This and other sections of this document contain information relating to the industry in which we operate. Certain information and statistics set forth in this section have been extracted from the Frost & Sullivan Report issued by Frost & Sullivan, an independent market research agency, which we commissioned, and from various official government publications and other publicly available publications. Information and statistics from official government sources have not been independently verified by us, the Joint Sponsors, [REDACTED], the [REDACTED], the [REDACTED], [REDACTED], and [REDACTED], any of the [REDACTED], any of our or their respective directors, officers or representatives or any other person involved in the [REDACTED], and no representation is given as to their accuracy.

#### OVERVIEW OF CHINA'S NEW ENERGY PASSENGER VEHICLES MARKET

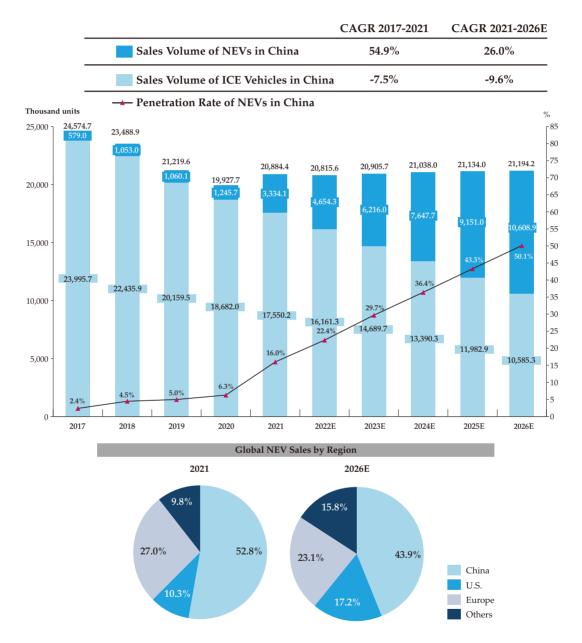
China was the world's largest passenger vehicle ("PV") market measured by sales volume in 2021, according to Frost & Sullivan. Approximately 62.9 million passenger vehicles were sold globally in 2021, of which 20.9 million units were sold in China. The sales volume of PVs in China is expected to increase to 21.2 million units in 2026, accounting for 30.9% of total estimated global sales in 2026.

New energy passenger vehicles (NEVs) comprise battery passenger electric vehicles (EVs), plug-in hybrid passenger electric vehicles (PHEVs) and extended-range passenger electric vehicles (EREVs). The sales volume of NEVs in China reached 3.3 million units in 2021. China was the world's largest NEV market by sales volume in 2021, which was approximately 2.0 times the size of the entire European market and approximately five times the size of the U.S. market. In 2026, China's sales volume of NEVs is expected to reach 10.6 million units, growing at a CAGR of 26.0% from 2021 and accounting for 43.9% of the global NEV market. Replacing internal combustion engine (ICE) vehicles rapidly, NEVs are expected to exceed ICE vehicles in sales volume in 2026 for the first time in China's PV market, according to Frost & Sullivan.

China's NEV market reached the inflection point of growth in 2021 and the growth rate continues to rise. The penetration rate of NEVs in China's PV market increased from 2.4% in 2017 to 16.0% in 2021 and is expected to surge from 22.4% in 2022 to 50.1% in 2026, according to Frost & Sullivan. NEVs have become increasingly popular among the mainstream consumer group. The mid- to high-end segment, with the price range between RMB150,000 and RMB300,000, is expected to become the largest and fastest-growing segment in China's NEV market from 2022 onwards.

The following charts illustrate the sales volume of PVs in China by energy type and NEV penetration rate from 2017 to 2026 as well as China's NEV sales volume and share in the global market in 2021 and 2026:

Sales Volume of PVs in China by Energy Type and NEV Penetration Rate (2017 to 2026E) and Global NEV Sales by Region



Source: China Association of Automobile Manufacturers, China Passenger Cars Association, Frost & Sullivan

Note: Sales volume of NEVs in the chart comprises that of EVs, PHEVs and EREVs.

EV is the most popular type of NEV in China. According to Frost & Sullivan, the penetration rate of EVs in China's NEV market reached 82.0% in 2021. The penetration rate of EV in China's PV market increased from 1.9% in 2017 to 13.1% in 2021 and is expected to surge from 18.2% in 2022 to 40.6% in 2026.

CAGR 2017-2021 CAGR 2021-2026E Sales Volume of EVs in China 55.5% 25.8% 80.8% 74.8% 78.7% 80.2% 82.0% 81.2% 80.8% 80.7% 80.9% 81.1% **Thousand Units** 9,000 100 8,600.8 8.000 7,404.1 80 7,000 6,170.1 6.000 60 5.020.5 5.000 3,780.0 4,000 40 3,000 2,734.0 2.000 20 999.0 5.0% 788.0 834.0 3.9% 1,000 3.4% 0 2020 2021 2025E **★** EV Penetration of China's PVs EV Penetration of China's NEVs

Sales Volume and Penetration Rates of EVs in China (2017 to 2026E)

Source: China Association of Automobile Manufacturers, China Passenger Cars Association, Frost & Sullivan

## Segment Market of NEV and EV Industry by Price

According to Frost & Sullivan, the NEV and EV markets can be classified into four segment markets according to selling price of vehicles, namely 1) entry-level segment (below RMB80,000), 2) mid-range segment (RMB80,000 – below RMB150,000), 3) mid- to high-end segment (RMB150,000 – RMB300,000), and 4) premium segment (above RMB300,000).

The entry-level segment in the NEV market is dominated by small and mini vehicles. These NEVs have low ownership costs, and mainly provide short-distance travel functions, with limited intelligent capabilities. The driving range of NEVs in this price segment is generally from 100 km to 300 km. Leading players increase their customer base by offering vehicles at competitive prices.

Mid-range NEV models can serve more diverse needs of consumers with a relatively low price. This market has a large number of participants and is relatively fragmented. NEVs in the mid-range segment are usually compact and used for daily commuting. The maximum driving range of NEVs in this price segment is generally around 400 km. Customers of NEVs in this segment are generally groups with a finite purchasing budget, and they prefer to choose NEVs that provide greater value for money. Leading players in this market segment provide NEV models equipped with a number of intelligent functions (e.g., ADAS, intelligent voice system, etc.) to attract more customers.

