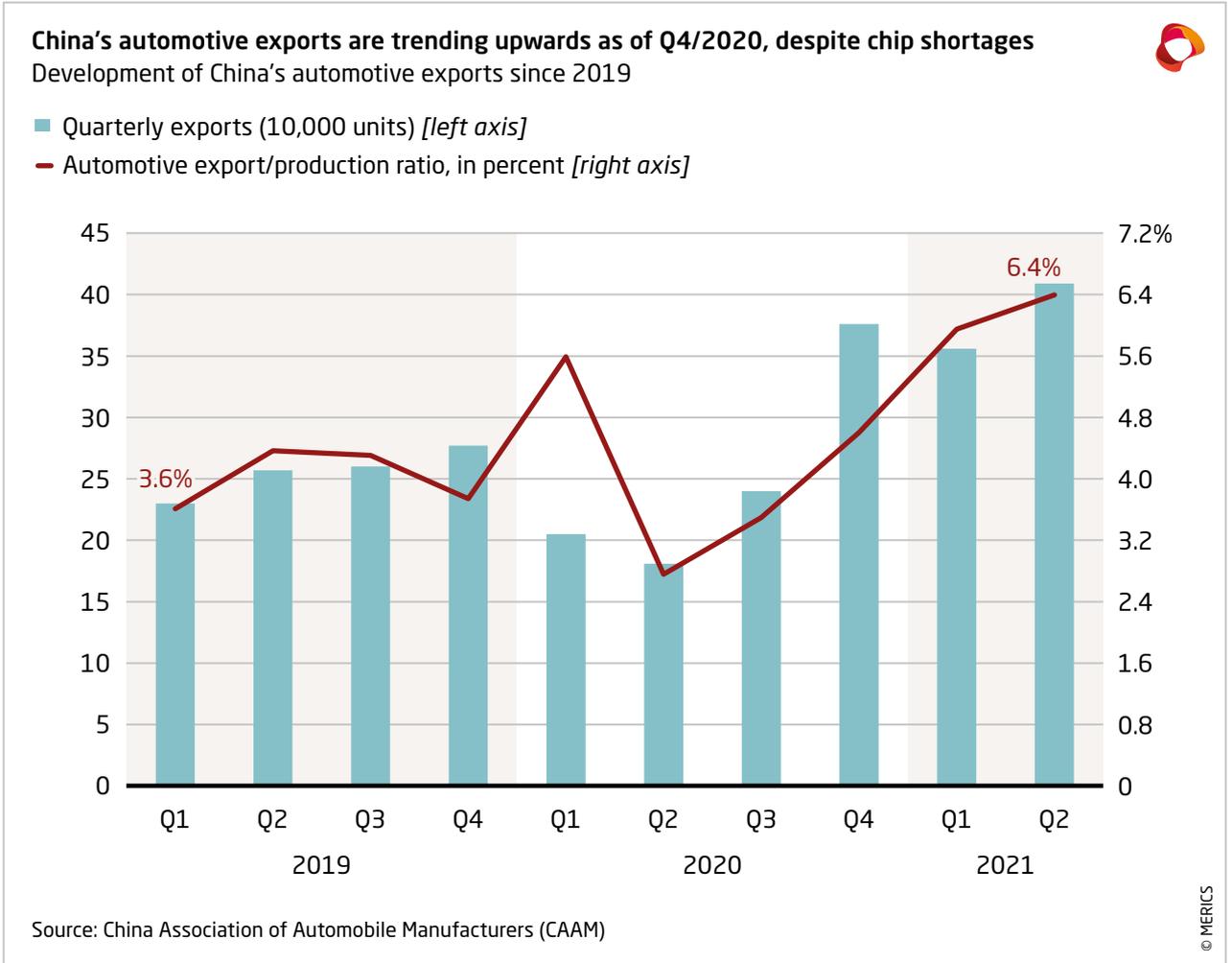
- **Strong presence of foreign MNCs:** Foreign multinational carmakers are starting to use China as an export hub. They are attracted by China's leading and dynamic EV market, local technologies and innovation capabilities and proximity to battery suppliers. China's government actively supports them in their export plans.

Exhibit 3



China's bet on electric vehicles and the involvement of foreign carmakers appears to be starting to pay off. The latest data shows that monthly exports have steadily increased since September 2020, with a record of 150,100 units exported in April 2021 (see exhibit 4). In April, EVs accounted for 16 percent of China's passenger car exports, of which 14,000 were Tesla models.⁴

