

## **AGENDA**

- **2** Executive Summary
- **4** Domestic priorities
- **8** Still the promised land for automobility?
- **12** China's green conscience
- **16** Chinese ambitions abroad
- **19** Quo vadis, China?
- **20** Excursus: Used cars in China

### **EXECUTIVE SUMMARY**

China's Year of the Tiger began on February 1 with the government determined to demonstrate the country's strength and stability. So what does this overriding priority signify for China's automobility industry in the year ahead?

Berylls can make several broad economic forecasts with reasonable confidence: China's Producer Price Index (PPI) fell for two consecutive months at the end of 2021, suggesting that the policy of maintaining supply and price stability will continue to be effective. New construction projects increased significantly in December, adding weight to other evidence that the economy is strengthening.

Against this background, foreign carmakers and suppliers in China confront a series of challenges and opportunities that demand answers now. They include whether China is still a safe bet for making a profit, especially for premium OEMs; what are the right price points; and whether there are any hidden gems that OEMs have overlooked. For example, we think it's time to enter China's rapidly expanding and increasingly mature used car market.

## We make the following key recommendations for foreign OEMs in China. They urgently need to:

- » Adapt their products, especially in EVs, to Chinese consumer preferences
- » Start taking China's commitment to decarbonization seriously to capture increasing EV opportunities
- » Become proactive marketers, leveraging (social) media and data analytics to anticipate and define market trends





## THE YEAR AHEAD.

### We are sorry to disappoint.

We have bad news for anyone fed up with the turbulence of 2021 and hoping for a calm and steady year in 2022 for anything China-related. The Year of the Tiger is the year where the Chinese Com-

munist Party (CCP) needs to demonstrate strength and stability more than ever, as President Xi Jinping aspires to extend his rule at the 20th Party Congress this autumn, the pivotal event of 2022.

# LET'S TAKE A STEP BACK. WAS 2021 ALL THAT BAD?

The short answer is no. According to the National Bureau of Statistics of China, gross domestic product (GDP) grew 8.1 percent year-on-year in 2021 to 114.37 trillion RMB (about 18 trillion USD), far exceeding the government's own target of "above 6 percent".

The last quarter only showed 4 percent growth year-on-year, the lowest three-month rise since the second quarter of 2020. However, there were two small positive trends that already indicate signs of economic improvement in November and December:

**1. The Producer Price Index (PPI)** fell for two consecutive months, indicating that the policies of maintaining supply and price stability continue to be effective

**2. Investment decline gradually slowed,** and on the plus side, new construction projects increased significantly in December

Nonetheless, economists at home and abroad don't expect China' economy to grow much faster than between 5 percent and 6 percent. Is that bad news?



### STABILITY ABOVE EVERYTHING

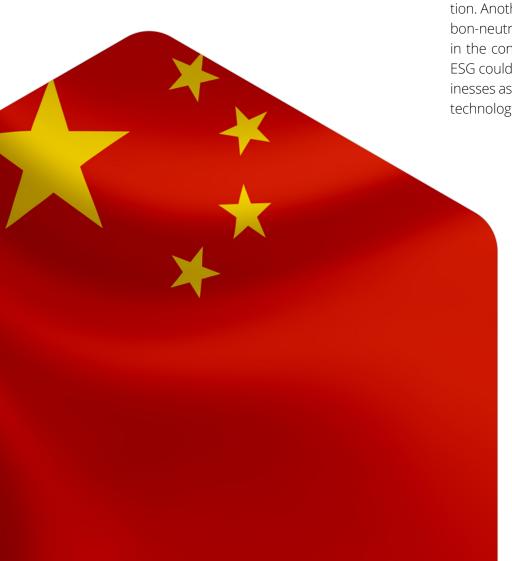
Yes and no. Along with controlling Covid-19 outbreaks, the CCP will not tolerate any other internal destabilizing factor, which means that maintaining economic growth is a top priority.

However, the goal is stable development throughout 2022, free from economic shocks, rather than achieving an end-of-year GDP growth target for the whole 12-month period.