NEV models in the mid- to high-end market are characterized by larger size, more comprehensive smart functions and connectivity features, as well as better driving and user experience. The driving range of the leading NEV models in this price segment can reach 600 km and above, which has a wider application in long-distance intercity trips and family travel and can further relieve customers' range anxiety. Driven by technological advancement and infrastructure improvement, more and more Chinese consumers tend to pursue NEV models with greater value propositions. Customers of NEVs in this segment generally have higher purchasing power. Mid- to high-end NEVs with advanced technologies, appealing design and superior space layout are increasingly favored by consumers. The mid- to high-end segment is also relatively fragmented with an increasing number of market participants, including both Chinese companies and some multinational automotive manufacturers. There were more than 60 automakers selling approximately 150 models in this segment in China's NEV market in 2021, according to Frost & Sullivan. Players with stronger in-house R&D and production capabilities can continuously introduce new models rapidly to address evolving market demands, and therefore are better positioned to succeed in this segment.

Premium NEVs usually offer more luxurious configurations, targeting a smaller group of customers with a higher level of household income. The premium market is also highly fragmented with an increasing number of market participants. The competition among premium NEV manufacturers concentrates on key factors beyond product competitiveness such as higher-end brand image and premium services.

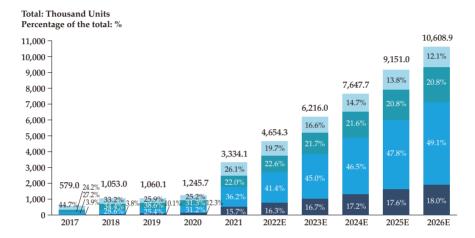
# The Mid- to High-End Segment is Expected to Become the Largest and Fastest-Growing Segment in China's NEV Market

In 2021, 36.2% of the NEVs sold in China were priced between RMB150,000 and RMB300,000. This segment is expected to become the largest and fastest-growing segment in China's NEV market from 2022 and onwards, with 59.6% year-over-year growth rate in 2022. The sales volume in this segment is expected to increase from 1,207.0 thousand units in 2021 to 5,209.0 thousand units in 2026, at a CAGR of 34.0%. In 2026, NEVs priced between RMB150,000 and RMB300,000 are expected to account for 49.1% of all NEV sales in China, becoming the primary growth driver of domestic NEV market.

The following chart sets forth the sales volume of NEVs in China by price range from 2017 to 2026.

Sales Volume of NEVs in China by Price Range (2017 to 2026E)

	CAGR 2017-2021	CAGR 2021-2026E
Below RMB80,000	35.4%	8.1%
RMB80,000-RMB150,000	51.3%	24.6%
RMB150,000-RMB300,000	66.4%	34.0%
Above RMB300,000	119.4%	29.5%



Source: China Association of Automobile Manufacturers, China Passenger Cars Association, Frost & Sullivan

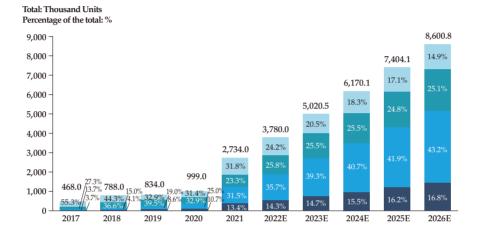
Significant increase in sales of NEVs demonstrates growing consumer demand for smart technologies, improving NEV charging infrastructure, and increasing market acceptance of NEVs by the consumers. Prior to 2019, sales of NEV in China were mainly driven by (i) lower cost of ownership and (ii) enthusiasm towards premium NEV models with cutting-edge technologies and advanced features. Therefore, the major patrons were consumers who purchased NEV models priced lower than RMB150,000 and "early adopters" for premium models. In the future, consumers who purchase NEVs as their first cars will require more sophisticated smart technologies and more comprehensive smart connectivity features. In addition, with increasing disposable income of Chinese households and the implementation of pro-natalist policy, more families are expected to purchase a second vehicle or replace their current vehicles to meet their growing mobility needs and will lay more emphasis on vehicle interior space. Accordingly, NEVs with smart functions and spacious interior design at a reasonable price are expected to become the first choice for consumers in China. Specifically, NEVs with a price range between RMB150,000 and RMB300,000 are expected to gain the most market share.

In 2021, 31.5% of the EVs sold in China were priced between RMB150,000 and RMB300,000. This segment is expected to become the largest segment in China's EV market from 2022 and onwards. The sales volume in this segment is expected to increase from 861.2 thousand units in 2021 to 3,715.5 thousand units in 2026, at a CAGR of 34.0%. In 2026, EVs priced between RMB150,000 and RMB300,000 are expected to account for 43.2% of all EV sales in China.

The following chart sets forth the sales volume of EVs in China by price range from 2017 to 2026.

Sales Volume of EVs in China by Price Range (2017 to 2026E)

	CAGR 2017-2021	CAGR 2021-2026E
Below RMB80,000	35.4%	8.1%
RMB80,000-RMB150,000	49.4%	27.6%
RMB150,000-RMB300,000	91.4%	34.0%
Above RMB300,000	114.5%	31.6%



Source: China Association of Automobile Manufacturers, China Passenger Cars Association, Frost & Sullivan

## **Evolution of NEV Consumer Profile in China**

Mainstream consumers are increasingly endorsing NEVs' overall performance, smart technology, cost of ownership, product quality, reliability, value-added services and environmentally-friendly benefits. These consumers may require multiple cars to satisfy mobility needs for various scenarios.

There has been an increasing NEV penetration across China. NEVs are already widely recognized by consumers in tier 1 and tier 2 cities, influenced by higher household disposable income and governments' incentives to promote NEVs. Easier access to private parking spaces and home charging piles stimulates the NEV purchase in tier 3 and tier 4 cities. In addition, consumers in tier 3 and tier 4 cities tend to make shorter trips due to smaller city sizes, which eases range anxiety.