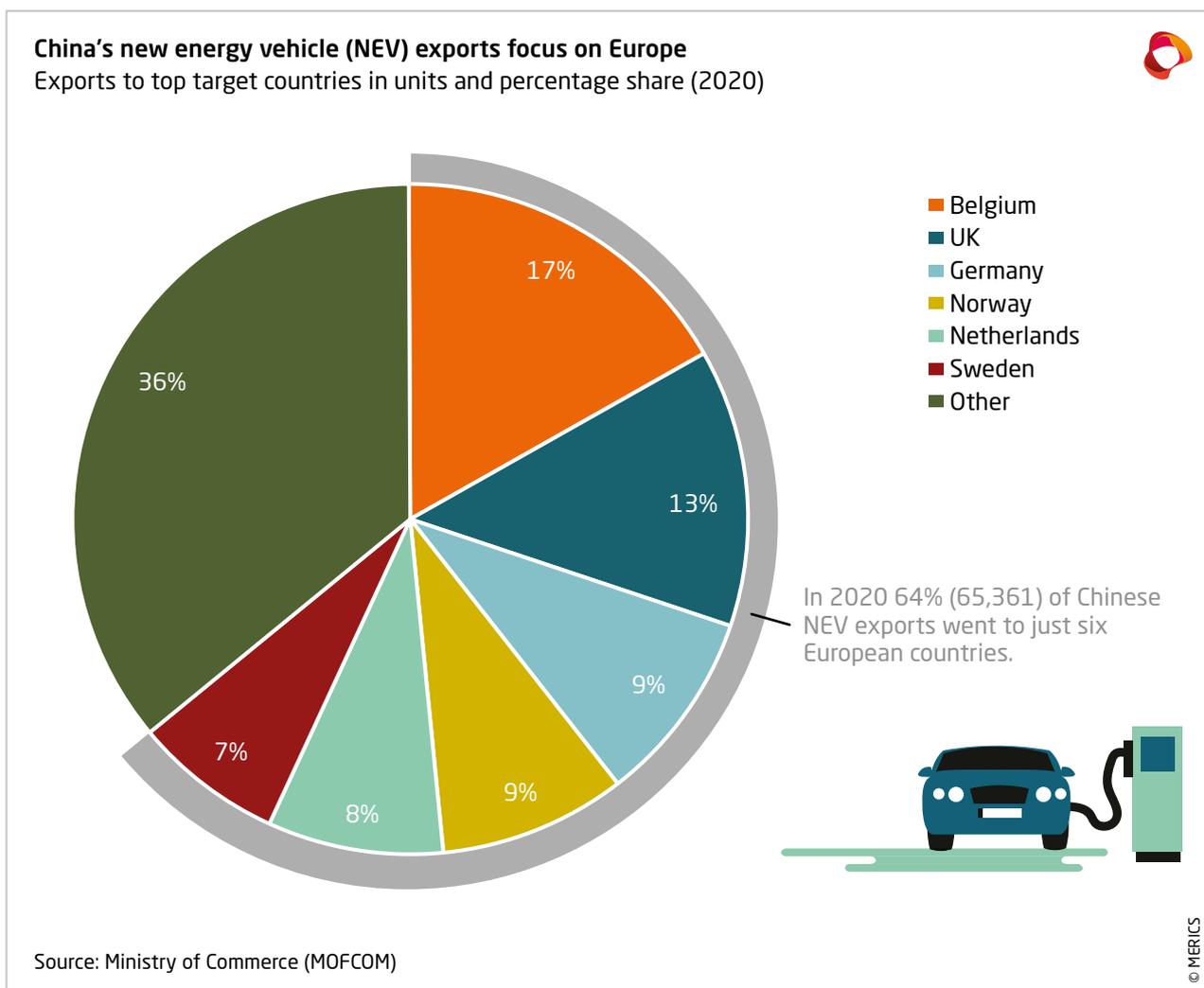
China's huge domestic market means it is unlikely ever to export as much of its output as Germany, Japan, or South Korea. However, it is feasible that China will export 10 to 15 percent of its output within the next five to ten years, provided that both Chinese and foreign carmakers start to use China as an export base. If China's domestic market stays at around 25-30 million units, that could translate to 2.5 to 3.5 million exported units per year.



2. CHINA'S EV EXPANSION CENTERS ON EUROPE

Europe has become the main destination for China's EV export push (see exhibit 5). Chinese EV makers are now trying to replicate domestic success in Europe, where an ambitious green agenda necessitates widespread EV adoption. European countries now offer high purchasing subsidies for EVs and there is increasing momentum for a European phase out of internal combustion engine (ICE) vehicles.⁵ Aside from China, Europe also has the most advanced charging infrastructure.⁶ Chinese EV makers use Norway as bridgehead to Europe, because EV adoption is most advanced there; 80 percent⁷ of new vehicles are EVs and various benefits and subsidies are in place to promote supply and demand, including no import taxes on EVs.⁸

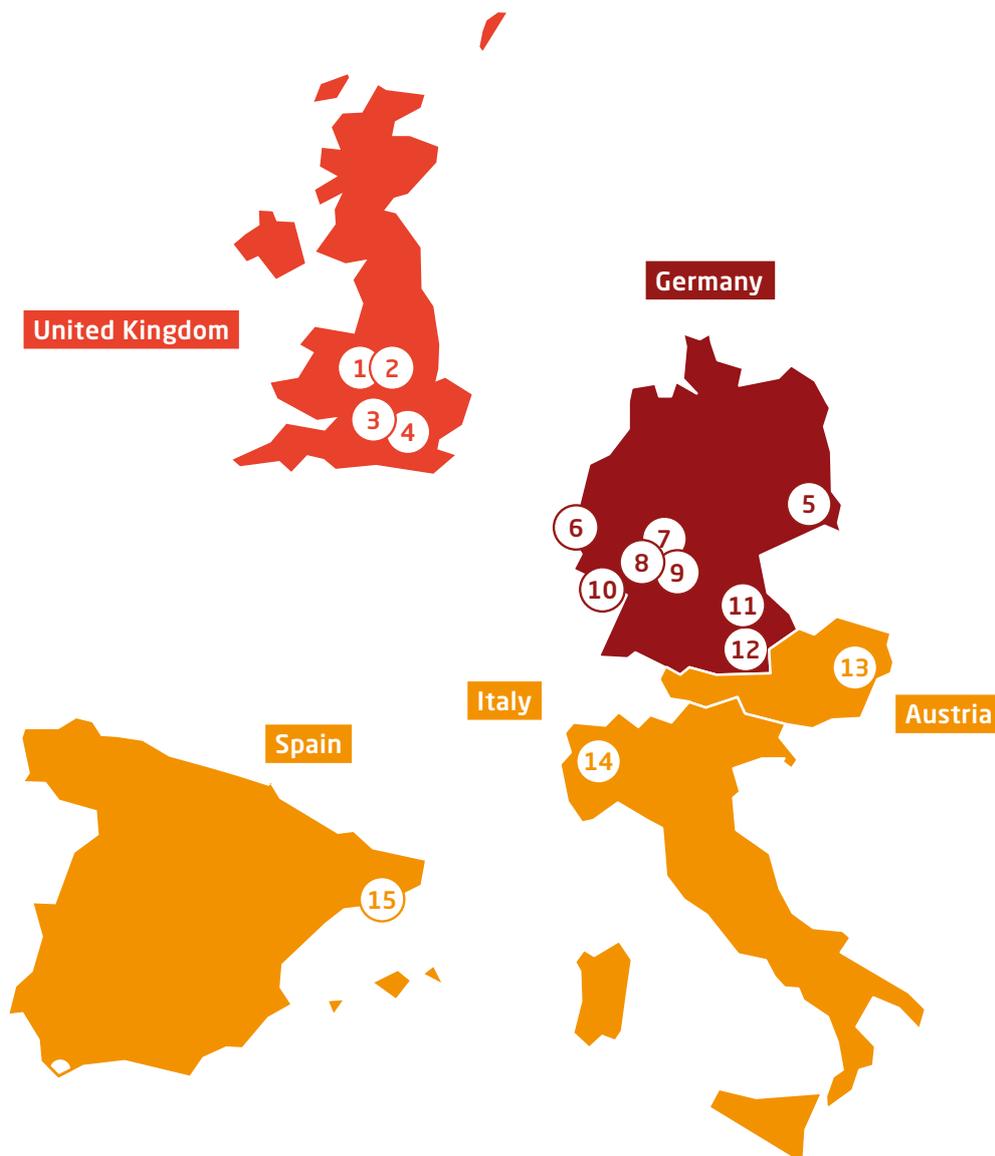
Politics also matter. China's government shares the EV makers' view that it is crucial to make inroads into developed markets for prestige and branding. In addition, while European governments are increasingly concerned about the economic rise of China, they remain more welcoming to Chinese actors than the United States. Europe continues to be an attractive investment location for Chinese companies.