"Economic work next year must have 'stability' as its watchword," resolved China's Central Economic Work Conference

in December 2021, chaired by the CCP. The notes to this conference also stated in unusually clear phrasing that China is going to counter any external shock momentum with economic "strength", "structure" and "tempo".

Based on the "seven key tasks" formulated by the conference for the economy in 2022, we can expect policy making that aims to drive domestic consumption in favor of domestic brands, coupled with a continued focus on value chain localization. Another interesting fact is that "carbon-neutrality" was explicitly mentioned in the conference notes, indicating that ESG could become a core focus for businesses as investments in environmental technologies sectors grow.



# SHAKEN OR STIRRED? THE CCP PRIORITY COCKTAIL

Since it is impossible to separate China's political and economic agenda, one needs to understand the CCP's domestic priorities, led above all by smooth preparation for this autumn's Party Congress.

In this context, strong economic growth and increasing technological self-reliance are of the greatest importance, along with controlling and eliminating any further COVID-19 outbreaks. Indeed, China's "Zero COVID" policy continues to be tested.

What does this complex cocktail of domestic priorities imply for the automobility industry? Will 2022 be the year when foreign carmakers and suppliers fully surrender in China-dependability? Or is China still a safe bet to make a profit for foreign, especially premium, OEMs? At what price? And are there any hidden gems that OEMs have overlooked? Spoiler alert: there are: used cars.

Looking ahead, what impact will the newly fashionable acronym ESG have on the industry? Will China, the West's favorite scapegoat for pollution and global warming, eventually become a world leader in environmental protection and sustainability? Indeed, are the Chinese going to beat the global automobility establishment in this area on their home turf, as more and more domestic players launch their own new energy vehicles (NEVs).

These are just a few of the hot topics we are going to evaluate as we once again ask the question: Quo Vadis, China?

# THE END OF THE PREMIUM SUCCESS STORY?

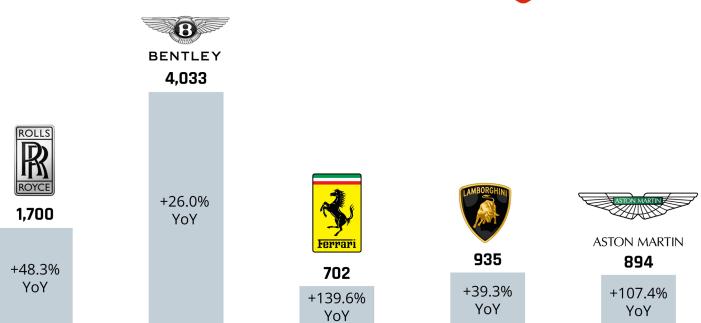
Overall, 2021 was a good year for China's automobility industry. However, a closer look reveals a rather more varied picture.

One segment – luxury – remained completely untouched by any market or economic turbulence. Sales of Rolls-Royce, Bentley, Ferrari, Lamborghini and Aston Martin models soared in 2021. For example, Rolls-Royce sold 1,700 units, a year-on-year increase of 48.3 percent, while Bentley's sales increased by 26 percent to 4,033 vehicles.

The same was true of **Mercedes-Benz's** Maybach brand and its upmarket *G*-Class off-roader. As the Year of the Tiger begins, the long-standing love affair between Chinese customers and luxury models shows no sign of ending anytime soon.

# **LUXURY NEW CAR SALES IN CHINA 2021** in units





It was a different story with other market segments, where 2021 witnessed the first stumbles by foreign OEMs after a long period of uninterrupted success. We believe the idea that Chinese customers will buy anything that foreign OEMs put into the market no longer holds true, based on several facts.

Let's start with premium brands. In the past, German premium brands in particular have enjoyed tremendous growth. That changed in 2021. For instance, **Audi** and **Mercedes-Benz** both suffered year-on-year sales declines of 5.5 percent and 3.6 percent respectively, while Japan's **Lexus** fell 6.9 percent. So why are these well-established and highly regarded brands - especially Lexus – losing out? One reason is certainly the worldwide chip shortage, but the main one is changing Chinese consumer tastes.