## **NEV Market Trends in China by Vehicle Class**

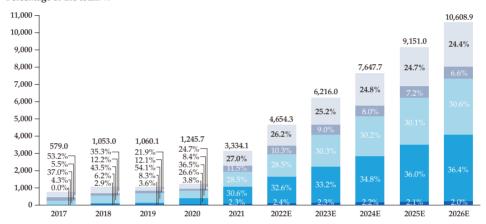
NEVs in China are categorized into five classes, namely A00, A0, A, B and C class, primarily by wheelbase and taking into consideration factors such as vehicle length and type. In 2021, B, A and A00 class models were the three largest segments in the NEV market, with market share of 30.6%, 28.5% and 27.0%, respectively. B and A class vehicles are expected to continuously offer compelling value propositions to consumers and appeal to the mainstream consumer group. In 2026, the market share of B, A and A00 class vehicles is expected to be 36.4%, 30.6% and 24.4%, respectively, totaling 91.4% of all the NEVs to be sold in China.

The following chart sets forth the sales volume of NEVs in China by vehicle class from 2017 to 2026.

## Sales Volume of NEVs in China by Class (2017 to 2026E)

	Wheelbase(1) (mm)	CAGR 2017-2021	CAGR 2021-2026E
Class A00	<2,500	30.8%	23.5%
Class A0	2,000-2,675	86.3%	12.8%
Class A	2,500-2,800	45.2%	27.8%
Class B	2,700-3,000	152.8%	30.5%
Class C	2,850-3,100	499.2%	22.2%

Total: Thousand Units Percentage of the total: %



Source: China Association of Automobile Manufacturers, China Passenger Cars Association, Frost & Sullivan Note:

(1) According to the GB/T 3730.1 - Terms and definitions of motor vehicles, trailers and combination vehicles (Draft for Comments) released in 2021

## Key Growth Drivers of China's NEV Market

- Battery technology advancement: As the core component of NEVs, batteries have experienced continuous enhancement which improves NEV's performance, safety, service life and driving range. Such advancement eases consumers' safety concerns towards NEVs and range anxiety. Furthermore, the deterioration of batteries and its impact on driving range has been significantly alleviated, improving customer satisfaction. Lower battery cost also renders the bill of materials (BOM) cost of NEVs on par with ICE vehicles of a similar class, bringing a prominent cost advantage to NEVs due to lower energy cost.
- Smart technologies improvement: With the development of autonomous driving, smart connectivity, OTA technologies, as well as the Internet of Things (IoT), the value proposition of vehicles has been redefined. ADAS and autonomous driving technologies enable smart and automatic steering and braking, leading to a possible hands-free driving experience in the near future. Smart cockpits are comprised of in-car AI assistants, personalized connectivity and entertainment systems, as well as smart voice control and interaction systems. OTA offers continuous features upgrade, delivering a cutting-edge smart mobility experience superior to ICE vehicles.

- Consumer preference for NEVs: NEVs are becoming smart mobile spaces, offering user-friendly interior space layout, superior driving experience and lower cost of ownership. Therefore, NEVs are gaining popularity over ICE vehicles, with strong endorsement and referrals from customers.
- Charging technology advancement and infrastructure expansion: With the advancement of smart grid technology, distributed charging piles can be uniformly connected to intelligent power management platforms to maintain charging stability while providing smart functions, such as automatic vehicle identification, overcurrent detection as well as power-off. In addition, the continuous development of high-voltage and fast-charging technology has greatly reduced the charging time, which makes NEVs increasingly feasible for inter-city travel and eases range anxiety. In addition, the PRC government is promoting network expansion and technology advancement of charging facilities, allowing NEV penetration to grow at a faster pace. In May 2022, the State Council announced a comprehensive package of economic incentives, including policies to optimize the business model for NEV charging infrastructure investment and construction, which aim to create a nationwide charging network to fully cover residential neighborhoods and commercial parking lots, and accelerate the construction of charging facilities in highway service areas and passenger transportation hubs.
- Favorable PRC central government policy: The PRC central government has set out the NEV development plan and incentive measures as one of its most important strategic mandates. In October 2021, the State Council of China set the target of increasing the share of vehicles fueled by new and clean energy to 40% by 2030 according to the Action Plan for Carbon Dioxide Peaking Before 2030 (《2030年前碳達峰行動方案》), the national climate policy, aiming at achieving "peak CO<sub>2</sub> emissions" by 2030 and "carbon neutrality" by 2060. Furthermore, in January 2022, the NDRC, together with several other central governmental authorities of China, jointly issued Implementation Measures for Promotion of Sustainable Consumption (《促進綠色消費實施方案》), which has demonstrated the PRC government's strong conviction in promoting the adoption of NEVs by lifting purchase restrictions and easing driving restrictions, as well as expanding the charging infrastructure. According to the Report on the Work of the Government published on March 5, 2022, the PRC central government aims to continuously promote NEV purchases. The aforementioned policies were reiterated under the Opinions on Fiscal Support to Achieve Carbon Peaking and Carbon Neutrality Goals (《財政支持做好碳達 峰碳中和工作的意見》) published by the Ministry of Finance in May 2022, which urged implementing preferential tax policies and improving government procurement policies for NEVs. In August 2022, according to a State Council meeting, the vehicle purchase tax exemption for NEVs will be extended to the end of 2023. Together with the existing policies restricting the number of license plates for ICE vehicles to mitigate air pollution, all these favorable national measures will incentivize consumers to purchase NEVs, especially EVs in China.