Chinese carmakers have established R&D and design centers in Europe to facilitate their entry into European markets. Doing so enables them to prepare for European regulations and to tailor software and design solutions to European customers. These R&D centers also work as a feedback-loop to China and can influence design decisions back home; for instance, NIO uses its Munich team to design its vehicles (see exhibit 6).

China's government has learnt from the failed export push in the 2000s; it now helps Chinese carmakers to test their vehicles under European conditions. In 2019, the China Automobile Engineering Research Institute (CAERI) set up the first Euro NCAP co-approved test facility outside Europe. The new testing facility was established in Chongqing's Liangjing New Area, a pilot area focused on promoting Chinese automotive exports. It enables Chinese carmakers to finetune their vehicles before exporting to Europe, thereby avoiding disastrous safety ratings. A second Chinese Euro NCAP testing facility has been established in 2021.⁹

Europe is an important innovation hub for Chinese carmakers and Germany ranks first
 R&D and design centers established in Europe since 2015



United Kingdom

- 1 Changan
Birmingham
- 2 Geely
Coventry
- 3 NIO
Oxford
- 4 MG Motor (SAIC)
London

Germany

- 5 BAIC
Dresden
- 6 BAIC
Aachen
- 7 Geely
Frankfurt
- 8 Chery
Raunheim am Main
- 9 Great Wall Motors
Dietzenbach

- 10 WM Motor
Saarwellingen
- 11 Aiways
Ingolstadt
- 12 Byton
FAW
Qoros
NIO
Munich

Austria

- 13 GWM
Kottingbrunn

Italy

- 14 BAIC
Turin

Spain

- 15 BAIC
Barcelona

Source: CEIC

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3. CHINA'S GOVERNMENT AND EV MAKERS AIM TO USE THEIR FIRST MOVER ADVANTAGE TO EXPLORE OVERSEAS MARKETS

China's central government, local governments and Chinese companies are united in their drive to expand globally – albeit for different reasons. The government has set overarching global expansion and export targets and offers guidance and subsidies to carmakers in China. Chinese carmakers are pursuing different strategies such as exports or overseas greenfield investments to enter overseas markets.

3.1 Government guidance is driving the globalization of China's automotive sector

For the central government, the automotive industry is of strategic importance as its crucial to both the economy and national security. The government invests heavily (an estimated USD 58.7 billion between 2009 and 2017)¹⁰ in this sector due to its dual-use nature. So far, the investments have paid off, as China is now home to the world's leading EV market. Next, it wants China to absorb larger parts of global value chains (GVCs). That is the entire range of activities required to bring a product to the consumer, including R&D and production of key components such as batteries and smart car technologies.

The automotive industry is a strategic sector that is both crucial to the economy and national security

Both this current export push and the previous one in the 2000s were guided by the central government. In the mid-2000s, the goal was to turn several automotive production hubs, such as Chongqing and Shenyang, into export bases. The central government has now given the provinces a freer rein. That means it is up to provincial governments to take initiative, publish automotive policies and incentivize local carmakers to export. Meanwhile, the central government encourages carmakers to establish overseas R&D centers, acquire foreign carmakers and use the window of opportunity offered by China's EV dominance to build exports (see Annex 1).

3.2 Provincial governments push local carmakers to go abroad to gain growth for their regions

While the central government has refrained from consolidating the EV sector, local governments are not hesitating to pick winners. They are eager to gain status with central government by fulfilling targets, but their main incentive is to increase local investment and create jobs. They guide and encourage their local champions to go abroad to further drive sales and earn prestige (see Annex 2). As long as production occurs in their turf, local governments are not too concerned about the ownership of their local champion.