Consider the example of Lexus. The current model line-up has a limited NEV portfolio. Furthermore, a close look at the product suggests the interior is out of step with Chinese customers' preferences compared with the offerings of new NEV players and even established premium competitors.

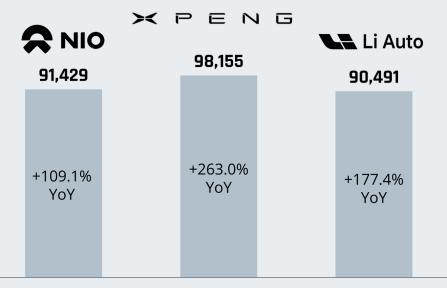
Another example is Audi. The brand has been declining in China for a while, judged by negative public opinion and increasingly discounted prices. In fact, Audi has the highest discounts in China among the German premium players and like Lexus, the brand has a rather weak NEV portfolio, especially in its battery electric vehicle (BEV) product lineup.

Plainly, Lexus and Audi's sluggish sales in China are partly due to specific brand issues with the portfolio and the product itself. But this also indicates that Chinese consumers are unapologetically discriminating and will punish the errors you make, even if you are a foreign premium carmaker.



## **NEW ENERGY VEHICLE SALES IN CHINA 2021** in units





Source: Press, Company Information, Berylls

### IT'S JUST A PHASE - ISN'T IT?

To a lesser extent, other foreign OEMs are also starting to experience consumer resistance to their lineup of NEV models.

Mercedes-Benz's EQC, BMW's iX3 and Audi's e-tron all experienced weaker sales in 2021. Even **Volkswagen's** ID family, with a large portfolio of ID.3, ID.4 and ID.6 vehicles sold by two joint ventures, still cannot match the sales numbers of local NEV players, which collectively shifted 70,625 units last year.

Indeed, China's leading NEV manufacturers flourished in 2021. **NIO** (up 109.1 percent year-on-year), **Xpeng** (up 263 percent) and **Li Auto** (up 177.4 percent) each sold more than 90,000 vehicles. It seems that Chinese NEV startups are at last fully accepted by customers, giving

these companies the confidence to expand their product portfolio; for instance, last year Xpeng launched the P5, a compact size sedan.

It is striking as well that several new Chinese players have emerged in other market segments. **Neta** (up 362 percent) and **Leap** (up 279 percent) both achieved strong sales in the smaller, more budget segments with 69,674 and 43,121 units respectively. At the upper premium end of the market, HiPhi made an impact with 4,237 units sold in 2021, despite only launching in May 2021 with a high price tag. Currently **HiPhi** enjo-

ys similar monthly numbers in China to **Porsche's** Taycan, with both brands selling about 900 vehicles in December.

The key question is whether the NEV troubles of Audi, Lexus and several other foreign carmakers is just a phase which will pass once new products such as Mercedes' EQE and EQS gain market traction; or whether these rising domestic NEV manufacturers are the harbinger of more bad news for overseas players.

We see two issues to unravel here – the first directly related to NEVs, the second concerning the entire China automobility industry.

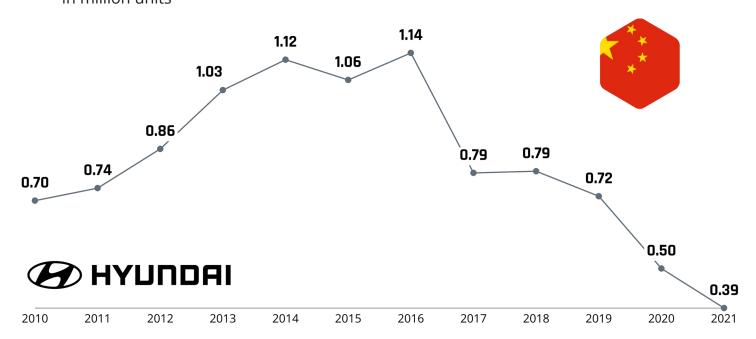
On NEVs, foreign OEMs should take note: Data analysis shows that Chinese customers really like these new local players and consider them to be "techier" than the established brands. Only **Tesla** is seen as similarly state-of-the-art regarding design, connectivity, ADAS and autonomous driving. Conversely, traditional players' NEV models are perceived to have old-fashioned design

and tech, reflected in their faltering sales numbers.