#### **Future Trends of NEVs**

NEVs apply more advanced power and smart technologies, which are principally manifested in the following aspects:

- Improvement in driving range: NEV manufacturers are developing more lightweight models by optimizing vehicle structure, streamlining production processes and reducing materials used. For example, the application of cell-to-chassis (CTC) integration technology can reduce the weight of the vehicle and effectively increase the driving range, while maintaining chassis strength. Furthermore, battery suppliers continue to develop battery cells with higher energy density, improving safety and lowering cost.
- Application of fast-charging technology: In addition to range anxiety, another
  pain point of driving NEVs is the energy replenishment anxiety due to slow
  charging speed. Benefiting from breakthroughs in SiC materials and related
  high-voltage fast-charging technologies, NEVs will be equipped with faster
  charging speed and higher efficiency.
- Customized smart cockpits: The internet of vehicles and advanced wireless communication technologies have accelerated the adoption and development of in-car intelligent infotainment systems, which offer a number of smart interaction functions such as voice recognition and interaction, touch panels, and in-cabin applications, enabling a more personalized and content-rich interaction experience. Smart cockpits are expected to provide more customizable in-car settings to further enrich user's mobility experience. Therefore, NEV manufacturers that are able to offer superior smart connectivity technologies will gain a competitive edge in the industry.
- More advanced autonomous driving technologies: NEV manufacturers strive to provide a safer driving experience while minimizing human intervention. See "— Levels of Autonomous Driving" for details. Leading players in the NEV industry have made significant investments in ADAS/autonomous driving technologies which require specialized R&D in advanced machine learning algorithms, multi-layered sensors, and strong computing power. Pure vision perception and LIDAR, and their combination are the mainstream solutions for autonomous driving technologies today. Moreover, offering ADAS/autonomous driving as a paid service has become an increasingly common practice for NEV manufacturers.
- Intelligent functionalities through OTA updates: As one of the smart technologies, OTA enables the improvement and expansion of intelligent functions in a convenient and cost-efficient manner. Leading NEV manufacturers can provide OTA updates to upgrade both software and firmware of the entire vehicle. NEV manufacturers with a high degree of software and hardware vertical integration and a more centralized E/E architecture will enjoy faster OTA updates. This will become a key industry focus. Customers may purchase more additional paid functions and services via cloud-based OTA in the future.

## Levels of Autonomous Driving

The Society of Automotive Engineers ("SAE") categorized vehicle automation into six levels by the degree of driving automation and this has been widely acknowledged by the industry. SAE defines levels of driving automation from Level 0 (no driving automation) to Level 5 (full driving automation) in the context of vehicles and their operations on roadways. The following table outlines the six levels of autonomous driving in terms of the extent of human driver involvement and system involvement in each level, as defined by the SAE.

AD/ADAS Level	Human Driver Involvement	System Involvement		
Level 0 (no driving automation)	<ul> <li>Execution of steering and acceleration/deceleration</li> <li>Monitoring of driving environment</li> <li>Fallback performance of dynamic driving task</li> </ul>	• None		
Level 1 (driver assistance automation)	<ul> <li>Execution of steering and acceleration/deceleration</li> <li>Monitoring of driving environment</li> <li>Fallback performance of dynamic driving task</li> </ul>	<ul> <li>Execution of steering and acceleration/deceleration (under certain conditions)</li> </ul>		
Level 2 (partial driving automation)	<ul> <li>Monitoring of driving environment</li> <li>Fallback performance of dynamic driving task</li> </ul>	<ul> <li>Execution of steering and acceleration/deceleration</li> </ul>		
Level 3 (conditional driving automation)	<ul> <li>Fallback performance of dynamic driving task</li> </ul>	<ul> <li>Execution of steering and acceleration/deceleration</li> <li>Monitoring of driving environment</li> </ul>		
Level 4 (high driving automation)	Fallback performance of dynamic driving task	<ul> <li>Execution of steering and acceleration/deceleration</li> <li>Monitoring of driving environment</li> <li>Fallback performance of dynamic driving task (under certain conditions)</li> </ul>		
Level 5 (full driving automation)	• None	<ul> <li>Execution of steering and acceleration/deceleration</li> <li>Monitoring of driving environment</li> <li>Fallback performance of dynamic driving task</li> </ul>		

At present, vehicles equipped with Level 2 autonomous driving technology have found their places in wide-scale commercial productions and commercialization in China. Meanwhile, some companies and research centers are testing vehicles equipped with Level 3 and above autonomous driving technologies in the specific scenarios of experimental and demonstration.

## Value Chain of NEV Market in China

The value chain of the NEV industry mainly includes raw material suppliers, electronic component suppliers, conventional vehicle component manufacturers, software developers, NEV manufacturers, sales and after-sales services providers. In general, the main differences between the value chains of NEVs and ICE vehicles are the battery, electric drive, electric control systems and the diversified downstream value-added services.

- *Upstream value chain:* The battery, electric drive, intelligent electric control systems and chipsets are key components that differentiate NEVs from ICEs. The cost structure of NEVs is fundamentally different from ICE vehicles due to their different power systems. Similar to ICE vehicles' fuel engine and drivetrain system, battery, electric drive, electric control systems and other smart electronic components have become the primary NEV components, accounting for approximately 70% of BOM of an NEV.
- **NEV manufacturers:** NEV manufacturers are principally engaged in designing, developing and manufacturing NEVs and related components. Ability to launch new models within the target timeframe is a key success factor for NEV manufacturers, imposing high requirements on manufacturers' R&D and production capabilities. Currently, only a few NEV manufacturers are equipped with the in-house capabilities to develop proprietary core technologies and produce core systems and electronic components.
- **Downstream value chain:** The after-sales services in the NEV market include charging, battery recycling, auto insurance, finance and leasing, etc. With the ecosystem of the NEV industry continuing to expand with more participants, all stakeholders can access more monetization opportunities.

## Entry Barriers to the NEV Market in China

- *R&D and technological capabilities:* Strong R&D and technological capabilities drive product differentiation in the highly competitive NEV market. These include: (i) technology development, which requires considerable amount of time and investment in R&D activities, (ii) recruiting and development of strong and experienced R&D teams, and (iii) R&D collaborations.
- Reputation and brand presence: Consumers are more willing to purchase branded products with superior quality, high safety standards and enriched functionalities. It takes a considerable amount of time and effort to build market reputation, gain users' trust and create a strong brand identity.
- Large-scale capital investments: NEV making is a capital-intensive business. Prior to the commercialization of models and technologies, NEV companies need to commit significant capital in R&D, material procurement, production facilities and sales and service networks. Moreover, a large amount of on-going investment is required to facilitate successful launch and mass production of new models.