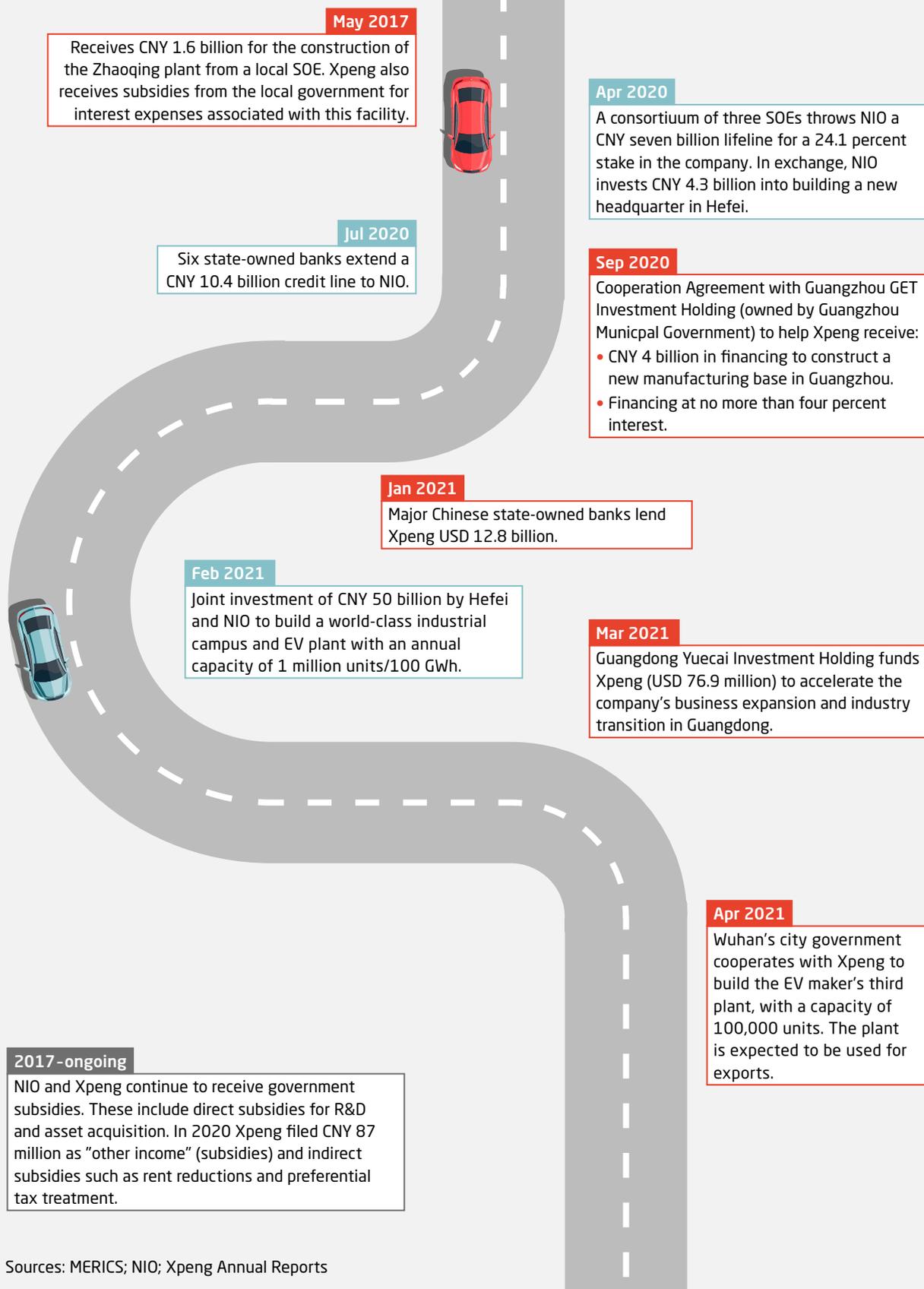
Local governments in Guangdong's capital of Guangzhou and in Hefei, Anhui province, have thrown their weight behind local champions which they support financially and in the case of NIO even saved from bankruptcy. Xpeng Motors is a Guangzhou-based EV maker, while NIO is headquartered in Shanghai but has built its vehicle-production R&D center in Hefei. Local subsidies have helped the EV makers to scale up production to serve global markets (see exhibit 7). And BMW is being wooed by Shenyang city in north-eastern Liaoning province, which wants to become an important export base for the German carmaker.

The Chinese state supports domestic carmakers in scaling up production

Various measures introduced since 2017



■ NIO ■ Xpeng



Sources: MERICS; NIO; Xpeng Annual Reports

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3.3 Chinese EV makers accelerate export plans to tap into overseas EV demand

In recent months, Chinese EV makers have announced export and global expansion plans. Developed markets in Europe and North America are the main targets (see exhibit 8 for Europe). The ownership of Chinese carmakers has diversified since the previous export push. EV makers are overwhelmingly private, although state ties remain strong. Chinese EV makers pursue different strategies to expand globally, ranging from exports to acquisition of foreign companies.

Exhibit 8

Chinese electric vehicle makers ramp up export plans to Europe 

CHINESE CARMAKER	OWNERSHIP	EV MODELS	EXPORT START
Maxus (SAIC)	SOE	eDeliver3; EV80	February 2018
Chery	Private	Exeed	October 2018
Zhi Dou	Private	D2S	June 2019
JAC	Private	E-S2	August 2019
MG (SAIC)	SOE	MG ZS EV; MG RX6	September 2019
Aiways	Private	U5	May 2020
SUDA	Private	SA01	May 2020
Tropos	Private	Able XT 1/2	August 2020
Xpeng	Private	G3i	September 2020
DSFK	SOE	SERES	October 2020
Dorcen	Private	FINN/LEO	October 2020
Weltmeister (WM Motor)	Private	EX5	November 2020
Great Wall Motor	Private	Wey	April 2021
BYD	Private	Tang*	May 2021
NIO	Private	ES8	May 2021
Skywell	Private	ET5/BE0	July 2021
Byton	Private	M-Byte	2021**
Geely	Private	Zeekr	2022**

* BYD also manufactures electric buses in Europe and also exports them to Europe.
 ** Announced

Source: MERICS

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3.4 Chinese Carmakers' "Going Global" Strategies

Strategy 1: Exports

Exports can enable Chinese EV makers to enter markets quickly and have comparatively low initial capital requirements. Exporters benefit from local subsidies and higher capacity utilization of their factories in China, though margins are trimmed by the costs of logistics

and tariffs (the EU has a 10 percent tariff on EVs). Export strategies generally rely on a local partner for sales and service infrastructure, which lessens the exporter's understanding of local market conditions. Naturally, exports can also become potential targets in trade disputes.

Examples: Chinese EV maker WM Motor is not yet exporting but has already started to build export collaborations with well-known global partners. It has paired with Enel X¹¹, a subsidiary of Italian power company Enel, to provide after-sales services for WM vehicles, smart charging solutions and help with vehicle-to-grid applications. WM Motor also has a tentative agreement with Uber which could see it supply EVs to Uber drivers in 10 European countries.¹²

Strategy 2: “Exports +”

To reduce their reliance on local partners and improve their understanding of overseas markets, Chinese carmakers have begun to supplement their export strategies with initial overseas operations. These may include R&D centers, showrooms or warehouses. EV makers who take this two-pronged approach can tailor products to overseas customers while continuing to benefit from subsidies and greater capacity utilization in China.

Chinese carmakers have begun to supplement their export strategies with initial overseas operations

Examples: NIO plans to set up its own sales and service network in Europe¹³ and transfer its NIO App to Europe.¹⁴ NIO has announced to open showrooms in Norway (NIO houses) featuring its battery swapping station to win over customers by highlighting its technological capabilities. By the end of 2022, its battery-charging and swapping system is expected to be available in Norway. In July 2021, Certification agency TÜV Rheinland issued certifications allowing NIO to sell and operate its swapping stations in all EU member states. The EV maker wants to make 1,000 of them operational outside of China by 2025.¹⁵

Strategy 3: Overseas production

Overseas production can help companies avoid tariffs, trade conflicts and transportation costs and foster political relations with local governments. Chinese battery makers have started to build plants in Germany to get closer to their customers (i.e., foreign carmakers), which provides a template for export strategies of China's EV makers.