Meanwhile, foreign OEMs are arguably confronting a more general problem in China, with some manufacturers apparently falling out of favor with Chinese customers. And as Hyundai's experience demonstrates, it is very difficult to win back the Chinese public once you have lost their business: from a peak of 1.14 million units in 2016, **Hyundai's** sales have steadily declined to 0.385 million units in 2021.

On both fronts, foreign OEMs need to react fast. However, some are currently not doing their homework, especially regarding NEVs. Mercedes-Benz and BMW are well equipped with upcoming models which have adequate range, connectivity and ADAS features. However, some other premium OEMs have a poor product portfolio and the wrong product roadmap for the Chinese market: they lack the right products to catch the NEV wave and are ill-prepared for the future.

# **HYUNDAI VEHICLE SALES IN CHINA SALES 2010 - 2020,** in million units



Source: Press, Company Information, Berylls



# DECARBONIZATION: IT'S TIME TO TAKE CHINA SERIOUSLY

Some OEMs appear from their actions to assume that the rise of NEVs and the recent move by Chinese consumers away from the ICE are not sufficiently important trends to commit to a full overhaul of their operations in China.

In our view, foreign OEMs are mistaken if they believe that decarbonization is unimportant to Chinese customers. On the contrary, the proliferation of NEV startups demonstrates that many Chinese car buyers do consider decarbonization when choosing a vehicle.

In this respect, it is perhaps revealing that Xpeng includes carbon neutrality and sustainability in its company mission statements. Far more significant is China's double goal of peak carbon emissions by 2030, and carbon neutrality by 2060, which implies a major move away from ICE vehicles. In short, both market sentiment and government policy are heading in the same direction.

Some observers might argue that our focus on China's NEV market and decarbonization is a bit exaggerated, given that ICE vehicles are still selling very well and it doesn't look as if this is going to change soon. Meanwhile, subsidies for NEV are going to be phased out. So why all the fuss about NEVs?

We believe that this way of thinking is outdated and in the short term will lead to some very serious problems for foreign OEMs. First of all, decarbonization in China is real, and not just a fad. To give an example: the central government has just introduced a program to introduce decentralized energy generation and storage at approximately 700 locations; features will include free photovoltaics installation.

Secondly, it's true that NEV subsidies have been cut by 30 percent this year, compared with their 2021 level, with a view to phasing them out by the end of 2022. But it is easy to overlook other "push" and "pull" instruments such as the double quota, which sets mandatory quotas for NEV production, and subsidies for installations of chargers.

Lastly, it's certainly not set in stone that subsidies will be phased out this year. They have already been extended three times since their introduction in 2014, most recently from April 2020 until the end of 2022. Given this track record, a fourth extension is not out of the question. For all these reasons, we advise OEMs not to put all their bets on ICE vehicles and start to focus on NEVs.

# THIS IS JUST THE BEGINNING OF THE RISE OF THE CHINESE NEV

### More problems are on the horizon for traditional foreign brands.

The much talked about Tesla Model 2 is rumored to be available soon in China at an unbeatable price of around 160,000 RMB (25,150 USD), well below Volkswagen's price tag of between around 200,000 – 280,000 RMB (31,440 – 44,000 USD) for the ID.4 Crozz. The Tesla Model 2 looks set to be an EV market game changer in China, putting enormous pressure on traditional OEMs.

Tesla is already considered a cool brand in China, so a low-priced model seems bound to attract many new customers who do not want to pay more for a less fashionable vehicle from a traditional player.