- Establishment of sales and marketing network: Effective marketing strategies for NEV companies usually include dual-pronged marketing channels consisting of both online platforms and offline stores located in the busy areas such as central business districts of major cities. It is also crucial to recruit qualified sales and services personnel. In addition, NEV companies usually provide services such as test drives and professional consultancy to create an intuitive, convenient and comfortable customer experience. It requires a considerable amount of investment and time to establish such a sales and marketing network.
- Industry qualifications and expertise: The PRC government requires NEV manufacturers to satisfy an array of qualification requirements before they can obtain a license to produce and sell NEVs. Moreover, due to increasingly complex NEV technologies, it is difficult to develop, produce and deliver high quality products in a timely manner with cost efficiency without the expertise gained from years of experience.

## Impact of the COVID-19 Pandemic on the Macroeconomic Environment in the PRC

Since March 2022, a new wave of the COVID-19 pandemic has begun to spread in China, affecting a number of provinces. In order to control the pandemic, many local governments have implemented restrictions over the flow of people and logistics, and megacities such as Shanghai have adopted city-wide restrictions, which have severely affected production, consumption and logistics. Affected by the government restrictions, the overall growth rate of industrial production in China slowed down in March 2022. China's industrial added value in March 2022 increased by 5% year-on-year, down 2.5 percentage points from January to February 2022.

The resurgence of COVID-19 has also caused obvious impacts in major affected cities, such as Shanghai. In the first quarter of 2022, Shanghai's GDP increased by 3.1% over the same period in 2021, and the growth rate was 1.6 percentage points lower than the two-year average growth rate in the same period. The total retail sales of consumer goods changed from an increase of 3.7% in January to February to a decline of 3.8% in the first quarter of 2022. However, the resilience of Shanghai's new economy remained prominent. In the first quarter of 2022, the total output value of Shanghai's industrial strategic emerging industries increased by 13.7% over the same period last year, 8.9 percentage points higher than the total output value of industrial enterprises above a designated size. Among them, the output value of the NEV market in Shanghai increased by 98.2%, or by 1.1 times year-on-year.

Looking forward, it is expected that, due to the continued spread of the pandemic in the short term, the growth rate of some major macro-indicators will be further impacted. Coupled with the uncertainty of the situation at home and abroad, the overall macroeconomy will experience downward pressure in the short term. With the gradual control of the pandemic as well as the resumption of work, the macroeconomy of China will recover.

## Impact of the COVID-19 Pandemic on the EV Industry in the PRC

The major automotive industries in China are based in Changchun and Shanghai. As such, the outbreak of COVID-19 in Changchun and Shanghai has affected many companies along the electric vehicle industry chain since March 2022 and caused some impacts on the automotive industry and electric vehicle industry at large.

From the supply side, the manufacturing of electric vehicles and key components has been disrupted or slowed down, given the restrictions implemented since March 2022. Prominent automobile manufacturers located in Changchun suspended their production in March. During the same period, the production of OEMs based in Shanghai also ceased. Meanwhile, due to the limited logistics and decreasing upstream supply, the production of NEVs in other areas has been affected by the pandemic to some extent. For example, some market players announced in April that their vehicle production had been suspended as a result of supply chain constraints in Jilin province, Shanghai, Jiangsu province and other regions.

From the demand side, considering the decline in consumer income and rising commodity prices due to the restrictive measures, the overall purchasing power of consumers may be impacted, resulting in shrinking demand for electric vehicles in the short term. It is expected that the pandemic will bring a negative impact on the sales of electric vehicles due to decreasing demand as well as offline store closures.

According to data released by China Association of Automobile Manufacturers in March 2022, affected by factors such as the COVID-19 pandemic and processor chip shortage, China's overall automobile production and sales fell by 9.1% and 11.7% year-on-year, respectively. Despite this, the production and sales of NEVs achieved a notable growth. In March 2022, the production and sales of NEVs in China were 465 thousand units and 484 thousand units, respectively, representing an increase of 1.1 times year-on-year and a market penetration rate of 21.7%. In the first quarter of 2022, the production and sales of NEVs in China were 1,293 thousand units and 1,257 thousand units, respectively, representing an increase of 1.4 times year-on-year, with a market penetration rate of 19.3%.

Meanwhile, local governments in Shanghai and Changchun are being proactive in promoting the resumption of work and production in the electric vehicle industry. For example, on April 16, 2022, the Shanghai Municipal Commission of Economy and Information Technology issued the "Guidelines for the Resumption of Industrial Enterprises and the Pandemic Prevention and Control in Shanghai (First Edition)" (《上海市工業企業復工復產疫情防控指引 (第一版)》). Among the first group of 666 key enterprises that had been approved to resume work, 249 auto-related companies have resumed operations since April 18, 2022. On April 18, 2022, with the full cooperation of Zhejiang Province, Jiangsu Province and Shanghai, the transit station for the emergency supply of important materials in the Yangtze River Delta (Zhejiang-Shanghai) (長三角重要物資應急保供中轉站 (浙江-上海)) was officially put into operation, which will promote the inbound circulation of important inter-provincial production materials, including auto parts, and will effectively open up the transportation network in the Yangtze River Delta region to realize cross-regional supply chain interconnection.

In general, the growth rate of the electric vehicle industry in China is expected to slow down to a certain extent in 2022 as a result of the COVID-19 pandemic. However, with the continuous support of the governments and resumption of production and logistics, it is expected that the industry will recover gradually from the impacts of the pandemic and demonstrate significant growth potential.

#### COMPETITIVE LANDSCAPE OF THE EV MARKETS IN CHINA

According to Frost & Sullivan, there were approximately 70 automakers selling NEVs in China in the first half of 2022. The major players in China's NEV markets are emerging EV companies and ICE automakers that also produce NEVs. The top 25 NEV companies accounted for more than 90% of NEV sales in China in the first half of 2022. New NEV companies have been quick to capitalize on the NEV market opportunity with innovative smart technologies and product differentiation. Meanwhile, ICE automakers are also quickly adapting to the fast-growing EV market by introducing their smart EV models, leveraging their legacies of established brand and traditional manufacturing know-how. NEV manufacturers compete on key factors such as E/E architecture performance, mobility features, quality, reliability and price, as well as design, brand awareness and user experience. In 2021, we sold a total of approximately 43.9 thousand EVs, ranking 4th among the pure-play EV companies based in China as measured by sales volume in China. In the first half of 2022, we sold a total of approximately 46.2 thousand EVs, ranking 4th among the pure-play EV companies based in China as measured by sales volume in China.