Examples: In Italy, China's giant automaker FAW Group is setting up a luxury EV maker in the north Italian city of Reggio Emilia, Silk-FAW. The joint venture brings together state-owned FAW and Italian engineering and design company Silk EV. They aim to produce an EV racing car under the Hongqi marque, whose name translates as “Red Flag” and is steeped in CCP tradition. The JV plans to invest more than EUR 1 billion over three years. Production is expected to begin in 2023.

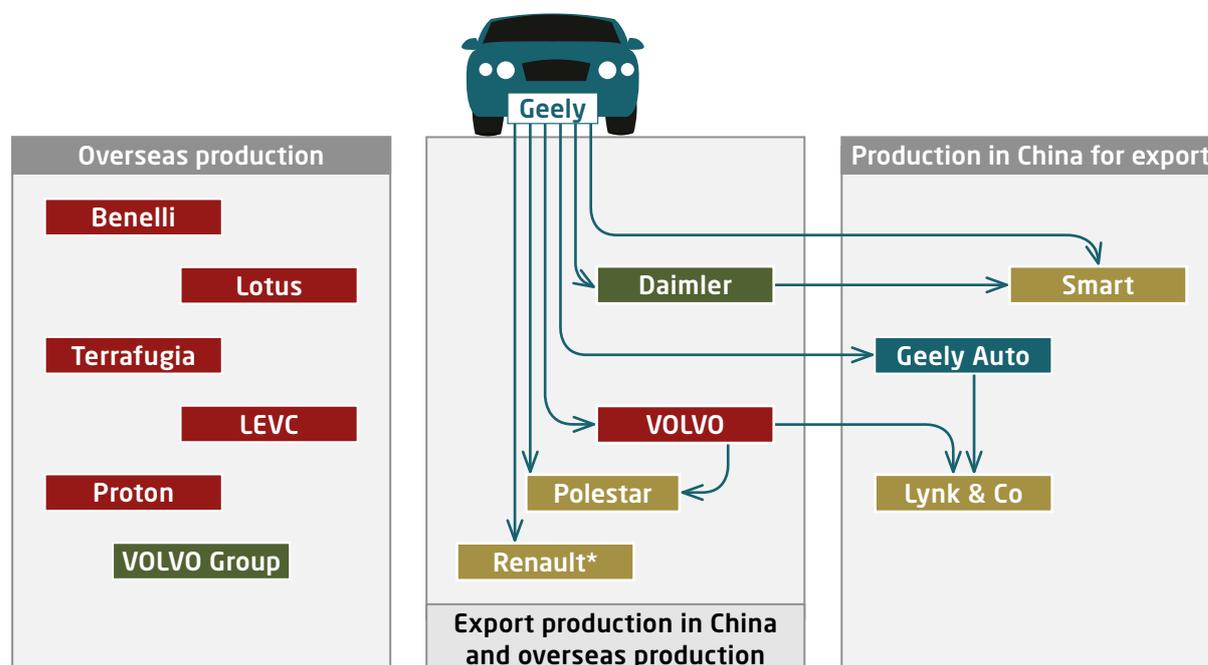
The EU's periphery has caught the attention of another giant Chinese state enterprise, Changan. In Georgia, Changan and local AiGroup will open an EV plant in 2022, with a capacity of 40,000 units, half of which are destined for export to the EU.¹⁶ For Chinese carmakers, Georgia is an attractive investment location due to its cheap workforce, geographic position on the Belt and Road Initiative (BRI) and free trade agreement with the EU which gives EVs tariff-free access to EU markets.

How a Chinese carmaker fast-tracks its global expansion

Overview of Geely's international automotive network



■ Established by Geely ■ Joint venture ■ Acquired by Geely ■ Geely (Li Shufu) as major shareholder



Geely – a Chinese carmaker opts for a shortcut

Geely has gone on a government-backed global buying spree.¹⁷ The acquisitions have enabled Geely to fast-track its global expansion:

- **Improve reputation and branding:** Volvo Cars (Volvo), an automotive safety pioneer, can counter-balance the negative stigma of Chinese vehicles. Volvo and Geely's Polestar brand is branded as a Swedish luxury marque, despite being built in China. In a new tie-up, Geely also intends to leverage Renault's brand in China and South Korea.
- **Gain market access:** Geely has European production facilities that give it a European market presence and enable it to leverage the know-how of local subsidiaries and benefit from data on European buyers.
- **Facilitate tech transfer:** Geely leverages Volvo's existing know-how and R&D capabilities. They run joint R&D centers in Gothenburg and Shanghai. They have jointly developed Geely's new EV-architecture SEA, which is also employed in Geely's JV with Mercedes-Benz.
- **Achieve economies of scale:** Geely and Volvo drive down costs by pooling their production and sharing procurement in China. They jointly run the JVs Lynk & Co and Polestar which are already exporting.
- **Leverage powerful allies:** Geely owner Li Shufu is a major shareholder in Daimler, which helped Geely to establish global partnerships and JVs with the German carmaker. They will export smart vehicles and four-cylinder engines from China.
- **Link to grander policy ambitions:** Geely and Volvo have touted their support for the Belt and Road Initiative (BRI)¹⁸. Li Shufu recommended to revise rail standards to facilitate EV exports via rail to Europe, which is a strategic goal for the CCP¹⁹.

*Memorandum of Understanding (MoU)

Sources: Geely Website, MERICS

Strategy 4: Acquisition of a foreign carmaker

Acquiring a foreign carmaker enables Chinese carmakers to jump-start their global expansion. It is an opportunity to leverage well-known brands, use existing production facilities, international market experience and technological know-how. Such acquisitions are often encouraged and supported by the Chinese government. The European automotive sector remains largely open for foreign investment from China. However, FAW's failed acquisition of Italian truck maker Iveco SpA after the Italian government declared heavy trucks a "strategic national interest" highlights that national security concerns, including issues of future economic competitiveness, may be coming to the fore.²⁰

Examples: SAIC could expand its EV exports by leveraging the British brand MG Motor, which it acquired in 2007. The China-made ZS EV has received stellar safety ratings and is available in countries around the world.²¹ SAIC also produces MGs in Thailand and India for sale in Asian markets.