To be sure, not all Chinese NEV brands are successful and running at full steam. The Shanghai brand Weltmeister, for example, registered mediocre sales of 44,157 units in 2021, with year-onyear growth of 96.3 percent, a less impressive performance than that of the "Big Three", NIO, Xpeng and Li Auto. Weltmeister has failed to find a Chinese brand "niche" and own it completely. By contrast, NIO is seen as a high-end brand which offers good service; Xpeng has made its name around safety performance, quality and technology; and Li Auto is known for its long range and spacious interior. Weltmeister has instead positioned itself in the volume market, where it must compete against strong competitors like BYD.

Weltmeister has other problems, too. It has failed to build up core competencies, opting instead for outsourcing. At present, Weltmeister obtains technology for autonomous driving systems from **Baidu Apollo**, which makes it dependent on one supplier in a critically important field. The company has also endured negative headlines about batteries catching fire during charging, compounding its difficulties.

It is also true that even NIO and Xpeng needed time to achieve their current success. As the market becomes more crowded, new entrants from China's tech sector are facing more obstacles. **Huawei**, for example, was praised by

the Chinese press when it entered the automobility market in 2020 by launching systems such as the Harmony-OS intelligent cockpit. Further positive media coverage followed when Huawei announced its partnership with **BAIC Arcfox** and **Seres**.

Yet these models have not been successful, despite the initial hype. In 2021, Arcfox sold 4,993 units while Seres sold 8,169 units. One can argue that Arcfox and Seres are small brands with only minor retail networks, but this is only partially true. Arcfox sales space is found in prime retail locations in major Chinese cities, such as Beijing's Sanlitun district, while Seres can be bought in Huawei's flagship stores, such as the

one on Shanghai's Nanjing East Road. Poor marketing and POS therefore do not seem to be the main reasons for their disappointing performance so far.

Huawei also has a cooperation with the Chinese battery manufacturer CATL and Chang'an Automobile Co. for a premium brand (called "Avatr"). In addition, Huawei has established the AITO high-end automobility brand with Seres. These initiatives indicate that Huawei is still confident it can win big in the EV market, even though it is playing in an increasingly crowded field. Examples of other new entrants include Baidu's Jidu EV joint venture with Geely, SAIC's IM joint venture with Alibaba, and the upcoming Xiaomi EV.



# IN-HOUSE DEVELOPMENT IS STILL THE RIGHT STRATEGY FOR FOREIGN OEMS

Generally, we think the emergence of increasing numbers of Chinese OEMs in China's EV market presents a medium rather than a short-term challenge to foreign OEMs.

At present, Chinese OEMs are still ramping up their capabilities in vehicle operating systems (OS), connectivity, and ADAS and AD technologies. By necessity, their level of maturity means that they have to collaborate with tech companies. In the long term, we believe that these OEMs will want all these core differentiating technologies in-house, eliminating the need to form joint ventures with tech companies.

Given this context, we recommend that foreign OEMs should not plunge blindly into cooperation with new Chinese players, just for the sake of collaboration. Instead, they should stick to their own pathway of in-house development of OS, connectivity, ADAS and AD, and only team up with tech players where necessary. By the same logic, we see more obstacles ahead for potential new Chinese entrants, because foreign OEMs with superior in-house tech capabilities will be moving into their domain rather than the other way round.

Overall, it is obvious that for OEMs in China, domestic as well as foreign, NEVs are the way to go. The error made by foreign OEMs is to use European standards as a benchmark – for example, by producing vehicles with a 400 to 500km range. Instead, they should bring long-range models to the market with a range of up to 1,000km. The same European standards mean OEMs like Volkswagen and

BMW pack their vehicles with a plethora of state-of-the-art, upgradeable vehicle displays and functions which go well beyond the minimum offering of remote controls, voice assistance and entertainment apps.

In theory, this world-class technology ought still to give foreign OEMs a head-start over less mature Chinese OEMs. However, in practice, foreign players have generally been slow to adapt their marketing to the needs and desires of Chinese customers.

This leads to a broader point. Having assumed for too long that they could simply offload their products on an insatiable Chinese market, foreign OEMs are now faced with playing catch-up as they react to consumer trends that they do not fully understand. It is one thing to have seamless customer management and smart sales operations. It is quite another for foreign OEMs to dig deep into social media, using data analytics to understand what Chinese car buyers think is really cool and what they think is past its sell-bydate - and then try to shift the buzz in favor of their own brand by mobilizing their existing grassroots fan base in China.