The following tables set forth the top five pure-play EV companies based in China in terms of sales volume in 2021 and the first half of 2022, respectively.

Top Five Pure-Play EV Companies Based in China by Sales Volume in 2021 and the First Half of 2022

	Sales		Sales Volume	Ranking
	Volume	Ranking	in the First	in the First
Automaker	in 2021	in 2021	Half of 2022	Half of 2022
	(thousand units) <sup>(1)</sup>		(thousand units) <sup>(1)</sup>	
Company B	96.7	1	68.9	1
Company C	90.8	2	49.4	3
Company D	64.7	3	58.9	2
Leapmotor	43.9	4	46.2	4
Company E <sup>(2)</sup>	35.6	5	21.8	5

Source: Frost & Sullivan, CATARC

Notes:

- Sales volumes were calculated based on the number of vehicle insurance registrations in China sourced from CATARC.
- (2) Company E is an emerging provider of EV products and mobility solutions headquartered in Shanghai, China. Company E delivers electric sedans and SUVs in China.

The T03 was ranked third among vehicle models of pure-play EV companies based in China sold to consumers in 2021 and the first half of 2022. The following tables set forth the top five models of pure-play EV companies based in China measured by sales volume sold to customers in 2021 and the first half of 2022, respectively.

Top five models of pure-play EV companies based in China by sales volume sold to consumers in 2021:

Ranking	Model	Company	Sales volume
			(thousand units) <sup>(1)</sup>
1	Vehicle Model B	Company B	54.0
2	Vehicle Model D	Company D	40.1
3	T03	Leapmotor	37.7
4	Vehicle Model C	Company C	34.1
5	Vehicle Model E	Company C	25.1

Top five models of pure-play EV companies based in China by sales volume sold to consumers in the first half of 2022:

Ranking	Model	Company	Sales volume
			(thousand units) <sup>(1)</sup>
1	Vehicle Model D	Company D	36.4
2	Vehicle Model B	Company B	31.5
3	T03	Leapmotor	28.2
4	Vehicle Model F	Company B	21.6
5	Vehicle Model C	Company C	17.0

Source: Frost & Sullivan, CATARC

Note:

In addition to the pure-play EV companies, NEV market participants also compete with the traditional ICE vehicle manufacturers that produce NEVs. With growing market demand as well as favorable policies in relation to NEVs, traditional OEMs which have built their reputations with ICE vehicles are also quickly adapting to the fast-growing EV market by introducing their smart EV models. Leveraging their legacies of established brand and traditional manufacturing know-how, ICE vehicle manufacturers have also introduced NEV models that gained popularity. Meanwhile, compared with traditional ICE vehicle manufacturers, the leading pure-play EV companies also have advantages in terms of dedicated and advanced NEV platforms, quicker adoption of smart technologies, faster iteration of vehicle models as well as more efficient sales channel management. With the continuous growing brand recognition and improvements of infrastructure, it is expected that leading pure-play EV companies will further strengthen their market position in the NEV industry which will help them compete against traditional ICE vehicle manufacturers.

<sup>(1)</sup> Sales volumes were calculated based on the number of vehicle insurance registrations in China sourced from CATARC.

According to Frost & Sullivan, we ranked 19th and 14th in the China NEV market in terms of sales volume calculated based on vehicle insurance registrations in 2021 and the first half of 2022, with a market share of 1.6% and 2.2%, respectively. The following tables set forth the ranking of companies in terms of sales volume of NEVs in 2021 and the first half of 2022 in China, respectively. The top five companies by sales volume of NEVs accounted for 54.2% and 54.9% in China in 2021 and the first half of 2022, respectively, according to Frost & Sullivan.

## Rankings of Companies by Sales Volume of NEVs in 2021 in China

Ranking	Automaker	Sales Volume
		(thousand units) <sup>(1)</sup>
1	Company F <sup>(2)</sup>	525.5
2	Company G <sup>(3)</sup>	425.8
3	Company A <sup>(4)</sup>	322.4
4	Company H <sup>(5)</sup>	134.4
5	Company I <sup>(6)</sup>	122.5
7	 Company B	96.7
9	Company C	90.8
16	Company J <sup>(7)</sup>	61.9
17	Company K <sup>(8)</sup>	55.0
18	Company L <sup>(9)</sup>	50.1
19	Leapmotor	43.9

Source: Frost & Sullivan, CATARC

#### Notes:

- (1) Sales volumes were calculated based on the number of vehicle insurance registrations in China sourced from CATARC.
- (2) Headquartered in Shenzhen, China, Company F is a high-tech company engaged in industries related to electronics, automobiles, new energy and rail transit. Company F is listed on the Stock Exchange and Shenzhen Stock Exchange. Company F delivers electric sedans and SUVs in the global market.
- (3) Company G is a smart EV company headquartered in Liuzhou, China. Company G produces and sells NEVs and related components. Company G delivers electric sedans and SUVs in China.
- (4) Headquartered in Texas, United States, Company A is an EV and energy company that produces and sells EVs, solar panels and energy storage equipment, etc. Company A is listed on NASDAQ. Company A delivers electric sedans and SUVs in the global market.
- (5) Headquartered in Baoding, China, Company H designs and develops SUVs, passenger vehicles and pickup series as well as powertrains. Company H is listed on the Stock Exchange and Shanghai Stock Exchange. Company H delivers electric sedans and SUVs primarily in China and in the global market.
- (6) Company I is a smart EV company headquartered in Guangzhou, China. Company I delivers electric sedans and SUVs primarily in China.
- (7) Headquartered in Shanghai, China, Company J is a Sino-German joint venture that produces and sells vehicles, components and accessories. Company J delivers electric sedans and SUVs in China.
- (8) Headquartered in Changchun, China, Company K is a Sino-German joint venture that manufactures large-scale passenger vehicles. Company K delivers electric sedans and SUVs in China.
- (9) Headquartered in Munich, Germany, Company L is a multinational manufacturer of automotives and motorcycles. Company L is listed on the Frankfurt Stock Exchange. Company L delivers electric sedans and SUVs in the global market.