3.5 Significant hurdles for Chinese EV makers remain

Failure seems inevitable for most of these Chinese EV firms. As Chinese carmakers leave the home environment, each strategy comes with strengths and weaknesses. Only those that successfully overcome the following hurdles will have a chance of success:

- **Lack of international experience:** Most Chinese carmakers lack an overseas sales and after-sales service network. Without one, it is hard to attract customers, especially if they don't recognize the brand or fear complicated maintenance procedures.
- **The politicization of trade:** China's economic rise will bring greater overseas scrutiny of Chinese EV-makers. Foreign governments have started to adopt new measures focused on procurement,²² investment, market access or tariffs that could impact China's EV makers.
- **Navigate local regulations:** The mounting automatization of cars creates new regulations on data²³ that could prove difficult for Chinese EV makers to navigate. Global trends to complicate data transfers abroad can create additional costs.
- **Challenge established local companies:** The first-mover advantage held by China's EV makers is disappearing fast as entrenched carmakers start to churn out EV models. In Europe, Chinese EV makers will have to compete on home ground with major automotive producers like Daimler and Stellantis, the Dutch-based group formed from the 2021 merger of Fiat-Chrysler and French group PSA whose brands include Peugeot and Citroen.

4. CHINA INCORPORATES FOREIGN CARMAKERS INTO ITS EXPORT STRATEGY

China's automotive export strategy also involves foreign carmakers, who view the leading EV market as a source of innovation that they can integrate into their global production layout. In fact, they have advantages such as international experience, data on European and US consumers and larger networks that make them well suited to export more successfully than their Chinese counterparts. China's government has recognized this potential and seeks to use foreign carmakers to increase its share of global value chains.

4.1 Chinese policymakers supports foreign carmakers to absorb GVCs

China had initially hoped to imitate South Korea by forcing foreign carmakers into joint ventures (JVs). It was a strategy that built up national champions through subsidies,

picking winners and restricting market access for foreign manufacturers. However, China's SOEs have struggled to use JVs to build self-owned brands. Foreign carmakers now account for 60 percent of China's domestic automotive market. Their dominant position has created an impetus to include them in China's export strategy. If successful, the benefits of this strategy would stretch across the entire value chain including upstream industries such as steel, machinery, chemicals and electronics.

China has relegated its ambition to build national auto champions in favor of absorbing GVCs, fostering industrial upgrading and stimulating domestic innovation. The Made in China 2015 (MiC25) strategy launched in 2015 and the mid-to-long-term Automotive Plan (2017) specifically called for Chinese brands to become world leaders. However, more recent policies have shifted to prioritize using foreign carmakers as a catalyst to transform China into an automotive export hub:

- The 15-year New Energy Vehicle (NEV) Development Plan (2021-2035) outlines the “Open Development Concept” which aims to “bring [foreign carmakers] in” and help foreign and Chinese carmakers to “go out” and expand globally.
- Under the Dual Circulation Strategy (2020), China's policymakers want to utilize the huge domestic market as a magnet to attract global production factors.
- The 14th Five-Year-Plan (FYP) (2021) seeks to attract and better utilize foreign investment.
- In March 2021, on a tour in Fujian Province President Xi Jinping drove that message home: “If you contribute to innovation in China, China will fully support you, regardless of where you come from.”²⁴

China's policymakers are gradually removing JV requirements in order to make it more attractive for foreign carmakers to use China as an export hub. For instance, Tesla was able to become a wholly foreign owned entity and to start construction on its huge “Gigafactory” in Shanghai in 2018. Without JVs, foreign carmakers can operate more autonomously and take home a greater share of their profits, incentivizing them to produce and export more.

4.2 China's innovative market attracts foreign carmakers to use it as an export hub

Previously, foreign carmakers mainly produced in China to sell in the Chinese market, but their motivations are starting to change. Lured by China's attractive EV market, foreign carmakers are starting to use the country as an export hub (Exhibit 10). For Tesla, China is already the “primary vehicle export hub.”²⁵ BMW and Volvo have also started exporting to Europe, while others like Daimler are ramping up production and research capacities for export purposes and more are interested. For instance, GM²⁶ has expressed interest and the Changan-Ford JV's executive vice president Zhao Fei has said that “China will become one of Ford's most important export bases in the world in the future.”²⁷ Volkswagen has not yet announced plans to export from China to Europe, but in 2018 it trialed exports to southeast Asia.²⁸ In a nutshell, foreign carmakers no longer view China as a market where you can sell foreign, sometimes outdated, technology but now as one at the forefront of innovation. This change mainly stems from China's industrial policy that, to leapfrog advanced manufacturing countries, has guided consumers and producers to focus on EVs.

Foreign carmakers view China as a market at the forefront of innovation

Foreign carmakers increasingly export from China



FOREIGN CARMAKER	PARTNER (IF APPLICABLE)	MODEL(S)	LOCATION	EXPORT START DATE
BMW	Brilliance Auto	BMW iX3 (EV)	Shenyang, Liaoning	September 2020
BMW	Great Wall Motor	E-Mini (EV)	Zhangjiagang, Jiangsu	2023
Daimler	Geely	Smart (EV)	Ningbo, Zhejiang	2022
Renault-Nissan-Mitsubishi	Dongfeng	Dacia Spring (EV)	Shiyan, Hubei	March 2021
Stellantis	Dongfeng	C5 X (ICE/PHEV)	Shenzhen, Guangdong	Late 2021
Tesla	-	Model 3 (EV)	Shanghai	October 2020
Volvo (CN)	Geely	Polestar 1 (PHEV)	Luqiao, Zhejiang	August 2019
Volvo (CN)	Geely	Polestar 2 (EV)	Chengdu, Sichuan	October 2020

Source: MERICS

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Foreign carmakers are drawn to help transform China into an export hub for the following reasons:

- Innovative market:** Foreign carmakers regard China as a “significant market for new technologies and an important purchasing market,”²⁹ according to Daimler. And BMW chairman Oliver Zipse recently hailed China as a key source of innovation.³⁰ To benefit from the dynamic market, foreign carmakers are integrating China into their global R&D and production layout. They build new R&D facilities and production centers and enter EV or autonomous driving related development partnerships with Chinese companies to increase the quality of their products for global markets. They also use China as a testing ground for global products. In 2019, Renault and Dongfeng released the electric K-ZE in China and now Renault is planning to export the Dacia Spring EV (based on the K-ZE) from China to Europe.³¹
- Evolving tech ecosystem:** China’s tech ecosystem is developing rapidly under the auspices of tech giants like Baidu and Alibaba and the Chinese government’s “new infrastructure initiative”. This digital and smart infrastructure push is highly relevant for automotive firms as it includes public financing in the realm of USD 1.4 – 2.5 trillion for 5G base stations and EV charging stations.³² No wonder then, that foreign carmakers want to participate. The digital infrastructure allows them to test and deploy innovative electric and autonomous models. BMW has entered a partnership with State Grid Service EV, a SOE, to provide charging piles in China and to develop and promote charging standards globally.³³

- **Highly competitive manufacturing system:** Foreign carmakers have in recent years invested heavily in their Chinese production facilities. This has resulted in state-of-the-art plants that use Industry 4.0 technologies³⁴ incorporating ever-higher levels of digitalization and AI. Volkswagen opened its new Anting plant near Shanghai in 2020, the group's first mass-production site for EVs using VW's innovative EV modular production system. VW plans to start EV production at another new plant in Hefei in 2023. The benefits are amplified by proximity to important suppliers such as battery makers like CATL and lower production costs in China.
- **Supportive government:** Government policies and support underpinned the emergence of China's EV charging infrastructure and consumer demand for EVs. China's government also provides foreign companies with loans, subsidies and preferential taxes if they base production and R&D there; some provinces hand out additional benefits to carmakers based on production volumes. In March 2020, the National Development and Reform Commission (NDRC) assisted foreign-invested companies in resuming production.³⁵
- **Production capacity:** For Korean carmaker Kia, exporting from China became a necessity (31,900 units in 2019) after its China sales shrank by 20 percent in 2019, leaving some production plants at below 50 percent capacity. Other carmakers, such as VW, have deliberately added production capacity despite a stagnant Chinese automotive market. Such moves could signal export intentions.
- **Focus on regional integration:** China is eager to conclude free trade agreements (FTAs) that can help it become an automotive export hub. In 2015 China and Australia signed an FTA under which Australian automotive tariffs were cut from five to zero percent.³⁶ China and ASEAN concluded the Regional Comprehensive Economic Partnership agreement in 2020, and in the 14th FYP China has reiterated its intention to join additional FTAs.

China's goal of absorbing GVCs, and thereby upgrading and strengthening its economy, is aided by foreign carmakers manufacturing for export there. BMW's joint venture with Brilliance Auto is a strong example of what the Chinese government hopes to achieve. In April 2018, the NDRC announced the timetable to lift JV requirements in the automotive sector. Three months later, BMW Brilliance announced it would expand capacity at its two Shenyang plants to export the full-electric iX3 from China. Soon after, in October 2018, BMW increased its stake in the JV to 75 percent. In September 2020, the first iX3 rolled off the Shenyang production line. The benefits of the export push extend across the supply chain. Vehicle development is taking place locally as the JV partners have run a R&D center in Shenyang since 2017. Local suppliers and national champions can also profit: CATL supplies cells to the JV's new battery center.

China is eager to conclude free trade agreements that can help it become an automotive export hub

4.3 Foreign carmakers have an opportunity to export successfully from China

Foreign carmakers are establishing themselves as important exporters. According to China's Ministry of Commerce (MOFCOM), foreign carmakers' JVs accounted for nearly 30 percent of China's total automotive exports in 2020, up from 27 percent in 2019. This data excludes Tesla, a wholly foreign-owned entity that in May this year exported 14,000 EVs and 11,500 in June which amounts to 57.5 percent of China's total EV exports.³⁷

Indeed, foreign carmakers are well-positioned to outperform their Chinese competitors. While China's EV makers can churn out high-quality vehicles, foreign carmakers are catching up fast. They possess international experience, data on European and US consumers, and a global sales and after-sales services network. Most importantly, compared to newcomers like NIO and Xpeng, they have the necessary scale to produce and ship thousands of vehicles per month. Politically, they are less pressured to prioritize exports for exports'

sake, a factor that may bear down on Chinese EV makers. Hence, the export strategies of foreign carmakers are more likely to be attuned to actual market opportunities.

To support China's industrial upgrading and fuel economic growth, the central government wants to attract more foreign investment, particularly in the automotive sector and in innovation. MOFCOM is drawing up a five-year plan dedicated to increasing foreign investment. Amid increasing geopolitical friction, China's policymakers have refrained from punishing foreign companies in the auto sector, which they view as important growth engines.

5. CHINA'S EV SECTOR WILL CHANGE GLOBAL PRODUCTION PATTERNS

China's push to become an EV exporter is set to transform the global automotive sector. China's market has been shaping automotive trends for some years now, setting up trends that have rippled out into wider changes. China has surpassed its early status as the world's manufacturing hub and is emerging as a global center of automotive innovation that will profoundly influence overseas markets.

- **Auto exports signal China is moving up the value chain:** Overseas demand for high-quality, made in China goods, such as vehicles, is rising as acceptance has grown.³⁸ In the EV sector, Chinese models have achieved high safety ratings and use technologies like battery swapping and autonomous driving that entrenched carmakers have not yet mastered. For customers, China's advances are beneficial as increased competition helps to improve the quality of EVs overall. As first movers, Chinese EV makers also have an opportunity to influence global standard setting.
- **Chinese exports could shake up Europe's auto sector:** Chinese EV exports could deepen the divide between European companies present in China and those who are not. Firms that lack a presence in China will face greater competition from Chinese brands. They will also risk losing out on the attractive dynamism of China's EV sector and access to the biggest EV market. Carmakers most likely to be hurt include Stellantis, which has a weak foothold in China, and smaller suppliers who cannot afford the upfront costs to localize their production in China. Others who are actively supplying both foreign and Chinese carmakers in China, like Bosch and Continental, stand to gain from this export dynamic. An estimated 70 percent of NIO's suppliers are foreign companies.
- **Europe's competitiveness as an industrial location may be at risk:** The European Commission regards the automotive sector as "crucial for Europe's prosperity." However, Chinese automotive exports could distort markets and threaten Europe's industrial heartlands. Motor vehicle manufacturing employs 3.5 million people in the EU, they are the most directly threatened. For now, European EV sales rankings are topped mainly by European-made electric vehicles or Teslas. However, subsidy-supported Chinese EV exports are on the rise globally so Europe's export-oriented auto sector may encounter problems.
- **EVs first, ICE second?** China could position itself to absorb traditional internal combustion engine (ICE) GVCs. While the global market share of EVs is rising rapidly, not all countries or regions want or will be able to phase out ICEs soon. So far, China has not committed to a national phase out. This could be for strategic reasons. If European governments ban ICEs, carmakers may look for ways to shift production closer to consumers. Geely and Daimler are already considering engine exports from China. And in 2022, JV restrictions in the ICE sectors will be lifted, paving the path for foreign companies to shift ICE production for exports to China.