In sum, foreign OEMs need to do in China what comes naturally to them in their home markets: get in the driving seat, stop simply reacting to market trends, and start trying to define them.

### TIME TO PROTECT HOME TERRITORY

Even in Europe, OEMs are beginning to feel Chinese players' grip.



Chinese NEV makers have begun to enter the European market with high ambitions and a lot of noise. So far, they don't have much to show for their efforts. We think that might change, meaning European OEMs need to be ready to defend their domestic base.

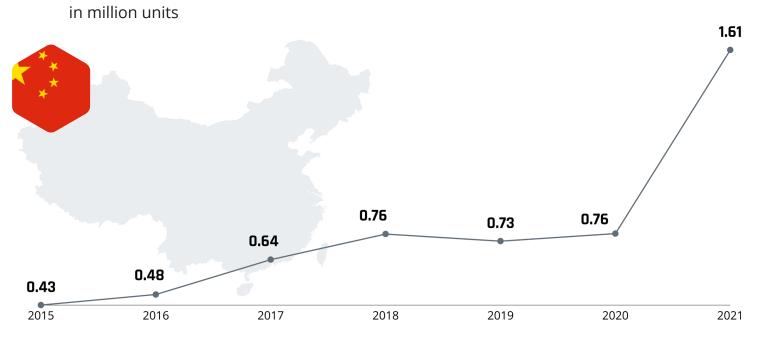
In 2021, China's vehicle exports (passenger cars only) increased significantly, more than doubling the volume of 2020 to reach 1.61 million units. Exports of NEVs increased most rapidly, with year-on-year foreign sales increased by 323 percent to approx. 296k units. Leading the Chinese export pack are OEMs like **SAIC**, which sold 290,000 passenger vehicles abroad in 2021, a year-on-ye-

ar increase of 68 percent; **Chery**, up 136 percent to 270,000 vehicles; and **Great Wall Motors**, up 103.7 percent to 140,000 vehicles.

Until now, Chinese OEMs have failed to open the door to Europe. In their view, NEVs are the key to unlocking this market, with Britain, Germany, France, Belgium, and Norway in their sights because of these countries' relatively strong government support and subsidies for electric vehicles. It isn't just rising Chinese NEV players such as NIO, Xpeng and Aiways which are aiming high in Europe. Traditional OEMs including Great Wall, BYD and Hongqi also see Europe as promising ground for their own NEVs.



### **CHINA EXPORT OF PASSENGER CARS 2015-2021,**



Source: CAAM, Berylls



European OEMs would be wise to take these potential competitors seriously. The best Chinese brands have excellent electrification and digitalization, their supply chains are relatively robust, and they have the capacity and know-how to provide competitive products for overseas consumers.

For their part, Chinese NEV makers need to be realistic about the major challenges that lie ahead if they are to become significant players in Europe. While they have achieved early successes in eastern Europe, they have yet to gain a strategic foothold in any major western European market. Instead, they are still mostly located in Norway, which can be considered as their "MVP".

Furthermore, Europe is unfamiliar strategic territory for Chinese OEMs, which are accustomed to learning about markets step-by-step, rather than developing a complete and systematic pre-entry plan. Their first essential task is to overcome the poor image in Europe of "Made in China" vehicles, building a brand image with the right positioning to target the right customer group. Next, they need to set up a corresponding retail network from scratch, which is a huge undertaking.

We believe their biggest challenge will be rolling out a comprehensive ecosystem, with access to a reliable charging infrastructure. In Germany, for example, EV car sales (or to be precise, car leasing or subscription) are largely B2B rather than B2C, as in China. German EV customers are extremely sensitive when choosing an ecosystem, focusing in particular on the charging network to ensure that they have a worry-free driving experience at low monthly rates. As newcomers in Germany, Chinese players will have to provide wall-boxes for home charging, as well as guaranteed access to public charging.