## Rankings of Companies by Sales Volume of NEVs in the First Half of 2022 in China

Ranking	Automaker	Sales Volume
		(thousand units) <sup>(1)</sup>
1	Company F	568.3
2	Company G	218.0
3	Company A	198.2
4	Company M <sup>(2)</sup>	95.1
5	Company I	83.2
6	Company B	68.9
10	Company D	58.9
11	Company N <sup>(3)</sup>	56.9
12	Company O <sup>(4)</sup>	49.6
13	Company C	49.4
14	Leapmotor	46.2

Source: Frost & Sullivan, CATARC

#### Notes:

- Sales volumes were calculated based on the number of vehicle insurance registrations in China sourced from CATARC.
- (2) Headquartered in Wuhu, China, Company M is a company engaged in automotive production. Company M delivers electric sedans and SUVs primarily in China.
- (3) Company N is a smart electric mobility and energy service technology company headquartered in Hangzhou, China. Company N is listed on the Stock Exchange. Company N delivers electric sedans and SUVs primarily in China and in the global market.
- (4) Company O is an automobile manufacturer headquartered in Wuhan, China. Company O is listed on the Stock Exchange. Company O delivers electric sedans and SUVs primarily in China and in the global market.

Among more than 30 smart electric sedans and more than 60 smart electric SUVs within the same price range available in China's EV market as of the Latest Practicable Date, the C01 and the C11 offers advantageous driving range, acceleration, interior space, and autonomous driving functions. In addition, EVs with more autonomous driving functions can satisfy a wider range of scenarios and offer consumers a better driving experience. Compared with the certain models within the same price range available in China's EV market as described on the relevant EV manufacturers' websites, the C01 and the C11 provides users with more diverse autonomous driving functions such as narrow road assist, highway assist and speed limit information function.

The following table sets forth benchmarking of C01 against major comparable electric sedan models within the same price range available in China's EV market as of the Latest Practicable Date.

Model	Leapmotor C01	BYD Han <sup>(1)</sup>	XPENG P7	BYD Seal	Model 3	NETA S
Official Price (RMB) Driving Range (KM) (CLTC/NEDC)	180,000-270,000 500-717 (CLTC)	214,800-288,600 506/605/ 550 (NEDC)/ 610/715 (CLTC)	239,900-429,900 480/586/ 706/670/ 562 (NEDC)/ 625 (CLTC)	209,800-286,800 550/700/ 650 (CLTC)	279,900-367,900 556/675 (CLTC)	245,800-338,800 650/715 (CLTC)
Length*Width*Height (mm)	5,050*1,902*1,509	4,980*1,910*1,495	4,880*1,896*1,450	4,800*1,875*1,460	4,694*1,850*1,443	4,980*1,980*1,450
Wheelbase (mm) Acceleration Time (0~100km/h) (s)	2,930 3.7-7.5	2,920 3.9/7.9	2,998 4.3/6.7	2,920 3.8/5.9/7.5	2,875 3.3/6.1	2,980 3.9/6.9
Number of Autonomous Driving Functions	23	19/24	15	12	15	23

Source: Company Websites, Frost & Sullivan

#### Notes:

- (1) BYD Han includes BYD Han EV and BYD Han Chuangshi Version.
- (2) The selection of the above electric sedan models for benchmarking is primarily because (i) the relevant EV manufacturers are leading NEV brands in China's NEV market; (ii) the prices of such electric sedan models are within the same price range as the C01; and (iii) the customer awareness of theses models are relatively higher in China's NEV market.

The following table sets forth the model benchmarking of C11 and major comparable electric SUV models within the same price range available in China's EV market as of the Latest Practicable Date.

Model	Leapmotor C11	AION V PLUS	XPENG G3i	WM EX5-Z	Volkswagen ID.4	NETA U
Official Price (RMB) Driving Range (KM) (CLTC/NEDC)	179,800-229,800 510/550/ 610 (CLTC)	189,800-269,800 500/600/ 702 (NEDC)	168,900-201,900 460/520 (NEDC)	169,800-189,800 403 (NEDC)	189,288-286,288 425/555/ 607 (CLTC)	123,800-201,800 400/500/610 (NEDC)
Length*Width*Height (mm)	4,750*1,905*1,675	4,650*1,920*1,720	4,495*1,820*1,610	4,585*1,835*1,672	4,612*1,852*1,640	4,549*1,860*1,628
Wheelbase (mm)	2,930	2,830	2,625	2,703	2,765	2,770
Acceleration Time (0~100km/h) (s)	4.5/7.9	6.9/7.6/7.9	8.6	8.3	2.6/3.1/3.2 (0-50km/h)	7.0/9.5
Number of Autonomous Driving Functions	22	14	21	12	10	23

Source: Company Websites, Frost & Sullivan

## Note:

(1) The selection of the above electric SUV models for benchmarking is primarily because (i) the relevant EV manufacturers are leading NEV brands in China's NEV market; (ii) the prices of such electric SUV models are within the same price range as the C11; and (iii) the customer awareness of theses models are relatively higher in China's NEV market.

## R&D Capabilities and Production Strategies of NEV Companies in the China Market

NEV companies in China have adopted different approaches towards their R&D and production strategies, and have achieved different levels of R&D capabilities and various degrees of vertical integration. According to Frost & Sullivan, leading pure-play EV companies are generally focused on developing in-house core systems and electronic components of the vehicle. On the other hand, ICE automakers tend to adopt the more traditional business model and rely more on their suppliers.