As first movers, Chinese EV makers also have an opportunity to influence global standard setting

- **Tough choices ahead - European carmakers will need to balance production between China and Europe:** While European carmakers are doubling down on production in China, they will not shift entirely. Despite the attractive market environment in China, they worry about increasing their dependency on the Chinese government, especially as the CCP is extending its reach into private firms. They also fear push-back in Europe, where labor unions have voiced opposition. Production in Europe has benefits and can curtail fears about cyber-espionage and data transfer that production in China entails. Foreign carmakers will decide on a strategic case-by-case basis which cars they produce for export in China.
- **Harmonizing the quest for absorbing global value chains and building national champions:** For now, the EV market is growing rapidly, leaving ample room for foreign and Chinese carmakers to exist side-by-side. However, competition will increase rapidly as more players are entering the field and China is beginning to phase out subsidies. For now, China's government is content to let foreign carmakers occupy a large share of the market in exchange for locating value chains in China. However, foreign carmakers should keep in mind that if China's government relegates their ambition to build national champions in favor of taking a greater share of global automotive supply chains, that choice is likely to be a temporary one.

European carmakers will need to balance production between China and Europe



National government policies guide China-based carmakers to focus on export and overseas expansion

POLICY	ISSUED BY	DESCRIPTION
Automobile Trade Policy (Aug 2005)	MOFCOM	<ul style="list-style-type: none"> Set up national automotive export bases and guide carmakers to export.
Decision to recognize four regions as automotive export bases (Sep 2007)	MOFCOM	<ul style="list-style-type: none"> Hefei, Guangzhou, Baoding and Liuzhou recognized as national automotive export bases and encouraged to formulate relevant policies.
Made in China 2025 (May 2015)	State Council	<ul style="list-style-type: none"> Encourage carmakers to establish overseas R&D centers and export. Use industry funds to support the automotive sector to acquire foreign companies.
Mid- to long-term Development Plan for the Automotive Industry (Apr 2017)	NDRC; Ministry of Industry and Information Technology (MIIT); Ministry of Science and Technology (MOST)	<ul style="list-style-type: none"> Use EVs and autonomous vehicles as breakthrough points to lead industrial transformation and upgrading. By 2020: Chinese brands will gradually be exported to developed countries, launching a significant increase in their overseas influence. By 2025: Several Chinese automotive firms will be in the global top ten and the international market share of Chinese carmakers will have grown significantly.
High-quality development report of China's automotive trade (Dec 2019)	CATARC (sponsored by MOFCOM)	<ul style="list-style-type: none"> Evaluates China's automotive exports and identifies further steps to absorb automotive GVCs in China.
NEV Plan 2021-2035 (Nov 2020)	State Council	<ul style="list-style-type: none"> Deeply integrate China's NEV industry into global industrial and value chains.
Technical Guideline (Dec 2020)	MOFCOM	<ul style="list-style-type: none"> Help Chinese EV-makers understand relevant technical and regulatory requirements of targeted developed countries (EU, US, South Korea, Japan) to enhance their competitiveness.
14th Five-Year-Plan (March 2021)	State Council	<ul style="list-style-type: none"> Increase the added value of exports and guide enterprises to deepen their export share.

Source: Chinese government policies

Local governments guide automotive champions abroad



ISSUING GOVERNMENT	POLICY	DESCRIPTION OF GOALS
Liangjiang New Area in Chongqing (Feb 2016)	National Foreign Trade Transformation and Upgrade Base	<ul style="list-style-type: none"> • Become a modern manufacturing base and attract global production factors in the automotive sector.
Zhejiang (Jan 2019)	Action Plan for the High-Quality Development of the Auto Industry (2019-2022)	<ul style="list-style-type: none"> • Cultivate internationally-leading enterprises, support independent brands to develop internationally, carry out M&A, build overseas R&D centers and enter strategic cooperation agreements.
Guangxi (July 2020)	Work Plan for Promoting the Transformation, Upgrading and Development of Guangxi Automobile Industry	<ul style="list-style-type: none"> • Build an automotive export base for the ASEAN region. Encourage companies like SAIC-GM-Wuling to export and increase their international reputation. • By 2025, automotive exports to quadruple to 150,000 units.
Guangzhou (Sep 2020)	Opinions to Promote the Accelerated Development of the Automotive Industry	<ul style="list-style-type: none"> • Support vehicle manufacturers to become bigger and stronger; use M&A to become world-renowned auto brands. • Guide manufacturers to “go global” and explore overseas markets (Central Asia and Europe).
Guangdong (Oct 2020)	Guangdong Province Action Plan for the Development of Strategic Pillar Industrial Clusters for Automobiles (2021-2025)	<ul style="list-style-type: none"> • By 2025, Guangdong will be a major automotive export manufacturing base with 2-3 auto companies exceeding one million units in production and sales.
Hefei (Dec 2020)	Opinions to Accelerate the Development of the NEV Industry	<ul style="list-style-type: none"> • Promote strong brands like JAC; NIO; Volkswagen Anhui; Hefei Chang’an and Chery to construct a NEV supply chain.
Shanghai (Feb 2021)	Implementation Plan to Accelerate the Development of the NEV Industry (2021-2025)	<ul style="list-style-type: none"> • The Lingang New Area promotes the export of vehicles.
Shenyang (Apr 2021)	Implementation Plan to Accelerate the Innovative Development and Promotion and Application of the NEV Industry in Shenyang (Draft)	<ul style="list-style-type: none"> • The BMW Shenyang production base will become BMW’s largest production base in the world and an important NEV export base. • Guide and encourage Evergrande, SAIC-GM, Brilliance-Renault Jinbei to develop NEVs and support enterprises to expand the production scale of NEVs.

Source: Chinese government policies

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