For the latter, they will also need to decide whether to take the fast route, by partnering with companies such as ChargePoint or Hubject, or follow the route taken by Tesla and NIO in China by setting up their own public charging network. The success of Chinese brands largely hinges on these issues. The availability of vehicles as both stock and test-drive vehicles is also important and requires building up a solid and resilient supply chain.

While they keep one eye on the Chinese, European OEMs should be aware that other players are entering their home markets, with American OEMs an even bigger threat. We expect Lucid, Rivian and Canoo, to name a few, to make a real splash in Europe.





As we mentioned at the start, 2022 is going to be another intense year as foreign premium brands and their NEV lineups come under attack in a market where Chinese customer tastes are changing and NEV startups are catching up and actually shaping consumer choices.

Against this background, foreign OEMs need to improve their product and customer engagement strategies. Currently, only NEVs are impacted with only a few premium OEMs encountering real problems.

Meanwhile, good ICE portfolio-driven sales are clouding decision makers' judgement about future market trends. This might only be the beginning of a major shift to electrification, considering China's shift towards carbon neutrality and the widespread adoption of NEVs. Ignoring or underestimating these developments may aggravate significant short- to mid-term risks for foreign OEMs.

At the same time, Chinese NEVs are entering Europe and taking the fight to the establishment's home territory. Right now, we are witnessing only the first steps - there are plenty of bold claims by Chinese players, but no visible results so far. However, they have a realistic chance of succeeding in Europe, if they manage to solve the key issues of building an ecosystem and adequate charging infrastructure.

For almost two years, COVID-19 has meant that the head offices of foreign OEMs in China have been forced to manage their biggest international market in a more virtual way. Now that the pandemic may finally be subsiding, it is time to get back into the driving seat. Otherwise, foreign OEMs risk acting too late in response to market changes and the rising challenge from Chinese NEVs.

At the same time, European players need to protect their home turf from a large number of new, highly ambitious Chinese entrants that are determined to succeed and take market share from established players.



# USED CARS - ARE THEY FINALLY GOING TO BREAK THROUGH IN 2022?

Fortunately, there is quite a lucrative white spot for foreign OEMs in China: used cars.

After years of explosive growth, China's auto market is cooling off for new car sales. Meanwhile, the used car market is still powering ahead, generating plenty of fast growth opportunities for both foreign and mainland investors. In 2021, 17.59 million used cars were traded nationwide, a year-on-year increase of 22.6 percent following the Covid-19 sales slump in 2020. Overall, annual used car sales have more than tripled during the past decade.





Source: CAAM, CADA, Berylls



Given these numbers, why do we say that 2022 could be the year when we see the used car market breaking through and receiving serious attention from OEMs? For the following reasons:

#### Huge consumer demand, with strong long term potential:

» China's automobile market is gradually becoming saturated. The market for car upgrades and replacements will therefore increase further.

#### New policies to support the used car market:

» In 2021, the government eliminated the restriction on used car ownership transferring across provinces and also reduced sales value-added tax on used cars.

### Increased used car trading opportunities due to the chip shortage:

» As waiting times for new car deliveries lengthen, the trading value of used cars will potentially rise.

#### Professionalization of the used car market:

» Increased state intervention means the used car market is finally becoming more orderly, transparent and efficient, encouraging the development of different distribution, auction and retail sales models.

#### Online and offline integration with higher customer centricity:

» Used car platforms are becoming more customer friendly. For instance, Guazi, a leading offline-only trader, has just rolled out an online sales service with customers able to return the car within seven days and get their money back.

#### Entry of several new leading Chinese EV OEMs into the used car market:

» NEV players such as NIO and Xpeng have launched their own used car subsidiaries, suggesting that used cars are finally becoming a core business for Chinese OEMs.

The message for foreign OEMs is that they also need to engage directly with China's used car market, in order to integrate their second-hand vehicles with their own ecosystem. So far, foreign OEMs have merely issued quality-assurance "certificates" to approved used car dealers. We strongly recommend they go further and become direct buyers and sellers of their own used vehicles, leveraging their existing online and offline retail networks, as well as their brand recognition as trusted manufacturers.



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