According to Frost & Sullivan, (i) a full-suite of R&D capabilities refers to the ability of an NEV company to design and develop all key hardware and software across the core systems and electronic components, namely, battery system, electric drive system, autonomous driving system and smart cockpit system. These systems are the most important elements of an NEV and are critical to its level of technology and feature richness, which in turn affects the user experience; (ii) vertical integration refers to the ability of an NEV company to self-design and self-produce these systems. The more of these systems that an NEV company is able to self-design and self-produce, the more vertically integrated it is considered to be. There are very few NEV companies in China that have achieved a full-suite of R&D capabilities and a high degree of vertical integration. According to Frost & Sullivan's research (which includes primary and secondary researches, see — "Source of Information" for details), among the top 25 NEV companies which accounted for more than 90% of NEV sales in China in the first half of 2022, (i) three have achieved a full-suite of R&D capabilities and a high degree of vertical integration, while (ii) others have different levels of R&D capabilities and vertical integration. Further, according to Frost & Sullivan's research, (i) for battery system and electric drive system, the majority of NEV companies, in particular the ICE automakers, have the ability to self-design and self-produce the key hardware and software; (ii) for autonomous driving system and smart cockpit system, the majority of NEV companies focus on the self-development of key software and only a few have the ability to self-design and self-produce the key hardware for these systems. As such, only very few NEV companies have built the in-house production capabilities for the electronic components of the autonomous driving system and smart cockpit system.

#### OVERVIEW OF CHINA'S EREV MARKET

Similar to BEVs, EREVs are powered entirely by the electric motor, with an auxiliary power unit, named a range extension system, to generate additional electric power. A range extension system is an ICE system that generates electric power from fossil fuel, bringing a flexible power replenishment solution by both electricity charging and gasoline refueling.

The EREVs offer a more convenient charging option in addition to battery recharging, which is especially relevant in areas with poor charging infrastructure support. This dual-pronged approach allows for more flexibility for power replenishment which reduces range anxiety by providing longer travel distance per energy refill and saving time for power replenishment. Due to the high fuel efficiency of the range extension system, EREVs typically enjoy a much lower overall energy consumption level than ICE vehicles in a similar class. While the coverage of fast-charging infrastructure is still insufficient and the next generation of large-capacity battery systems and charging technologies for BEVs is yet to become widely commercialized, as an ideal transitional solution, EREVs may help to promote the penetration of NEVs in China.

## Competitive Landscape

In 2021, the sales volume of EREVs in China reached 107.1 thousand units, accounting for 3.2% of the total NEV market. The market is highly concentrated, with the top five models accounting for 99.2% of total EREV sales in 2021. Looking ahead, the EREV market is estimated to maintain relatively high growth in the coming years, as other NEV companies are entering the market and expecting to launch new EREV models or EREV versions of their existing EV models. Since 2021, a number of automotive companies in China, including pure-play EV companies and traditional automakers, have entered the EREV market and launched EREV models. Several automotive companies plan to launch BEV and EREV models concurrently, creating a diversified product portfolio and enhancing their appeal to potential customers. As a result, China's EREV market is expected to become less concentrated in the near future, according to Frost & Sullivan. EREVs sales in China are expected to reach 200.3 thousand units in 2022 and further increase to 651.7 thousand units in 2026.

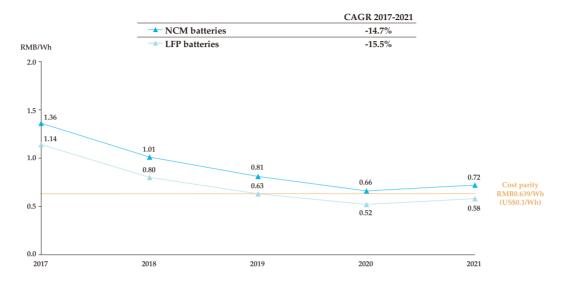
## HISTORICAL TRENDS OF PRICES ON MAJOR RAW MATERIALS AND COMPONENTS FOR NEV PRODUCTION

The major raw materials and components for NEVs include: (i) battery cells; (ii) metal, such as copper, aluminum and stainless steel; (iii) electronic components and PCBs; and (iv) plastic components. The operating results of NEV manufacturers can be adversely affected by price hikes or supply fluctuations of raw materials as a result of changes in macroeconomic conditions, supply and demand, as well as market prospects.

Battery cell prices generally decreased from 2018 to 2020, mainly due to the technological advances and decreased anode material prices, according to Frost & Sullivan. Apart from fluctuations caused by short-term increases of raw material prices, battery costs are expected to continue to decrease to approximately US\$100 per kWh, thus NEVs will reach cost parity with ICE vehicles of a similar class, accelerating the trend of NEVs replacing ICE vehicles. Stainless steel and plastics are mainly used for frames, chassis, in-car decoration and other components. Copper and aluminum are important raw materials for manufacturing batteries and vehicle parts.

The following chart sets forth the historical prices of Lithium-ion batteries:

## Average Price of Lithium-ion Batteries for NEVs in China (2017-2021)



Note: Data in the chart is tax-inclusive prices;

Source: Frost & Sullivan

#### SOURCE OF INFORMATION

In connection with the [REDACTED], we have engaged Frost & Sullivan to conduct a detailed analysis and prepare an industry report on the markets in which we operate. Services provided by Frost & Sullivan include market assessments, competitive benchmarking, and strategic and market planning for a variety of industries. We have agreed to a total of RMB680,000 in fees and expenses for the preparation and use of the Frost & Sullivan Report. The payment of such amount was not contingent upon our successful [REDACTED] or on the results of the Frost & Sullivan Report. Apart from the Frost & Sullivan Report, we have not commissioned any other industry report in connection with the [REDACTED].

We have extracted certain information from the Frost & Sullivan Report in this section, as well as in the sections headed "Summary," "Risk Factors," "Business," "Financial Information" and elsewhere in this document to provide our potential investors with a more comprehensive presentation of the industries in which we operate. Unless otherwise noted, all of the data and forecasts contained in this section are derived from the Frost & Sullivan Report, various official government publications and other publications. Frost & Sullivan prepared its report based on its in-house database, independent third-party reports and publicly available data from reputable industry organizations. Where necessary, Frost & Sullivan contacts companies operating in the industry to gather and synthesize information in relation to the market, prices and other relevant information. Frost & Sullivan believes that the basic assumptions used in preparing the Frost & Sullivan Report, including those used to make future projections, are factual, correct and not misleading. Frost & Sullivan has independently analyzed the information, but the accuracy of the conclusions of its review largely relies on the accuracy of the information collected. Frost & Sullivan's research may be affected by the accuracy of these assumptions and the choice of these primary and secondary sources.